MONETARY AND FISCAL ECONOMICS OF ISLAM

Selected Papers

EDITED BY
MOHAMMAD ARIFF

International Centre for Research in Islamic Economics
King Abdulaziz University, Jeddah - Saudi Arabia.

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Selected Papers
Presented to the
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on the
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held at Makkah under the
auspices of the
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Research in Islamic Economics
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Jeddah, Saudi Arabia
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FOREWORD

It gives me immense pleasure to write a foreword to this valuable compilation of papers and proceedings of the International Seminar on the Monetary and Fiscal Economics of Islam held in the holy city of Mecca during 5 - 10 Dhul Qidah 1398 H (7 - 12 October 1978 A.D.) under the auspices of the International Centre for Research in Islamic Economics, King Abdulaziz University, Jeddah. This seminar represents not only the first major activity of the Centre but also the first serious attempt ever undertaken by any academic institution in the Muslim world to seriously discuss the monetary and fiscal issues in Islamic eonomics.

It is perhaps in order that I briefly mention here the extent of behind-the-scenes preparations undertaken by the Centre. The research papers were carefully planned and thoroughly reviewed. Early in 1396 H (1976) the first draft of the document outlining the major topics for research in monetary and fiscal economics of Islam was prepared by Dr. Mohammad Umer Chapra. It was subsequently revised and modified by about a dozen scholars. This valuable document, published by the Islamic foundation, London, early in 1397 H (1977), is also presented in Appendix 1 of the present volume. It is also of interest to mention that out of 52 Muslim economists who were invited to write research papers on the various topics, 32 responded. The Review Committee finally accepted 14 papers for presentation in the Seminar. The authors were required to revise their papers in the light of the detailed comments made by the Review Committee.

The Seminar has shed light on a number of monetary and fiscal issues in Islamic economic analysis and made valuable contributions to the development of Islamic economics as a social science. The Centre takes great pride in publishing the papers and the proceedings of a seminar of such academic and historical importance. It is my fervent hope that this excellent piece of literature will stimulate further research works which will contribute significantly to the advancement of Islamic economics. I also hope that the materials contained in the present volume will provide inputs for new textbooks in the field of Islamic economics.

This foreword would be incomplete without special mention being made of the key people who played crucial roles in the planning and implementation of the Seminar. Dr. Mohammad Omar Zubeir, former President of the King Abdulaziz University, took an active part in the long drawn preparations right from the stage of conceptualization. His endeavours and support have gone a long way towards making the Seminar a resounding success.

Dr. Hassan O. Balkhy, my predecessor, steered the Seminar to its successful completion. His selfless dedication and commitment to the cause of Islamic economics provided the fuel for the organizational machinery. I also wish to record here with a deep sense of appreciation the contributions made by Dr. Abdul Mannan and Dr. Mohammad Anas Zarqa, research professors at the Centre, who toiled very hard behind the scenes.

I wish to take this opportunity to express my deep appreciation for the excellent secretariat work done by Mr. Hassan Chisti, and the reception and protocol work of Messrs. Mohammad El-Gari, mohammed Ridwan and Usmah Filali. Acknowledgement must also be made of the valuable services rendered by other supportive staff who are not mentioned here by name.

Let us pray to Allah for His guidence.

Ghazi O. Madani

Director
International Centre for
Research in Islamic Economics
King Abdulaziz University
Jeddah.

INTRODUCTORY REMARKS

Mohammed Omer Zubair

It is gratifying to note that on the recommendation of the First International Conference on Islamic Economics held in Mecca in 1396 H (1976 A.D.), an International Centre for Research in Islamic Economics was established in 1397 H (1977 A.D.) - the first of its kind in the whole Muslim world, nay , the entire world. This unique institution is established with a sense of history. Its main objective is to find Islamic solutions for modern economic crises and conflicts for which contemporary economic ideologies have failed to provide satisfactory answers. This is, indeed, a great challenge to Muslim economists, scholars and thinkers.

For several centuries Muslim scholars remained pioneers in their fields of learning and continued to push the frontiers of knowledge thus contributing in a highly significant way not only to the advancement of the Muslim world but also to the development of science and the expansion of the store of human learning. Unfortunately, however, there came a period during which the vigour and resilience of the response of Muslim scholars to the fresh challenges they faced assumed a low key, and the quality and character of their intellectual contributions left much to be desired. In recent years, to the satisfaction of all Muslims, there has been an encouraging revival in the intellectual activity of Muslim scholars around the world and a serious effort is being made to respond successfully to the intellectual challenges that the Ummah is now facing.

Among the fields that have received the special attention of Muslim scholars is the area of the monetary and fiscal economics of Islam on which a number of treatises and books have been written so far in several languages. Some valuable ground has already been covered in this field but a large number of questions are yet to be answered.

Viewed from this perspective, the importance of this Seminar on Monetary and Fiscal Economics of Islam, which is the first major activity of this Centre, can hardly be over-estimated. I hope and indeed believe that this Seminar, which brings together a select group of professional economists and scholars from various economics departments and institutions, should be able to formulate the basic concepts and to identify real issues and problems from which further rigorous economic analysis can be started within the framework of the Islamic Shari'ah.

May Allah fulfil our mission, thereby helping a renaissance of a new Islamic age of culture and learning. Amen. Truly, Allah is noble and beneficient to us all.

INAUGURAL ADDRESS

Hassan O. Balkhy

Your Excellencies, Honourable Guests,
Dear Professional Colleagues :

It is for me a great honour and real pleasure to welcome you all in this holiest of lands. You are all aware that this Seminar on "Monetary and Fiscal Economics of Islam" is the first major activity of the newly-established International Centre for Research in Islamic Economics (ICRIE). And it is most appropriate that this Seminar is organised by the Centre and held in the first holy city of Islam. I take this opportunity to give you a brief background of its establishment and the activities with which the Centre is currently involved.

Background

The First International Conference on Islamic Economics which was held in Holy Mecca on Safar 21-26, 1396 H (February 21-26 1976), at which many of you were active participants, recommended that King Abdulaziz University should, as part of its constructive efforts in the academic field for the service of Islam and the Ummah, consider the establishment of an International Centre for the study of Islamic Economics. Consequently, in Jamad Al-thani 1397 H (1977 A.D.) the Centre was established to coordinate and to support international research at the highest level of scholarship. The Centre is expected to direct its efforts to achieve the following objectives as recommended by the conference:

a) "the establishment of a specialised library that would collect scholarly works in the field of Islāmic Economics in various languages and issue catalogues to research scholars everywhere;"
b) "conduct and support theoretical and applied research in various fields of Islamic Economics, publish textbooks in this field for the use of Muslim universities and organise training courses needed by Muslim economic establishments";
c) "provide research facilities and scholarships for visiting Muslim scholars to undertake research in their fields of interest";
d) "promote cooperation in the field of Islamic economic research among various universities and institutions";
e) "publish research papers and periodicals in Islamic Economics"; and
f) "help establish chairs for the teaching of Islamic Economics, provide scholarships for research in this field and promote lectures with conferences and regional symposia in this field".

Think Tank and Task Force

With the active support of His Excellency Dr. Mohammad Omar Zubeir, the President of the University, it has been possible to initiate a number of activities so that the objectives of the Centre can be achieved. It is gratifying to note that the Advisory Board of the Centre, composed of eminent Muslim scholars in Economics and the Shari'ah drawn from the Kingdom of Saudi Arabia and other Muslim countries, has already been set up. The Centre is and will soon get further involved in a number of activities such as (a) conducting pure and applied research in various areas of specialisation in Islamic Economics (b) the production, distribution and translation of teaching materials in Islamic Economics (c) organising guest lectures and workshop activities (d) the publication of professional journals and bulletins (e) the publication of occasional papers and monograph series (f) the exchange of scholars (g) the offering of in-service training facilities (h) awarding fellowship for doctoral and post-doctoral studies for the young Muslim economists (i) organising, conducting seminars and conferences here and abroad, and so on. The above mentioned list of activities is not exhaustive. This work commitment is indicative of the fact that the Centre is expected to act both as a "think tank" as well as a "task force" for economic institutions in all Muslim countries.

New Challenge and New Opportunity

There is no doubt that Islam gave birth to a great civilisation - a civilisation that was and is directed towards achieving the peace and prosperity of mankind. Economic activity is just a facet of the total activities of man. In general economic text books there is a wide range of definitions of the science. Recently in his book, *"Economics As a Science"* (1970), Professor Boulding defined Economics 'as that science which studies the provisioning of exchangeables.' By this he is making Economics relevant to man, thus guarding his definition from falling into the traps of an irrelevant abstract theory of exchange.

Though his definition includes the "provisioning of material goods and services" and also the provisioning of social justice, dignity, security from threat and violence and so on, yet his definition like many others is quite consistent with the basic assumptions on which the neo-Classical orthodox doctrine is based. Islam rejects many of its assumptions and dimensions. For example, Islam rejects the capitalistic concept of individual self-interest, harmony of interest and maintenance of "status quo" and so on. Clearly, the need for a science of Islamic Economics emerges. Economic activities are to be seen here as an integral part of the total acxtivities of man. As such, economic activities in Islam must promote the kind of economic welfare which can also advance the cause of social, moral and spiritual welfare of the Ummah. This distinctiveness of Islamic Economics needs to be clearly understood and the consequent reconstruction of thought is more needed now than ever before.

I would like to take this opportunity to throw some light on some of the current problems and issues confronting Muslim countries in general and the world at large many economic nations which dominated the economic literature and influenced governmental policies until the 60's seems to be inopertive in the context of present-day situations. For example, until the late 1960's the Keynesian formulas seemingly worked well through successful stimulation of an economy by increasing public expenditure during slumps and cooling off booms by cutting them back. Its main policy implication is that the government must then choose between the feasible combination of unemployment and inflation as shown by the estimates of the esteemed (or not so esteemed) Phillips Curve (e.g., 3 per cent unemployment and no inflation or 1½ per cent unemployment and 8 per cent inflation, etc.). But the recession-ridden 1970's have demolished this Keynesian notion. It turns out that the rate of inflation and the rate of unemployment can rise at the same time. Those fine-tuning attempts to maintain economic balance are frustrated. Thus the situation in the 1970's , with both relatively higher unemployment and extremely high wage increases, represent points well off the Phillips Curve. Now the question arises: What type of employment strategy should an Islamic State follow in the light of this recent experience? Also, what type of economic policy should be followed to combat inflation? these challenges call for serious research work by Muslim economists.

Another key area before us is the challenge of modernisation and development within the frame work of Islamic social justice. Apart from the difference in natural resource endowment, different Muslim countries have their own history of development and different institutional set-ups which, in many cases, are still carrying the legacy of colonialism and imperialism in its old and new dimensions. This type of institutional set-up has a profound impact on the development strategies of the many Muslim countries, affecting quality of life styles and cultural values. What is extremely important for us is to identify the difficulties that stand in the way of effective cooperation among the Muslim countries and also to develop a viable model (or models) of development from which social justice will follow.

Here we come upon a very significant economic question of our time. What is growth and development for? "Contemporary civilisation whether capitalist or Marxist, despite its material achievements, has led both individuals and societies to conflict, division, anxiety and loss of purpose. Technology has been given preference over man's peace, security and stability." It needs to be understood clearly that we do not exist for technology; technology exists for us. Furthermore, in many countries, largescale technology is intimately connected with the problem of equitable distribution of income and social justice. Do we then want to follow the strategy of development which is likely to maintain and enhance disparities in the distribution of purchasing power and to make us subservient to machines? Are we not disillusioned with doctrines that disease, squalor and ignorance will disappear by the theory of "trickling down" from ever growing consumption and accumulation in an uncontrollable private enterjprise system?

Furthermore, in discussions of the problem of economic development of LDCs, a phrase that comes up frequently is "the vicious circle of poverty", or as the Late Professor Nurkse puts it tautologically, "a country is poor because it is poor". The rapid economic advance of many poor countries of Latin America and South East Asia in recent decades has cast serious doubt on the validity of this thesis and has made us believe that given will and determination, it is possible to make siginifficant economic progress in the less-developed Muslim countries. What is needed however is to find the appropriate strategy of development which focusses attention on the people and their Islamic culture rather than on alien ideologies and models of development.

There is no doubt that true Islamic tenets motivate us to foster development and the social progress of Muslims in general and humanity at large. The greatest challenge before us is how to get the true Islamic economic values internalised among the people of Muslim countries and thereby remould the existing; institutions so as to achieve the goal of an Islamic State.

So far, I have been talking in general terms. Let me turn to our expectations of the participants in this Seminar.

Our Expectations

I have no doubt that the distinguished scholars who are taking part in this seminar will, in the words of Dr. Zubeir, "be able to formulate the basic concepts and to identify the real issues and problems from wich further rigorous economic analysis can be started within the framework of the Islamic Shari'ah." This means that we have got to set up a priority of priorities. It is hoped that your active participation would enable us to identify the basic areas of concern and for effective cooperation. In addition, we want you to assist us in mapping out a line of action needed to introduce the teaching of Islamic Economics at all levels of schooling where Economics is taught. As such, your active participation in the Seminar is vitally important to the cause of Islam.

I am extremely glad that you have accepted our invitation to attend this Seminar. On behalf of the staff of the Centre and myself personally, I welcome you all here.

At this stage, I would like to disclose my new assignment as a Deputy Mayor of the City of Jeddah. But wherever I go, I prefer to maintain a serious professional link with you all. However, I look forward eagerly to hearing the views of the eminent participants of the Seminar. I wish you all a very enjoyable stay in the Holy land. Amen.

OPENING SPEECH

Khurshid Ahmed

I am extremely happy to be with you this morning. It was in 1973, on the occasion of an international conference organized by the World Assembly of Muslim Youth in Riyad, that some of us broached the idea of organizing a professional conference on Islamic Economics. We have been fully conscious of the valuable work that has been done in expounding some of the basic ideas of Islamic Economics. Nonetheless, we realized that one of the pressing needs is to develop this subject as an academic discipline and to do that with professional rigour.

The contribution of the Ulema in expounding some of the basic economic teachings of Islam has been immense. Although these writings did not come from professional economists, in them one could see a realisation of the challenge of modern economic thought and practice to the values and principle of Islam and as such these writers tried to make the Muslim world conscious of its own unique approach to the problems of economy. These pioneering contributions blazed a new trail and persuaded many economists to join in this debate. Nevertheless, the scene remaind dominated by those whose exposure to economic theory and policy-formulation was extremely limited. Literature expounding some of the economic ideas of Islam multiplied, but what can be described as the theory and practice of Islamic economics remained in the realm of possibility. There was some visible movement in this direction; quite a few milestones could be distinguished on the way; but the destination remained distant. The transition from 'economic teachings of Islam' to 'Islamic Economics' had yet to be made.

It was in response to this challenge that some Muslim economists who met in that conference in 1973 resolved to make a systematic effort to seek the development of Islamic economics as an academic discipline and as a tool-kit for policy operations. They were conscious that the task ahead was difficult and challenging, yet they realised that a serious effort deserved to be made in this direction, albeit in all humility. By the grace of Allah these efforts were crowned with success and the First International Conference on Islamic Economics was organized early in 1976 under the active leadership of Dr. Omer Zubeir, President, King Abdulaziz University, Jeddah. Over 180 professionals mostly economists and Sharia scholars, from all over the world participated in the conference and discussed major themes relating to Islamic economics. It was an elementary effort, but nonetheless, a path-breaking one. From that Conference emerged the idea of a permanent International Centre for Research in Islamic Economics. The Centre has been by the grace of Allah, in operation for some time now and we are meeting today to participate in its First Research Seminar on the theme of the Monetary and Fiscal Economics of Islam. Our effort, in this Seminar, is to widen our horizons of knowledge and deepen our analytical insights in the field of Islamic monetary and fiscal economics. We are proud of the valuable contributions that have been made in this field over the last fifty years. Now it would be our humble effort to promote basic and applied research and to concentrate on those areas which have not been fully covered in the debate so far. We have also to seek solutions to the difficult problems that we face in order to evolve a systematic course of action for the implementation of the Shari'ah in our socio-economic life.

Preparation for this seminar have kept some of us busy for the last eighteen months. A committee was formed to work out research themes on the subject which were circulated amongst prominent economists in the Muslim world. On the basis of their response to this agenda for research, a Plan for the Seminar was drawn up. Now, by the grace of Allah, we are meeting in witness to partial fulfilment of the dream of 1973. I am sure useful results will accrue from the deliberations of this Seminar.

There are at least two basic pre-requisites for making any real contribution in the field of Islamic economics: commitment to Islam and academic rigour. First and foremost is our commitment to Islam and its values, to its principles and to the guidance that the Quran and the Sunnah have given us. Our starting point is not that we are a club of economists with certain new and novel ideas. Instead, our distinctive characteristic is that we are Muslims and that we want to look upon the world through the eyes of Muslims and are eager to remake the world in accordance with the vision of man, society and economy given by Islam. One of the delusions perpetrated in the contemporary world is that value judgements are offered under the cover of positive and scientific statements. Economists know that in the study of economics there is an area of technical relationships which could be value-free but these technical relationships take place within the framework of value-relations. And it is very difficult to disengage one from the other. Nonetheless, instead of clearly stating the value-framework on which Western economic thought - capitalist as well as socialist - has been couched, an effort is made to conveniently gloss over this reality and to assume that all that is being said in the name of economics is value-free.

As Muslim economists we are not shy in articulating our value premises in clear terms. We have nothing to conceal. Professionally it is more honest and more rewarding to start with an exposition of one's value-framework, of the socio-economic objective one wants to pursue and then to show how economic relationships can be developed to fulfil these objectives. As Muslim economists we are eager to undertake these tasks with care and rigour. We do not play with words, or try to hoodwink the real issues or resort to slogans and cliches as our stock-in-trade. We want to approach the problem in a calm and calculated manner. We want to put in hard research, original thinking and careful experimentation. We are not starting with the smug feeling that we have ready-made answers to all the questions. In fact, we are trying to begin from where beginnings should be made: to find out what the right questions are even before we move towards finding solutions.

After this submission about our approach, I want to very briefly touch upon some of the problems that Muslim economists have to squarely face.

First, we have to develop a new conceptual framework for the study of economic problems. Economics, as it has developed over the last two hundred years, has concerned itself mainly with the analysis of certain sets of behaviourial relationships. Are we going to regard these relationships as constant and then try to fiddle with this or that aspect of economic life, even if it is to see whether that conforms or deviates from the norms given by the *Qur'an* and the Sunnah? Can we attack economic problems at the micro-level without going into the question of the overall framework, institutional as well as attitudinal? I submit that our primary problem is to develop a new conceptual framework - a framework that would enable us to study man's economic problems in a different perspective and then to come up with an analysis of human behaviour as it is and as it can be induced to be. As we are not content with the framework that we have inherited from capitalist or socialist economics, we want to develop a new framework for economic analysis and policy-making. The challenge that we face is more complex that the one faced by other economists.

I would like to emphasize that the Islamic economic system is a part of the Islamic way of life which goes to make an organic whole. The Islamic economic scheme covers all major areas of economic activity. If the Islamic system is equated simply with the abolition of interest and introduction of *Zakāh* this would amount to some kind of an over simplification. I agree that abolition of interest and the introduction of the institution of *Zakāh* are the most important pillars on which we have to base the new structure of society and economy, but they do not go to make up the whole structure. They constitute pillars for the structure. They symbolise a very different approach to man's economic problems: an approach free from exploitation of man by man; an approach leading towards the establishment of a just and sharing society, where the well-being of each is tied to the wellbeing of all. Abolition of interest is one of our primary targets. Establishment of Zakah is a priority of objective in our scheme. But they do not constitute the be-all and end-all of the Islamic economics. So my submission would be that, however limited be the area of our enquiry in this Seminar we must keep the total perspective in view. We have to be very clear that our target is a fundamental change in the economy and society: a change that affects peoples' attitudes and motives, their consumption and production relationships, society's institutions and structures, individual life styles and collective policies at all levels.

Secondly, we should try to differentiate between an *Islamic* economy and an *Islamising* economy. the ideal should always remain before us but to achieve that ideal we may have to travel a long way. There has to be a period of transition and the problems of transition are, by definition, somewhat different from the problems we would face in an Islamic economy. I would invite my fellow economists to carefully differentiate between these phases and to develop a transition path so that we can systematically and vigorously move from the present Islam-neutral status-quo of the contemporary Muslim world towards the ideal of an Islamic society and economy. Here we have to be careful about two things: First, never to allow our idealism to be dampened down because of the difficulties that have to be surmounted and secondly, never to allow the transition period to turn into a permanent phenomenon. To ignore the realities of the transition phase would be futile, but to let it become a permanent state could be fatal. We have to pursue the middle path, wedding idealism with realism.

I would also like to avail this opportunity to invite my colleagues to realise the importance of experimentation in the field of applied Islamic economics. At the theoretical level, we have to develop workable models and spell out policy alternatives that would lead towards the realization of our socio-economic objectives. We have to help Muslim ilnstitutions and governments in their efforts to implement the Islamic economic scheme. We should be prepared to entertain honest differences of opinion and to learn from experience and experimentation so as to sharpen our tools of analysis and refine our policy prescriptions. Looking into the vista of Muslim history, one finds that Muslims have made a number of experiments with countless achievements to their credit but there are also a few failures in the balance sheet. Islam is free from all error, but Muslims are human beings. We have to make every effort to reach our ideal but we should be prepared to face all eventualities. It is only through sincere and concerted experimentation, with critical appraisal of our own performance, with ceaseless dialogue and discussion amongst ourselves and above all with ideological integrity, professional honesty, intellectual openness, and sincere humility that we will be able to face the odds that confront us. The challenge we have resolved to meet is great; but the potential of Islam is still greater. I have no doubt that with faith in Allah and with rigorous and imaginative effort we will be able to establish the Islamic socio-economic order and to show the world a new path that leads to the establishment of a truly just human society.

EDITOR'S NOTE

Fourteen papers were submitted in the Seminar on Monetary and Fiscal Economics of Islam in Holy Mecca. The present volume contains all the papers except the one on "Islam and Money" prepared in Arabic by Dr. Rafik Al-Misry and presented by Dr. Mohammad Afr. It is most unfortunate that this paper could not be included in the proceedings, as the English translation was not available on time.

It is of interest to note that Dr. Ariff, Dr. Chapra, Dr. Kahf, Mr. Laliwala, Dr. Mahfooz Ahmad, Dr. Mannan, Dr. Salama, Dr. Uzair and Dr. Naqvi have revised their papers in the light of the Seminar discussions, and that the present volume contains the revised versions of their papers. The rest of the papers appear in their original form, subject of course to changes of an editorial nature. At this juncture, it is perhaps in order for me to stress that the papers contained in this volume are written by authors in their personal capacity and that the views expressed represent the personal views of the contributors and do not reflect the views of the institutions or agencies to which they are attached.

I have taken the liberty of abridging lengthy papers by rephrasing long-winded sentences, paraphrasing some of the lengthy quotations, transforming some portions into footnotes, and summarising some of the passages which were somewhat verbose. The purpose of all this was to make the papers more readable without changing their substance. Readers may, however, discover that some of the footnote information is incomplete. There was nothing much I could do about that.

The Seminar discussions, which followed the presentation of papers by their respective authors, are compiled and furnished in a fairly readable form. Readers may find some of the comments somewhat redundant, as some authors have subsequently revised their papers taking into account some of the comments made during the Seminar. Some parts of the discussions had to be dropped where the tape recordings of the proceedings were rather unintelligible.

An attempt has been made in the "Introduction" to compile the salient points made during the course of the Seminar and to arrange them in an orderly manner under broad sub-headings. The main purpose of this was to put the Seminar contributions in proper perspective before the readers. I hope that I have not done any injustice to any contributor in preparing this introductory chapter.

I wish to take this opportunity to place on record my sincere gratitude to the International Centre for Research in Islamic Economics (ICRIE), King Abdulaziz University, Jeddah, for giving me a chance to edit the proceedings of a seminar of such academic, international and historical importance. I accepted this task with humility and confidence, motivated by a strong commitment to Islam. I am thankful

INTRODUCTION

Mohamed Ariff*

1.

THE CONCEPT OF AN ISLAMIC ECONOMY

Monetary and fiscal economics of Islam hinge crucially upon the kind of Islamic economy envisaged. It is therefore essential to begin the Islamic monetary and fiscal analysis with a clear concept of an Islamic economy. What is an Islamic economy? How does it work? What makes it tick? These questions are indeed difficult to answer, especially because no Islamic economy really exists anywhere in the world. Such an economy must have prevailed in the 'classical' era, about which no rigorous research has been done so far. Besides, conditions have changed so profoundly since the 'classical' days that the 'classical' structure might provide only a partial basis for conceptualising a 'modern' Islamic economy. This, of course, does not mean that the basic character of an Islamic economy is subject to change over time. It cannot be denied, however, that structural changes over time do affect the profile of the economy significantly.

It is sometimes said that when there are two economists, there will be three opinions. True to the discipline to which they belong, the Muslim economists at the International Seminar on Monetary and Fiscal Economics of Islam have agreed to disagree on several points. However, it is of interest to note that these differences relate only to matters of detail and that there is a clear unity amidst diversity on a number of major and basic issues.

Although each participant seems to have his own perception of what an Islamic economy is all about, the conceptual differences in the final analysis are really no more than marginal. The divergence of views, if any, is largely due to differences in the interpretation of the Islamic Shari'ah. There is no doubt that the Seminar has helped narrow the gap at the conceptual level so that the anatomy of an Islamic economy becomes fairly visible in the form of a vision which is capable of being translated into reality.

It is significant to observe the consensus to the effect that an Islamic economic system is different from other contemporary economic system, so much so that Western concepts, notions, ideas and instruments are not applicable to an Islamic economic system without suitable modifications. For, it has been duly recognized that the moral values and the ethical norms of Islam do significantly affect the mode of economic behaviour of Muslims in an Islamic society.

* The author wishes to record his thanks to Dr. Abdul Mannan, Prof. Khurshid Ahmad, Prof. Dr. Nejatullah Siddiqi and Dr. Mohammad Anas Zarqa for their valuable comments on an earlier draft of this introductory chapter. Their comments and suggestions have greatly helped the author in preparing the revised version as it now appears.

Nevertheless, it is interesting to see an Islamic economy being conceptualised by some in a highly idealised form which clearly portrays an economic behaviour based strictly on Islamic ethics and which boldly assumes that all Muslims behave puritanically. To put it differently, the Islamic economy is conceived to be so entirely different from all other economies in almost every single detail that Western concepts, ideas, tools of analysis and policy instruments are all in danger of being rejected as totally irrelevant and completely alien to an Islamic economic system. This approach seems to symbolise ultra-conservatism. Of course, there can be no harm if one begins the analysis with an idealistic model of an Islamic economy and subsequently introduces elements of realism into it by relaxing the unrealistic or heroic assumptions. In fact, there is virtue in adopting such an approach, as shown by the history of the development of economic thought in the West, where economic models based on perfect market conditions have preceded economic analyses that are more down-to-earth, incorporating market imperfections. Seen in this light, a model of an 'ideal' Islamic economy would provide a convenient and logical starting point. But, care must be taken to ensure that unnecessarily stringent conditions are not built into the model in the name of an 'ideal' Islamic economy.

To be sure, the Islamic economy is based on the Islamic *Shari'ah* which governs all aspects of human behaviour. The Shari'ah is meant to provide only a broad guideline and it therefore spells out no details, as pointed out in the Seminar by Ahmad Mohamed Ali. Nevertheless, the Shari'ah is perfect in the sense that it is valid for all countries and at all times. Since the Shari'ah transcends space and time, it must refrain from details which are bound to vary from place to place and from time to time. However, as Khurshid Ahmad carefully observes, it will be wrong to conclude that the Shari'ah deals only with generalities and not with specifics, for it is capable of being specific as well through extensions, inferences and deductions. On matters of some detail, it is a question of interpretation where logic and common sense must prevail.

In an 'ideal' Islamic economy, ethics and economics are not only compatible but also inseparable. For, Islam is not just a religion but a complete way of life. Economic behaviour in such a society cannot be adequately explained without reference to the Islamic ethics which govern it. It is in this sense that 'Islamic man', as conceived by some including Akram Khan, Sabahuddin Zaim and Anas Zarqa, differs from 'economic man'. 'Islamic man' draws upon his moral resources and acts in accordance with ultimate ethical values, whereas 'economic man' indulges in his personal preferences motivated by self-interest. This does not mean that 'Islamic man' is not as rational as 'economic man', for rationality consists not only in pursuing the chosen ends consistently and efficiently but also in choosing the ends themselves.

There are some Muslim economists who seem to believe that no Islamic economy can really function where 'Islamic man' does not exist, while there are some others who seem to think that it is possible to operate an Islamic economy where the people respond rationally to the various incentives and disincentives offered by the Islamic system, even if their economic behaviour is not exactly in line with that of the so-called 'Islamic man'. The difference between 'Islamic man' and the 'ordinary' Muslim is that the former acts voluntarily while the latter needs to be 'induced' by the policies of the Islamic State. In other words, moral restraint is supplemented or reinforced by policy constraints in an Islamic economy. This presupposes a certain amount of state intervention.

Although there is a consensus as regards the need for state intervention in an Islamic economy, opinions differ on the question of the extent of such intervention. Thus, some tend to view an Islamic economy essentially as one based on individual freedom, while some others are inclined to look upon it as one where the state has a dominant role to play. There is really no valid reason to be dogmatic about this, for it would depend on the actual circumstances. In the final analysis, state intervention appears to be a substitute for the voluntary actions expected of an 'Islamic man'. Where such voluntary actions are not forthcoming, state intervention may well be justified. It would therefore depend on the 'stage' an Islamic economy happens to be in. In the transition stage, we may envisage a great deal of government intervention which can be gradually reduced to the bare minimum as an Islamic economy moves towards maturity.

What makes an Islamic economy different from other economies is its value system which influences its consumption, production, saving and investment decisions. It is perhaps an exaggeration to assume that these functions are performed very differently in an Islamic economy. For, the price mechanism plays the same allocative role in an Islamic economy as in other systems. We shall have more to say on this later on. Suffice it to note here that the mechanics of the behavioural sciences are basically the same in all societies regardless of their underlying differences in the value systems. Islamic economics, seen in this perspective, provides no basis for rejecting the conventional tools of economic analysis which are really neutral or value-free. Thus, the marginal analysis with respect to costs, revenues, rates of substitution, etc., concepts such as propensities and elasticities, and principles like the multiplier, the accelarator and comparative advantages in international specialisation, developed in the West, are all applicable in the field of Islamic economics as well. Care must, however, be exercised to ensure that the apparently value-free analytical tools are really neutral before they are incorporated into the economic analysis of Islam. Tools like the IS-LM framework, in which interest rate plays a crucial role, are unambiguously alien to the Islamic ideology and hence totally unacceptable.

Similarly, we must be wary of using concepts like 'optimality' indiscriminately in Islamic economics. For, what may constitute an optimal solution in one situation may be sub-optimal in another, depending on the set of criteria which are not necessarily value-free, Thus, for instance, Pareto optimality is based on a distributive justice according to which no one should be made worse off - so as to avoid interpersonal comparisons. Pareto optimality thus seems to be too restrictive to be a guide for redistribution in an Islamic economy which is much more egalitarian. In any case, it is generally recognized that Pareto optimality cannot provide a practical policy guide for any social system.

The preceding discussion suggests that there is no basis in Islamic economics for either a total rejection or an indiscriminate absorption of Western economic concepts, analytical tools and policy instruments. Thus the 'moderates' seem to acknowledge that an Islamic economy is different from other economies but deny that it is as stringent in its requirements as the 'conservatives' believe it to be.

The subject matter of economics is man, of course. Economics is essentially a behavioural science in that it constitutes a study of the behaviour of people as agents of consumption and production. And the ethical content of human behaviour is by no means unimportant. It is in this sense that ethics and economics are interwoven. A complete abstraction from all human values would, then, render economics an insubstantial discipline.

It therefore follows that the economic behaviour of Muslims in an Islamic economy cannot be explained without reference to Islamic values which are distinctly different from the values of other systems. The implication of all these is that consumption, saving and investment in an Islamic economy are bound to be somewhat different from those in other set-ups. While Islamic economists seem to subscribe wholeheartedly to this basic proposition, opinions are clearly divided when it comes to postulating the nature, character and mechanics of consumption, saving and investment decisions in an Islamic economy.

2.

CONSUMPTION

Consumption is regarded as the ultimate objective of all economic activities under both Capitalism and Socialism. In contrast, consumption in an Islamic economy is viewed by Monzer Kahf as a means towards the attainment of a Godly objective, i.e., to maintain human life in a state most conducive for the role of man as a vicegerent of God. He therefore thinks of 'optimum' level of consumption as one that yields maximum human time and energy for fulfilling man's obligations to God. This calls for moderation in consumption, avoidance of waste and conservation of God's bounties.

Akram Khan envisages a consumption behaviour based on Iqtisad and devoid of Tana'um, Israf and Tabdhir in an Islamic society where advertisement will play no more than an informative role, and interest-free credit for conspicuous consumption is not permissible.

However, we must recognize that the line between moderation and excess or between necessities and luxuries is changing over time and space. Thus, for example, there is no basis for asserting that the Shari'ah would not allow the purchase of a refrigerator on borrowed money, as has been pointed out by Ahmad Mohamed Ali.

Mohamed Ariff, like Akram Khan, assumes an 'ideal' Islamic society where consumers conform totally to puritan expenditure norms and observe austerity in their spending behaviour. He thus asserts that a low posture in consumption is simply a natural way of life and accordingly postulates that the marginal propensity to consume (MPC) in an Islamic economy is significantly low.

Even if we were to concede that the affluent sections of the population do practise moderation in consumption, the MPC of an Islamic economy may still be quite high so long as the country is at an early stage of development, with most of the benefits of growth accruing to the low-income groups who, on account of large unsatisfied demand, have a high MPC, as is pointed out by Ziauddin Ahmad.

It may also be argued, as indeed Mohammed Omar Zubeir does, that the Islamic prohibition of interest and discouragement of hoarding would raise consumption in an Islamic economy to a very high level. This line of reasoning is further extended by Mohammed Umer Chapra, who thinks that in the absence of well-developed money markets and business opportunities Muslims may be inclined to spend more in order to offset the risk of erosion in the value of money due to inflation.

It also appears that an Islamic economy being highly egalitarian, the transfer of income from the rich to the poor (through, say, *Zakāh*) will lead to a high MPC. However, the impact of income distribution on consumption propensities will depend on the structural and institutional changes which accompany such income transfers, as Ziauddin Ahmad carefully observes.

The nature of consumption in an Islamic economy is envisaged to be such that Abdul Mannan dismisses the notion of consumer sovereignty in the Islamic context. This issue is looked at somewhat differently by Saqr who says that the concept of consumers' sovereignty should be understood as seen in the light of Islam rather than as it is practised in capitalist societies where consumer rationality is sabotaged by commercial advertisements of all sorts. He asserts that the consumer is the true sovereign in an Islamic economy, as the ability of the producer to manipulate the rationality of the consumer is substantially curtailed. Saqr thus maintains that, in an Islamic economy, the consumer's legitimate desires are truly reflected through the price system.

3.

SAVING

Western theories usually postulate a positive relationhip between saving and interest rate. By implication, saving would be zero in an Islamic economy where interest rate must be zero. In fact, Syed Nawab Haider Naqvi even argues that, given positive time preference, zero interest rate will lead to negative saving. He further asserts that zero interest rate is not compatible with positive time preference, as the future needs to be discounted. He therefore, maintains that a positive interest rate is required to offset the marginal disutility of saving associated with positive time preference. He seems to pose two interest-free alternatives. One of these calls for replacement of private saving with public saving so that positive time preference in the private sector is offset by a negative time preference in the public sector. The other solution requires a combination of fiscal, monetary, price and wage policies designed to swell the undistributed profits of the corporate sector, which are then reinvested. He is strongly against the second alternative.

It is, however, extremely difficult to accept the diagnosis or the prescriptions made by Naqvi. In particular, his thesis that private saving will be lower in the absence of interest than in the presence of it, can be seriously questioned, not only because savers can be adequately rewarded without having to resort to interest payments, but also because saving is not motivated purely by the prospects of financial rewards.

Ariff swings to the other extreme. He claims that saving in an Islamic economy will be positive and large due to the low consumption posture. He attributes saving in an Islamic economy to Islam's stress on thriftiness in spending and moderation in consumption. He even goes so far as to conclude that saving in an Islamic economy will be 'painless', since moderation in consumption becomes a natural way of life for Muslims. Ariff's 'saving function' is thus based on the assumption of puritanic behaviour on the part of Muslims. This is not at all realistic, as is pointed out by Chapra.

The explanation offered by Kahf is plausible and convincing. He regards saving as a positive behaviour which people naturally like to adopt, motivated by the desire to be rich and secure in a world of uncertainty. To Kahf, saving is not an expression of abstention from spending, nor is it the residual of 'income minus consumption'. Kahf's 'saving function' is unique in that saving is not treated as the excess of income over consumption; on the contrary, an economic rationale for saving may even influence the level of consumption in Kahf's model. Kahf's treatment of *Zakāh* in his 'saving function' is also unique: for, until now *Zakāh* was seen only as tax on saving - i.e., as a disincentive to save - but Kahf postulates a positive relationship between *Zakāh* and saving. His reasoning is as follows. It will be in the interest of Muslims to increase their savings at least by the amount of *Zakāh* so that *Zakāh* payments do not lower their wealth positions; by the same token, it will pay them to invest these savings so that the return on investment at least equals *Zakāh* levies in order that they will not be made poorer by *Zakāh*. An extension of this reasoning also leads Kahf to suggest a positive association between saving on the one hand and 'spending for the sake of God' (which includes *Zakāh*) on the other.

4.

INVESTMENT

Turning to the question of investment, we note that investment in the context of an Islamic economy refers to the committing of capital resources to productive uses. In the neo-classical and Keynesian models, investment is treated mainly as a function of interest rate, although in the more recent models investment is often related to the rate of profit rather than to the rate of interest. Nonetheless, Western theories unambiguously assign interest to factor capital and profits to factor enterprise.

It does not, however, follow that capital is costless in an interest-free Islamic economy. For as aptly observed by Zaim and several others, Islam does recognize the productivity of capital, although it does not allow the factor's prior claim on the productive surplus. Mohammed Uzair, however, insists that capital cannot be treated as a separate factor in Islamic economics and that it should be merged with enterprise, capital being a "physical manifestation of enterprise." It is also of interest to note that Kahf is not prepared to regard capital as a fund, as it ceases to be a fund as soon as it is committed to participate in the production process.

Ariff submits that the holding of idle money balances will be minimised in an Islamic economy, as hoarding is discouraged in Islam and unproductive wealth is penalised by *Zakāh*. He therefore hypothesises that saving will be quickly mobilised and committed to productive uses either through interest-free lending or through profit-sharing investment. Such a scenario appears to be idealistic and, as pointed out by Chapra, it is quite conceivable for Muslims to hang on to idle balances without investing them especially if they face prospects of losses rather than profits. Besides, there is nothing un-Islamic about holding idle balances in times of such bleak prospects.

Several participants in the Seminar have made valuable contributions towards a better understanding of the investment phenomenon in an Islamic economy, and it will be appropriate to refer to these in the subsequent sections. Suffice it to note here that several scholars consistently maintain that investment in an Islamic economy will partake of the character of profit-sharing arrangements and equity participation.

5.

PROFIT AND EFFICIENT ALLOCATION OF RESOURCES

It cannot be denied that, in a capitalist economy, both profit rate and interest rate help allocate scarce capital resources effectively if not efficiently. In an Islamic economy, where interest rate has no legitimate role to play, the question of effeciency in resources allocation needs to be clarified. The search for an alternative mechanism is by no means over. While many Islamic economists believe that profit sharing would provide such a mechanism in the absence of interest rate, there are some others who seems to think otherwise. We shall first look at the role of profit in an Islamic economy and then discuss its implications for resource allocation.

Although the distinction between capital and enterprise would appear to be somewhat blurred in an Islámic economy, in view of the fact that both are subject to the same reward, namely profit, there is nothing un-Islamic about drawing a line between the two not only in theory but also in practice. In Islam, the owner of capital is not entitled to a fixed return, but he can legitimately share the profits made by the entrepreneur with the help of equity capital.

What makes profit sharing permissible in Islam, while interest is not, is that it is the profit-sharing ratio and not the rate of return which is predetermined. As Mohammad Mohsin rightly points out, owners of capital have no priority over others in the form of a fixed rate of return. Profit sharing, often mentioned in the literature and the Seminar discussions, refers to the assignment of one's resources to the productive sector through an entrepreneur in exchange for a share in the return on that investment. This arrangement, based on the principle of *Qirād* or *Mudaṛabah*, allows the financier to share the profits with the entrepreneur, while financial losses, if any, fall entirely on the former and not on the latter. If the entrepreneour uses his own capital in addition to 'borrowed' capital he bears only the losses devolving on his own capital. In the case of a partnership or Shirkah, which involves equity participation, profits and losses are to be shared by both parties, in proportion to the capital supplied.

Profits and profit sharing are thus legitimate in Islam. This has led many Islamic economists to suggest profit sharing as an alternative to interest. Kahf, for example, strongly believes that profit sharing can provide an efficient mechanism for allocating capital resources between various possible uses, as it would lend itself to be influenced by market forces. He, therefore, claims that the share of the *Muqarid* is determined by the forces of supply and demand - i.e., the availability of investible funds and entrepreneurial skills - in the *Qirād* market. We may interpret this to mean that capital will flow into those sectors which offer the highest rate of profit to the investor until equilibrium is reached in the sense of profit rates being equalised for all sectors. In addition, Akram Khan and Uzair suggest that these profit sharing ratios can be manipulated by the monetary authorities so as to control money supply in the economy and to divert capital flows into certain sectors.

However, Naqvi seems to regard the substitution of interest with profit sharing as somewhat crude and imperfect. He, in fact, rejects the substitution of interest by profit sharing as a resource allocating mechanism, saying that such a substitution would lead to monopolies, allocative inefficiency, economic instability and so on.

To be sure, profits are not sacrosanct. But, it is important to note that profit maximization, as understood in economics, is consistent with both normal and abnormal profits, in the sense of marginal cost being equated with marginal revenue in both instances. It is in this narrow mathematical sense that the profit maximization principle can be considered as neutral. But, the capitalist philosophy of profit maximization itself is value-loaded and, therefore, there is no place for it in Islam. Mahfooz Ahmad even contends that profit maximization cannot be an important motive of private enterprise in an Islamic framework. It would perhaps be more appropriate to say that profits and other moral goals are the moving forces of the private sector in an Islamic economy.

This takes us to a point raised by Naqvi: "while positive profits are not consistent with an optimal situation, a positive rate of interest is". The confusion here is caused by the application of capitalist terms to an Islamic system without exercising any caution. The term "profits" in the capitalist world refers to the reward for enterprise, whereas in the Islamic context it is a reward which has to be divided between capital and enterprise. In other words, "profits" in an Islamic system consists of return to capital and reward for enterprise. Therefore what may be called "excess" profit in a capitalist model may well be "normal" in an Islamic model, now that profit is inclusive of the return to factor capital as well. Seen in this perspective, positive profits are not inconsistent with an "optimal" situation in an Islamic economy. Besides, by zero profit economists mean zero excess profit of the marginal firm, as is pointed out by Zarqa.

Having rejected profit sharing as the sole or the most important principle of allocation, Naqvi pleads for retaining the institution of interest as a necessary evil in the "transition period". He argues that zero rate of interest is a necessary but not a sufficient condition for an Islamic order, since interest can be eliminated even under socialism. He admits that interest is ethically bad and recognizes that there is no place for it in Islam. But, at the same time, he contends that interest rate performs an allocative function in a capital-scarce economy and that the elimination of interest before the economy is fully Islamized will amount to removing interest from a capitalist society with disastrous consequences. His recommendation briefly is that interest rate should be gradually reduced to zero and not eliminated overnight by an administrative fiat.

We cannot, of course, quarrel with Naqvi's logic that the elimination of linterest alone will not convert a capitalist economy into an Islamic one or that the reduction of interest rate in a capitalist economy to zero will be disastrous. But, then, Naqvi implicitly assumes that everything about the economy remains unchanged except for the eradication of interest. This assumption is not valid, since the economy in the process of Islamization undergoes changes or transformations on all fronts. Moreover, his case in favour of a positive interest rate in the transition period is really an antithesis of the viewpoint of Islamic jurisprudence.

When the transition period is over and a full-fledged Islamic economy is set up, according to Naqvi, "The state will have to adopt an increasingly greater role in financing the processes of saving and investment". Naqvi even suggests that "the government may have to take over completely the management of the capital goods sector" of capital by the planning agency to help investment decisions.

Mannan comes to a similar conclusion in his paper without getting caught up in a discussion of the profit-sharing mechanism. He studies the allocation process in terms of objective and subjective factors. Objective considerations lead him to say that, if we do care for efficiency, we should use a "shadow price" or an "accounting price" for capital,which will constitute no more than a mere calculating device and not an income for capital owners. Subjective considerations lead him to present two axioms and ten criteria which provide some allocative guidance.

Mannan's shadow price proposal is subject to a barrage of criticism, in spite of the fact that he cautiously declares that his accounting price does not constitute a cost of production and that it does not influence the market prices in any way.

Then, there is the question of the mechanics of determining the "accounting price" of capital. And it is argued that this accounting price may be expressed in terms of opportunity costs. To give the accounting prices for capital an Islamic orientation, Mannan proposes that these prices be determined by "share-dividend index" or "profit index" of an industry based on a cross-section or a time-series analysis. It appears however that it will be extremely difficult to estimate these prices in practice.

Laliwala draws a distinction between "financial" capital and "physical" capital, and questions whether the so-called shadow prices represent interest rate on financial capital or the prices of physical capital goods. Kahf makes it clear the capital in an Islamic economy is not a fund, as it cease to be a fund as soon as it is committed to the production process. He argues that a capital fund deserves no reward, as it does not participate in the production process. He further maintains that the concept of profit sharing will help determine the price of "real" capital and obviate the need for fixing its shadow price. As Kahf sees it, the price of "real" capital is similar to the rental prices of capital goods.

Uzair suggests the use of profit rates prevailing in the economy for estimating the opportunity cost as a guide for project evaluation and resource allocation. Meanwhile Zarqa argues that it is the rate of return on equity capital and not the rate of interest which truly reflects the opportunity cost of capital. The shadow price of capital should then refer not to the shadow rate of interest but to the shadow rate of return on equity capital. Seen in this light, the shadow price of capital may be called for, not because interest rate is eliminated but because market imperfections, if present, distort the rate of return on equity capital.

6.

MONEY AND BANKING

It is widely acknowledged that money can continue to play its basic role as a medium of exchange, as a store of value and as a unit of account in an Islamic economy. For there is nothing un-Islamic about any of these functions. But, there is a controversy as to whether money creation in an Islamic economy should be confined to the central bank or whether the commercial banks should also be allowed to create money by creating credit.

Nejatullah Siddiqi, in his review of the literature, refers to Abu Saud who claims that the creation of artificial purchasing power by the commercial banks would allow these institutions to "gain a lot out of thin air no or air at all". Chapra makes a similar point, but his overall prescription seems to be nationalization of all commercial banks in an Islamic economy, although he lays no emphasis on it in his revised paper. Zubeir thinks that the question of nationalization of banks can be considered only as a last resort in an Islamic framework and asserts that it would be closer to the Islamic spirit of individual freedom if banks can function properly and efficiently in the hands of the private sector.

Chapra even goes as far as to say that the commercial banks should be deprived of the power to creat money by imposing a 100 per cent reserve requirement. Such a move would certainly reduce the commercial banks to no more than safe-keeping institutions. It is therefore not surprising to see that this proposal of Chapra's has met with strong resistance. It is interesting to see that Chapra himself revises his position in the revised version of his paper where he concedes that private commercial banks may continue to create credit, but suggests that created money or "seigniorage" resulting from it be transferred to the public exchequer for the sake of equity and justice. In any case, Chapra seems to exaggerate the dangers of credit creation, which is by no means unlimited, as is aptly pointed out by Ziauddin Ahmad, in view of the fact that the commercial banks are subject to central bank supervision and control.

Looking at the issues from a different angle, Siddiqi sees no dangers of overexpansion of credit in an interest-free system, since the liability to losses will effectively restrain the banks. And distributive injustice, if any, may be taken care of through institutional arrangements. It is Siddiqi's considered opinion that much of the objection to credit creation stems from the vague notion that credit is the child of interest. This he dismisses, saying that the ability of the banks to create credit is clearly independent of the terms on which credit is created.

It is however, difficult to refute the statement that the fractional reserve ratio system is inherently inflationary, as is pointed out by Mabid Al-Jarhi. It is also difficult to disagree with Al-Jarhi that creation of money based on the fractional reserve ratio system has, in addition to the redistributive effects of inflation, a number of other redistributive effects.

A number of commercial banking models have been envisaged in an Islamic economy. Siddiqi's model, which probably is the most familiar of all, has been used by Akram Khan in his analysis of inflation in an Islamic economy. The essence of Siddiqi's model is that it is based on a two-tier *Mudarabah* system where depositors place their funds in the *Mudarabah* account of the bank agreeing to share the profits made by the bank which in turn enters into *Mudarabah* contracts with entrepreneurs who seek capital. In this model, the liability to loss rests with the financier only, as the working party bears no part of the loss apart from the loss of time and effort. In the case of partnership contracts between the bank and the entrepreneurs, losses are to be shared by both parties proportionately based on the capital ratio, while profits are to be shared according to an agreed percentage ratio. Should the bank run into a net loss in a given period, the loss is to distributed proportionately between share capital and *Mudarabah* deposits.

Some Islamic economists, including Chapra, suggest the setting up of loss-compensating reserves built-up during good times to take care of losses in bad times. so that the depositors are absolved of this liability. It is pertinent to note that depositors with a guarantee of repayment become "lenders" who are not entitled to any return. It must also be emphasized that *Mudarabah* provides capital and not loans.

Chapra's model of Islamic banking is also based on the *Mudarabah* principle. Chapra, however, is rather concerned about the concentration of economic power that private banks might enjoy in such a system. He seems to prefer medium-sized banks which are neither too small to be uneconomical nor too large to wield excessive power. Chapra's scheme also contains proposals for loss-compensating funds and loss-absorbing insurance facilities. He also speaks of non-bank financial institutions whose specialty is to bring financiers and entrepreneurs together and to act as investment trusts.

Mohsin's model is also based on the profit-sharing principle, but profit sharing in this case is extended to cover the employees of the bank. Uzair, however, points out that this may not be legitimate from the *Mudarabah* point of view. We shall have more to say on Mohsin's model later on.

Ariff envisages an Islamic banking system based on profit sharing, although the *Mudarabah* principle is not specifically invoked anywhere in his model. His thinking is more along cooperative lines, where depositors become co-owners of the bank, sharing profits and lossess, while the bank enters into similar arrangements with its clients, again sharing both profits and losses.

It appears that profit sharing cannot be the basis for short-term loans, since it is extremely difficult to determine profits in such cases. There seems to be an unanimous view that a part of the demand deposits should be earmarked for providing interest-free loans. But then, there is the problem of bringing about an equilibrium between supply and demand for such 'costless' funds as demand will be theoretically unlimited. There is, of course, the possibility of the central bank augmenting the supply of such funds by providing refinancing facilities. Nevertheless, there is still a need for some mechanism to regulate the demand side. In this regard, Siddiqi's suggestion that banks apply a set of criteria sounds helpful.

It is pertinent to point out in this context that the *Mudarabah* principle can be invoked in the case of those short-term operations which are self-liquidating. It is also pertinent to note that much of the demand for short-term loans at present is attributable to the narrow equity base of modern businesses. The demand for short-terms loans can be substantially reduced if firms learn to meet their working capital needs from equity capital. In other words, even the short-term capital requirements can be met by widening the equity base.[1]

There is also the question of consumer credit. Ariff ignores this aspect of banking completely, to be consistent with his low-key consumption assumption. Akram Khan considers the possibility of providing interest-free loans (*Qard Hasan*) for consumption purposes, but he is prepared to extend it to "needy" customers only. Chapra's views on consumer credit are strikingly similar to Akram Khan's. There are proposals in the current literature to the effect that banks collect *Zakāh* and distribute the proceeds by way of grants and interest-free loans, the permissibility of which however is questionable, as is pointed out by Siddiqi. Uzair speaks of the possibility of banks facilitating the purchase of durables by consumers on an instalment basis, with banks financing the supply side and sharing the profits with the sellers of consumer durables. Mohsin even thinks of banks buying the goods for the

1. It was Dr. Anas Zarqa who brought this point to the author's notice during a private discussion.

consumer and adding a profit margin to the purchase price.

There are some problems with respect to credit for the government and the public sector. Some Muslim scholars including Siddiqi do not rule out the possibility of public sector projects being financed on the basis of *Mudarabah* or *Shirkah*. But Ariff thinks that equity participation by the private sector in public sector projects is by definition, out of the question and that the notion of profits is totally irrelevant for most public sector projects which are guided by social cost-benefit considerations. Ariff's suggestion is that a portion of the current deposits should be set aside for the purpose of interest-free government securities.

It is Mohsin who presents a detailed and elaborate framework for what he calls "*Ribā*-free banking" based on "sound banking principles". His model incorporates the characteristics of commercial, investment and development banks: it is a sort of blend of all these. Mohsin packs into his model various non-banking services such as trust business, factoring, real estate, consultancy, etc., giving the impression that an interest-free bank cannot survive on the basis of banking services alone. As Uzair carefully observes, most of these non-banking activities are of a sophisticated and specialised nature, so much so that they will be irrelevant to most Muslim countries of today at their present stage of development and will burden the banks with a lot of administrative problems. Uzair also finds some of the non-banking businesses mentioned by Mohsin too risky and hence unsafe.

The implicit assumption behind Mohsin's model is that it will be set up in a capitalist environment. He explicitly states that the Riba-free bank can co-exist with interest-based banks. This raises a number of questions regarding the permissibility of such co-existence in an Islamic economy and the practical problems such co-existence and inter-bank dealings would give rise to. In this connection, Uzair favours a phased programme to transform the entire banking system. Chapra and Siddiqi also go along with this and suggest that a time table be laid down to phase out all interest-ridden banks in an Islamic economy.

On central banking, the general opinion seems to be that the basic functions of a modern central bank are relevant also for an Islamic economy, although the mechanisms through which these functions are performed may have to be different in an Islamic set-up. Thus, the Bank Rate instrument will not be available to an Islamic central bank. Uzair suggests a profit-sharing ratio as an alternative which Siddiqi wholeheartedly endorses.

It appears that the instrument of open market operations will be available to the Islamic central bank. But the absence of interest-bearing securities may render the weapon somewhat blunt, although some including Siddiqi and Uzair seem to believe otherwise. Be that as it may, a number of conventional tools, such as cash reserve ratio, legal reserve ratio, selective credit controls, moral suasion, etc., may continue to be used in the economy after Islamization. In addition, a number of new instruments such as profit-sharing ratio, lending ratio and refinancing ratio are being suggested. It will be appropriate to take these up in the next section which deals with monetary policy.

A proposal by Uzair deserves a special mention here. He advocates that the central bank acquires an equity stake in commercial banking by holding, say, 25 per cent of the capital stocks of the commercial banks. The rationale behind this proposal is that it would give the central bank access to a permanent source of income so that it can effectively act as a lender of last resort. The danger, however, is that such equity participation would lead to the creation of vested interests which may prevent the central bank from acting judiciously.

7.

MONETARY POLICY

The choice and the role of policy tools in an Islamic economy would depend greatly on the policy objectives to be pursued. Four broad objectives seems to have gained wide recognition, viz. (a) internal stability, (b) distributive justice, (c) external equilibrium and (d) economic growth. The last two objectives appear to have received scant attention in the Seminar, as the discussion is dominated by closed and static economic models. Consequently, the focus is mainly on the goals of internal stability and distributive justice. It is of interest to note that monetary policy instruments are discussed mainly in the context of maintaining internal stability in the economy.

The question of internal stability is discussed by both Akram Khan and Ariff in their respective papers. In spite of adopting different analytical approaches, they come to the same basic conclusion, i.e., an Islamic economy is inherently stable. This conclusion is hardly surprising in view of their underlying assumption of an 'ideal' Islamic economy.

Akram Khan attributes the internal stability of an Islamic economy to built-in stabilisers which include interest-free banking, speculation-free stock exchange, just wages and the absence of market rigidities. However Khusro points out that interest-free banking may be inflationary, that demand for higher wages cannot be ruled out even in an Islamic economy and that monopoly and oligopoly elements may not totally disappear with the Islamization of the economy.

The internal stability of the system in Ariff's model is explained primarily by the absence of significant divergence between saving and investment and by the low MPC which gives rise to a weak multiplier so that economic distrubances are not magnified. Saving and investment decisions may well be independent even in an Islamic economy, as is pointed out by Ziauddin Ahmad. And the low MPC assumption is also questionable.

In the light of the above discussion, the proposition that an Islamic economy is inherently stable appears to be somewhat far-fetched. The main issue, however, is not whether an Islamic economy is inherently stable but whether an Islamic economy is potentially stable in the sense of having access to various stabilization policy instruments. On this there is a clear consensus and the capacity of an Islamic economy to activate effective stabilization measures is well recognized.

Laliwala places the entire blame for inflation neatly and squarely on the government and believes that non-deficit budgets and reduction in external reserves (for oil-exporting countries) would eliminate the inflationary pressure. We may find Laliwala's diagnosis of and prescriptions for inflation hard to accept.

Policy measures that would ensure internal stability in an Islamic economy are warranted by the preceding analysis. Ariff argues at length that the absence of the interest rate instrument will not cripple the monetary policy in an Islamic economy, since interest rate as an instrument of monetary policy is not all that powerful even in a capitalist set-up, contrary to popular belief. Although he stresses that monetary policy in an Islamic economy can be activated by regulating the supply of money, which is what really matters in his opinion, he concludes that the scope for monetary policy in an Islamic economy is somewhat limited, not because of the non-availability of the interest rate instrument, but because of the neutralising changes in the velocity of money circulation.

Ariff raises the issue of monetary compensation for financiers, who provide interest-free loans, against erosion in the value of money due to inflation and argues that there is no interest element involved in such compensation. So does Sultan Abou Ali. The issue of indexation needs to be approached with extreme caution, as its ramifications remain unexplored. Its permissibility from the Islamic *Shari'ah* point of view would depend very much on the technicalities which are yet to be spelt out in detail.

It appears that a number of monetary instruments would be available to the central bank in an Islamic economy. No doubt, the conventional tools of control such as the reserve ratio and qualitative measures including moral suasion can legitimately be used in an Islamic economy as well. Chapra lays considerable emphasis on policy tools designed to regulate the supply of high-powered money and bank credit.

Siddiqi proposes "Refinance Ratio" which refers to the central bank's refinancing a part of the interest-free loans provided by commercial banks. Variations in this ratio would influence the quantum of short-term credit extended by the commercil banks. Siddiqi also proposes "Lending Ratio" by which is meant the percentage of demand deposits that commercial banks are obliged to lend out as interest-free loans. This ratio is referred to as "*Qard Hasan* Ratio" by Akram Khan. The central bank would be able to influence the availability of interest-free credit through changes in this ratio. Ariff visualises a similar instrument, i.e., the share of interestless government securities in the advances portfolios of banks and non-banking financial institutions. This ratio may be manipulated by the central bank so as to affect the availability of investible funds in the economy. No doubts have been expressed about the permissibility of these instruments from an Islamic point of view.

Some controversy seems to exist with regard to the proposed instrument of "profit-sharing Ratio". Akram Khan refers to it as a "Profit-share Ratio" in his paper, but it is Uzair who attaches considerable importance to it as an instrument of monetary policy. This ratio, on the basis of which profit is to be shared between the bank and the entrepreneur, lends itself to be adjusted upward or downward by the central bank for the purpose of bringing about an equilibrium between supply of and demand for investible funds. According to Siddiqi, this represents a potent regulatory device in an Islamic economy where Bank Rate cannot be used. Moreover, this instrument is also capable of inducing changes in the sectoral allocations, as it can be used in a discriminating manner so as to encourage some sectors at the expense of others.

However, Abou Ali insists that a profit-sharing ratio should be determined by market forces and that the central bank should refrain from meddling with it. Chapra objects to it on the premise that the manipulation of this ratio by the central bank would amount to changing contractual relationships in the economy. Looking at it from another angle, Saqr says that profit sharing is a contractual agreement between two parties and that this agreement can be changed only by a mutual consent and not by a third party such as the central bank. He also warns that arbitrary changes in the profit-sharing ratio will upset the operation of the economy.

Siddiqi defends the profit-sharing ratio as an instrument of monetary policy by driving home the point that there is nothing in Islamic jurisprudence to prevent the Government from ruling that a certain profit-sharing ratio cannot operate, although he concedes that the advisability of such a move would depend on the actual circumstances and the ultimate ends. He goes on to say that, as the Islamic central bank is concerned not only with money supply but also with a number of socio-economic goals, it would be advisable to set a range within which some manoeuverability may be allowed. This suggestion falls in line with Laliwala's proposal in favour of a maximum ratio and a minimum ratio as a compromise that would permit some flexibility.

It is perhaps desirable not to alter the profit-sharing ratio for on-going projects financed by the banks so that such changes would be applicable only to 'new' projects that banks may consider financing. It would be unfair to interfere with the profit-sharing ratio previously agreed upon, as it would amount to changing the rules of the game in the middle of the game.

Al-Jarhi suggests an alternative approach which calls for a more discrete and less direct intervention by the central bank. This means that the central bank would be able to influence the profit-sharing ratio indirectly through an adjustment in the supply of *Mudarabah* funds instead of changing this ratio through administrative fiat. The two possible means of influencing the supply of *Mudarabah* funds, as envisaged by Al-Jarhi, would be (i) to set aside a portion of the central bank's funds which could be deposited with the commercial banks for purpose of Mudarabah investments and (ii) to float profit-sharing bonds, the proceeds from which would be made available to these banks to augment their *Mudarabah* funds.

The question of permissibility of the instrument notwithstanding, Osman Rani raises doubts about its efficacy. He highlights the possibility of an increase in the cost of capital through a rise in the profit-sharing ratio in favour of the financier being passed on to the consumers in the form of higher prices.

Open market operations also seem to present some thorny problems in an Islamic framework, although Uzair is of the opinion that there may be scope for open market operations in treasury bills even in an Islamic economy. And he attempts to justify such operations based on treasury bills in an Islamic economy. His reasoning is that the interest element here is so small that it is equivalent to service charges. This obviously begs the questions: why, then, should the return on treasury bills vary with time?

Ariff speaks of interest-free bonds, but he rules out the possibility of these Islamic bonds playing the role of conventional bonds in open market operations, as they can only be sold and bought at face value. This implies a very limited scope for open market operations as an instrument of monetary policy in an Islamic economy.

Siddiqi, however, visualises that the central bank could buy or sell commercial papers in the open market. This Akram Khan finds unacceptable, as it amounts to the grafting of the present-day stock exchange operations-which offer an unlimited scope for wild speculation - on to an Islamic economy. This view of Akram Khan's is apparently influenced by his assumption that all speculations are un-Islamic. It is of relevance to note that stabilizing speculation is permissible in Islam, as is pointed out by Zubeir. But there is no doubt whatsoever that destabilising speculation, speculative transactions in commodity markets and futures trading without physical transfer of commodities are un-Islamic, as is shown by Abou Ali, Ariff and others.

Uzair, too, is not sympathetic to the idea that the central bank should resort to buying and selling of stocks and shares. For stocks and shares are poor substitutes for treasury bills; and the central bank's active involvement in the securities market may introduce distortions in the prices of stocks and shares.

The message is loud and clear: an interest-free Islamic economy can design and adopt a variety of monetary policy instruments, according to the needs of the circumstances, depending on the level and stage of the development of the money market. Thus, the absence of interest rate does not reduce the scope for monetary policy interventions.

8.

FISCAL POLICY

Islamic fiscal policy is discussed mainly within the framework of Islamic distributive justice. To be sure, distributive justice is not the only objective that fiscal policy is capable of achieving; and, by the same token, fiscal policy is not the only means of ensuring distributive justice in an Islamic society. *Zakāh* dominates the whole discussion, as if distributive justice is concerned only with transfer payments and as if *Zakāh* is the only instrument available. This does not mean that other aspects of distributive justice and other functions of *Zakāh* are completely ignored. Indeed, Khurshid Ahmad draws attention to Islam's emphasis on equity and justice in all aspects of human relations, saying that the notion of "fair wages" and the concept of "just prices" also form part and parcel of social justice as envisaged by Islam. Several scholars, including Kahf, attempt to assign a counter-cyclical role to *Zakāh*, in addition to its traditional distributive function.

The principles of *Zakāh* are given excellent treatment in the "theoretical" part of Abidin Ahmad Salama's paper. Al-Raddady, however, objects to any "theoretical" treatment of *Zakāh*, since "theoretical" analysis implies a set of relations that are conceivably falsifiable. He further observes that non-conformity of Islamic principles to a given theoretical model does not by any means diminish the practical importance of Islamic economics.

Some differences of opinion seem to exist with respect to the *Zakāh* base. Kahf thinks that the *Zakāh* base ought to include industrial and real estates. Siddiqi questions the basis, from the Shari'ah viewpoint, for including the capital of industrial establishments, such as machinery, buildings, etc. in the *Zakāh* base. Mahfooz Ahmad looks upon *Zakāh* as a form of wealth tax and therefore he argues that it is not permissible to include income in the *Zakāh* base. But Salama holds on to the view that all incomes in excess of a certain minimum should be allowed to escalate with the rate of inflation. It is also of interest to note in this context that some Islamic economists, including Al-Raddady and Salama, are in favour of widening the *Zakāh* base so as to make *Zakāh* a potent fiscal instrument.

Zarqa triggers off a controversy by arguing that *Zakāh* must be paid on a zakahtable asset regardless of whether it is owned by private individuals or by government. His reasoning is that *Zakāh* is earmarked for certain purposes as spelled out in the *Qur'an*, whereas Government revenues are not. Kahf disagrees strongly with Zarqa on this point and says that, according to *Fiqh*, commercial exploitation of mineral resources can be undertaken only by the state and not by individuals. He even goes as far as to suggest that revenues from such state-owned mines are similar to *Zakāh*, regardless of whether these are used to benefit the poor or society as a whole. Siddiqi's views on this issue are similar to those of Kahf's. Siddiqi thinks that the government may be exempted from having to pay *Zakāh* on state-owned assets, since it is supposed to take care of every individual, rich or poor, and since income transfer from the rich to the poor is not the only rationale for *Zakāh*

The question of imposing taxes in addition to *Zakāh* in an Islamic economy is raised by Salama in his paper. The need for such additional taxes is recognized and appreciated by all, in view of the fact that *Zakāh* funds cannot be used for purposes other than those clearly specified in the *Qur'an* and that the modern state needs funds to meet its enormous recurrent and development expenditures. But, then, Salama attempts to justify these taxes on the ground that there is always "an obligation on wealth beyond *Zakāh*". This Zarqa finds difficult to accept, as it implies that only the rich can be asked to pay these taxes (in addition to *Zakāh*) and not just anybody. Moreover, Zarqa points out that *Zakāh* is designed to help the poor and that the financing of government services has to be based on an entirely different set of Islamic principles. Siddiqi is of the opinion that the state is entitled to impose additional taxes which may well be spent on, say, the construction of roads, without being earmarked for the transfer of income to the poor.

Upon close scrutiny, it becomes fairly clear that there is really no conflict of views between Zarqa and Siddiqi with regard to the rationale for additional taxes. Confusion can be avoided, if one makes it clear what one means by additional taxes. If extra taxes are taken to mean non-*Zakāh* taxes, then they need not conform to the *Zakāh* rules with regard either to the sources or to the uses of the revenues.

It is interesting to see some ingenious ideas being suggested in an attempt to turn Zakah into a powerful fiscal instrument in an Islamic economy. Kahf, for example, views *Zakāh* as a fiscal tool which serves not only the goal of redistribution of wealth and income but also the goals of development and stabilization.

Akram Khan speaks of a *Zakāh* Budget which may run into surplus in times of inflation. Observing that the distribution of *Zakāh* in cash may be inflationary, Osman Rani recommends *Zakāh* distribution either in the form of goods such as fertilisers and machines, or in the form of services such as free medical and educational facilities for the poor. Kahf advocates collection and distribution of *Zakāh* in kind, i.e., consumer goods and consumer durables, in times of recession and unemployment, thus "forcing zero saving on the part of *Zakāh* receivers and emptying the shelves of *Zakāh* payers".

However, Shafey has some reservations about the collection and distribution of *Zakāh* in kind. He draws attention to the heavy burden this would place on the *Zakāh* administration and to the high costs of collection and distribution of *Zakāh* that would have to be incurred.

Kahf toys with the idea of changing the ownership titles of current and fixed capital - instead of collecting and distributing *Zakāh* in the form of money - so as to minimize the effect of *Zakāh* on aggregate demand in times of inflation. Siddiqi questions the practicality of this proposal and feels that it would be cumbersome and unnecessary to tamper with ownership titles, as there are simpler alternatives such as the postponement of *Zakāh* collection and distribution.

The so-called "*Zakāh*-benefit mix", proposed by Akram Khan is also aimed at combating inflation. This "mix" refers to the various combinations in *Zakāh* disbursements. According to Akram Khan, the state has discretionary powers to vary the share of *Zakāh* accruing to any particular group of rightful beneficiaries. The point made by him is that this discretion can be used in such a way as to keep the aggregate demand in the economy at a reasonably low level by allocating a lower share of the *Zakāh* proceeds to those with high MPC.

Kahf sees merit in distributing *Zakāh* is such a way as to enhance capital formation in the economy, with an accent on greater employment and better income for the poor rather than on immediate satisfaction of their wants. Akram Khan's "*Zakāh* certificates" are in fact aimed at investing *Zakāh* funds in industries which would provide employment for the poor.

It is interesting to notice in Siddiqi's review of the literature suggestions to the effect that commercial banks collect *Zakāh* and disburse the proceeds by way of grants and interest-free loans. Abou Ali draws attention to difficulties in making budget appropriations by groups of beneficiaries. He therefore suggests that a portion of the total government revenue equal to *Zakāh* be set aside for the benefit of those who come within the ambit of *Zakāh* so that the balance can be spent for other purposes. It is also of relevance to mention that Kahf lays considerable stress on the need to devise "*Zakāh* equivalent" for taxing non-Muslims in an Islamic economy.

According to Naqvi, distributive justice should be considered both marginally and intra-marginally. He drives home the point that in spite of income being equalised at the margin, substantial intramarginal inequalities would still exist. He therefore holds the view that *Zakāh* alone is not enough to ensure distributive justice and calls for additional measures such as death duties.

Zubeir's concern, however, is that the distributive system must not encourage the practice of begging by the poor. He does not subscribe to the view that snatching from the rich and giving to the poor will really help to alleviate poverty.

The tenor of the preceding arguments adequately reflects the Islamic economists' concern for efficiency even when they discuss equity. But Zubeir points out that it would be wrong to look at the distributive system solely from the efficiency angle. He underscores the importance of first ensuring that the distributive system complies with Shari'ah before debating the question of efficiency. He also emphasises the need to consider the system as a whole, for efficiency cannot be measured purely in terms of productivity increases and capital accumulation.

The preceding discussion is also indicative of the preoccupation of the Islamic economists with *Zakāh* as the fiscal instrument in an Islamic economy. It is Al-Jarhi who draws attention to the fact that *Zakāh* does not constitute the entire fiscal system of an Islamic state. He therefore places considerable stress on the need to devise other taxes within the Islamic framework. In this connection, Al-Jarhi wishes that Islamic criteria for such taxes be discussed. It is pertinent to note that Salama barely touches on this aspect of the Islamic fiscal policy in his paper by invoking the concepts of vertical and horizontal equity. According to Salama, vertical equity requires the unequals to be treated unequally, whereas horizontal equity refers to equal treatment of equals. But he does not delve deeply into these criteria.

It is of interest to note that Shafey speaks of modernising the Islamic institution of *Waqf* and extending its activities so as to combat the problem of poverty at its roots. He thinks that non-government Muslim foundations can play an important role in eliminating illiteracy, malnutrition, sickness and other causes of poverty. and he believes that there are enough rich individuals and families in the *Ummah* for establishing such private foundations.

Finally, for the sake of completeness, mention must be made of measures designed to reduce income disparities among Muslim countries. The panacea suggested by Mahfooz Ahmad is massive international income transfers from the rich to the poor Muslim countries. But, Khurshid Ahmad is of the view that aid may not be the best vehicle for bridging the gap between the rich and poor countries of the Muslim World. He puts forward closer economic cooperation and freer trade flows between Muslim countries as alternative solutions.

9.

GENERAL OBSERVATIONS

In the preceding sections an effort has been made to capture the main highlights of the Seminar papers and discussions in a summary form under several major sub-headings. In what follows, we shall attempt to round it up by making some general observations.

The preceding survey of the papers and the proceedings of the International Seminar on the Monetary and Fiscal Economics of Islam clearly exhibit professionalism which largely account for the diversity of views expressed. All this manifestation of diversity notwithstanding there are several central ideas which seem to have gained general acceptance. Thus, for example, it is aptly recognized that the Islamic economy is unique with the state playing a significant role to supplement market forces, that the institution of interest can be abolished without having to sacrifice efficiency for all loan transactions regardless of whether they are meant for consumption or investment purposes, and that an Islamic economy has access to a wide range of monetary and fiscal policy instruments in the interestless environment for promoting economic growth, stability, equity and other socio-economic objectives consistent with Islamic ideology.

It appears that the development of Islamic economics has gone through a number of stages. It has advanced from the stage in which Islamic economic values were identified and distinguished from other value systems, to the present stage where these values are being translated into analytical 'models', as it can be clearly seen in the papers presented in the Seminar. However, we observe two tendencies, the desirability of which may be scrutinised. One of these refers to the attempts by some writers to vindicate Islamic economic principles by demonstrating the ills of the modern money and banking system, flaws in the present distributive patterns, shortcomings of interest rate as a weapon of monetary policy, and so on. It must be pointed out that these "negative proofs", instead of contributing to the enhancement of Islamic economics as a social science discipline, may hinder the process by side-tracking attention away from the issues which are central and crucial to the economic order of Islam.

The other tendecy mentioned above is related to the attempts to borrow as much as possible from alien systems ideas, institutions and instruments which do not apparently violate Islamic principles. Of course, there is nothing wrong with that from the viewpoint of the Islamic ***Shari'ah***. No doubt, as aptly pointed out by Ehsan Rashid, such exercises are healthy in the sense that they would open up new avenues and dimensions for Islamic economics. We may, however, question the wisdom of promiscuously resorting to this at the present stage of the development of Islamic economics. An undesirable outcome of these 'external excursions' is that treasures from within wouldremain unexplored. It is important to do a stock-taking of our own inventories and identify gaps before attempts are made to fill in the gaps with materials borrowed from without. But, at the same time, we should not close the avenues of *Qiyas* and *Ijtihad* as supplements to the *Qur'an* and the ***Sunnah***, as is pointed out by Shafey.

We also feel somewhat uneasy about the over-emphasis especially with regard to the Mudarabah system in the realm of Islamic banking and *Zakāh* in the sphere of Islamic fiscal policy. This observation needs to be elaborated on, since we consider this to be fairly important.

As we have already seen, the Mudarabah principle is often invoked and extended to the banking system in an Islamic framework. Strictly speaking, the *Mudarabah* contract is between two *persons,* i.e., the financier and the working party *Mudarib* who does not invest any capital of his own. The application and extension of this principle to banking has already been questioned by Muslehuddin (in the First International Conference on Islamic Economics in 1976), to which reference are made in Siddiqi's review of the literature. The purpose of mentioning this here is not to revive an 'old' controversy, but to provoke some thinking on other possible alternatives.

Coming to the fiscal economics of Islam, we are struck by the variety of ingenious suggestions with respect to *Zakāh.* As we may recall, these include surplus *Zakāh* budget, collection and distribution of *Zakāh* in kind, postponement of *Zakāh*, variations in the *Zakāh*-benefit mix, etc. The main purpose behind all these suggestions is to make *Zakāh* a powerful instrument of fiscal policy. Perhaps now is the time to pause and reconsider whether these suggestions are really in line with the spirit of *Zakāh* as a divine institution.

It is clear that *Zakāh* is frequently mentioned together with *Salat* in the *Qur'an* and that it is one of the five pillars of Islam. We may venture to say, at the risk of disturbing a hornets nest, that is not proper to meddle with *Zakāh* in any way. For attempts to 'improve' *Zakāh* tend to change the fundamental character of *Zakāh* as a divine institution. For example, the suggestions to implement surplus *Zakāh* and to postpone *Zakāh* distribution in times of inflation amount not only to 'interfering' with the divine command but also to with-holding help at a time when the rightful beneficiaries need it most. Inflation hurts the poor most, and it will be unfair to prevent a part or the whole of *Zakāh* proceeds from reaching the poor in times of inflation, simply because *Zakāh* distribution is inflationary.

In the first place, it is not certain that *Zakāh* is always inflationary. Even if it is, this consideration should not be given an undue weight in administering *Zakāh*. And, *Zakāh* is not the only fiscal instrument that is available to policy makers in an Islamic economy.

10.

POINTERS FOR RESEARCH

It is manifest that the International Seminar on the Monetary and Fiscal Economics of Islam has made significant contributions to the advancement of Islamic economics. Elimination of Riba and application of *Zakāh* have received a fairly rigorous treatment and the stage is now set for examining the nitty-gritty and other issues in depth. There are a number of important issues on which research efforts need to be focussed in the future. We shall identify some of these issues in what follows.

(i) *Consumption function:* It appears that consumption function in an Islamic economy is unique as is indicated by the references to the *Qur'an* and the *Sunnah*. But there is a need to translate consumer behaviour into a set of postulates, tracing the movements towards consumer equilibrium in an Islamic economy. It is also pertinent to examine the implication of all these for growth, resource allocation, stability and employment.

(ii) *Built-in stabilizers:* There seem to be differences of opinion among professional Muslim economists as to whether an Islamic economy is inherently stable. In particular, it is important to look closely into the implications of the substitution of interest rate with profit sharing for the stability of an Islamic economy. Another aspect of built-in stabilisers also merits some attention, i.e., whether the built-in stabilisers cut both ways symmetrically by slowing down a recovery as it slows down a boom. This raises the question: at what level of activity will an Islamic economy be stabilized?

(iii) *External sources of instability:* It is well known that nowadays inflation and unemployment are being exported from one country to another. The closed economy assumption of the papers presented in the Seminar has not allowed a discussion of these issues. It will be interesting to know how an Islamic economy would respond to external disturbances.

(iv) *Stagflation:* Only passing references have been made to the phenomenon of stagflation in the Seminar. Needless to say, the simultaneous occurance of inflation and unemployment has baffled economists all over the world. This calls for a systematic analysis not only to find out if there is any significant conection between interest rate and stagflation but also to see if there are enough safeguards within the Islamic economic system against stagflation. If not, we would like to know what measures, both preventive and curative, can be taken in an Islamic economy to combat stagflation.

(v) *Economic growth:* The static nature of the economic models presented in the Seminar has also precluded a thorough discussion of issues related to economic growth in an Islamic economy. It is important to examine the implications of Islamic patterns of consumption, saving, investment and distribution of income and wealth for economic growth. We ought to find out whether an Islamic economy is pro-growth-oriented or anti-growth-oriented. In this context, the question of trade-offs between inflation and unemployment, and economic growth and income distribution, deserves special attention.

(vi) *Money and banking:* Despite the fact that a great deal of attention has been focussed on Islamic banking in the Seminar, there are still a number of issues which remain unresolved. The question of credit creation by commercial banks has caused a stir. Attention, however, has been confined to the legitimacy of credit creation by commercial banks on the basis of distributive justice in Islam. The question of efficiency has not been touched on. In addition, we need to devise adjustments in the pattern of ownership and control and the distribution of profits in the banking sector so as to lend legitimacy to credit creation, if it is to be considered an integral part of commercial banking on efficiency grounds.

(vii) *International banking:* Interactions of Islamic banks with interest-based banks which dominate the world present formidable problems. The simple solution based on "permission due to necessity" is not satisfactory. The search for a positive solution must therefore continue. If forward exchange dealings are not acceptable, spot exchange transaction can continue. The question of intervention by the monetary authorities in the foreign exchange market must also be looked into.

(viii) *Monetary instruments:* Although monetary policy instruments have received a lot of attention, there are some problems which need to be sorted out. The replacement of Bank Rate by a profit-sharing ratio may not be as simple as it appears to be at first sight. Although changes in the profit-sharing ratio will affect the cost of capital indirectly, the cost is known only in retrospect. Besides, it is a ratio and not a rate. It is important to examine the implications of the substitution of Bank Rate by a profit-sharing ratio in the light of the Seminar discussions.

It appears that the scope for open market operations in an Islamic economy is somewhat limited, because of the absence of interest-bearing bonds. What makes open market operations effective is the inverse relationship between bond prices and interest rate. The price of interest-free bonds is fixed at the face value and cannot vary by definition. One question which may be posed is: will open market operations based on commercial papers influence the profit-sharing ratio and hence the money supply in an Islamic economy?

(ix) *Fiscal instruments:* The discussion of fiscal issues has centred around *Zakāh*, as if *Zakāh* is the only fiscal instrument available in an Islamic economy. Consequently, *Zakāh* is looked upon as a multi-purpose fiscal tool. The point we ought to rub home is that *Zakāh* cannot solve all problems and that *Zakāh* does not devise taxes and expenditures outside the framework of *Zakāh*, without infringing any Islamic principles. To do this, we ought to be sure of the Islamic criteria for raising government revenues and designing government expenditures. What are the Islamic cannons of a good tax system? What pattern of government expenditure is consistent with Islamic ideals? Can such a system of taxes and expenditures be used to stabilise the economy, to promote economic growth and development and to redistribute income?

(x) *Project evaluation and appraisal:* Only one paper in the Seminar has dealt specifically with the problem of evaluating and appraising projects in an Islamic economy. It is obvious that Western techniques of project evaluation and appraisal, which are not value-free, are not applicable. The use of accounting prices of capital based on opportunity cost considerations has been suggested. Nevertheless, it is necessary to spell out the mechanics of computation, evaluation and appraisal before the permissibility of such techniques from the *Shari'ah* point of view can be ascertained. There is also a need to examine ways and means of incorporating Islamic values into project evaluation and appraisal, assigning appropriate weights to the various Islamic criteria.

(xi) *Empirical research:* The main purpose of empirical studies is to test a set of hypotheses or postulates. Since we are still in the process of crystallizing Islamic economic postulates, the scope for empirical research appears to be rather limited at the present stage of development of Islamic economics which is highly 'theoretical'. This does not mean that no empirical studies can be undertaken now. Although no full-fledged Islamic economy exists anywhere in the world, there are still pockets of Muslim communities which conform closely to the *Qur'an* and the Sunnah. It will be useful to study the economic behaviour of households and firms in these isolated communities which are more or less insulated from the vagaries of Western civilization and which the Westerners would brand as "traditional societies". It will also be revealing to study Islamic institutions such as Islamic banks and *Zakāh* administrations in 'hostile' environments. Empirical research in these areas will throw valuable light on the 'transition' problems. However, we ought to draw a demarcation line somewhere: for example, empirical studies relating to trade between Muslim countries, inflation in Muslim countries, income inequalities between Muslim countries, etc., are relevant and useful but they do not constitute Islamic economics proper.

ISLAMIC APPROACHES TO MONEY, BANKING AND MONETARY POLICY
A Review

Muhammad Nejatullah Siddiqi

Muslim society has been using money and practicing some form of banking since its inception. But the issues relating to money, banking and monetary policy posed themselves in an entirely new perspective in the twentieth century. The emergence of modern banks and other financial institutions in Muslim countries, the introduction of paper currency, the increase in public debt and the commercial dealings in securities presented the jurists with new questions to answer. Reviews of newly introduced Western institutions were followed by attempts to devise alternatives free from interest and other features repugnant to the *Sharī'ah* As Muslim countries regained political independence, their elite were called upon to manage their own affairs. Interest grew in such injunctions of Islam as were relevant for the management of money and finance, and the desire to spell out the distinctive Islamic approach, in contradistinction to Capitalism and Socialism, led to a number of fresh formulations.

The main juristic issues discussed in the early stages were usury and interst, gambling and speculation, transactions involving *Gharar* (chance and uncertainty), forward sales, foreign exchange transactions and debt transactions. While the problem posed by the introduction of paper currency was soon settled by accepting it as a substitute for the familiar gold and silver coins, the remaining issues continue to be debated.

We shall not be able to review this debate in this paper as it involves detailed juridical discussions. Our focus is the very recent writings, mostly by economists, on the nature and role of money, banking free of interest and monetary policy in an Islamic framework.

1

MONEY

Islamic writers concede the advantages of money as a medium of exchange, greatly favour the transition from barter to a money economy, and interpret the injunctions of the Prophet (peace be upon him) against *Ribā al Fadl* as steps to hasten such a transition in the early days of Islam[1]. These injunctions were directed at eliminating the possibilities of injustice and exploitation in barter and making it rational. Similarly, the prohibition of interest is vital for freeing the money economy from injustice and exploitation and making it rational.

This is borne out by examining the function of money as a store of value. Justice and efficiency considerations demand that money remains 'neutral', and the abolition of interest is a must for ensuring the neutrality of money. Making a reference to Keynes's *General Theory* (chapter 17: Properties of Interest and Money) Mahmud Ahmad emphasises the distinction conferred on money as compared to other assets by the institution of interest: It has a liquidity premium but no carrying costs. On the other hand, its elasticity of substitution is zero so that a rise in its demand must raise the rate of interest[2]. Should interest be abolished, the liquidity premium would not exist and the speculative motive for holding cash would also disappear. The liquidity premium is not the cause but the effect of interest. Speculative hoarding of money is at the root of instability in the demand for money and is the cause of trade cycles. To discourage hoarding and bring money to par with other assets (commodities), it should be subjected to a carrying cost, besides being divested of liquidity premium by the abolition of interest. The 2.5 per cent per annum zakah levy is regarded as a measure ensuring such a carrying cost. Abolition of interest and imposition of zakah would thus ensure that money serves its primary function of a medium of exchange.

The above point, made by several other writers besides Mahmud Ahmad, is further elaborated by Mahmud Abu Saud. When barter is replaced by the use of money as a medium of exchange it becomes possible for one to leave the process of exchange incomplete by withholding the money obtained from the sale of a commodity "....... because money obtained represents half an exchange transaction, the value of money related to itself in terms of present time as against future time becomes different. This is the basis of the 'time preference' theory."[3] The deficiency of money as a measure of value also derives from this phenomenon: the value of money is unstable because its supply cannot be controlled in view of the money holders' power to withhold it from circulation. Unless we standardise our money and stabilize its value, letting the values of the measured objects oscillate, no economy can be held in a wholesome state and nobody can rightly claim that money is the 'standard of value' or the real 'unit of account'[4]. As Abu Saud sees it, "Interest is gained because somebody *does not purchase* immediately on receiving the proceeds of his sales, because this somebody knows that if he abstains from spending he will gain ...."[5].

The key to a solution lies in subjecting money to the natural law of depreciation over time to which all other commodities are subjected. This is the purpose of the Islamic principle of *Zakāh* which makes all forms of private wealth 'depreciate' from the viewpoint of the private owner, by about 2.5 per cent annum. This will discourage

1. Nur al Din Itr : Illat riba'l Fadl', *al wa'y al Islami* (Kuwait) (116), Aug. 1974 pp 51-53 and Ahmad Safiuddin Iwad : "Tasawwur Jadid li riba'l fadl", *al wa'y al Islami* (Kuwait) (III), Mar. 1974 pp. 57-69.
2. Sheikh Mahmud Ahmad: "Man and Money", Islamic Studies, (Islamabad) IX (3) Sept. 1970, p. 226.
3. Mahmud Abu Saud : "Interest-free Banking", p.20. Paper presented at the First International Conference on Islamic Economics held at Mecca, 1976.
4. Ibid., p. 20.
5. Ibid., p. 91.

hoarding and make all money circulate. Money will serve as a medium of exchange and remain stable in value, thus serving as a standard measure of value.

Najjar has also discussed the nature and role of money in detail, concluding that hoarding, the rate of interest and reckless spending by governments are the main obstacles in the way of money playing its proper role in the economy[6].

Economic literature abounds in evidence to the effect that hoarding and speculative holding of money is a source of much trouble in the economy causing instability in the value of money, fluctuations in output and employment and resulting in maldistribution. Islamic economists have scored a valid point by demonstrating that *Zakāh* will discourage hoarding. The view that the institution of interest has something to do with speculative holdings of money is also substantially correct. Abolition of interest and consequent disappearing of bond market will leave little room for the type of speculation prevalent today. Savings will have to be invested in common stocks (ordinary shares) or deposited in the 'profit-sharing' accounts of the 'interest-free banks' (i.e. advanced to entrepreneurs, through banks, on a profit-sharing basis). This will still leave some room for holding cash in expectation of a rise in the expected rate of profit, or in anticipation of better investment opportunities.

This does not, however, decrease the weight of the Islamic economists' arguments noted above, nor does it seek substantially to modify them. It is only meant to put on record something which they have failed to note in the context of the above discussion. In so far as the 'speculative motive' would still be operative in an Islamic economy, it will no longer be capable of generating the wide fluctuations experienced at present. Along with the expected profit, the saver would have to weigh the possibility of loss which in a profit-sharing banking system would devolve entirely on him. Shackle's "focus gain - focus loss" hypotheses can be invoked to demonstrate that fluctuations in profit expectations may be counter-balanced by accompanying loss expectations and the net result may be a movement within not too wide a range. In an economy where speculative demand for money is a function of the rate of interest, the story is entirely different.

Money in a money economy must not cease to perform the function of a store of value. Although the carrying costs involved in *Zakāh* would certainly make an impact, they cannot obliterate precautionary and 'speculative' motives (as a function of the changing profit-loss expectations). While abolition of interest and the *Zakāh* levy would eliminate wide fluctuations, there will still be a need for a monetary policy to ensure stability.

The institution of credit and bank money has been another object of scrutiny by Islamic economists. Early writers saw something morally wrong in it. Some doubted its need and ascribed its proliferation to the vested interest of the banks. More recently it is realised that interest is the villain of the piece. Abolition of interest will to a great extent curtail the harmful features of credit creation of banks. However, strong arguments have been advanced against allowing private commercial banks to create credit in an interest-free banking system.

"Banks gain a lot out of thin air or out of no air at all. They create an artificial purchasing power and take advantage of the demand for it. This demand is also illicitly created by those who have managed to liquidate their assets and preferred to

6. Najjar, Ahmed: *al Madkhal ila'l-nazariyat al iqtisadiyah fi'l minhaj al-Islami.* Dar al-Fikr (Beirut), 1973. pp. 125-153.

enjoy a guaranteed income against their withheld money."[7] Having so pronounced, Mahmud Abu Saud sees no need for bank-created money, as real money can take care of all transactions. As to the extra money needed for financing innovations, the central bank can always issue additional currency for this purpose with no real harm done apart from a temporary inflationary effect[8]. S.M. Yusuf, while suggesting a 100 per cent reserve system, also seems to take a similar position[9].

The anti-credit verdict based on the alleged undeserved profits of the banks is further strengthened by a more valid argument that a credit economy is inevitably an inflationary economy. Over-expansion of credit caused by the lure of easy banking profits leads to an untenable situation with the inevitable downturn and depression[10]. The crucial question relates however to the role of interest in such a credit system. As Mahmud sees it, the cause of trade cycles is the institution of interest and not the creation of credit as such. The entrepreneur has to aim at a rate of profit which is three times as high as the rate of interest or even higher. Thus, ".....high pitching of profits is a compulsive phenomenon emerging from the institution of interest. The essential high profits can only be made by either raising the price of the produce or lowering the wages. Whatever proportion is assigned to either of the alternatives, effective demand is slashed."[11]

The remedy suggested by him is "to reshape the credit structure so that loans cease to command any interest and profits get reduced to the level where they will pay only for the labour of the enterprise. Pure profits will tend to reach zero at zero rate of interest."[12] It is difficult to agree with the last part of Mahmud Ahmad's statement, but that does not concern us here. But he is right in his vision that, with the abolition of interest, the structure of credit will be directly governed by the profits of enterprise.

It takes only one step further to conclude that the posibilities of overexpansion will then be severely limited, especially since the liability to losses will restrain the banks as the creators of credit. As Siddiqi has argued, in an Islamic system of banking without interest, "credit would be created only to the extent that there exist genuine possibilities of creating additional social wealth through productive enterprise. Demand for profit-sharing advances will be limited by the extent of the available resources and banks' ability to create credit will be called into action only to the extent of this demand, subject to the constraint imposed by profit expectations that satisfy the bank"[13]and their depositors. Earlier, Uzair must have had the same point in mind when he argued that the possibilities of overexpansion of credit can be eliminated by making capital and enterprise move together through abolition of interest[14].

7. Mahmud Abu Saud, op.cit.,p.91.
8. Ibid., pp. 91-93.
9. S.M. Yusuf, *Economic Justice of Islam*, Sheikh Muhammad Ashraf, (Lahore) 1971, p. 51.
10. Muhammad Uzair, *An outline of Interestless Banking* Raihan Publications, (Dacca) 1955.
11. Sheikh Mahmud Ahmad : "Monetary Theory of the Trade Cycle." p. 176. Islamic Studies (Islamabad) XII (2) Sept. 1973 pp. 159-178.
12. Ibid.
13. Muhammad Nejatullah Siddiqi, "Banking in an Islamic Framework", *Islam and the modern Age* (New Delhi) 8 (4) Nov. 1977, p. 10.
14. Muhammad Uzair, *Interest-Free Banking* p. 20, Royal Book Co. Karachi, 1978.

This important clarification justifies Hasan Homud's acclamation of credit in an interest-free system[15] and leaves no room for scepticism regarding credit per se as harboured by Kahf[16] and early writers on the subject. Some of these misgivings were rooted in the vague notion that credit was in some way the child of interest. This is far from being true. As Siddiqi demonstrated a decade ago[17], the ability of banks to create credit is independent of the terms on which it is created, depending as it does on the habit of the public to keep only a part of its income in cash and deposit the rest with banks. Credit will therefore continue to be created even after the switch over from interest to *Mudarabah* (profit sharing) as the basis of bank advances to businessmen.

While ruling that commercial banks are not permitted to create money which should be a monopoly of the state in an Islamic economy, Kahf fails to examine whether such permission to interst-free commercial banks, operating on the basis of *Mudarabah* (profit sharing), will still be against the public interest, and whether the Monetary Authority will not be able to regulate their activities in the public interest. It is not clear how his suggestion can be put into practice without nationalising commercial banks. He envisages private commercial banks operating with 100 per cent reserves as 'service instituations'. If the commercial banks were to operate with 100 per cent reserves their only earnings would consist of service charges on checking deposits and fees charged for transfers, safekeeping and other services. They will be obliged to raise their charges to meet their administrative costs and earn competitive returns on the bank's capital. In order to justify this additional burden on the public, one must argue that the main objective of the 100 per cent reserve banking, i.e., control on the total supply of money, cannot be secured in any other way. This Kahf fails to do. The Chicago plan for banking reform, which advocated 100 per cent reserves during the thirties, has been thoroughly debated and rejected. A reconsideration of the idea in the context of Islamic banking requires a more detailed discussion than is available to date in our literature.

Kahf suggests the establishment of Finance Houses for handling *Mudarabah* funds for investment on a profit-sharing basis. But he does not insist on it since, according to him, both the bank and the finance house "can be thought of as one body providing two separate services".[18] It may be desirable to combine the two institutions in view of the fact that a separation will leave the commercial banks in a very weak position as profit-making institutions.

15. Sami Hasan Ahmad Homud, *Tatwir al a'mal al masrafiyah bima yattafiaqu wa'l shari'at al Islamiyah, Dar al ittihad al'araby li'l tiba'ah.* (Cairo) 1976, p. 361.
16. Monzer Kahf, *The Islamic Economy* pp. 74-75 The M.S.A., Plainfields Indiana, 1978.
17. Muhammad Nejatullah Siddiqi, *ghairsudi bank kari,* (Lahore and Delhi), 1969, Chapter 5. English Translation : *Banking without Interest,* (Lahore) Islamic Publications 1973, Chapter 5.
18. Monzer Kahf, *The Islamic Economy,*

2

INTEREST-FREE BANKING

An Overview

As reported earlier[19], the idea of interest-free banks based on the Islamic legal concepts of *Shirkah* (partnership) and *Mudarabah* (profit sharing) has gradually evolved during the last thirty years, leading to a farily comprehensive model of banking by the early seventies.

A bank is conceived, in the first instance, as a financial intermediary mobilising savings from the public on the basis of *Mudarabah* and advancing capital to entrepreneurs on the same basis. Profits accruing to entrepreneurs on the capital advanced by the bank are shared by the bank according to a mutually agreed percentage. The bank also provides a number of familiar banking services against a fee or a commission. The bank's own share capital also goes into its business of offering banking services and advancing capital on a profit-sharing basis. Making allowance for administrative costs, the net revenue on all these counts constitutes business profits, to be distributed over the entire capital involved: public deposits on the basis of *Mudarabah* and the bank's share capital. The percentage profits so worked out are then shared with the depositors according to a proportion announced in advance. Profits received by the depositors in *Mudarabah* accounts are, therefore, a percentage part of banking profits which mainly accrue to the bank as a percentage part of the profits of enterprises financed by it.

Deposits are also accepted in the current accounts with promise to pay on demand. No profits are distributed to these depositors from whom a service charge may or may not be realised. The bank is obliged to grant very short-term interest-free loans to the extent of a part of the total current deposits.

The above model is based on a two-tier *Mudarabah* contract. A large number of depositors enter into individual *Mudarabah* contracts with a banking company, organised on the basis of share capital, agreeing to share the profits of the "banking business". The bank undertakes two kinds of "business": (a) it offers banking services earning fees and commissions, and (b) it assumes the role of a financier-enterpreneur making judicious selection of businessmen who seek capital from it, stipulating that it share in the profits of their productive enterprise. Liability to loss in a *Mudarabah* contract rests with the financier only, as the working party bears no part of the loss accruing to capital extended by the financier. As shown by Siddiqi, *all* schools of Islamic law are unanimous on this point[20]. It follows that the loss incurred by an individual enterpreneur working with capital advanced by the bank is borne by the bank. The bank, however, advances capital to a large number of entrepreneurs, diversifying its investments as far as possible. Thus, losses incurred on some advances are likely to get absorbed by the profits resulting from some other advances. Should there be a loss, it will have to be distributed equally on share capital and *Mudarabah* deposits.

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19. Muhammad Nejatullah Siddiqi, *Muslim Economic Thinking:* A survey of contemporary Literature, The Islamic Foundation, Leicester U.K. 1981.

20. Muhammad Nejatullah Siddiqi, *Shirkat aur mudarabat ke shar'i usul.* Delhi, Lahore 1969, pp. 25-30.

This possibility is merely theoretical both on economic and empirical grounds. But according to the nature of a *Mudarabah* contract, the depositors in *Mudarabah* accounts do stand liable to loss should such a possibility actualise.

Islamic economists in search of a viable alternative to interest-based banking have, quite understandably felt uneasy about this conclusion. They have sought to absolve the depositors of this liability in different ways.

The bank may build loss-compensating reserves, out of its earnings in good times, to take care of a net loss in bad times, so that depositors can always be sure of getting their deposits back in full, if not with any profits. A deposit insurance scheme may be launched with the backing of the central bank and participation of all banks and their depositors. This is the approach of Siddiqi[21], Irshad Ahmad[22] and Najjar[23] among others.

Baqir al Sadr seeks to absolve the depositors of even the theoretical liability to loss by denying the status of the bank as the middle link in a two-tier *Mudarabah* outlined above-a status they enjoy according to Abdullah al Araby[24], Siddiqi[25] and the majority of writers on the subject. According to Baqir, the bank is an agent working for the depositor for a special kind of reward, akin to a prize, called ju'alah in Islamic law[26]. The *Mudarabah* contract takes place only between the bank and the enterpreneurs. Having absolved the depositors of the liability to loss, Baqir seeks to ensure that banks too do not incur any losses by stipulating some kind of a wage contract between the bank and the entrepreneurs[27].

In his recent work, Sami Hasan Homud[28]conludes that individual *Mudarabah* contracts, discussed by early jurists, cannot be expanded to cover collective investments involved in interest-free banking. He too seeks to modify the two-tier *Mudarabah* model, described above, in such a manner that liability to loss in the depositor-bank relationship attaches to the bank only. According to him, the bank's share in the profits actually accruing to entrepreneurs can be justified only on the basis of assuming this liability. The only other basis of a right to profits could be supply of capital or work (enterprise). The bank provides neither of these two, as capital comes from depositors and work is done by entrepreneurs [29]. The bank's share in profits, in the model outlined above, could therefore be justified on the basis of the liability to losses in respect of the depositor's money being advanced by the bank to the enterpreneurs.

The question that Homud fails to raise and answer is: how could the depositors be entitled to a share in profits when the return of their 'capital' is guaranteed to them? They have ceased to be suppliers of 'capital', having becomes suppliers of 'loan' instead. A lender with guarantee of repayment is not entitled to any profits. Secondly, Homud is mistaken in hypothesising that the bank does not supply work or

21. Muhammad Nejatullah Siddiqi, *Banking without Interest*, Lahore 1973, pp. 45-47.
22. Shaikh Irshad Ahmad, *Interest-Free Bankig*, Orient Press of Pakistan.
23. Najjar., Ahmad, *al madkhal, op. cit.*, p. 179.
24. Muhammad Abdullah al Araby, "Contemporary Bank Transactions and Islam's Views Thereon", *Islamic Thought* (Aligarh) 11 (3,4) July 1967 pp. 10-43.
25. *op. cit.*
26. Muhammad Baqir al Sadr, *Islamic Bank* pp 83-87 and pp 187-189. Jamali Publications, Bombay 1974 (Urdu Translation of *al bunk al Larabvi fi'l Islam*).
27. For a critical review of Baqir's model see Siddiqi, M.N., *Islami Bank*, Islam aur Asr-e-Jadid (New Delhi) 7 (2) April 1975, pp. 106-126.
28. Sami Hasan Ahmad Homud; *op. cit.*, pp. 341-448.
29. *Ibid.*, p. 448.

enterprise. The entrepreneurial activity of the bank lies in scrutinising the projects the businessmen present to it, making a choice of whom to advance its capital, and keeping an eye on the progress of their productive enterprises. Siddiqi refers to F.H. Knight's classic work, viz., *Risk, Uncertainty and Profit,* in support of the view that the essence of enterpreneurship lies in the choice of men who would conduct the actual business[30].

As regards the loss incurred by an individual entrepreneur on capital obtained from the bank, it has already been noted above that it attaches to the bank, Some scholars seem to question this principle on 'practical grounds' but we have not come across any reasoned statement of their case.

The two-tier *Mudarabah* model has been further extended by providing for partnership contracts between the bank and an entrepreneur. The bank would participate, through its employees or commissioned agents, in the actual conduct of business, along with the entrepreneur who invests his own capital as well. Losses, if any, would be shared by both parties in proportion to capital supplied. The profits of the joint venture would be shared according to agreed percentage. Some writers, especially Najjar[31], would like this to be the dominant form of banking operations. Banks conceived by Najjar seek a marriage between development banks and commercial banks. They would promote savings and effect their useful employment, mainly in the rural sector. He has reported in detail the successful operation of such banks in Egypt[32].

Some of the recently established interest-free banks too have gone directly into productive enterprises. The Dubai Islamic Bank is a case in point. The model of banking outlined above admits of such an extension, but the economic advisability of mixing this function with the other functions remains to be thoroughly examined by our economists.

As regards the numerous banking services such as safe keeping, transfers, letters of credit, etc. performed for a fee or commission, they would continue to be performed as interest is not involved. Several writers have examined them in detail. Homud, finding some commissions similar to interest, has suggested some modifications[33].

A number of questions relating to the accounting aspect of profit sharing arising out of the variety in size and duration of *Mudarabah* deposits have been discussed by several writers but they need not detain us here. Of special interest, however, is Homud's suggestion relating to the term structure of the rates of profit-sharing between the banks and the depositors who commit their deposits for a longer period of time[34].

We do not endorse Homud's view, based on some legal texts pertaining to individual *Mudarabah* contracts, that costs of bank administration should be met out of the revenue from commission and fees only, so that profits earned through advancing depositors' money are not affected [35]. It is not necessary to do so, if we

30. Muhammad Nejatullah Siddiqi, *Islam ka Nazariyah-e-Milkiyat* Vol 1, Lahore, 1967, p. 163.
31. Ahmad Abdul Aziz al Najjar, *Bunuk bila fawa'd,* Jeddah 1972 and *Manhaj al Sahwat al Islamiayah* also *al-Madkhal, op.cit.,*pp. 440.
32. Najjar, A.A.A., *Manhaj al Sahwat al Islamiyah.* Jeddah, 1977, p. 440.
33. Sami Hasan Ahmad Homud, *op.cit.,* pp. 350-387.
34. *Ibid.,* pp. 485-487.
35. *Ibid.,* pp. 492-497.

take the entire business of banking as the activity in which both *Mudarabah* deposits and share capital are invested. Moreover it is not a practical suggestion.

Since this model began to be seriously discussed, a number of practical problems have attracted special attention. The supply of short-term interest-free loans, discounting of bills of exchange, supply of credit to consumers and the related problems of instalment credit (hire-purchase) and, lastly, the financing of the public sector are the main issues which merit mention.

2.A *Short-Term Loans:*

It is agreed that, as far as possible, all advances to business parties should be on the basis of profit sharing. In so far as it is not possible to do so, as in the case of call money and loans for a few week's time, provision for interest-free loans to business becomes inevitable. Many writers on the subject have suggested that banks should be obliged to earmark part of the total deposits in their current accounts for granting such interest-free loans. This supply would however be limited, though there is some scope for the Central Bank to augment this supply in a manner explained later on. The crucial problem is how to control the demand for interest-free loans by businesses so as to ensure an equilibrium between supply and demand.

"Much of the demand for call money and very short-term credit emanates from within the financial sector itself and is likely to disappear when that sector shrinks in consequence of abolition of interest. In the production sector, the total demand for short-term credit depends on the volume of long-term investment and the extent of trade credit (credit extended by one firm to another) prevalent. Credit needs for the week or the month can be estimated at the macro level. This could be done by the central bank which would then ensure a supply commensurate with the demand by manipulating the 'refinance ratio' and the 'lending ratio' [36]. The task of allocating the loanable funds at the micro level would then be performed by the individual banks on the following criteria:

1. Specific credit needs of a firm.
2. Social priority attaching to the enterprise.
3. Nature of the security offered against loan.
4. Whether the credit seeker has also obtained long term advances from the bank for the same enterprise.
5. Annual, monthly or weekly average of the applicant's balance in current account with the same bank."[37].

2B. *Bills of Exchange*

Bills of exchange pose a special problem for interest-free banking. The two solutions suggested long since have been: extending an interest-free loan against the bill or advancing cash to the buyer (who would have written the bill) on the basis of *Mudarabah*, claiming a share in the profits from sale of the merchandise involved. No discounts are involved in either case. Recently, however, Ali Abd al Rasul has justified discounting bills of exchange, citing some *Maliki* jurists on validity of "leaving part of a loan to (be appropriated by) the one who secures repayment of the

36. Both these instruments of Central Bank policy are explained in the next section.
37. Muhammad Nejatullah Siddiqi, "Banking in an Islamic Framework", pp. 16-17.

loan (from the borrower) as a reward for this service of securing repayment"[38]. It follows that if the loan is not actually repaid no reward can be given. This view failed to find any support in the literature. It has been criticised on practical as well as juristic grounds. It has rightly been characterised as allowing a payment similar to interest[39]. There is hardly any necessity to adopt this device, as a *Mudarabah* advance stipulating a comparatively smaller proportion of profits would suit most buyers who are presently meeting their obligation to the seller by writing a bill of exchange duly under-written by a bank.

2C. *Credit for the Consumer*

Interest-free banks can play only a marginal role in supplying loans to needy consumers. This is a service which should be organised as part of a comprehensive social security programme. Proposals to the affect that banks collect *Zakāh* and disburse them by the way of grant and interest-free loans, have not found favour with most writers and this can at best be looked upon as a transitory arrangement in view of the state's failure to discharge this function. Banks could grant interest-free loans to their depositors as overdrafts for short periods of time.

A more active role has been envisaged for interest-free banks in facilitating the purchase of durable goods by consumers who can pay for them only in easy instalments. Uzair had suggested that commercial banks should finance the supply side and share profits with sellers[40]. Recently, Sami Hasan Homud has suggested financing the demand side in a manner that would bring some profits to the bank. Consumer A aproaches the bank requesting it to purchase a durable good which A is willing to buy from the bank, stipulating payment in instalments. The bank then buys it for him and sells it to A at a 2 or 3 per cent profit on its own purchase price. Homud cites a precedent from Shafa'i in his support[41]. Though it is not mentioned by Homud, the consumer may have to pledge a security to the bank till all instalments are paid up. The operational difference between it and the prevalent practice is that the seller will get the full price for the goods and the consumer will be under obligation to pay the instalments to the bank. Economic consequences of the change will be substantial as the banks will have to operate within the constraints of liquidity imposed by the system. Instalment credit will be part of the credit system operated through the banks under the supervision of the Monetary Authority. It will not have an uncontnrolled growth outside the system and, in all probability, will be much more restricted than at present.

2D. *Finance for the Government and the Public Sector*

One of the major evils of the interest-based system, according to Islamic economists, has been the phenomenal growth in public debt. A switch over to an interest-free system will curtail this growth to a very great extent. Costs of administration, defence and other 'non-productive' services of the state will have to be met through fiscal measures including compulsory borrowing from owners of

38. Ali Abdal Rasul, *Bunuk bila fawaid* p. 2 Paper presented at the First International Conference on Islamic Economics, Mecca 1976.
39. Sami Hasan Ahmad Homud, *op.cit.*, p. 378 and Siddiqi, M.N., *Muslim Economic Thinking: A Survey of Contemporary Literature on Islamic Economics. op.cit.*
40. Muhammad Uzair, *Interest Free Banking*, p. 34.
41. *Op.cit.*, pp. 479-480

large surpluses. Public sector projects may be financed through issue of 'shares' promising part of the profits to shareholders. Funds could flow into the public sector projects on the basis of *Mudarabah* or *Shirkah* directly from the public or indirectly through the commercial banks[42]. Our writers envisage a sizeable flow of interest-free loans to the government, specially in the event of a war or national calamity. Exemption of money lent to the State from the *Zakāh* levy could be an added incentive to the lenders. Some other tax concessions have also been suggested.[43]

The above model of interest-free banking has not evoked any serious criticism in professional circles. Doubts have been expressed, mainly on one point: the possibility of cheating by businessmen who would, it is alleged, find it to their advantage to understate their profits, or even show losses, with a view to surrendering a smaller part of their profits to the banks, or even avoid surrendering any profit at all. This they may do in view of the condition that banks can claim only a share of actual profits of the business and, in case of a loss, have to bear the entire loss. It has rightly been pointed out, however, that such practices will be contrary to the interests of the businessmen themselves. It will destroy their credit-worthiness and ruin their chances of getting any further advances from the banks. The banks, in selecting their business partners, will naturally be guided by their past records. Those with a record of involving the bank in a loss will be poor candidates for a fresh advance. Those with a record of ploughing back positive returns to the banks on the advances made by it will have a better chance of fresh accommodation. It will be, therefore, in the interest of businessmen to strive to make high profits and yield attractive returns to their financier banks.

Furthermore, modern techniques of audits and accounts will be used, preferably under the patronage of the Central Bank,to eliminate the possibility of cheating the system. It is also hoped that the moral standards in an Islamic economy will be sufficiently high as to counteract such tendencies towards cheating.

Furthermore, modern techniques of audits and accounts will be used, preferably under the patronage of the Central Bank, to eliminate the possibility of cheating the system. It is also hoped that the moral standards in an Islamic economy will be sufficiently high as to counteract such tendencies towards cheating.

A total rejection of the *Mudarabah*-based model has come from Muslehuddin[44]. He thinks that *Mudarabah* as envisaged by Islamic jurists cannot provide a basis for the depositor-bank and bank - businessmen relations envisaged in the above model. This view is based on a narrow interpretation of the legal texts involved, which makes him conclude that the *Mudarabah* contract can be only between two *persons*, which means that neither the working party (*Mudarib*) can invest any capital of his own in the business financed by the bank nor will the Islamic bank be able to make advances to firms which have already invested their own capital in their businesses. Lastly, he finds that the condition that the risk of loss in case of *Mudarabah* would attach to the bank alone rules out the possibility of success for these banks.

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42. Siddiqi, M.N., *Banking without Interest,* Chapter 7.
43. *Ibid.*, pp.156-166.
44. Muhammad Muslehuddin, "Interest-Free Banking and the feasibility of mudarabah", Paper presented at the First International Conference on Islamic Economics, Mecca 1976; and *Banking and Islamic Law,* Islamic Research Academy Karachi 1974, especially Chapter XIV.

Unfortunately, Muslehuddin fails to suggest a viable alternative to the *Mudarabah*-based model. His Islamic Bank[45] will be confined to services performed against a fee or a commission. They would lend depositors' money for short periods recovering only service charges just sufficient to cover administrative costs. This would hardly make his banks a profitable business, allowing them to pass back some of the profits to the depositors.

The juridical issues involved in the above model and questioned by Muslehuddin have already been thoroughly examined[46]. Our writers have established the validity of the two-tier *Mudarabah* involved in the model outlined above. It is also valid for a working party in *Mudarabah* to invest its own capital in the same enterprise, and for the financier to advance capital to a businessmen who has already invested his own capital. Some of the issues relating to the feasibility of the above model, the supply of short-term loans, and the possibility of cheating, etc. raised by Muslehuddin have already been discussed above.

3.

MONETARY POLICY

Monetary policy is directed at regulating the quantity of mony, its availability and its cost. The usual objectives of monetary policy are price stability, balance of payments, growth of the economy and distributive justice - objectives in whose realisation fiscal policy also partakes. The Central Bank functioning under supervision of the Government (the Ministry of Finance) pursues these ends using a number of instruments at its disposal.

Policy ends have been discussed by Islamic economists under the general study of the economic functions of the Islamic State. It is presumed that the above-mentioned goals are desirable with comparative emphasis on stability and distributive justice.

Not many writer have paid special attention to central banking, the immediate interest being focussed on evolving a viable model of commercial banking. Some have tended to assign the relevant functions to the *Bait al Mal*, a view that could hardly stand further scrutiny. As a result, Siddiqi's preliminary discussion on central banking[47] has yet to be followed up by a more detailed treatment of the subject. He notes the absence of Bank Rate as an instrument of policy. But changing the reserve ratio and direct controls on supply of credit are two of the conventional weapons still available. In the absence of interest-bearing securities, sale and purchase of a certain kind of share and 'loan certificates' could provide the means of 'open market operations[48]. As an alternative to the Bank Rate, a number of other policy instruments are suggested. The Refinance Ratio' refers to the offer of the Central Bank to provide additional cash to the commercial banks to the extent of a certain

45. *Banking and Islamic Law,* Chapter XVII,XVIII.
46. Several writers have discussed these issues (See the Bibliography entitled: Contemporary Literature on Islamic Economics, Leicester, 1978). Reference may be made here to Siddiqi, M.N., *Shirkat aur mudarabat ke shar'i usul.* Delhi, Lahore 1969, especially pp. 84-100.
47. Muhammad Nejatullah Siddiqi, *Banking Without Interest* Chapter Six.
48. Siddiqi, M.N. : *Some Aspects of Islamic Economy,* p. 105 Delhi, Lahore, 1970. This ratio had been earlier named the 'Borrowing Ratio' vide *Banking Without Interest,* pp. 116-122.

percentage of the interest-free loans granted by them. Raising or lowering this ratio will have the effect of expanding or contracting the supply of short term credit by the commercial banks.

Prescribing different ratios in respect of credit extended to different sectors of the economy can be a means of channelling credit in desired directions. Another instrument is the Lending Ratio[49] which refers to the percentage of demand deposits which the commercial banks will be obliged to lend out as interest-free loans. This instrument too can be manipulated to affect the supply of short term credit. The Central Bank may also consider the advisability of controling the 'ratios of profit sharing' i.e., the percentage of profits accruing to the entrepreneur (working with capital advancd by the commercial bnks), which would flow back to the bank.

'Moral suasion' and policy decisions arrived at through mutual consultation have been playing a significant role in recent times. It is hoped they will have a greater role to play in an Islamic banking system.

Thus the Central Bank, in an interest-free system, will have a number of instruments which could be used to regulate the supply of credit and the terms at which it is available to the entrepreneur. Abolition of interest, absence of interest-bearing securities and, hence, of the speculation in the bond market, will greatly reduce its problems. The marriage of capital and enterprise, effected by the replacement of interest by profit-sharing, will contribute towards growth and development. The ends of distributive justice will be served by the abolition of interest coupled with the principle of *Zakāh* applied to most forms of wealth.

These considerations provide a sound enough basis for concluding that interest-free banking is viable in both commercial and central banking. As practice grows, the Monetary Authority as well as the banking community is sure to discover and devise newer means of realising the desired objectives.

Presently, the chief practical concern for Monetary Authorities in the Muslim countries is controling inflation - a subject being covered separetely in this Seminar. With the creation of high-powered money entirely vested in the central banks, and the automatic curtailment of credit with the abolition of interest and curbs on speculation, inflation can be more easily controlled in the framework of Islamic policies and interest-free institutions.

4.

INTERNATIONAL BANKING

Most of the discussion on interest-free banking assumed a closed system, in the first instance. In an interest-free international economy, the same model can be extended without difficulty. A special problem is, however, posed by the realistic assumption that interest-free national banking systems will have to interact with the interest-based system dominating the world. This issue was taken up by early wirters on the subject and a simple solution based on 'permission due to necessity' was suggested. While transactions with interest-based institutions would involve payment as well as receipt on interest, these transactions can be channelled through

49. *Ibid.*

the central bank which could, as far as possible, insulate the indigenous economy from the effect of these transactions. If and when a number of countries are willing to operate on an interest-free basis, they can form a group of their own. Interest can be abolished from all international transactions within this group. The group can negotiate alternatives to interest with the outside world wherever feasible.

The establishement of the Islamic Development Bank at Jeddah followed by the formation of Islamic banks at Dubai, Cairo, Khartoum and Jordan have prepared the ground for international monetary cooperation free of interest. The recently founded International Association of Islamic Banks is a step in that direction. One of its declared airms is to advise its members on investment and to attend to their liquidity problems, besides effecting coordination in their working and standardization in their practics. One of the prime concerns of International Islamic Banking should be the mounting foreign exchange reserves of the oil rich countries which are exercising inflationary pressures at home and have, surprisingly enough, increased their vulnerability to the maneuevrings of international high finance. Speedy utilisation of these surpluses for human capital formation, and transfer of technology to the Islamic peoples in particular and the Third World in general is hardly possible in the framework of interest bearing loans and investments. Interest-free loans on a liberal scale and long-term profit-sharing arrangements, possibly with an initial period of grace, could usher in an era of rapid all-round development to the advantage of the entire region of North Africa and South and South East Asia for the mutual benefit of the creditor and debtor countries.

5.

CONCLUSION

Abolition of interest has become the hallmark of Islamic Economics in modern times. Here lies the greatest challenge for Islamic economists: to justify it by a fresh analysis of money and its role in the economy, and present an operational model of interst-free banking which may convince modern man that Islam's economic system based largely on the twin principles of *Zakāh* and abolition of *Ribā* is more just and more efficient than any other alternative. They have been quite aware of this challenge and their response has been vigorous. The idea of interest-free banking has already entered the stage of experimentation after a quarter of a century devoted to model building. It is now receiving attention not only from trained economists but also from professional bankers and from governments. It is advisable that the existing interest-free institutions provide relevant data and report their problems for analysis and careful consideration by economists. In money and banking, more than in any other area in economics, practice leads theory.

Meanwhile, the entire area of non-bank financial intermediaries, of near-money, of transactions in foreign currencies and the vital subject of international monetary organisation awaits the attention of Islamic economists. It is hoped expert attention will be focussed on these areas in individual research as well as in seminar discussions.

COMMENTS

Dr. M.M. Al-Radday *(Discussant)*

The recent growth of books and articles on Islamic economics suggests a new development in the subject matter. The significance of all this would depend on our perception of what is being published and on what topics. The purpose of the review, therefore, determines its approach. If, for instance, we endeavour to enrich our Islamic library for the forthcoming generations, then a well-established or well-equipped systematic programme for abstracting the relevant materials should be adopted. This, of course, includes the compilation of appropriate bibliography.

Starting from almost nothing is a limiting factor against suitable choice. Laboriousness arises from the unpalatable fact that abudance of Islamic economic ideas have not yet been matched by vigorous research. This is precisely the crux of the matter.

The obvious neglect of fertile Islamic economic ideas, while traditional economic theory has approached a high level of academic perfection, would raise the question of the survey strategy. To be sure, economists are unlikely to reject the prevailing traditional ways of thougt unless they are convinced of better alternatives.

Dr. Siddiqi's paper reveals a great deal of persuasion and subtlety. His paper manifests soundness, perception and above all an analytical-review approach.

The first chapter surveys the most recent works on money, yet shows preoccupation with some economic factors that might contribute to smoothing out fluctuations in demand for money. The author argues that strict application of *Zakāh* and abolition of interest would check speculation, hoarding and other precautionary variables.

One interesting conclusion emerging from Dr. Siddiqi's analysis lis that a state of money neutrality would be achieved by means of *Zakāh* application and interest abolition. This point, however, has been abscured by the shifting of analysis from micro to macro levels. We have been told that a link between short-term and long-term loans will ensure a state of equilibrium, but this point has not been elaborated. This problem is also complicated by introducing quantity of money in the picture without a detailed explánation. One can find reason in the nature of this paper which claimed to be "a review". In fact, I found it more than a review. It contains stimulating analyses of various leading economic issues.

On the whole, the paper is fairly broad and stimulating, and it exhibits variations in quality fromm excellent to superlative.

GENERAL DISCUSSION

1. On the issue of neutrality of money Dr. Monzer Kahf questions the purpose of neutralising money - so that money remains only as a medium of exchange and ceases to be a store of value. He points out that the cost of holding goods will exceed that of holding money, since the former entails storage cost, depreciation and *Zakāh* whereas the latter consists only of *Zakāh*. Since *Zakāh* is imposed on both forms of wealth, he raises the question: will *Zakāh* still perform the function of neutralising money?

Dr. Kahf argues at length, stressing the importance of drawing a distinction between an Islamic bank in an Islamic economy and an Islamic bank in a non-Islamic economy where it competes with interest-ridden banks. He then points out that Dr. Siddiqi has not made this vital distinction in his paper, for he has frequently referred to a book by Dr. Sami Homood, which discusses the role of an Islamic bank in a non-Islamic set-up.

Finally, Dr. Kahf raises the issue of *Muḍārabah* in the context of short-term loans. Observing that the Shafie school of thought does not consider the time element in it, he points out that time is crucial for short-term loan transactions. He therefore emphasizes the need to reconsider the applicability of *Muḍārabah* to short-term loans.

2. Dr. Mabid Al-Jarhi explains that the concept of neutrality has been used by monetary economists in the sense that the increase in money supply will not affect the real growth of the economy. He mentions three necessary conditions for money neutrality in a dynamic model - i.e., existence of full employment, absence of money illusion and zero redistribution effect. Dr. Al-Jarhi is of the view that the contemporary Islamic economic literature reviewed by Dr. Siddiqi does not go into the depths of the concept of the neutrality of money.

Dr. Al-Jarhi expresses concern over the dismal performance of Islamic banks with "International balances". He suggests that these banks be given access to the funds of the Islamic Development Banks (IDB). He thinks that this arrangement would help the IDB's fund to be channelled productively along Islamic lines through these banking networks. He observes that at the moment the IDB operations are not very Islamic and that the practice of the IDB does not differ very much from that of the World Bank (IBRD). Dr. Al-Jarhi's recommendation is that Islamic banks should devise a large variety of commercial and investment facilities and develop greater sophistication.

Dr. Al-Jarhi wishes that the author had given his own comments in reviewing the contemporary literature on Islamic economics. He further remarks that the quality of the literature reviewed has been extremely uneven and that the arguments contained therein have not been airtight in expounding the Islamic approach.

3 Dr. Ehsan Rashid speaks of the possibility of bank lending being subject to a sort of auction money arrangement and raises a question about the permissibility of such an arrangement within an Islamic framework. He thinks of the borrowing

of funds as equivalent to the leasing of funds and therefore asks: why not impose a fee on funds so leased?

4. Mr. Laliwala believes that the concept of the neutrality of money is closely associated with the issue of price stability in Keynesian analysis. His reasoning is as follows: As investment opportunities and demand for investment loans fall, interest rate and hence savings also fall, but the consequent movement towards equilibrium between investment and savings is disturbed by speculators, thereby depressing security prices and raising the rate of interest. This means that savings will continue to exceed investment, generating depressionary forces.

   Mr. Laliwala thinks that *Zakāh* can be used as a fiscal instrument to penalise hoarding. He is also of the view that interest-free banking and *Zakāh* will eliminate the danger of depression, while the instruments of refinance ratio and lending ratio, which help control the supply of money, will check inflation. He thus concludes that price stability and hence neutrality of money can be maintained in an Islamic economy.

5. Professor Mohammed Mohsin does not agree with Dr. Siddiqi on the point that even though there is room for speculative motives in an Islamic economy, they are not capable of generating wide economic fluctuations. On the contrary, Prof. Mohsin thinks that an Islamic economy is prone to fluctuations, now that interest rate is replaced by profit-sharing, and that profits are volatile by nature. He points out the possibility of such uncertainty stimulating intense speculation in an Islamic economy.

   Prof. Mohsin's second point concerns the issue of short-term loans in interest-free banking. He explains that while primary reserves provide liquidity and earning assets ensure profitability, the secondary reserves in the form of short-term loans, securities and commercial papers strike a compromise between liquidity and profitability. He thinks that interest-free banking will be severely handicapped by the fact that banks are not allowed to invest in such securities with fixed returns. He therefore attaches considerable importance to trading operations as opposed to short-term loan transaction in Islamic banking.

   Speaking on the financing of Government projects, Prof. Mohsin draws a distinction between commercial ventures and non-profit projects. He suggests that Islamic banks can finance the former by investing in participating bonds. As for the non-profit projects, he thinks that there is no alternative to providing interest-free loans.

6. Dr. Mohammad Umer Chapra raises issues regarding *"Ribā-al-Fazal"*. He says that Dr. Siddiqi has confined his discussion of *Ribā-al-Fazal* to the barter trading aspect of it. He draws attention to the writings of Islamic jurists on *Ribā-al-Fazal* which contemporary Muslim economists seem to take no notice of. Dr. Chapra explains that *Ribā-al-Fazal* refers to a number of injustices inflicted on society in addition to Ribā or interest which Islam has prohibited outright. He points out that a number of statements by the companions of the Holy Prophet (peace be upon him) indicate that a substantial part of unearned income constitutes *Ribā-al-Fazal.* Dr. Chapra thinks that it would have been instructive had the author done

justice to this topic in his review of Islamic economic literature.

Referring to Dr. Siddiqi's statement that "Money in a money economy cannot cease to perform the function of a store of value", Dr. Chapra finds it too sweeping a statement which needs to be modified. He says that money can cease to perform this function in a hyper-inflationary situation, as shown by the German experience after the First World War. He concedes, however, that the above statement will be valid under *normal* circumstances.

Finally, Dr. Chapra points out that Dr. Siddiqi's statement to the effect that banks alone will bear the loss and entrepreneurs will not, may create misunderstanding. Dr. Chapra explains his point in terms of "management-entrepreneur relationship". He says that the practice in Western societies where the manager is paid a fixed fee, cannot be allowed in Islam. He further clarifies that the concept of Islamic justice entitles the manager to a share of the profit; in the case of loss, the manager does not share the loss, nor is he entitled to receive any fee.

ALLOCATIVE EFFICIENCY, DECISION AND WELFARE CRITERIA IN AN INTEREST-FREE ISLAMIC ECONOMY: A COMPARATIVE POLICY APPROACH

Muhammed Abdul Mannan

1.

INTRODUCTION

The main objective of this paper is to discuss the nature and scope of the allocation of scarce resources among the goods and services produced by an interest-free Islamic economy. The paper will also attempt to establish certain conditions or criteria which must be fulfilled for an efficient allocation of resources based on Islamic economic values. This allocation issue has been the focus of microeconomics and the related discipline called welfare economics. The present analysis is essentially static, concerned with the uses of resources at a given moment of time, and not dynamic, concerned with the resource growth over time.

The paper is based on the assumption that there is virtually no difference between *"Ribā"* and interest and that Islam prohibits interest but allows wages, rent and profit subject to the injunctions of the *Qur'an* and the *Sunnah*.The paper then seeks to show that in an interest-free economy of Islam, it is possible to make an efficient allocation of resources through the introduction of an Islamic value-loaded concept of "accounting price" for capital into decision criteria.

In other words, the scarcity prices of capital based on material considerations must be combined with the economic ethics based on Islamic values of life. The allocation of resources in an Islamic economy must, then, be guided by objective and subjective criteria: the objective criteria will be reflected in terms of economic ethics based on the injunctions of the Holy *Qur'an* and the *Sunnah*. Therefore, the scope of allocation of resources becomes restrictive and wide at the same time: it is restrictive in the sense that the allocation of resources must be made within the framework of Islamic values; it is wide in the sense that the allocation of resources must take into consideration market and non-market forces including externalities, and secular and non-secular forces including the moral, social and economic values of Islam.

The plan of the paper is as follows:

In the first section of the paper, the underlying assumptions of an Islamic socio-economic paradigm, based on total fulfillment of human life, are delt with. The proper understanding of the underlying assumptions is crucially important for appreciating the dynamics of the actual process of resources allocation in Islam.

This wil be followed by a brief review of the actual mechanism of resource allocation in capitalist and socialist economies.

The third section will deal with the theory and practice of allocation of resources in an Islamic economic system.

The last section will attempt to draw policy implications from the analysis and conclusions.

Since the literature on the economics of resources allocation in Islam is extremely scarce, one must rely considerably upon intuition, speculation, and experience in making an analysis that is basically inquisitive rather than definitive. However, this paper should provide the basis for further analysis and study of the complex problem of resources allocation in Islam, particularly from the microeconomic standpoint.

2.

UNDERLYING ASSUMPTIONS

The underlying assumptions, on which an Islamic socio-economic paradigm is based, are as follows:

i) *Belief in "Islamic man"*: The Islamic socio-economic paradigm calls for the presence of "Islamic man", evolution of Islamic consciousness and the consequent establishment of Islamic production relations. Islamic man is conceived as an economic and moral maximiser presumed to be individualistic, co-operative and socially responsible. Islamic man rejects the classical doctrine of "economic man" who, motivated by self interest, is profit-maximising, highly individualistic and competitive.

ii) *Lack of harmony of interest*: The very fact that the *Qur'an* declares that everything between heaven and earth belongs to God is indicative of the fact that Islam believes in human limitations and frailties. The possibilities of exploitation of the weak by the rich and the strong are not ruled out. All resources are a trust to mankind, to be used for the welfare of the people. The *Qur'an* has repeatedly asked the rich to discharge their duties towards the poor. Any failure on their part justifies the intervention of the state which is required to solve the problems of externalities and achieve allocative and distributive justice.

Apparently, on this point of harmony of interest, Islam and Marxism seem to be very close. But they differ widely in their interpretations. In Islam, the lack of harmony of interest is expressed in terms of human limitations and weakness; in the case of Marxism, it is expressed in terms of social class and class conflict.

iii) *Built-in-flexibility and rigidity of laws:* Islamic laws are both flexible and rigid at the same time. They are flexible, because these laws may change from period t^1 to t^2 through fresh interpretation and consensus. They are rigid, because the flexibility of Islamic laws must be consistent with the spirit of unalterable laws as expressed in the *Qur'an*. Islamic laws are, both hypothetical and definitive at the same time. Thus, for example, the obligation on the part of the rich to pay *Zakāh* and the items on which it is to be spent are fixed but its operational details are subject to change.

iv) *Disbelief in historical materialism:* Islam rejects the Marxian materialistic interpretation of history, according to which economic events determine the forces of social and political life. "The idea of inevitability of the historical process leading to the fulfilment of a predestined end finds no counterpart in Islam which recognises the existence of different classes of people and differences in income among them". Islam is based on the *Qur'anic* doctrine of 'Tawhid' - "all life is one." Therefore, no separate sphere can claim independence of another, since it is the moral and spiritual version of man that harmonizes the economic, social, political and biological activities of society."[1]

v) *Relative ownership of private property:* Islam allows private ownership of property, but subjects the owner to restrictions, preventing him from using property as a tool for exploitation of the poor. His ownership of anything and everything is relative, and *not* absolute. This makes Islam a highly revolutionary and dynamic force. Under the Islamic state, anybody who is using private property as a tool of exploitation may be deprived of his ownership on payment of a fair compensation.

vi) *Non recognition of either consumer's or producer's sovereignty:* It follows that Islam disapproves of both consumer's and producer's sovereignty. The exploitation of resources and their use is conditional in the sense that both producers and consumers benefit themselves equitably, not for exploitating or holding others in subjection. Islam maintains a balance between exaggerated opposites.

vii) *Stress on change and reform through "concensus":* Islam believes neither in marginal change stressing the status quo nor in radical change. It advocates change and reform through "concensus", operating within the framework of the *Shari'ah*, thereby leaning towards the "institutionlist" school of thought which advocates that economic activity is the reflection mainly of habit, custom, tradition, and technological processes. It is argued that self-interest is culturally determined. We have noted earlier that Islam rejects the Classical doctrine of "economic man."

viii) *Positive attitude towards history:* The great trend of history is to increase state involvement in various spheres of life. Islam once again provides a link between Marxian and neo-Classical paradigms by giving due emphasis to both history and to universality of approach to socio-economic problems. The universality of approach is retained by emphasis on the unity of God. Through His unity, the unity of the whole of mankind is sought. But Islam's concern for establishing Islamic socio-economic framework on earth makes it historic-specific.

1. Mannan, M.A., *Islamic Economics: Theory and Practice,* Ashraf Publications (Lahore) Pakistan, 1970.

It follows from the preceding analysis that lthe different motivational properties of an Islamic economic system will make the meaning of opportunity cost, marginal efficiency of capital and other related concepts different from the ones based either on market or on command, thereby influencing the pattern of allocation of resurces. Let us now review very briefly the method of allocation of resources under neo-Classical and Marxian systems.

3.

REVIEW OF NEO-CLASSICAL AND MARXIAN METHOD OF ALLOCATION OF INVESTMENT FUNDS

A. *Allocation Under Neo-Classical Doctrine:*

Despite the fact that neo-Classical orthodox doctrine has failed to give a clear-cut answer to the question as to why interest is paid, interest does play an important role in the neo-Classical allocation of resources both from the micro-and macro-economic points of view of the capitalistic economy.

From the microeconomic point of view, prices and interest rates in a market economy are established in such a way that they ensure an equilibrium between supply and demand for every commodity at every instant. Market economies have been formalised notably in competitive equilibrium models. Thus, it is claimed that perfect competition should usually lead to the choice of a Pareto optimum, in which interest rate "p_t" would be equal to both the marginal productivity of capital between "t" and "t + 1", both of them being defined by reference to a particular commodity chosen as 'numeraire.'[2]

Since the existing markets only provide an imperfect balance between the intentions of the various agents, some degree of planning is advocated, the aim of which is to determine an optimal programme. Assuming that marginal costs and benefits are obtained for the relevant combination of private-social, direct-indirect, and economic-non-economic variables, the criteria for choosing among projects must reflect the time value of money, because the return to capital takes the form of a stream of income over a number of years.

In order to compare the anticipated stream of income with the cost, the future sums of money must be reduced to a present value - a process accomplished by deducting the prevailing interest earnings from lifetime returns to investment. Essentially, discounting involves a reversal of compounding interest into the future. This is how interest enters into decision criteria, regardless of who gets the interest earning (i.e., the capitalist or the state). Ignoring for the moment certain relevant questions pertaining to the appropriateness of interest rate (r) used to discount an infinite future sum, *two* types of decisions are called for: whether a particular project should be carried out or which projects to choose from a limited number of alternative projects. Generally, one has to select a 'variant' of a project that has been previously accepted. Four decision criteria for the choice of projects has been given

2. *Malinvaud, J.M., "Interest Rate in the Allocation of Resources"* in *Theory of Interest* (Ed) by Hahn, F.H. & Brchling (London) Macmillan & Co., 1965.

attention. They are: (i) 'Present Value', (ii) Benefit-cost, (iii) Internal Rates of Return, and (iv) Break-even Time.

(i) *Present Value:* By definition, the present value of the marginal net benefit is:

$$B_v^h = \frac{h_{b\,1}}{(1+r)} + \frac{h_{bn}}{(1+r)^2} \,\ldots\ldots\ldots\ldots + \frac{h_{bn}}{(1+r)\,n} = \sum_{t=1}^{t} \frac{h_{bt}}{(1+r)\,t}$$

This criterion is set by the following two rules: (a) investment in programme "h" should be carried out if B_v^h is positive, assuming that (r), the rate of interest, reflects social opportunity cost of capital and that no competing programmes exist; and (b) the "variant" selected should maximise B_v^h

(ii) *Benefit-cost ratios:* As before, discounting is appropriate. The decision criterion for selection of projects for the purpose of investment, requires that, after discounting, the ratio of gross benefits (B) to costs (C) at the margin is at least equal to unity, that is

$$\frac{B_v^h}{C_v^h} \geqslant 1.0$$

If another programme "k" is competing for funds, ... programme "h" will be selected provided that

$$\frac{B_v^h}{C_v^h} > \frac{B_v^k}{C_v^k} > 1.0$$

iii) *Internal rate of return:* The third decision criterion consists of calculation of the internal rate of return (r*), which is expressed as a percentage, to be compared with any interest rate representative of the social opportunity cost of public capital. The rate of return is that rate of interest rate which equates the present value cost and benefits. If the rate is greater than the required return, the larger investment is preferred provided sufficient capital is available for additional investment. Under the restrictive assumptions of infinite returns, the rate of return for discounting may be expressed as $r^* = \frac{B}{C}$. Under finite time conditions and constant gross benefits (B) and costs (C) per period for programme "h" the internal rate of return is implied by selection of a rate of return r* that equates cost and returns:

$$C_v^h = \sum_{t=1}^{t} \frac{B_v^h}{(1+r^*)\,t}$$

This criterion is set by the following rules: (a) the investment in program "h" should be carried out if its rate of return is higher than the market interest rate; and (b) the "variant" selected should maximise the rate of return.

iv) *Break-even time:* By definition, the break-even time is the time from which the accumulation sum of the net values

$$(B_v^h - C_v^h) \geqslant 1.0$$

This criterion lays down that: (a) the investment should be carried out if its break-even time is smaller than a time "D" fixed in advance; and (b) the "variant" selected should be the smallest break-even time. This criterion enjoys official favour in the Soviet Union and in the countries of Eastern Europe.[3] Properties of a typical linear

3. Malinvaud, J.M., *op. cit.*

break-even chart are shown in Figure 1 below:

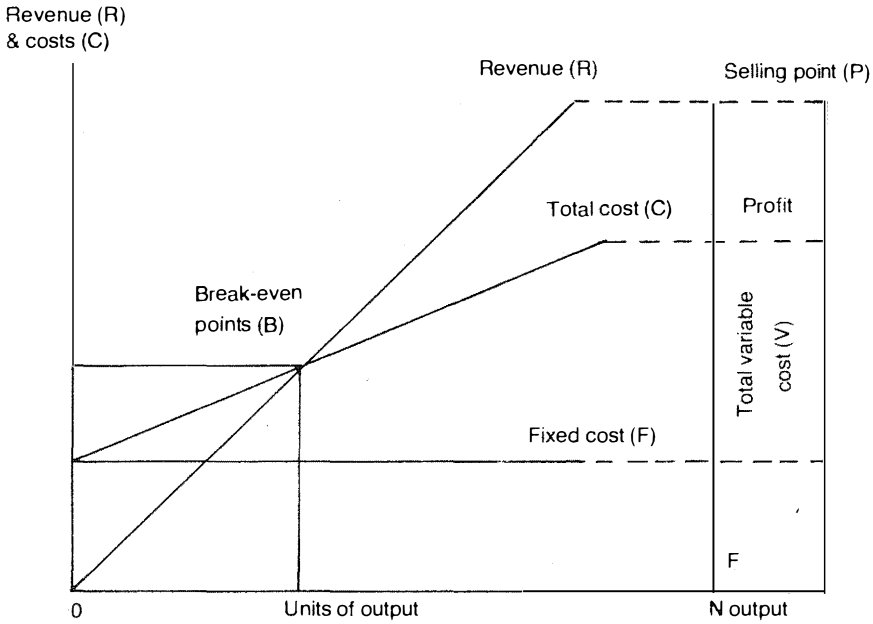

Figure 1: Linear break-even chart

But when the linear relationship is replaced by a non-linear expression as shown in Figures 2 and 3, it is to be evaluated by applying differential calculus. Thus, we see that a decision to lower the break-even point for an operation can be made from a study of total revenue and costs, although this seldom reveals the in-plant means to implement the decision.[4] Controversy, however, exists as to which of the decision criteria and which discount rate is the most appropriate.

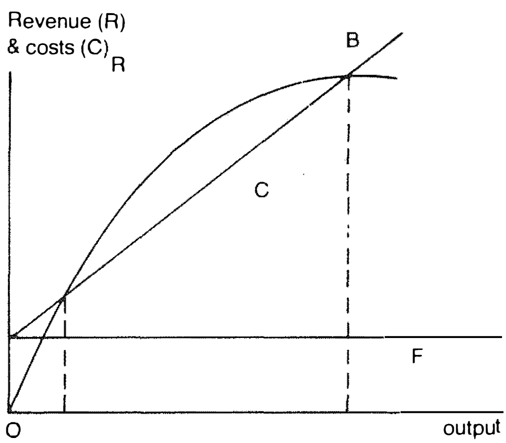

Figure 2: Non-linear break-even chart for decreasing marginal revenue and cost

4. Riggs, L.J., *Economic Decision Models,* McGraw Hills, U.S.A. 1968, pp. 46-64.

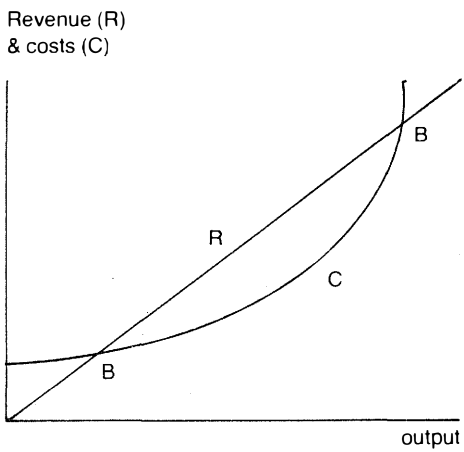

Figure 3: Non-linear break-even chart for increasing marginal cost and linear revenue

We shall now consider resource allocation from the macro-economic viewpoint in the capitalistic economy. We are aware that the essence of the Classical view was that interest is a reward for 'waiting'. Rather than being a reward for saving as such, interest is regarded by Keynes and other proponents of the liquidity preference approach as a reward for parting with liquidity. Interest is the price that must be paid to persuade those who, in response to the speculative motive, hold idle money balances to part with the liquidity inherent in such balances.

It is necessary to pay people a premium in the form of interest to compensate for the insecurity and diminished liquidity involved in holding assets in non-monetary form at the time of uncertainty. The greater the degree of uncertainty with respect to future economic values the greater will be the rate of interest. Again, interest-earning financial assets such as bonds are usually emphasized in most discussions of the speculative demand for money. The speculative demand, however, involves not only bonds and financial assets, but also all assets. When the prices of assets are so high that the speculators expect them to fall, they would want to hold their wealth in the form of money rather than assets which are expected to decline in value. Conversely, when the speculators expect the prices of assets to rise, they would not want to hold their wealth in the form of assets which can be sold for a profit when their prices rise.[5] However, the willingness of the speculators to hold infinite amounts of money at the minimum level of interest rates-which can be represented by the perfectly horizontal portion of the money demand curve, known as the "liquidity trap," - can come into play, if technical progress is too slow to prevent the marginal efficiency of investment from falling as capital accumulates.

It is, of course, quite possible for any further increase in the money supply to result in increased consumption and in increased transaction demand for money. However, speculations about the future economic values provide the basic explanation as to why individuals and firms shift from money to debt or equity instruments and vice

5. Lindauer, J., *Macro-economics,* J.Wiley & Sons (New York) 1968, pp. 138-139.

versa. This involves consideration of future values for the marginal efficiency of capital as well as for the rate of interest. Holding equities means that wealth is being stored in the form of real capital assets. Wealth holders must, therefore, consider future values of such assets as well as their prospective yields as reflected in the marginal efficiency of capital, compared to bonds and other forms of debt instruments. But the value of a capital asset - both present and expected - depends in part on current and expected interest rate. Thus, money, debt and equities are therefore linked in an intimate and complex fashion.[6]

The idea that investment will take place when the marginal efficiency of capital is greater than the prevailing rate of interest is the key element in Keynes' theory of investment. That is, profitability is the dominant factor of the investment decision.

Thus, the rate of interest under capitalism becomes relevant in the theory of growth in so far as it affects the volume of investment. It is further argued that interest rate is also a technological concept in so far as it is relevant not only to gross investment in new machines but also in terms of its impact on human behaviour. The rate of interest affects the degree of utilisation of old machines (because if affects the instalment of new machines which compete with old machines) and the discounted value of future returns and consequently also the valuation of these assets. This influences capital formation which, according to capitalist' theory, is a vehicle for carrying technological progress into effect. A change in the rate of investment will take the economy on to an adjustment path; consequently, the rate of interest will approach its new equilibrium. An optimum rate of investment will be one which maximizes per capita consumption at every point of time on the equilibrium path. The optimum level of interest appears to be equal to the rate of growth of gross output. Thus, we see that interest rate is linked with investment decisions in a very complex way. As such, it plays an important role in the allocative process under the market economy conditions.

B. *Allocation of Resources Under Command Economy with Special Reference to the USSR:*

Schumpeter has asserted that "...... in a communistic or non-exchange society in general there would be no interest as an independent value phenomenon."[7]

It is true, after private enterprise was virtually eliminated in the USSR, interest does not appear as a cost of production on the books of a Soviet state-owned enterprise and no interest (with negligible exception) is paid for the use of fixed capital. As capital is not so abundant as to warrant a zero rate of interest, its relative efficiency in alternative employments is considered in the USSR to allocate capital resources. Moreover, since an important range of investment decisions is actually made in a decentralized fashion, rational allocation of capital requires that a scarcity price be communicated to each decision maker who is obliged to abide by it. According to well-known maximization conditions, the rate of interest should be uniform throughout the economy so as to equate the demand with an exogenous (i.e., politically determined) supply of investment funds.[8]

6. Patterson, W.C., *Income, Employment and Economic Growth,* Norton & Co., Inc. (New York) 1962, pp. 205-206.
7. Schumpeter, J.A., *Theory of Economic Development,*Cambridge, Havard University Press, 1951, p. 176.
8. Grossman, G., "Scarce Capital and Soviet Doctrine" *Quarterly Journal of Economics,* August, 1953.

Thus, the Soviet project-making engineers have introduced various "co-efficients of deficitness," along with "norms of capital effectiveness" as neutral delta assigned as a parameter to every project maker to correct for unduly low prices of rationed material inputs.[9] At least three lines of reasoning are advanced for "capital charges" in the USSR: (a) that it is based on the concept of opportunity cost in allocation of scarce capital; (b) that it takes into account the economy's need to accumulate capital for new net investment;and (c) that it is consistent with the criterion of the minimum sum of capital and current cost over its arbitrary period T (Year), which can easily be discovered by dividing the sum in question by T (thus assuming a uniform stream of annual current operating cost) - a procedure which in effect is equivalent to applying an interest charge of *100* per cent to the initial capital outlay.

But, the Soviet engineers were careful to dissociate the "capital charges" advanced by them from the capitalist category of interest, even to the extent of asserting that there is nothing in common between the two. The proposed "capital charges" are no more than a calculating device, and not at all a price paid to the capitalists for the use of capital.

It is interesting to note, however, that capital charges do play an important role in allocating scarce capital in Eastern European countries such as Poland and Bulgaria, although in Czechoslovakian and Hungarian models large investments continue to be financed by non-reimbursable and non-interest-bearing grants from the Ministry of Finance paid through the Industrial Bank, while Rumania's new financial disposition of 1967 and 1970 do not include any charge on capital.

It is however argued that the allocation of scarce capital along Marxian lines is inefficient. As Grossman has observed:

> ".... There is little doubt that Soviet price system remains inefficient in the strict allocational sense ....In the task of removing this inefficiency, Soviet economics, as a discipline, faces some serious obstacles. The chief of these is the axiom represented by the labour theory of value. Whatever its advantages for other purposes, and there may be such, the labour theory of value is a barrier to the development of a meaningful and cogent theory of resources allocation, and especially of the allocation of capital."[10]

In this connection it is interesting to note that Friedman has criticised the Marxian labour theory of value from the distributive point of view, as shown by the following passage:

> "......even if one accepts the basic ethical proposition, the Marxian theory of exploitation is logically fallacious. Clearly, some part of current product is attributable to non-human capital. The Marxian answer is that non-human capital is the product of past labour-embodied-labour, as it were. But if this were so (and I do not mean to imply that it is), the Marxian slogan would have to be rephrased: present and past labour produce the whole product but present labour gets only part of the product. At most, this implies not that present labour is exploited but past labour is, and a new ethical proposition

9. *Ibid.*
10. *Ibid.*

would have to be introduced to argue that present labour should get what present and past labour produce."[11]

It is now clear that interest rates or "capital charges" do play a role both in the capitalist and the socialist systems. While the capitalist system is essentially based on consumer's sovereignty, the Marxian radical paradigm is based on the producer's sovereignty; hence the difference in the role of interest. For firms with different ownership relations and different interests in the proceeds of the firm's output are likely to have different motivational properties, and different notions of opportunity costs and interest rates. Thus allocation of investment under producer's sovereignty turned out to be quite different from that based on the marginal productivity criterion under consumer's sovereignty.[12]

4.

TOWARDS THE THEORY AND PRACTICE OF ALLOCATION OF RESOURCES IN ISLAM

A. *A Comparative Overview:*

The preceding analysis brings us to the crucial part of our discussion concerning allocation of resources in Islam. In fact, Islam differs fundamentally from both the neo-Classical orthodox paradigm as well as the Marxian doctrine in respect of allocation of resources.

It differs from the neo-Classical doctrine in at least three ways. Firstly, while the neo-classical doctrine treats interest as a cost of production, thereby recognising *four* distributive shares, viz., rent, wage, interest and profit, Islam rejects interest as a cost of production and recognises *three* distributive shares such as rent, wage and profit. Second, since interest does not appear as a cost of production there is no place in the Islamic social economic set-up for interest earning by the capitalist. Third, the capitalist type of money market-where money, bond, debt and equities, in which economic values can be held over time, are influenced by the presence of interest rate- has no counterpart in Islam. The Islamic money market is simple and complex at the same time for it recognises the right of the share-holders, encourages equity participation on the basis of profit-sharing, ... and rules out the part played by the Keynesian "speculative motive" in the money market. In the Islamic money market, speculation is to be replaced by forecasting and projection based on solid economic data.

Islam also differs from the Marxian doctrine at least in three ways. First, in Islam, allocation of resources has not only economic but also social and moral destiny, whereas the Marxian welfare and investment function disregards the moral, ethical and non-material values in the way Islam understands. This does not, however, mean that the Marxian doctrine is value-free. As such, the concept of accounting price in Islam (to be explained later on) differs from the Marxian concept. In the Marxian

11. Friedman, M., *Price Theory,* Frank Case & Co., Ltd. London, U.K., 1962.
12. Leibenstein, H., "Some Notes on Economic Development Planning and the rate of interest under multiple sovereignty" in *Essays in Socialism and Planning* in honour of C. Landauer (ed) by G. Grossman, Prentice-Hall, U.S.A. 1970, pp. 87-88.

system, the accounting price for capital does form a price-forming element and it is reflected in the prices, whereas in Islam it cannot. For if it were allowed to enter into price, it would amount to recognising interest rate indirectly.

Second, the Marxian labour theory of value interprets value as reflecting the cost of production measured in terms of labour time absorbed and asserts that only labour yields surplus value, because the value of the labour to the capitalist is greater than the value the capitalist pays in exchange for labour services. According to the Marxian doctrine, other factors of production such as plant and machinery and raw material, reproduce themselves in the production process. Islam does not accept this narrow view. Like the Marxian doctrine, Islam rejects interest as a category. But unlike the Marxian system, Islam does not look upon labour as the sole source of value.

Lastly, the Marxian welfare function, which influences the investment decision, orginates from sources *inside* the society in the sense that it represents the will of the Communists party in power. In Islam, such a function essentially originates from a source *outside* the society itself, meaning the will of Allah. This constant exogenous variable provides a valid frame of reference to an Islamic model of economic structure. The flexibility of endogenuous variables, which do not depend on the whims of the capitalists or the bureaucratic controls of the Communist party, are subject to the principle of Shari'ah. This does not mean that there is no scope for fresh thinking and reasoning in Islam.

B. *The Allocation Process:*

It is evident from what we have discussed that the actual allocation of resources in Islam depends on two factors: (a) objective factors expressed in term of accounting price for capital; and (b) subjective factors expressed in terms of Islamic welfare criteria.

In an Islamic economic system, it is possible to introduce the accounting price for capital to ensure efficient allocation of resources. The accounting prices can be determined by "share-dividend index" or "profit index" of a selected industry based on either cross-section analysis or time-series analysis. This accounting price may very well be based on the opportunity cost concept. It is quite possible to have a range of accounting prices in an Islamic State. In a sense, this accounting price can be seen as an ideologically neutral concept, because as an accounting technique it can operate under any economic system. But in Islam it must have an ideological orientation and bias. For the objectivity, associated with the introduction of accounting price of capital, has to be evaluated in terms of *a set of explicit value judgments* based on Islamic welfare criteria to ensure efficiency and equity in resource allocation.

There is no reason why the pattern of accounting prices should not be diversified in different sectors of the economy to reflect the pattern of priorities assigned to the various sectors in the national plan, the main function of which is to determine the total amount to be invested in any given period by the private and public sectors, and the direction and the form of investment within the framework of Islam.

This implies considerable flexibility and decentralisation of investment and output decisions. For Islam recognises the freedom of choice of occupation and freedom of choice of consumption subject to the injunctions of the *Sharī'ah.*

To see how the accounting price for capital can help the process of allocation of resources in an Islamic economy, let us suppose that the Planning Authority has identified five projects: A, B, C, D, and E. Suppose that all of them are equally desirable from the social point of view and consistent with the Islamic ideology. Also suppose that the available resources enable us to implement only three out of these five projects. Now the question arises as to which of the two projects are to be dropped for the time being and how to determine the priorities in such a case. On the basis of past experience, let us fix the accounting price for capital, say at 10%, then calculate the rate of return in each of the projects. Suppose, the five projects have five different rates of return (i.e., 15% for A, 13% for B, 8% for C, 9% for D, and 10% for E).

Based on accounting price for capital we should, then, select projects A, B and E. The final implementation of these projects depends, however, on welfare considerations. *It must be noted here that this accounting price for capital is shown only in books and that no actual transaction takes place.* So far, this concept is ideologically neutral and simply facilitates the decision-making process as it injects objectivity into the process of allocation of resources.

It would be a mistake to place this on the category of interest in the captalistic economy, which recognises interest both from functional and distributional viewpoints. Equally, it would be a mistake to treat it as "Capital Charges" or the accounting price of socialistic economies, where the accounting price is determined by the aims and valuations of the bureaucracy in charge of administration and national planning.

In Islam, the accounting price of capital reflects the economic, social and moral welfare function: the preferences of both consumers and producers are subordinate to it. Neither the producer nor the consumer is allowed to exploit each other; they are required to work in co-operation for the welfare of all the members of the community.

Thus, we see that the accounting price for capital in Islam must take into account the following variables:

1. Consumer's preference.
2. Private sector preference.
3. Public sector preference.
4. Relative scarcity and profitability in terms of displaced alternatives in investment at home.
5. Relative scarcity and profitability in terms of displaced alternatives in investment abroad.
6. Islamic ideological weight.

This concept of accounting price can very well be used for in allocating resources in at least five areas of economic activities, as mentioned below:

i) *Pure public sector allocation of resources:* (i.e., where there is a need for making provisions for social goods and where externalities exist and the market mechanism does not operate).
ii) *Pure private sector allocation of resources:* (i.e., where small investments are needed for production of consumers or producers goods: an individual does

not need loan or credit facilites).
iii) *Public sector induced investment with private sector:* (i.e., where the private sector is shy in the face of risk and there is great uncertainty, based on the principle of partnership and the sharing of profit and loss in projects).
iv) *Private sector induced partnership:* (i.e., sharing profit and loss in projects having a minimum of risk and uncertainty, where the fund required is beyond the capacity of an individual entrepreneur).
v) *Externally induced investment:* (i.e., sharing profit and loss in projects requiring transfer of technology from one country to another).

The price mechanism is allowed to operate within the overall Islamic framework of production, consumption and distribution. There is not much scope for the socialist solution of directed labour, administered prices and output in an Islamic set-up. This does not mean that the market approach adopted by Islam is not different from the capitalist solution. In capitalistic economies, market mechanism generates the impersonal forces of demand and supply the whole transaction is impersonal and profit-oriented behaviour. In a very restricted sense, this is also true in Islam. But the market mechanism in Islam must generate the forces of both demand and supply, consistent with values originating from the belief in Allah. In this sense, the whole transaction becomes personal in nature and welfare-orientated. For, the need for straight-forwardness, reliability, a high degree of honesty in economic and business transactions, etc. has been stressed time and again in the Qur'an and the Sunnah.

All in all, when a project is selected on the basis of material considerations guided by the forces of market mechanism, it must also satisfy Islamic welfare criteria. Let us now discuss in some detail the welfare function in Islam and its role in the allocation of resources.

C. *The Welfare Criteria*

In Islam investment criteria and welfare criteria are inter-mixed; as is the case of individual and social welfare.

Thus, in Islam, welfare economics does not differ essentially from the economics of individual consumer behaviour or the behaviour of the firm, because both the individual and the firm operate within the framework of the Shari'ah. As such, Islam refuses to accept the Pareto optimality criteria on which the entire edifice of the capitalistic economic theory is virtually built.[13]

The Pareto criterion states simply that "any change which harms no one and which makes some people better off (in their own estimation) must be considered to be an improvement."

To compare it with some Islamic insights, it is convenient to translate the Pareto criterion into graphic terms.

For simplicity, let us deal with a community in which there are only two persons, X and Y. In Figure 4, let us represent the utility of individual X along the horizontal axis and that of Y along the vertical axis.

"The Pareto criterion then states that if we start off from a situation which is represented by a point like A, then a policy change is an improvement if it results in a move to any point like B, C or D which lies to the right of A, or above A, or above

13. See Wineh, D.M., *"Analytical Welfare Economics"* Penguin Australia. 1971.

and to the right of A. For at B, X is better off than at A with Y as well off as before, whereas the move to C benefits Y without harming X, and the move to D benefits both persons. However, a move from A to E cannot be evaluated on the basis of the Pareto criterion, for this change increases Y's welfare but it does so at X's expense."[14]

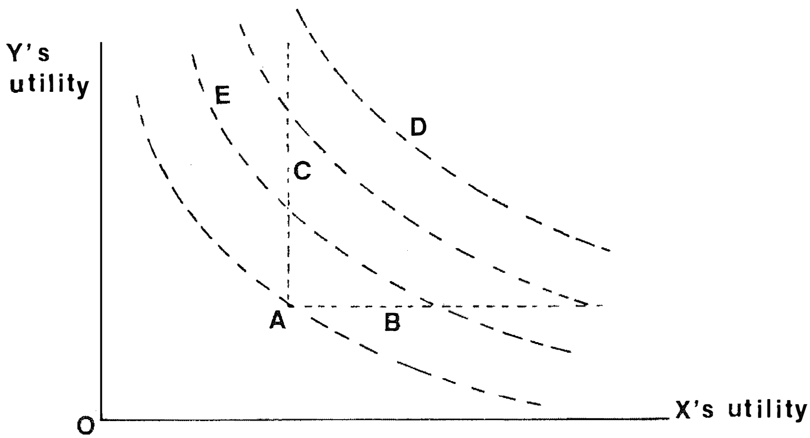

Fig.4: Pareto Optimality

The "someone gains - no one loses" definition of economic efficiency on which the Pareto optimality criterion depends contributes little to solving the basic social issues of distribution and redistribution with which Islam is very much concerned. Even when this problem of distribution is faced by the capitlistic economies, it is tackled by the whims of the individual government from which distributional value judgments emanate. Whatever they may be, they consitute the basis of the welfare function. In this sense, capitalistic economics lack a valid basis for welfare economics. But in Islamic economics, social and moral considerations are intimately inter-linked in such a way that it must encompass the *Qur'anic* value judgments. Such a welfare function is, however, limited to Islamic societies only.

Unless the economist knows how to distinguish between a policy change resulting from a new investment decision which is an improvement and one which makes things worse, he is in no position to make any recommendation regarding resource allocation. Despite the problem of inter-personal comparisons, there is hardly a priority way of weighing the net result objectively. The only wayout of the problem is the formulation of *a set of explicit value judgments* which would enable the analyst to evaluate the investment decision in the light of welfare criteria. These judgments as to what constitutes justice and virture in allocation, production and distribution in Islam are derived from the *Shari'ah*

It is therefore necessary to lay down a set of general criteria which in effect would amount to the construction of an indifference map which ranks different combinations of utility accruing to various members of the Islamic community. Such an indifference map, on which investment decisions are to be based, may be called the social and moral welfare function of Islam.

14. Baumol, W.J., *Economic Theory and Operations Analysis,* 2nd Edition, Prentice Hall, U.S.A., 1965.

We can deduce at least two basic principles and ten criteria of welfare based on the principles of the *Qur'an* and the *Sunnah.* It must, however, be clearly understood that every system, whether it is capitalistic or socialistic, has its own internal logic and criteria of welfare. The difference lies in the fact that our welfare criteria emerge from the Islamic value-system.

The two principles are: (i) Islamic permissibility and consistency and (ii) operational transitivity.

(i) *Islamic permissibility and consistency:* This means that any allocation of resources for investment or productive purposes must be permissible and consistent with the spirit of the *Qur'an* and the *Sunnah.* In other words, allocation of resources cannot be made for any type of economic activity which is explicitly or implicitly against the injunctions of Islam.

The application of this rule may lead to wide interpretations. But this is where the dynamism of Islamic laws lies. In fact, it would not be difficult to pronounce, through *"Ijtihād"* and *"Qiyās"* (fresh thinking and concensus), whether a particular investment decision is ideologically consistent, inconsistent, neutral or negative at any given point in time.

(ii) *Operational transitivity:* This means that if option 'A' is accepted for investment purpose in preference to option 'B', then we cannot accept option 'C' if option 'B' is preferred to 'C' even when option 'C' is within the permissible limit. The transitivity criterion, used by Arrow[15] in developing his "General Possibility Theorem" regarding "Social Choice and Individual Values", is based primarily on the assumptions of capitalistic economics with which Islam does not generally agree. Our transitivity axiom stands for blending of both material and non-material values of life. "Righteous living making proper and balanced use of one's faculties and of the bounties provided by God is the rule of life in Islam." (The *Qur'an* 23: 52). Thus, any violation of the transitivity axiom will lead to the problem of inconsistency and inefficient use of God's resources.

Apart from the two basic principles which all investment decisions must satisfy, there is a set of at least ten criteria or conditions of Islamic choice among different investment options or alternatives based on the Shari'ah. They can be expressed in terms of the following ten preferences, although some of them are mutually overlapping:

1) preference to ideological promotion over neutrality;
2) preference to efficient use over inefficient use of resources;
3) preference to equity over equality;
4) preference to common interest over individual interest;
5) preference to beneficient use over harmless use;
6) preference to proximity over remoteness;
7) preference to stability over flunctuations;
8) preference to certainty over uncertainty;
9) preference to continuity over discontinuity in utilisation of resources; and
10) preference to universalism over parochialism.

15. Arrow, K.J.,*Social Choice and Individual Values,* John Wiley & Sons, New York, U.S.A., 1963.

Preference to ideological promotion over neutrality: The investment expenditure should be made to promote the cause of Islam as far as practicable. It cannot, however, demote or denigrate the cause of Islam. As the Holy *Qur'an* says: "The similitude of those who spend their wealth for the cause of *Allah* is like the similitude of a corn which grows seven years, in each year a hundred grains. *Allah* multiplies even more whomsoever He pleases. *Allah* is Bountiful, All knowing" (2: 261). Thus, whatsoever God has bestowed upon man must all be put to appropriate use through the co-ordinated development of all resources. Otherwise it would cease to promote the cause of Islam.

Therefore, preference should be given for investment which can directly or indirectly advance the cause of Islam.

Preference to efficient over inefficient use: Efficient use of resources has been stressed in the *Qur'an,* because the inefficient use of the same means wastage which is to be avoided. God warns against ostentatious, extravagant and reckless spending. The *Qur'anic* stress on efficiency must be understood in a wider sense. The effecient use of resources must, therefore, include natural resources, human resources man-made and non-human resources.

Preference to equity over equality: The allocation of resources for investment purposes must promote the cause of equitable distribution of income rather than equal distribution of the same. The fact is that the *Qur'an* recognises the existence of different 'classes' in society; it does recognise the difference in talents and incomes among the different members of society (4: 33). As such, Islam has ruled out the possibility of dead-level equality in income. But the consideration of equity is a relative concept: it depends essentially on the level and stage of social and economic development of a society tempered by the consideration of Islamic economic and social justice.

Preference to common over individual interest: In the process of implementation of investment decisions, the group and individual interests may come into conflict, in which case group interest is to be preferred. This does not mean that individual interest is to be ignored or that it is not to be duly compensated in case of loss. Individual ownership is recognised and safe-guarded in Islam, but all ownership is subjected to the moral obligation that all sections of society, and even animals, have a right to share[16] in all wealth. The Prophet (peace be upon him) commends and commands socially beneficial expenditure.[17] Resources should be used for the benefit of the people. Islamic laws gives preference to the greater right of the community. The law seeks to avoid infliction of harm, but where harm is inevitable, the lesser of the evils is preferred. This is implicit in the laws of God.[18]

Preference to beneficient use over harmless use: The resources, both human and non-human, should be used to generate the forces of beneficence which can be positive, negative or neutral. The investment decision with positive beneficence is

16. *Al-Qur'an*, 2:20.
17. Al-Hadith (Bukhari, 8).
18. Mannan, M.A., *op.cit.*

preferred. There are a number of verses in the *Qur'an*[19] and sayings of the Prophet (peace be upon him) to support this contention.[20]

Preference to proximity over remoteness: Given the scarcity of resources, it is unrealistic to assume that resources can be invested always for the benefit of all members of the community equally. Hence, there is a need to set up a priority basis for the allocation of resources. The proximity criterion provides a basis for such priority. We can deduce the notion of priorities from the following verse of the Holy *Qur'an,* which says:

> *"Worship Allah and associate naught with Him, and conduct yourselves with beneficence toward parents, and toward kindred and orphans,and the needy, and toward the neighbour that is of the kindred, and the neighbour that is a stranger, and the companions by your side, and the wayfarer; and those who work for you. Surely, Allah loves not the proud and boastful who are niggardly and enjoin people to niggardliness."* (4: 37-38).

This verse of the *Qur'an* has a symbolic significance and the letter and the spirit of this verse provides a basis for understanding the intra-regional, inter-regional and inter-national investment priorities.

Preference to stability over fluctuations: This criterion of stability is to be kept in view, while expenditure is made for investment purposes. The essence of stability lies not in maintaining the status quo but in generating deliberate and calculative friction necessary to effect changes. The unplanned investment and allocation of resources may escalate inflation which may very well reduce confidence in money and its effectiveness. Uneven inflation distorts relative real income levels and price ratios, which may jeopardize both equity and efficiency. Islam has clearly condemned hoarding, speculative business and monopoly, because they disturb the stability of the economy. The whole emphasis is on balanced use of resources.

Preference to certainty over uncertainty: Most of the investment in the Islamic State is likely to be corporate investment, which has a greater risk-absortive capacity. Despite this, there is a need to minimise the risk of loss resulting from uncertain prospects of profit. Since the economy is based on the principle of profit-sharing and equity participation, the need for making profit from the investment is paramount, for it would help further stimulation of economic and social activities. There is, of course, a variety of methods such as "risk discount" and "sensitivity analysis" for dealing with "risk" and "uncertainty".

Preference to full and continuous use of resources over discontinuous use of resources: It is not really enough that a system has allocated existing resources so as to maximise production, or that it distributed the goods and services produced in such a way as to provide maximum welfare in a particular point of time. What is more important is that the investment which ensures continuous utilisation of resources and its growth should be preferred to investment which uses resources only

19. *Al-Qur'an,* 2:262, 269, 272-275.
20. Mannan M.A.,*op.cit.*

intermittently.[21] The Prophet (peace be upon him) is reported to have said that "the person who seized land belonging to nobody would cease to have any right to such land if he did not reaonably exploit it after three years of possession." Aisha reported that the Prophet (peace be upon him) said: "Whoever cultivates land which is not the property of anyone has a better title to it".[22]

Preference to universalism over parochialism: The allocation of resources must be made keeping in view the principle of universality. That is, the benefit of investment expenditure should be diffused throughout the community. The investment fund should not, then, be channelled towards the benefit of a particular group of people or to a particular region to the neglect of others. The degree of universality to be allowed in a particular situation depends, of course, on the sound judgement and implications of an investment decision at a particular point in time. Therefore, there is a need to assign importance or weight to it, as with other criteria.

D .*The Application of the Welfare Criteria:*

While the two basic principles of investment in Islam must be satisfied under all circumstances, the other criteria or conditions mentioned may or may not be simultaneously satisfied.

The efficiency criterion may come in conflict with equity; the stability criterion may come in conflict with the criterion of ideological promotion as the latter may demand expenditure which are inflationary in nature, and so on. If one of those conditions cannot be fulfilled somewhere in the economy, then the first-best solution cannot be achieved. The best that can be attained would be the second-best or the third-best, involving a violation of some of the welfare conditions.

It is true that the subjective or intangible factors reflected through the Islamic welfare criteria are most difficult to take into consideration. In fact, their evaluation by any means is dependent on the value judgement of the person making the evaluation. Undoubtedly some can be assigned a quantitative value, by means of educated estimates.

Nevertheless, they are extremely important, and may outweigh or over-ride, in many cases, the more easily determined cost items. The following outline suggests a method of evaluation:[23]

1) Determine all factors that affect or apply to any of the alternatives under consideration.
2) Review the factors selected (in step 1) and reword, or restate them, if necessary, to be sure they are well defined and clearcut.
3) Determine the relative importance of each factor from the most important to the least important.
4) Assign an important value to each factor, using 100 for the most important, and a lesser value to each of the others, based on the judgement of the evaluator(s).
5) If desired, adjust the values so that the total is 100 for convenience. This is

21. Al-Hadith (Bukhari 41:15)
22. *Ibid.*
23. Canada, J.R., *Intermediate Economic Analysis for Management and Engineering,* Princeton Hall, U.S.A. 1971.

done by totalling the unadjusted values, dividing each by the sum, and multiplying the result by 100.

6) Evaluate each factor for each alternative in terms of its relative importance or effect on the project at hand, on the basis of 100 for the lmost important and so forth.
7) Determine weighted evaluation.
8) Total weighted evaluations.

At this point, all factors - objective and subjective - will have been evaluated. All that has preceded is intended only to help decide which alternative is to be chosen on the basis of the evaluations. It is, of course, possible that the evaluation of the intangibles may outweight the cost factors. Here again, the analyst must exercise his judgement in deciding whether or not the subjective welfare factors outweigh the cost factors, and to what extent.

At this stage, it is perhaps desirable that the analyst assigns "weights" to the cost results, the weights reflecting the "value" of the subjective factors. If done, the calculation should be:

$$\frac{\text{Total of cost factors}}{\text{Weighted evaluation of subjective factors}} = \text{Weighted evaluation of cost factors}$$

The stage is now set for the project analysts and statisticians to handle the nuts and bolts, and for further research and investigation.

5.

CONCLUSIONS

The following basic conclusions emerge from the preceding discussions:

1. The fact is that the allocation of investment resources under producer's sovereignty turned out to be quite different from the marginal productivity criterion under consumer's sovereignty. It is argued however that allocation of resources in an Islamic economy combines not only the best of the two systems but also incorporates additional criteria based on the social and moral welfare function of Islam.

2. The actual allocation of resources in Islam, which differs fundamentally from both the neo-Classical and Marxian doctrines, depends on both objective and subjective factors. The objective factors are expressed in terms of accounting price for capital which may be determined by "share dividend index" or "profit index" of selected industries or it may be expressed in terms of "opportunity cost". This accounting price of capital is Islamic value-loaded; it may be different for different sectors of the economy depending on the need and overall priorities in the national plan. The subjective factors are expressed in terms of welfare criteria with which investment criteria are to be inter-mixed. We have deduced two basic principles and ten criteria or conditions of welfare from the *Qur'an* and the Traditions of the Prophet (peace be upon him).

3. All welfare conditions may not be simultaneously satisfied. The best way to approach this problem is to determine the relative importance of each factor from the most important to the least important, to assign importance value to each factor and to determine weighted evaluations. The project analyst may weight the cost results by the value of the subjective welfare criteria. While the technical details will be done by the analyst, the weight of importance value is to be assigned by the policy makers thoroughly conversant with the pros and cons of each investment decision from the viewpoint of the Islamic ideology and values. The stage is thus set for further research.

COMMENTS

1. Dr. Mohammad Saqr *(Discussant)*

The paper under review can be devided into two parts. The first part starts with the basic characteristics of Capitalism, Marxism and Islam, and then takes up the problems of resource allocation in Capitalism and Marxism. "Consumer Sovereignty", the author contends, is totally responsible for the allocation of scarce resources among different industries in the capitalist system. The instrument through which this allocative mechanism works is the rate of interest. It is this rate which decides whether any investment is profitable or not. In contrast, "Producer's Sovereignty" prevails in a Marxian economy. Here investment decisions are not guided by market forces and the rate of interest has no place. Yet the author points out that in some centrally planned economies capital charges are used as an accounting price for capital.

The second and major part of the paper is devoted to a discussion of how resources can be allocated in an Islamic economy not in the transition period but in the full working of the system. The author rightly takes for granted that Islam prohibits interest and states that Islamic *'Fiqh'* considers *'Ribā'* and interest to be one and the same thing.

What about allocation of resources in Islam? The author's answer may be summarised as follows: If we care for efficiency then we should have a shadow price or an accounting price for capital, not as an income for capital-owners but rather as a calculating device. At the end of this part, two axioms and a number of criteria are mentioned in an attempt to formulate a welfare function in an Islamic economy.

The author should undoubtedly be commended for producing a thought-provoking paper. Nevertheless, I cannot help but feel that the marginal utility of the reader could have been significantly increased, had the author cut off completely certain portions of his paper and concentrated the time and effort thus saved on tackling more deeply and adequately several central issues that are treated very lightly in the paper.

It is not clear what the author means by "revolutionary force" when he says that "ownership of anything and everything is relative not absolute. This makes Islam a highly revolutionary and dynamic force."

Dr. Mannan dismisses the notion of consumer sovereignty in an Islamic economy. I feel it is very important, however, to understand consumer sovereignty in the light of Islam rather than as it is practised in capitalist societies. In present-day mass consumption societies, consumer's rationality has been sabotaged almost completely by commercial advertisement. In an Islamic society, the producer's ability to manipulate consumers tastes and preferences is substantially curtailed and hence consumer's rationality is always kept at a high level. Government plays its due role to rectify any abuse in production and consumption and to ensure an efficient allocation of resources according to Islamic social norms. In such a framework, the consumer is the true sovereign. It is his legitimate desires, which express themselves through the price system, that really count in resource allocation. The welfare of the individual is of supreme importance in an Islamic setting.

In discussing the role played by the rate of interest in the macro-ecnomic context, Dr. Mannan states Keynes's view that investment will take place as long as marginal efficiency of capital exceeds the rate of interest. But Keynes himself noted that the rate of interest does not matter much when future expectations are introduced. The marginal efficiency curve for capital can shift upward and more investment can take place regardless of the rise in interest rate. It is the rate of profit rather than the rate of interest which influences investment decisions. The author should have given more time to undermine the invalid proposition that interest rate is really responsible for the allocation of resources. The internal financing of a big corporation is a well-known phenomenon. Even in some less-developed countries where credit is being acquired by a few people of the merchant class, it is their monopolistic power which enables them to borrow large chunks. Small merchants and businessmen usually find it very difficult to obtain the same facilities. Interest rate in such cases is functioning to misallocate resources.

Dr. Mannan unconsciously has accepted the argument put forward by some capitalist economists that a positive rate of interest is a must whether the economy is run by the state or by private firms. He says: "It is now clear that the rate of interest or capital charges does paly a role both in capitalist and socialist systems."

Dr. Mannan observes rightly that Islam rejects interest as a cost of production. This does not mean that capital is not a factor of production. It is a factor of production on condition that its reward is variable and should be subject to trade risks.

Coming to the crux of the matter, Dr. Mannan proposes the idea of an accounting price for capital to rationalize its use in an Islamic economy on the condition that it should not be a price-forming element. How can one arrive at such a price? The author suggests that it can be arrived at through the process of trial and error, making use of prices historically given. Here he keeps the assumption of a competitive market. It is not difficult to question Dr. Mannan on his advice. What does he mean by prices historically given? Are they the interest rates prevailing in the pre-Islamic era? Do prices of from past history reflect competitive models envisaged and efficient allocation aimed at?

The author thinks that the introduction of accounting price is necessary to measure efficiency in carrying out the plan. One is entitled to ask what plan Dr. Mannan is talking about? Are we dealing with a fully planned economy? Or are we dealing with an Islamic economy?

Any how, the problem of resource allocation in an Islamic economy is not that difficult. It should be made clear that, in an Islamic economy, major investment decisions are taken up by private firms. Such firms apply their rules of thumb. Resources will be diverted to the production that gives the most desired rate of profit in the ex-ante sense and not necessarily the highest rate of profit. Equilibrium will be reached when the expected rate of profit is just equal to the normal rate of profit. Each industry has its own normal rate and rates differ according to the size of investment, time maturity, degree of risk and other related factors. Furthermore, streams of income can be discounted using normal rates of profits, so that investment is carried out as long as the present value of the sum total of the income streams is larger that the amount of investment or its replacement cost.

So much for the private sector. What about the the public sector? The answer is tow-fold. First, if investment in the public sector is meant for the production of goods and services to be marketed along the same lines as private firms, then the same rule holds as in the case with private investment decisions. Second, if Government investments are in public utilities or welfare projects, then the investment criteria would include so many variable and nothing can be decided *a prior* on the basis of economic calculations alone. Once the socio-political decision is taken, then and only then can economic calculations be made use of in order to economise on cost and to maximize benefits. Rational choice at this stage can be made between different processes and methods of production.

Coming now to the welfare economics part of the paper, we find that Dr. Mannan, after noting that the welfare of the firm and the individuals are different in capitalism, goes on to say that in Islam welfare economics does not differ essentially from the economics of the individuals or the firm because both of them are subject to same overall control and directions imposed by the will of Allah as expressed in the *Qur'an* and the *Sunnah.*

On the whole, the paper's main mission is the treatment of resource allocation in Islam. The mission has not been fulfilled. In my view, there is a need for the entire paper to be reorganized. The last part of the paper dealing with welfare as it stands is not relevant and can be bypassed altogether. Instead, the author can state the main objectives of the economic system of Islam as a prelude to the discussion of the resource allocation question. The distinctive feature of welfare in Islām can be brought in. The same holds for the first part of the paper. Basic differences that exist between different economic systems can be sketched out concisely. If these remarks are accepted by the author, he is left free to dig deep and concentrate on the main theme of his paper, i.e.,resource allocation.

2. Professor Dr. Sabahuddin Zaim *(Discussant)*

It is significant that this paper is prepared by Dr. Mohammad Abdul Mannan, who is a well-known scholar in the field of Islamic Economics, especially for his valuable book, *Islamic Economics: Theory and Practice,* a prize winner in Pakistan in 1970. This valuable book also published in the Turkish language, is one of the best known books on Islamic Economics. I have had the opportunity to meet him personally in the Islamic Development Bank and to be aware of his qualifications. I am sure that it is a gain for International Centre for Research in Islamic Economics, King Abdulaziz University, to have him as a senior research staff.

Dr. Mannan prepared this paper according to the outline of this seminar on the subject of "Allocation of Resources in a *Ribā*-Free Economy". Dr. Mannan selected his topic under the title of "Allocative Efficiency, Decision and Welfare Criteria".

In the first section he compare Neo-Classical-Orthodox and Marxian Radical with Islami socio-economic paradigms. In the second section, he examines the problem of allocation of resources in neo-Classical and Marxian models. But Dr. Mannan restricts his study of resource allocation only to investment funds, focussing his attention mainly on the neo-Classical model, and it is analysed at both micro and macro levels. More space is denoted to micro analysis of investment decisions in a market economy, while macro analysis occupies relatively less space. For the analysis of the Marxian method of allocating, investment funds, the Russian model is taken as an example. In the third section, Dr. Mannan makes a comparison between Islamic thought and neo-Classical and Marxian doctrines on the question of allocation of resources and then proceeds to study the actual allocation process in Islam in terms of objective and subjective factors. The objective factor is explained in terms of "accounting price" of capital. He accepts it as a shadow rate of interest which is seen not as a cost of production. So he makes a distinction between Marxian "capital charges" and the so-called "accounting price" in Islam. He then goes on to discuss the application of "accounting price" criterion for investment in public, private and mixed sectors.

The subjective factors are expressed in terms of the welfare criteria of Islam. Dr. Mannan emphasizes that the social and moral welfare function of Islam depends on two axioms, and ten criteria for investment decisions. The two axioms are: (a) ideological consistency and (b) operational transitivity. The ten criteria are: ideological promotion; efficient use, equity, common interest, beneficence, proximity, stability, certainty, continuity and universalism. Dr. Mannan tries to explain these two axioms and ten criteria according to Islamic sources, the Qur'an and the Hadith, followed by a summary and conclusion.

The author's response to some basic questions needs to be noted:

1. Does the rate of interest really perform efficiently the function of allocation of resources in a capitalist economy?

According to the explanation of Dr. Mannan, the answer is "yes" in the sense of project evaluation and feasibility studies.

2. How well is the function of resource allocation taken care of in a socialist economy? Is the use of a shadow rate of interest really essential and does its introduction ensure efficiency?

The answer of Dr. Mannan, to this question, is also partly affirmative to some extent, but with some reservations. He explains the use of "capital charge" as a shadow rate of interest to guide resource allocation.

3. Would it be necessary to have such a rate in an Islamic economy?

Dr. Mannan's answer to that question is also affirmative. He explains the function of accounting price for capital which is to be shown only in books with no actual transactions taking place.

This objective of accounting price for capital in investment decisions is evaluated in terms of a set of explicit value judgements based on Islamic welfare criteria. Dr. Mannan's paper is a valuable contribution to this important branch of Islamic economics. But if I may be permitted, I believe that a revision along the following lines would improve the high-quality of this valuable paper.

It seems that Dr. Mannan has consulted a large number of pre-1971 publications in the area of Islamic Economics. It appears that some of valuable papers presented to the First World Conference on Economics in Islam in 1976 directly and indirectly related to the subject of allocation of resources have not been referred to. I may mention some of them:

M.N. Siddiqi,	*"A Survey of Contemporary Literature on Islamic Economics."*
M.A. Quraishi,	*"Investment and Economic Development in an Islamic Framework".*
A. Zarqa,	*"Social Welfare Function and Consumer Behaviour, an Islamic Formulation of Selected Issues."*
M. Kahf,	*"A Contribution to the theory of Consumer Behaviour in an Islamic Society."*
M.U. Chapra,	*"The Islamic Welfare State and its Role in the Economy*
M.A.M. Al-Jarhi	*"Relative Efficiency of Interest-free Montary Economics."*
H.O. Balkhy,	*"The Just Price in Islam".*
F.R. Faridi,	*"Zakāh and Fiscal Policy."*
M.A. Saqr,	*"Islamic Economics: Its Foundation and Concepts."*

In addition, the following two works also deserve special mention:

A.B.M. Chowdhri,	*"A Mathematical Formulation of Mudarabah: the profit sharing in Islam," Associations of Muslim Social Scientists, 1974, Gary, Indiana, USA.*
M.N. Siddiqi,	*"Banking without interest, Lahore, Islamic Publication, 1973."*

It would be advantageous to make a brief analysis of the previous studies on related issues before the author explains his own ideas. This he does in this paper only when he deals with neo-Classical and Marxian postulates.

Dr. Mannan has pointed out two axioms - i.e., ideological consistency and operational transitivity. I may add a third axiom: existence of Islamic man rather than homo-economicus. This idea is already implicit in his paper. But it is better to make it explicit. This axiom is an essential prerequisite of Islamic economics, because we have to educate the people so that they behave according to Islamic values. Otherwise, the Islamic economy cannot function. Prof. Khurshid Ahmad stresses this point as the first objective of Islamic Developmental Policy and calls it "human resource development."[1] Dr. Anas Zarqa, uses the terminology of "homo-Islamicus" for Islamic man, and stresses that the fundamental difference between homo-economicus and homo-Islamicus, is that the utility function of the latter has a

1. Khurshid Ahmad, "Economic Development in an Islamic Framework", Paper submitted at the First World Conference on Economics in Islam, Mecca, 1976, p. 26.

new variable in it, namely the reward or penalty in the hereafter.[2] Unless we have homo-Islamicus in Islamic society, the other two axioms and the ten criteria mentioned by Dr. Mannan cannot be realized. Thus there is a need to make this third axiom, which is implicit in Dr. Mannan's explanation, rather explicit.

Dr. Mannan rightly points out the existence of "lack of harmony of interest" as the first element of Islamic socio-economic paradigm. He mentions that: "The very fact that *al-Qur'an* declares that every thing between Heaven and Earth belongs to God, is indicative of the fact that Islam believes in human limitations and frailties".[3] "In Islam the lack of harmony of interest is expressed in terms of human limitations and weakness." This is a very important point. Islam accepts that there is an inclination of personal interest in human nature. "Say unto them: If ye possessed the treasures of the mercy of my Lord, you would surely hold the back for fear of spending; for man was ever grudging." "Greed hath been made present in the minds of men."[4] Islam at the same time, subjects the economic behaviour of man to a set of principles based on ethics. Islamic economic theory, therefore cannot be value-free. In an ideal Islamic society, men does not behave as natural homo-economicus.

In this paper micro-analysis is given more emphasis than macro-analysis. I think that the macro aspect of resource allocation in Islam deserves a more elaborate treatment than what Dr. Mannan has been prepared to give it if I may be permitted, I would like to put some small points for the consideration of Dr. Mannan.

Firstly, Dr.Mannan points out that: "All resources are a trust to mankind to be used for the welfare of the people. *Al-Qur'an* has repeatedly asked the rich to discharge their duties towards the poor. *Any failure on their part justifies the intervention of the state which is required to correct the problems of externalities as well as to achieve allocative and distributive share.*"[5] This is a very important statement and needs more clarification and explanation. One explanation may be as follows: The Islamic State has the right of compulsory state planning action. If the economc behaviour of the people does not conform to Islamic principles, the Islamic State has the right to act in an authoritarian way and intervene in the economic life of its citizens in order to achieve allocative and distributive justice. I do not think, or at least I am not sure, that Dr. Mannan means this. In that case the function of the Islamic State in allocative and distributive justice needs more explanation.

Secondly, Dr. Mannan observes that "*Al-Qur'an* recognises the existence of different classes in society." This phrase also needs more clarification, because the term "class" should not be used here in the marxist or capitalist sense which is alien to Islamic ideology. It therefore needs more clarification to avoid misunderstanding.

Finally, Dr. Mannan notes that Islam does not permit extremes in consumption behaviour and stresses that extravagance is condemned in Islam. It will be pertinent to examine the implications of this for the investment behaviour in the light of the theory of conspicuous consumption and demonstration effects.

I hope that this valuable paper of Dr. Mannan will stimulate further research on this subject so that we have a better understanding of Islam.

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2. Anas Zarqa, "Social Welfare Function and Consumer Behaviour," Paper presented at the First World Conference on Economics in Islam, Mecca, 1976, p. 30
3. *Al-Qur'an* (17:100)
4. *Ibid.*, (4:128)
5. Italics added.

GENERAL DISCUSSION

1. Dr. Syed Nawab Haider Naqvi begins by saying that, in a mathematical system, there are two criteria to satisfy, i.e., consistency and independence, whereas the two axioms in Dr.Mannan's paper are one and the same, and not at all independent. He argues that Dr.Mannan's axiom system would collapse if transitivity were replaced by its opposite. Insofar as the criterion of consistency is concerned, Dr. Naqvi points out that it is a property of the axiom system as a whole and not of an individual axiom. He, therefore, maintains that it would be quite meaningless to say that a particular axiom is consistent or inconsistent in itself.

Dr. Naqvi disagrees with the author that Arrow's transitivity criterion is based on the assumptions of capitalistic economics. He points out that Arrow's transitivity criterion is based on simple mathematical logic: If A is preferred to B, and B is preferred to C, then A must also be preferred to C.

It is Dr.Naqvi's contention that the rule of welfare economics is perfectly neutral with respect to the institutional framework. Thus he argues that the utility function may well be extended to include not only consumption goods but also spiritual goods. He is of the opinion that Dr.Mannan's ten welfare criteria do not follow from his two axioms. Dr. Naqvi finds some elements of inconsistency between criterion 6 and criterion 9. He also rejects as invalid the inference drawn by the author from the Qur'an in support of criterion 6, i.e., preference to proximity over remoteness.

Finally, Dr.Naqvi criticizes that careless use of certain words by the author has led to misunderstanding. Thus, for instance, "continuity" and "discontinuity" in Dr.Mannan's paper have not fallen in line with the standard meaning of these terms. Similarly, it is pointed out by Dr. Naqvi that the term "sensitivity analysis", as it is understood in modern times, deals not with the interaction between variables as suggested by the author, but with the reaction of the system to a change in a parameter.

2. Dr.Mohammad Uzair stresses that, at this formulative stage of Islamic economics, there is a need to coin new terms which will bring to bear the uniqueness of Islam's approach to economics. Thus Dr.Uzair points out that the term "welfare" has a special connotation in the framework of a capitalist economy, and suggests that it will be appropriate to have this replaced by "economic justice" or "social justice" in Islamic economics.

Dr.Uzair goes on to argue that it will be inconsistent for Islamic economics to recognize capital as a factor of production and yet reject interest as a reward for capital. For logic would demand that the elimination of one is also accompanied by a similar elimination of the other. He does not think that interest can be simply replaced by profit which is recognized as a reward for enterprise. He therefore suggests a way out which requires capital to be merged with enterprise. His argument is that capital is a physical manifestation of enterprise.

Finally, he highlights the possibility of using the average profit rate prevailing in the economy to estimate the opportunity cost as a guide for project evaluation and resources allocation in the private sector. As for the public sector, he maintains that financial costs and benefits are irrelevant. But he says that, if "costing" is necessary, one could resort to opportunity cost based on the average profit as suggested earlier.

3. Professor Mohammed Mohsin thinks there is a tendency for economists, in analysing resource allocation, to overemphasize the role of interest in capitalist economies and to underestimate its role in socialist economies. Saying that he has already made references to the role of interest in the capitalist system in his previous interventions; Dr. Mohsin confines his remarks to the role of interest in socialist set-ups. Referring to two books on Russia and China, he claims that interest is actually charged by the state banks of these countries on credit given to public enterprises.

Dr.Mohsin stresses that modern techniques of project evaluation, whether in capitalist or socialist economies, are based on profit and cost considerations where cost includes interest. In short, the point that he is trying to drive home is that it is incorrect to say that socialist systems ignore interest as a cost which the capitalist system is obsessed with.

4. Mr.J.I. Laliwala raises questions relating to the shadow prices of capital. He observes that Dr. Mannan's paper has not made any distinction between financial capital and physical capital and that it is not clear whether the so-called shadow prices, to be determined by government agencies, refer to interest or the prices of physical capital goods.

He then goes on to say that the question of shadow prices would become relevant if financial institutions and capital goods industries are in the public sector, as the author has assumed. Mr.Laliwala is of the view that it will be neither easy nor necessary to fix the shadow prices where capital institutions and industries are in the private sector: it will not be easy, because Government officials often lack the intimate knowledge of the private sector's perceptions of the capital market; and it will not be necessary, because in interest-free banking depositors part with their liquid capital, return on which is not pre-determined, on a profit-sharing basis which would automatically determine the price of capital.

Mr.Laliwala rejects the view that the "invisible hand" does not function any more and emphasizes that self-correcting mechanisms do operate especially in the long run. However, he concedes that an Islamic society is not a stateless society and that a certain amount of state intervention is necessary in view of market imperfections, in addition to safeguards provided by trade unions, consumer associations, etc. which flourish in Western societies. But he cautions that there is a real danger of excessive controls stifling private initiatives, due to errors of judgement on the part of the policy makers. He therefore places considerable stress on the role of self-correcting market mechanisms in an Islamic economy.

5. Dr. Monzer Kahf detects confusion in the mind of the author with regard to the shadow price of capital. Dr. Kahf finds it difficult to reconcile the author's earlier

stance that capital deserves nothing in the Islamic distribution theory with his subsequent attempt to set aside a reward for capital, which would reflect its cost. He attributes this confusion to the way in which capital has been viewed by the author. Dr. Kahf explains that capital is not a "fund", for it ceases to be a "fund" the moment it is committed to particiate in the production process. He argues that a capital fund deserves no reward as it does not participate in the production process, while real capital deserves a reward for its participation in the production process. Dr. Kahf is of the view that the concept of profit-sharing will help determine the price of "real" capital and obviate the need for fixing its shadow price. The price of "real" capital seen in this light would be similar to the rental prices of capital goods in modern times.

Dr. Kahf also discovers some inconsistences in Dr. Mannan's paper. For example, the author has stated that, in an Islamic money market, speculation is replaced by planning. Dr. Kahf observes that this accent on planning would imply a limited scope for the role of market mechanisms which characterise an Islamic economy.

Dr. Kahf disagrees with the author that considerations for social and moral destiny are given due importance in allocating resources in an Islamic, and not a Marxian, economy. Dr. Kahf points out that this is incorrect, for the USSR does set aside resources for the propagation of atheism. He stresses that an Islamic society should not be singled out for mixing non-economic values with economic activities. Accordingly, he finds Dr. Mannan's first axiom somewhat meaningless.

Dr. Kahf points out that the investment criteria spelled out by Dr. Mannan are applicable to any system. For he cannot see any uniqueness that would make them Islamic. He is particularly critical of the principle of giving preference to certainty over uncertainty. He wonders whether this implies the Muslims are risk averters, and wants to know the basis for such a conclusion. Finally, he comments that one cannot Islamise economic activities by simply adding an Islamic terms to the economic concept.

6. Dr. A.M. Khusro makes a philosophical point that there is no need in Islam to reject ideas, techniques and instruments developed by non-muslims provided that they do not violate the principles of Islam. To substantiate his point, he makes references to the valuable contributions made in numerous fields by early Muslim scientists and sholars who had worked on the stock of knowledge acquired from Greek and Indian sources. He therefore sees no harm in borrowing Western techniques of social cost-benefit analysis. He however cautions that such techniques and concepts should first pass the test of Islamic permissibility before they are adopted. He is thus in favour of introducing the concept of Islamic costs and benefits to replace social costs and benefits, and Islamic accounting price for capital to replace interest - a substitution which Dr. Khusro thinks is permissible in Islam.

Classifying all commodities into three categories - i.e., (a) those which are *Haram* (b) those which are permissible but discouraged and (c) those which are permissible and not discouraged - Dr. Khusro suggests different pricing policies which he considers appropriate for these categories of goods. Thus, he suggests that the first group of commodities be eliminated by fixing a prohibitive price which will be so high that the production of these goods can be virtually ruled out or by resorting to other control mechanisms. For the second category of goods which consist of luxury items, Dr. Khusro thinks that a range of shadow prices, depending on the degree to which these are discouraged, may be applied - the range being lower than that applied to the first category and higher than that applied to the third category of goods. As for the third category of commodities, which consist of usual consumer goods, Dr. Khusro is inclined to leave them to be determined by the forces of demand and supply. For purposes of resources allocation, he suggests low accounting prices for such goods.

7. Dr. Mohammed Omar Zubeir rejects Dr. Khusro's suggestion that *Harām* goods are priced out of the market. He points out that it would amount to legalising them at a price. For *'Harām'* goods with high price tags would then become *'Halāl'* for those who can afford them. Such an interpretation of *Harām* and *Halāl* is totally unacceptable. Dr. Zubeir says in no uncertain terms that *'Harām'* is *'Harām'* and that price considerations have nothing to do with it.

8. Dr. Nejatullah Siddiqi makes a number of points. His first point is related to the concept of Islamic paradigm developed by Dr. Mannan. Dr. Siddiqi categorically states that one paradigm should not be defined with reference to another paradigm, as Dr. Mannan has done. Referring to the third paradigm - i.e., disbelief in historical materialism - Dr. Siddiqi questions the need for defining a reality that has been there for last 1400 years with reference to something which has emerged only recently. Dr. Siddiqi finds the sixth paradigm - that changes envisaged in Islam are neither marginal nor radical but institutional-quite unintelligible. He points out that this begs the question whether or not radical changes include institutional changes as well.

The second point made by Dr. Siddiqi concerns the set of criteria laid down by Dr. Mannan. He notes that some of these criteria (especially 2-5) overlap each other to such an extent that the differences between them are only marginal. Dr. Siddiqi is particularly struck by the eighth criterion - i.e., preference to certainty over uncertainty. He points out that this may give rise to a terrible misunderstanding. This criterion may be interpreted to mean that an Islamically oriented individual would opt for a salaried position rather than a business venture which is risky, or that entrepreneurship is un-Islamic! According to Dr. Siddiqi, that a fixed rate of profit is ruled out in Islam shows that Islam recognizes that the world is characterised by uncertainty, not by certainty nor by perfect foresight.

Dr. Siddiqi's third point deals with the concept of "accounting price". He makes it clear that he would never accept the idea of indexation, or the concept of shadow prices for capital, or the accounting rate of profit. He points out that such an issue is not being raised for the first time and recalls that it was already discussed a decade earlier by Mr.Ali Sabri. The problem as perceived by Dr. Siddiqi is basically one of measuring the value productivity of capital - which however does not provide any rationale for fixing shadow prices. He says that Dr. Mannan's advocacy of shadow prices was the result of his search for a reward for capital per se and not for capital and entrepreneurship. He recalls that a reward for both these factors in the form of "average profitability" has been suggested by Dr. Uzair (in his discussion earlier) who recognised the individuality of capital only when it is used in enterprise which means that it cannot solve the problem posed by Dr. Mannan i.e., the selection of some projects from a wide range of alternatives.

Dr. Siddiqi also disagrees with Dr. Uzair on his earlier comment that the cost element is not relevant for social welfare projects. He therefore reiterates that the question raised above still remains unsolved. In this connection, he reaffirms his earlier stance that shadow prices or accounting prices for capital as suggested by Dr. Mannan and Dr. Naqvi are not acceptable. He thinks that a solution may be worked out by modifying Dr. Uzair's "profitability" measure in the light of Dr. Kahf's profit-share idea which has the virtue of separating out the share of enterprise from that of capital. Dr. Siddiqi, however, cautions that the difficulty with this approach is that it is a ratio, not a rate of profit, and urges that the search for a solution must continue.

9. Dr. Abdul Hameed Abu Sulaiman is of the opinion that the author has been overcome by the values of the capitalistic system. He expresses concern that there seems to be a lack of understanding of the political, ideological and social aspects of resource allocation and he therefore calls for an inter-disciplinary approach. He is also of the view that Dr. Mannan has confused the issues of productivity, efficiency, profitability and intrest rate. He feels that the author, by associating interest with productivity, has trapped himself in the capitalistic system.

Dr. Abu Sulaiman points out another misunderstanding about the role and the price of capital. He emphasizes that Islam recognizes that capital is productive and that it deserves a reward, but the issue is: who has to pay the price for capital, to whom, and how? Dr. Abu Sulaiman wishes that the author had addressed this basic issue directly.

10. Dr. Mohammed Sultan Ahmed Abou Ali begins by saying that Dr. Mannan has skillfully demonstrated his command over economic theory but has failed to do justice to the topic of resource allocation in an Islamic framework. Pointing out the fact that some laws are common to all social formations while some others are applicable only to certain social formation, Dr. Abou Ali wonders whether the two axioms and the ten criteria, mentioned by Dr. Mannan, are really Islam-specific and questions if these provide useful guidelines for resource allocation from the operational point of view. He suggests that the general rules of modern economic theory, such as the equality between marginal rates of substitution in production and consumption, are sufficient so long as they do not infringe any of the Islamic principles.

INTEREST RATE AND INTERTEMPORAL ALLOCATIVE EFFICIENCY IN AN ISLAMIC ECONOMY

Syed Nawab Haider Naqvi*

The existence of a positive rate of interest in an Islamic society raises ethical and economic questions. At the ethical level, the case is indeed strong for eliminating the rate of interest as a matter of conscious policy. In a capitalistic society, with unlimited right to private property, it tends to reinforce economic inequality and social injustice, by making it possible, through a web of general-equilibrium interrelations, for the owners of wealth to live in luxury at the expense of society. The problem of intergenerational equity gets complicated because the debt incurred by the present generation has to be paid ultimately by posterity along with heavy service charges. The policy implication is then clear: abolish such social abomination.

In the realm of economics, the issue is not so very clear-cut. Given the distribution of income, static efficiency requires at a given point of time, that scarce economic resources be allocated optimally among various sectors of the economy. In free market economies a differential interest rate is an important policy instrument for achieving this objective[1]. Complications arise because investment decisions are essentially dynamic, adjusting on the margin the rival claims of additional consumption and capital formation. Dynamic efficiency involves a comparison of the present values of utilities of future income streams, discounted back to the present at the current rate of interest. Additional investment is recommended in those 'activities' or sectors where, on the margin, the present values are the highest. Hence, the rate of interest links up current investment decisions with their future profitability throughout the economy.

It is well known that in a steady state (i.e., dynamic equilibrium) the rate of interest must equal the marginal productivity of capital. This apparently simple rule

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1. A differantial interest rate policy also takes the form of 'twisting' the maturity structure - referred to in the literature as the 'term structure' of interest rates - by raising yields on securities with short-term maturity while simultaneously lowering, or at least holding the line, on long rates. Such an 'Operation Twist' aims at simultaneously stemming the outflow of short-term capital from the country and stimulating domestic private investment.

is, in fact, quite complicated because its satisfaction requires intertemporal adjustments in the basic parameters of the economy. It will be shown in this paper that when a fully dynamic analysis is carried out, interest rate in a steady state must equal a sum of three terms: positive rate of social time preference (i.e., present income being systematically preferred over future income); the social cost of using capital for productive purposes; and the secular decline in the utility (or an increase in the disutility) of saving owing to its growth over time. When money is introduced implicitly, the rate of interest must also offset price expectations which have a direct bearing on the rate of time preference - expectations of lower price in the future tend to decrease the rate of time preference while those of price inflation increase it.

It should be noted that the present analysis is designed " *to effect a separation between the institution of interest and the essential economic functions which it performs.*" It also shows that while these essential functions must be performed in any dynamic economy - capitalistic, socialistic or Islamic - where capital is a scarce factor of production[2], there is no necessary connection between the two. It is conceivable to restructure an economy in a way that these functions are performed while the institution of interest is abolished - as it must be in an Islamic economy. Once the matter is seen in this way, two important conclusions immediately follow: (i) Interest rate cannot be abolished just by an administrative fiat, without making alternative arrangements, financial and real, to ensure the effective perfirmance of these functions. (ii) It is a *non sequitur* to deduce that, since interest rate is 'bad' - which in the perspective of a fully-functioning Islamic structure it is -, any policy which replaces it has to be 'good'. The optimality of policy alternatives must be established by evaluating the comparative merits of alternative policy instruments in achieving the stated objectives of economic policy in an Islamic economy - in particular, the ethical requirement of promoting *al Adl.*

It should also be noted that a *zero rate of interest is a property of an Islamic economic system and not of capitalism.* Thus, if interest rate is abolished by an administrative fiat while leaving all other capitalistic institutions intact, the Islamic 'reform' may end up by pushing the economy away from the Islamic ideal. To put this argument formally, while a zero rate of interest is a *necessary* condition for an Islamic economic order, it is by no means a *sufficient* condition in that this step, *all by itself,* need not usher in an Islamic society, based on *al Adl.* This point is crucial especially for those Muslim countries whose economies are at present run on capitalistic principles[3]. For them a period of transition must elapse on their way to the attainment of an Islamic Ideal. It is, therefore, important to analyse: Firstly, how these functions will be performed during the 'transition period', until the present economic systems prevalent in the Islamic countries are replaced by a full-fledged Islamic economic system; and secondly, how this job will be done once such a system does get established.

2. In the context of long-run equilibrium positions - 'stationary states' - capital scarcity is defined as a state of affairs when an additional amount of resources permits an alternative stationary state which allows a higher consumption of some, and no lower consumption of any commodity, in all future periods. If this state of affairs does not exist, we get the *state of capital saturation, which is perfectly consistent with a zero rate of interest.* For a discussion on this see, T.C. Koopmans, *Three Essays on the State of Economic Science,* pp. 122-123, McGraw Hill Co., London, (1957). *However, the Islamic injunction against interest does not necessarily require capital saturation.*

3. This argument is no less applicable to socialist Muslim countries which may abolish interest without becoming any more Islamic.

The basic theme of this paper is spread over four sections. The first section develops an appropriate analytical framework to decompose interest rate into its component elements - i.e. its 'functions' - in the context of a dynamic 'real' economy. This analysis is invariant with respect to the institutional framework postulated. In the second section, the Islamic point of view regarding the legitimacy of these functions is broadly indicated. Once we consider the question of how these functions will be performed, a proper institutional framework must be specified. This is the general theme of the third section, which will be divided into two subsections: The first one considers the problem of abolishing the rate of interest in the transition period; the second sub-section analyses the problem of duplicating in a full-fledged Islamic economy - without interest rate, that is - the essential functions which the interest rate performs in a capitalistic society in order to generate the investible surplus required to provide the minimum wherewithal for promoting economic growth consistent with the Islamic principle of *al Adl.* The final section, drawing together the threads of the main arguments of this paper, reexamines their 'reasonabless' within a general philosophical perspective.

THE ANALYTICAL FRAMEWORK

For clarity of exposition, we at first abstain from the complications of a money economy. This may appear to be an artificial abstraction because the interest rate is known to be a monetary phenomenon. However, this is only partially correct. A positive interest rate will exist even in a 'real' dynamic economy, with no money in it. It is essentially a relative price which equals the marginal rate of transformation between the present price of capital and the future price of capital, which, being a ratio, is independent of the unit of account in which it is expressed. The justification for this analytical approach is that it leads to a precise statement of the economic functions which a positive rate of interest performs, independently of any particular institutional framework. In fact, in this sense, it will exist under every dynamic economic system, be it capitalistic, socialistic or Islamic. The next step will be to introduce, through only tangentially, money into the system and analyse the consequences of it in terms of these essential functions. It will be noted that money rate of interest is in general higher (lower) than the 'real' rate of interest, mainly due to the need for offsetting inflationary (deflationary) expectations.

(i). *Interest Rate in a Dynamic 'Real' Economy*

The role of interest rate in a *dynamic* real economy is best seen in relation to the capital theory[4]. According to this theory the society, at a given point of time, must make an explicit choice between the amount it wishes to consume now and that in the future. This choice entails a decision regarding the optimal intertemporal allocation of investment resources, because investment is nothing but postponed consumption. The problem is made difficult by the fact that, depending upon the initial level of capital stock, a variety of optimal time paths of consumption may satisfy the

4. The following treatment is based on Robert Dorfman, "An Economic Interpretation of Optimal Control Theory", *The American Economic Review* (1968); and K.J. Arrow, "Applications of Control Theory of Economic Growth", American Mathematical Society, *Mathematics of the Decision Science,* Part 2, Providence 1968, pp. 85-119.

requirements of a steady state[5], since dynamic equilibrium is consistent both with too little saving and with too much saving. Hence, the need for an optimal time path - in a loose sense, the 'best' of the many 'good' ones.

Complications arise because society must *simultaneously* maximize the discounted sum of utilities over the entire planning period and keep the economy growing at the planned rate by making a suitable provision for capital formation over the same period. In mathematical language, the decision-maker must maximize a current value utility functional, subject to the constraints of technology and initial conditions[6].

To bring out the role of a positive interest rate in the above-mentioned constrained maximization problem, consider a simple 'real' economy with the following characteristics[7]. The production function is given by

$$Y = f(K,L) \tag{i}$$

where Y is output, K is capital and L is Labour. The production function is assumed to be 'well-behaved'. Furthermore

$$L(t) = L_0 \cdot \exp \cdot (\gamma t) \tag{ii}$$

specifies the growth of labour force at the rate γ. The discounted utility of per capita consumption (x) for the entire labour force is given by

$$\exp \cdot (\gamma t) \cdot \exp \cdot (-)\, \alpha t \cdot \phi(x)$$

or

$$\exp \cdot (\gamma - \alpha)\, t \cdot \phi(x) \tag{iii}$$

where α is the social rate of time preference, assumed to be a decreasing function of time. The utility functional is then:

$$\int_0^T \exp(\gamma - \alpha)\, t \cdot \phi(x) \cdot dt \tag{iv}$$

(This finite-horizon problem becomes one of optimization over an infinite horizon if $T = \infty$).

The aim of public policy should be to maximize expression (iv) by manipulating the 'control' variable x, subject to the constraint:

$$\dot{v} = \psi(v) - x - (\gamma + \beta)\, v \tag{v}$$

5. The steady-state for a dynamic economy corresponds to the equilibrium situation for a static economy. In it, all variables grow at the same proportionate rate.
6. A functional is a kind of a function where the independent variable is itself a function (or curve). For this reason we deal with functionals rather than functions in dynamic analysis which is the subject matter of the calculus of variations and the Pontryagin's Maximum Principle. We use the latter technique in our exposition. This principle, which forms the basis of optimal control theory, developed in response to the needs of the space technology. It is given in L.S. Pontryagin, et al., *Mathematical Theory of Optimal Processes* (1962), Inter-Science, New York.
7. The acute reader will note that the dynamic model presented here makes the restrictive assumption of 'malleability', i.e. capital can be shifted costlessly from one line of production to another in order to secure an optimal capital/labour ratio. This assumption is restrictive because capital is usually 'embodied' in machines of different vintages.

where v (t), the 'state' variable[8], describes the state of an economic system at any given time t; and ß is the rate of capital deprecition. It is also assumed that the planner saves an amount of current income varying between zero and 1.

Note the chain of causation: starting from time zero and a given capital stock, v, the planner chooses an optimal initial value of the control variable, x. This will make the capital stock to grow, giving rise to a new enlarged value of the state variable. The system is then started over again by varying the value of the control variable and so on. The optimal time path of capital accumulation is traced out once the optimal initial value of per capita consumption is chosen, thus providing a 'constructive' (i.e. step-by-step) solution of the problem.

This problem is solved by using the Pontryagin's Maximum Principle, which involves differentaiting the Hamiltonian[9] successively with respect to the control variable, x. The maximized Hamiltonian is then differentiated with respect to the state variable, v to give the differential equation for the 'shadow' price of the state variable (capital stock)

$$\frac{\partial H}{\partial x} = \exp \cdot (\gamma - \alpha)\, t \cdot \phi'(x) = p \tag{vii}$$

$$\frac{\partial H}{\partial v} = p\,[\,\psi'(v) - (\gamma - \beta)\,] = -\dot{p} \tag{viii}$$

where $\{\dot{p} = -\frac{dp}{dt}\}$ is the time rate of capital *depreciation*. To derive a more meaningful result, rearrange (viii) and eliminate $\dot{p}$ with reference to (vii) to get:

$$\psi'(v) = \alpha + \beta - \frac{\phi''(x)}{\phi'(x)} \cdot \dot{x} \tag{ix}$$

This is our final result giving the equation of optimal capital accumulation[10].

Now recall the basic result for a growing economy in steady state:

$$i\,(t) = \psi'\,(v)^{11} \tag{x}$$

In words, interest rate (i), at any given point in time, equals the marginal

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8. According to the optimal control theory, the key variables in a growing economy can be classified as 'control' and 'state' variables. The general point of view of this theory is that 'system' - e.g., an economy - can be controlled by an appropriate manipulation of the control variables.
9. The Hamiltonian (H) is the lagrangean expression:
$$\exp \cdot (\gamma - \alpha)\; t \cdot \phi\,(x) + p\,\{\dot{\psi}(v) - x - (\gamma + \beta)\, v\},$$
where p, the lagrangean multiplier, is in effect a dynamic 'shadow price'. It is *defined* as the marginal contribution of the state variable v to total utility - i.e., $\partial\phi/\partial v$.
10. It may be noted that the optimal rule is limited to selecting the 'best' from steady-state positions. It does *not* necessarily prescribe the most-preferred course of action, given *any* arbitrary initial position.
11. This rule follows directly by differentiating the production function, assumed to be linear homogenous, with respect to capital (K), and depends crucially on the restrictive assumption of malleability. For if capital can be decumulated and consumed, then investment can always be regarded as a loan of infinite short duration. Hence the optimal rule given by equation (x) must be satisfied on the margin. However, as shown in footnote (7), this assumption is not really restrictive in a growing economy.

productivity of capital. This makes sense because, as pointed out by Arrow, investment can be regarded as a short-term loan of an arbitrarily short duration[12]. Substituting (x) into (ix) we get:

$$i\ (t) = \alpha + \text{ß}\ \frac{\phi''(x)}{\phi'(x)} \cdot \dot{x} \qquad \text{(xi)}$$

In words, the rate of interest is the price that society, in order to stay along the steady-state path, must pay over a specified (or infinite) period of time to offset a positive rate of social time preference and the increasing *disutility* of saving owing to its secular growth and to provide for capital depreciation[13].

(ii) *Interest Rate in a Dynamic Money Economy*

The preceding analysis has highlighted the socially necessary functions a positive rate of interest performs to keep a 'real' economy growing, according to the steady-state optimal rule given by equation (xi)[14]. This analytical strategy underscores the highly important fact that present resource allocation is determined by the future.

Let us now introduce money into the system. This complicates the picture considerably. Strictly speaking, the analytical procedure presented above cannot handle an economy with money in it. This is because money, in effect, introduces a second good into a single-commodity economy - an assumption we have made so far. Hence, the brief analysis of the problems of a money economy is only heuristic. The introcduction of money into the system means that, in addition to changes in relative prices, which alone matter in a real economy, the absolute level of prices can also now change. The decisions of savers and investors will be influenced by future price expectations. For instance, it is well known that inflation erodes the real value of saving and inflates the cost of replacement expenditure. In terms of equation (xi), inflationary expectations tend to increase the value of time preference, which, in turn, increases present consumption and decreases saving. Furthermore, the third (negative) term, the marginal disutility of saving, also gets bigger. The same holds for the cost of providing for capital depreciation, i.e., ß.

12. It may be noted that equation (xi) is a dynamic rule since the rate of interest here reflects fully the future movements of the profitability of investment throughout the economy. It is interesting to note in this connection that the Keynesian rule, which compares the marginal efficiency of investment *now* with the rate of interest *now,* is not correct because new investment is not marginal to the present stock of capital but to *future* optimal stock of capital. [see, Arrow and Mordecai, (ibid)]. This is an important point which has been missed by those authors, who quote Keynes to justify, on economic grounds, Islam's prohibition of interest rate. For instance, see Anwar Iqbal Qureshi, *Islam and the Theory of Interest,* Sh. Muhammad Ashraf, Lahore, (1946), esp. pp. 30-39.
13. Ragnar Frisch has identified the first and third terms in equation (xi) to be Bohm Bawerk's second and first grounds for the existence of a positive interest rate: positive α reveals 'the systematic under-valuation of future consumption', while the third term gives 'the decrease in the marginal utility of consumption owing to its growth'. Ragnar Frish, "Dynamic Utility", *Econometrica,* (1964).
14. In situation *off* the steady-state the optimal rule will not hold, since interest rate will differ from marginal productivity. However, the discrepancy between consumption and investment patterns will move the interest level to the steady-state level, mainly by changing suitably the capital/labour ratio (v). Till such time, the rate of growth of per capita consumption will continue to differ from its long-run value. It may be pointed out that the rate of interest determines the stock of capital and *not* the rate of investment, which would more appropriately be related to the *rate of change* of the interest rate. See, Arrow and Mordecai, (ibid) Chapter 3.

It should be immediately clear that the rate of interest has to be higher in an economy with money than in one without it; for, in addition to the three functions noted above, interest rate must also offset the dynamic (depressing) effect of inflation (deflation) on the rate and level of real saving in the economy.

FUNDAMENTAL FUNCTIONS IN A DYNAMIC ISLAMIC ECONOMY

Equation (11) should help us to form precisely the Islamic point of view with respect to the essential functions enumerated in the previous section. Exactly how these functions will be performed is a different matter and will be taken up in the next section. Here we focus on these functions *per se.*

It should be clear that making an explicit 'provision' for capital depreciation (a positive ß) does not run counter to the tenets of Islam. However, a positive α is a more complicated matter to settle; particularly the question whether the *government* can legitimately discount future consumption, even though the individuals are naturally myopic with regard to future events[15]. This is a deep philosophical issue and has attracted considerable attention in the economic literature, which may be reviewed briefly.

The classical Ramsey-Pigou[16] argument is that the government should not discount the future because, unlike the individuals, it is not myopic. However, authors like Marglin[17], feel that it is undemocratic for governments not to discount the future while individuals do. After all, democratic governments must reflect the preferences of individuals in the society. The difficulty arises because, in order to reflect the preferences of the individuals, the government must find a way of *averaging* them, which will require positing axioms based on an irreducible *value judgement.* This is because, according to Arrow's Impossibility Theorem, no such *rational* deduction is possible from the so-called democratic premises.

One of the tasks of Muslim economic policy-maker will, therefore, be to devise axioms, based on the teachings of Islam, to reflect the ethically-conditioned preference ordering of the individuals in a Islamic society. This is important because, unlike a communistic regime, where individuals don't matter, an Islamic society does not neglect the role of individuals initiative. Man, being *Allah's* vicegerant on earth, occupies a unique place in the Universe and, also, by inference, in the economic framework[18]. However, apart from these rather hair-splitting theoretical considerations, myopic discounting *will* find a place in an Islamic economy, as opposed to other economies, because a zero time preference amounts to imposing too much sacrifice on the present generation for the sake of posterity.

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15. Individual investor may be *rationally* myopic and hence a positive time preference exist, if, among other things, the marginal productivity of capital is positive. For, then, the opportunity for investment open to present income may not remain available to future incom recipients.
16. A.C. Piogou, *Economics of Welfare,* (1952) McMillan, London; Frank P. Ramsey, "The Mathematical Theory of Saving", *Economic Journal,* (1928).
17. S.A. Marglin, "Social Rate of Time Preference", *The Quarterly Journal of Economics,* (1963).
18. See my, "Islamic Economic System: Fundamental Issues" *Islamic Studies,* (quarterly), Winter 1977, Institute of Islamic Reserach, Islamabad, Pakistan. However, this point should *not* be overplayed to become a justification for the capitalistic mentality which glorifies egoistic behaviour for which Islam has little room.

The next question is: How high should $\propto$ be in an Islamic society? While I cannot given an authoritative answer, there is some presumption that it will in general be low[19]. However, to make such a presumption operational, the basic parameters of the underlying the economic model have to be spelt out clearly. Furthermore, this presumption requires that the Islamically legitimate normal levels of consumption will be systematically enforced through conscious government policy. Islam denounces in no uncertain terms the squandering away of wealth on vain and conspicuous consumption[20]. To leave such a matter *only* to the voluntary decisions of the individual is, to say the least, a gross over-simplification of the problem.

Now what about the value of the third term in the equation (11), according to which the marginal disutility of saving must be offset by a positive rate of interest? It may appear that the third term is related to the first, but it is not. To see this, we look at Ramsey's formulation. He reformulated the problem of utility maximization in terms of the difference between the marginal utility of actual consumption and that of the 'bliss' level of consumption (b).[21] Hence functional (iv) becomes

$$\int_0^\infty [\,B - \phi(x)\,]\,dt \qquad \text{(xii)}$$

subject to the constraint

$$\dot{v} = \psi(v) - x - \beta v$$

where $\dot{v}$ is investment.

Applying the Maximum Principle[22] we get

$$\frac{\partial H}{\partial x} = -\phi'(x) = p \qquad \text{(xiii)}$$

$$\frac{\partial H}{\partial v} = p\,[\,\psi'(v) - \beta\,] = -\dot{p} \qquad \text{(xiv)}$$

Using (xiii) to eliminate $\dot{p}$ from (xiv), and keeping in view (x) we get

19. It is elementary but may be noted that, with the rate of interest zero – i.e. the cost of transferring future income to present consumption being zero – a positive (negative) time preference implies negative (positive) saving. Thus a policy of reducing α to zero will only reduce the level of *dissaving*, in the economy due to this factor, when it is positive and high. *It may also be noted that, with a positive time preference,* dissaving will occur at low rates of interest.

20. Qur'ān is emphatic: "O ye who believe! Squander not your wealth among yourselves in vanity, except it be by trade or mutual consent . . ." (An-Nisa: 4, 29). Conspicuous consumption is evil. "Eternal doom is the fate of man who spend their wealth to be seen of men . . ." (An-Nisa: 4, 38). (All English translations from Marmaduka Pickthal, *The Glorious Qur'ān,* (1930) London: George Allen and Unwin.

21. Such a reformulation becomes necessary, because with zero discounting, an 'improper' integral, with $T = \infty$, may not converge. Consequently, the optimal time path of capital accumulation will not be located. No social welfare criterion will then exist to 'rank' different time paths of consumption, since with $T = \infty$, every time path will be equally a candidate for selection.

22. Ramsey solved this problem by using the Euler's equation.

$$i\,(t) = \beta - \frac{\phi''(x)}{\phi'(x)} \cdot \dot{x} \qquad \text{(xv)}$$

This expression is identical with (11), except for $\alpha = 0$, reflecting Ramsey's assumption of zero time preference. It is interesting to see that the second and the third terms in (xi) do not drop out, even when the rate of time preference is assumed to be zero[23]. It then follows that even if $\alpha = 0$, the policy makers, in the absence of a positive rate of interest, will still have to make explicit provision for the declining marginal utility of saving and for depreciating capital stock.

The next point to consider is the attitude of an Islamic government to the problem of inflation. This question will be discussed in the next section. It will suffice here to note that in order to ensure intertemporal allocative efficiency, the social time preference, which is bigger with inflation than without it, must be appropriately offset by making future income at least as attractive as the present income. Furthermore, equity demands that an explicit provision be made for the erosion of the purchasing power of the savers caused by inflation - particularly when government's expansionary policies are responsible for it. It follows that in so far as inflation keeps the rate of interest higher than it would be in a regime of price stability, an Islamic government must contain inflation within reasonable limits or make explicit provision to offset it in order to facilitate the transition of present-day capitalist Muslim economies to a full-fledge Islamic economy - the one with no interest in it.

HOW CAN THE INTEREST BE ABOLISHED IN AN ISLAMIC ECONOMY ?

We have so far limited our discussion to separate interest rate from the minimal set of essential functions that must be performed in any dynamic economy, including an Islamic economy, to keep it on the steady-state path. The next basic question is: exactly what policy instruments will be required to perform these functions in an Islamic economy?

It may be noted in this connection that a description of the functions does not require an institutional framework in an essential way, even though their relative 'weights' may differ across different economic systems. For instance, as mentioned earlier, positive but low rate of discounting may be a distinguishing feature of an Islamic economy. However, this is not the case once we address ourselves to the question of exactly *how* these functions can be performed. A proper institutional framework must now be specified. This is a fundamental point because the *solutions most relevant in the context of one economic framework may be entirely irrelevant in the context of another economic framework.*

23. It should be noted that Ramsey's result depends crucially on the assumption that population remains constant over time. This assumption is clearly unrealistic. It has been shown by Chakravarty that, if labour force is allowed to grow in the Ramsey model, a positive discount rate will re-appear. Sukhamoy Chakravarty, *Capital and Development Planning,* (1969). MIT Press, Cambridge, Mass. At any rate, as pointed out above, a positive, though a relatively lower, α will exist in an Islamic economy.

Like mathematical structures, which are completely defined by their fundamental assumptions together with the logical consequences of these assumptions, economic systems are also 'self-sufficient' entities. The truth of one system may become false in another system[24]. Thus, in a socialistic economic, with no private property, interest rate is used merely as an arithemetic discounting device for project evaluation. It is not an institution which guarantees any social class with sizeable private property – of course, assuming that the government is not a social class. On the other hand, in capitalism, with an almost unlimited rights to private property, interest rate is highly relevant. Islam recognizes limited private property, yet prohibits interest rate *primarily on ethical grounds.* It follows that a zero rate of interest, *with private property,* presupposes a distinct economic system raised on the ethical social principles of Islam.

3A. *Administrative Fiat*

Let us return now to the basic question: How can interest be abolished in an Islamic economy? Our analysis has made one thing absolutely clear: in a capital-scarce economy, interest rate can never be abolished by an administrative fiat *without making alternative financial and real institutional arrangements so that the essential functions are performed to keep the economy on the optimal growth path.* If this is not done, all capital will depreciate without replacement, and the economy will gradually return to the primitive stage through capital consumption.

The truth of this statement can be easily established directly from equation (xi). Suppose the interest rate (i), is equated to zero by an administrative fiat. Equation (xi) then becomes:

$$\frac{\phi''(x)}{\phi'(x)} . x = \alpha + \beta \qquad \text{(xvi)}$$

Integrating both sides, we get

$$\log \phi'(x) = (\alpha + \beta)\, t + \log A$$

where log A is a constant of integration. Taking exponentials of both sides,

$$\phi'(x) = A\, e^{(\alpha + \beta)t} \qquad \text{(xvii)}$$

where A is always positive. Since $\phi'(x)$ increases exponentially, $\phi(x)$ will rise explosively. Thus to set interest rate at zero arbitrarily will impose on the economy a maximum marginal utility of consumption or - which is the same thing - a maximum marginal disutility of saving. Since saving must equal investment along the steady-state path, it follows that investment will then be minimized. This cannot possibly be the objective of an Islamic economy, particularly because Islam does not encourage profligate squandering of wealth (see footnote 19). It is important to see that if $\alpha = 0$, then a zero rate of interest will necessarily entail zero saving. Hence, the problem is not just of bringing α down to zero, but of turning it negative, in order to generate any net saving (and investment) at all. It follows that *interest can be abolished only by effecting structural changes in the economy, induced by conscious government policy, to set up institutions which perform adequately essential functions of a dynamic economy, growing along the steady-state path.*

24. To take an example from mathematics: in Euclidean geometry the sum of the interior angles of a triangle is equal to two right angles. This 'universal' truth is completely false in the context of spherical geometry!

ALTERNATIVE WAYS TO ABOLISH INTEREST

Having put the problem in this perspective, the most natural question to ask is how best to accomplish a transition from the present economic system prevalent in the present-day Muslim world - mainlly capitalism - to a full-fledged Islamic system? It is now to a discussion of this question that we turn.

It is important in this connention to be clear about the logical relation between a zero rate of interest and the Islamic economic system. While a zero of interest may be a necessary condition, it is by no means sufficient to 'span' an Islamic economic system ordering. In other words, although a full-fledged Islamic economic system implies a zero rate of interest, the reverse does not necessarily hold. This observation has two clear logical implications: (i) a zero rate of interest occurs whenever an Islamic economic system occurs; (ii) however, it is possible that a zero rate of interest occurs even when an Islamic economic system does not occur[25]. Put together, these two statements suggest that *any proposition which asserts that a zero rate of interest is sufficient for the establishment of an Islamic system is false*[26]. This is because, in a formal sense, socialistic societies also have no use for interest as an institution[27]. Indeed, going a step further, the validity is highly suspect of even the milder statement that the abolition of interest, within the framework of a capitalist economy, will by itself unleash a chain of events leading to its automatic transformation into a fully-fledged Islamic economic system. The problem in an Islamic economy is not to abolish interest rate *by any means whatever.* It is instead, to *replace* ot by an alternative financial machanism, which rejects interest rate, to support an Islamically legitimate 'real' system raised on the Islamic principle of *al Adl.*

Sub-Optimal Policy Alternatives

These observations can be sharpened by approaching the problem of abolishing interest rate from a negative angle: what is not the best way to abolish the interest rate for achieving the Islamic ideal? We illustrate the problem by discussing those policies which apparently do not rely on a positive interest rate to generate investment resources.

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25. In the terse language of mathematical logic: If A (= an Islamic economic system) then B (= a zero rate of interest), does not exclude B occurring without A. Also B if only A does not preclude B occurring without A. See M.C. Gemignani [2].
26. This conclusion also accords with "commonsense" (based on a knowledge of Islamic economic ethics) because Islam not only prohibits *riba* but most aleatory *(Gharar)* transactions - pure speculative deals, forward trading, etc. Abolishing *riba* does not automatically lead to the elimination of all aleatory deals - which requires additional action.
27. This way of reasoning is referred to in mathematics as *disproof* by counter-example. We negate a statement by finding an instance, just one, where it does not hold. This is a disproof because in order to be true a statement must hold in every circumstance in which it claims to hold. See M.C. Gemignani [2]. It may be noted here that in socialistic societies, a positive rate of interest is used only for accounting purposes - to calculate the relative social profitability of investment projects. However, it does not exist as an institution, in which one set of people lends money to others in the society. In the absence of the institution of private property under socialism, it is impossible for interest to exist in this form. Furthermore, since all saving and investment is done by the State, a positive rate of interest is not required to encourage saving and capital formation. Of late, some socialist countries have allowed interest on personal saving which remains a miniscule proportion of the total saving. However, this does not vitiate the argument in the text.

(i) Promoting Corporate Saving

The government may rely overwhelmingly, or even completely, on *corporate* saving to maximize the generation of investible resources. Under such an arrangement savings originate within the private sector by a combination of fiscal, price and wage policies, all tending to swell undistributed corporate profits, which are then supposed to be reinvested. This policy, which contrasts with the encouragement of private and public saving through a positive rate of interest, in effect amounts to granting an interest-free loan (through the market) to industrialists who then invest these funds directly into productive channels. Such a policy has the advantage of diverting investible resources into the hands of those who can use them effectively, through not necessarily optimally.[28]

Is such an economic strategy compatible with the Islamic view of the basic economic processes? The answer is clearly in the negative if corporate savings were allowed to become the predominant - or even worse, the only source - of investible saving. This policy deliberately fosters extreme inequalities of income and wealtlh, *even more than a positive interest rate does,* on the assumption that only the rich save and invest[29]. If carried to extremes, it would degenerate into private capitalism of the most exploitative kind. Such a state of affairs contradicts the Islamic injunction to maintain *al Adl* in the distribution of income and wealth. It is neither economically efficient nor morally justified to let the privileged few enjoy luxurious living at the expense of the rest of the society. In so far as a positive rate of interest is a symbol of gross social disequilibrium, born of extreme inequalities of income and wealth, any policy that tends to exaggreate such tendencies instead of reducing them must be self-defeating. To abolish the symbol of evil, but only at the expense of intensifying the evil itself, is neither moral nor sensible[30].

(ii) *Interest Versus Profit*

It has been suggested that profit can replace interest – (i) on the left hand side of equation (xi) – so that the essential economic functions can be performed by profits in an Islamic economy as much as they are by interest under capitalism. In a strict mathematical sense, this equivalence holds by definition. This is because profit rate is pure interest rate, as defined by equation (xi), *plus* a risk premium when uncertainty prevails, that is

$$i_{\gamma}(t) = i(t) + \epsilon(t) \qquad \text{(xviii)}$$

28. This policy was pursued in Pakistan during the Fifties and the Sixties. This process of profit multiplication, accentuated by stringent import restrictions, raised substantially the monopoly power of the domestic producers, who sought to maximize their profits by curtailing output and raising prices. Thus production was not raised to the optimal level; nor was social consumption maximized. As a result, social welfare declined.

29. A high interest rate policy was never consciously pursued in Pakistan to promote saving or investment during this period. Interest rates were kept lower than the 'equilibrium' level. Also, interest rate as an instrument of monetary policy was rendered ineffective by the availability of ample 'own' resources in the private sector. This had the entirely undesirable effect of freeing the private sector from the monetary discipline of the State Bank, which failed to impose social priorities on private investment decisions. For details of such a policy see my, *Egalitarianism Versus Growthmanship,* (1971), Pakistan Institute of Development Economics, Karachi.

30. For details of this line of argument, see my, "Ethical Foundations of Islamic Economics", *Islamic Studies* (Summer 1978), Pakistan Institute of Islamic Research.

where i (t) is the interest in a situation of risk and ϵ (t) is a stochastic function of time corresponding to the risk factor. Now it is clear that the average value of i γ (t) is just i (t). Thus we can deal with the uncertain situation *as if* it was certain, by minimizing the value of the stochastic term[31].

Thus in steady-state situations, the profit rate is formally equivalent to the real rate of interest. More accurately, the profit rate decomposes into the interest rate in such conditions. Hence a mere substitution of profit for interest is at best a 'trivial' solution of the problem; for, whatever is said against interest rate will apply against profit rate as well. Furthermore, from a substantive Islamic point of view, since risk can't be identically zero, any statement which establishes a formal equivalence between the profit rate and the interest rate in steady-state situation is meaningless. At any rate, the question here is not of mathematical equivalence but of practical policy-making: Can profit be relied upon to perform the essential functions that interest performs under capitalism? The answer depends on what policies are pursued to generate profits in the economy. The method most generally relied upon is the one we have already rejected: the heavy reliance in corporate profits as a means of financing investment. In general, profits are not invariant with respect to the market structures postulated – e.g., perfect competition, oligopolostic competition, monopolies etc. *Thus when speaking of profits it is impossible to floss over the question of the market structures that would be acceptable to Islam.* As such policies most suitable in a capitalistic framework need not even be legitimate in an Islamic economic framework, which accept ehical constraints to be binding. To put it more bluntly, capitalism cannot be 'Islamized' by a simple substitution of profits for interest.

The proposed substitution of profit for interest is neither a necessary nor a sufficient condition for the establishment of an Islamic economy. If only for this reason, no sanctity attaches to the proposed reform, particularly because profit, as we understand the term in to-day's world, is the product of the 16th century capitalism. While this is no reason for rejecting all arrengements based on profits in an Islamic economy, the realization of this point leads us to the following positive statement: *an interest-free Islamic economy is consistent with a multiplicity of institutional and financial reforms, which may include economic activities based on the principle of profit-sharing.* The choice of an optimal solution depends on its success in inducing the structural reforms required to make a transition to the Islamic economy.

'Optimal' Islamic Solution

We have so far analysed the reasons why, as long as capitalism reigns supreme, a

31. This procedure is adopted, for example, in quantum mechnics where uncertainties have to be included in all calculations – i.e. the theorem of Ehrenfest that the expectation values of all quantum quanties follow the classical laws

$$\frac{d}{dt} \langle q_i \rangle = \langle \frac{\partial H}{\partial p_i} \rangle, \quad \frac{d}{dt} \langle p_i \rangle = \langle \frac{\partial H}{\partial q_i} \rangle$$

where q and p are the canonically conjugate variables, t is time and H is the Hamiltonian. In economics the canonically conjugate variables are the "quantity" and the "shadow price". As, when applying quantum mechanics there is no guarantee of certainty in individual cases, but we are nevertheless very sure of the average outcome, so also in economics we can talk of the certain situation for the average , whereas we can not do so for the individual cases. For a discussion of Ehrendest's theorem see, for example, "Quantum Mechanics" Vol. I by A. Messiah, translated by G.M. Temmer (Norther Holland 1965). My attention to Ehrenfest's theorem in the present context was drawn by Dr. Asghar Qadir.

simple substitution of 'profits' for interest is not Islamically meaningful. Such simple remedies may in fact block the necessary transition to an Islamic system by promoting allocative inefficiency, unemployment, and a more unequal distribution of income – all of which do not reflect the Islamic vision of a desirable economic and social ordering of human societies.

What should then be done? Must we throw up our hands in despair and adopt an attitude of defeatist resignation. Our answer is in the negative. All we have done so far is to warn the reader of the highly complicated nature of the task ahead and the impossibility of getting the desired results so long as we talk of adopting bits and peices of 'alien' economic systems. Hence, we must first understand the Islamic system as a whole before we can talk reasonably of what can be done about the elements of such a system. It will take us too much off the track to do any justice to this vastly complicated subject[32]. Here we restrict the discussion to equation (xi) to see consider *one* possible solution, which appears to be optimal in the sense of inducing the desired structural reforms, to the problem of how the essential functions of a dynamic economic. It need not be emphsized too much that this solution does not preclude other conceivable solutions even though it appears to be the most promising.

(a) Social Time Preference (α)

We have noted in the first section that α will continue to be positive, though much lower, in an Islamic society. Taken by itself this means that, even in the absence of zero rate of interest, the extent of *dissaving* will be less in an Islamic economy than in a capitalistic economy. However, this does not solve our problem, which is to ensure positive (and adequate) investible saving; for with $\alpha = 0$ all dissaving will cease, but net saving will still be zero!

Let us first see how α can be moved down toward zero. In an Islamic economy this problem will be tackled at both the moral and the economic plane. At a moral level, habits of simpler living would discourage consumption botlh in the present and in the future. Hence, *on the margin,* people will not divert future income to present consumption as $\alpha \rightarrow 0$ under the force of moral suasion. However, *this is not enough.* The presumption that individuals will start preferring *systematically* future income more than present income just by moral restraint is an over-simplification of the problem. As pointed out above, positive time preference derives its plausibility from the hard economic fact that while present income can be deployed to take advantage of profitable investment opportunities, as long as marginal productivity is positive and large, future income cannot be so used.

Under the present economic system, a positive rate of interest, to generate positive saving, *in effect* turns α negative by increasing the cost of diverting future income to present consumption. How can this task of turning a positive α[33] negative be accomplished in an Islamic society, with a zero rate of interest? More simply, how can

32. I have argued elsewhere that in order to understand the Islamic economic system we must go back to the 'first principles': The Islamic ethical system. Ultimately all scientific systems depend on ethics - the commonly accepted norms in a society - and the Islamic system is no exception to this rule. For a detailed discussion of all these matters, see my, "Ethical Foundations of Islamic Economics", *Islamic Studies,* ibid.

33. Alternativelly, one can also think of a positive rate of interest as *enhancing* the future incomes of savers by making it possible to *lend* present income for future consumption. In the case noted in the text, a positive rate of interest plays the role of *decreasing* the amounts of future income which can be transferred to present consumption by borrowing.

we generate positive saving in the face of a positive (though much lower) α?

No easy answers can be given. It appears that the solution lies *in reducing the reliance on private saving and shifting to public saving*[34]. The government is not restricted by the 'optical illusion' with respect to future possibilities that individuals suffer from. Hence generating 'net' public saving really amounts to more than off-setting of the private α, which is positive, by a government α, which must be made negative. It also follows that any policy which enhances the total reliance of the society on (private) corporate saving must be self-defeating. This is another argument agaist shifting, *on an economy-wide basis*[35], to an economic system that relies only on corporate profits to generate investible savings.

(b) Marginal Disutility of Saving Over Time

As savings grow larger with the passage of time, their marginal disutility in terms of the sacrifice of the present consumption, tends to dicline. A positive rate of interest again offsets this psychological factor, which tends to erode the savings base. When interest is abolished in an Islamic society, this psychological factor will not vanish all at once, *although the rate of decline may be slower* because of a more austere living style that Islam enjoins. Once again, a greater reliance on public saving is the only feasible answer.

(c) Depreciation of Capital and New Investment

It should now be clear that an explicit provision for the depreciating capital stock will also have to be made largely by the government and financed out of public savings. This is obvious since private saving will be much lower in the absence of interest than in its presence. Indeed once on this track, there is no looking back. *We reach the inescapable conclusion that in an Islamic society the state will have to adopt an increasingly greater role in financing the processes of saving and investment.*

This conclusion receives additional force if the economy is off the steady-state growth path, when positive investment is also occurring in terms of equation (xi). (This means that the right side will then be greater than the left-hand side of the equation). With lesser private saving, *new* investment will also have to be financed by the government.

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34. The necessity for active government participation to promote saving in an Islamic economy can also be established in terms of Max Weber's thesis about the 'protestant ethics' as a mainspring of capitalism in the West. According to Weber, the appearance of capitalism required a human attitude which could only be supported by an ethic of 'worldly asceticism' - which justified normally indefinite saving and investment by individuals, along with the concomitant inequalities in income and wealth. See Raymond Aron, *Main Currents in Sociological Thought*, Vol. II (Chapter on Max Weber), (1970) Anchor Book, Doubleday & Co., New York. Applying this thesis, it can be easily established *why Islam* (not Muslim practice) *could never have given rise to capitalism.* Islam prohibits ostentatious personal consumption but extols voluntary giving as a means not only of spiritual salvation but also of worldly good. Thus large saving at a personal level cannot arise in a truly Islamic economy. Furthermore, the Islamic ideal, as evidenced in the practice of pious Muslims in the early years after Prophet's death had emphasized collective ownership (not to be confused with state ownership) rather than individual ownership. Dr. Ziaul Haq in his book, *Landlord and Peasants in Early Islam, (ibid)* has related Abu Dharr's assertion that the payment of Zakat did not absolve the Muslims of his duties towards other Muslims (see page 36). This might be an extreme idealization, but shows clearly what the Islamic ideal demanded. These attitudes could never have given rise to capitalism, according to Max Weber's thesis.
35. However, it may be noted that *Mudharaba* type of transaction can be usefully introduced in the case of small-scale industries.

Indeed, in order to achieve intertemporal allocative efficiency the *government may have to take over completely the management of the capital-goods sector.* The consumer-goods sector will continue to be in private hands, and the individual will continue to enjoy the (constrained) freedom of consumption. This may become necessary because in the absence of a positive rate of interest, there will be no mechanism left for rationing and allocating scarce capital goods. The planning agency will have to calculate the shadow prices (indeed a whole series of them) of capital and use them for making investment decisions. Thus there may have to exist a dual price system: *market* prices for consumer goods and *shadow* or accounting prices for capital goods. This sounds complicated; but no easy answers are possible when an existing and tried economic order is being replaced by a new Islamic order, which must be built up from the scratch. However,the suggested alternative is entirely feasible though cumbersome and expertise-intensive[36]. A failure to evolve some such policy will lead us back to square one, with a positive rate of interest high and dry!

(d) Fighting Inflation

We have seen in the first section that a positive rate of interest performs the function, though imperfectly, of safeguarding the real value of private saving. Interest income also provides the reserve funds to finance this monetary escalation of money expenditure on depreciation and new investment. What will be done about these problems when interest is abolished in an Islamic economy?

As far as the higher cost of depreciation and new investment are concerned, the State will have to take on the major burden. This does not pose very difficult problems as long as the tax-base is price-elastic, so that tax reserves increase automatically in periods of inflation. The first problem must, however, be tackled in a more systematic fashion. It appears that a system of linking private saving with an appropriate cost-of-living index may provide an answer - perhaps the only answer - to this problem. No doubt, this will constitute a built-in inflationary bias in the economy, but the problem has to be faced. Perhaps a system of 'imperfect indexing' may have to be devised in which the decline in the real value of private saving is only partially offset. This will take care of the problem of inflationary bias also.

36. On the economic reasonableness of such a dual-price technique, see Oscar Lange, "On the Economic Theory of Socialism",*op cit.* It may be noted that the shadow price of capital may also be approximated by an appropriate tax-cum-subsidy policy or by a system of investment auctioning. Imports of capital goods will be rationed, just like consumer goods, by a system of import duties to reflect their scarcity price. It may be noted that the policy of *under-pricing* capital goods to accelerate industrial development saws the seeds of its own undoing: such a policy leads to an 'uneconomic' capital/labour ratio, setting up of excess capacity which contributes to its underutilization. Pakistan's case illustrates all these problems. See my, "Islamic Economic System: Fundamental Issues", *Islamic Studies,* (ibid).

SUMMARY AND CNCLUSION

The difficult problem of reducing the rate of interest to zero in an Islamic economy has been discussed at length in this paper. The analytical strategy has been to separate the institution of interest from the socially desirable functions that it performs in a capital-scarce, growing economy. The first natural question then is: What are these functions? A fully dynamic analysis has revealed that for a growing real economy to attain long-run equilibrium, the rate of interest must be high enough to offset a positive time preference and the secular decline in the marginal utility of saving and to make adequate provision for the depreciation of capital stock. If money is introduced into the system the rate of interest must also take into account the effect of the changing price expectations on the real values of saving and investment.

It has been shown that these functions constitute the basic laws of motion of any dynamic economic system, an Islamic system not excluded. A legitimate question arises at this point: If the basic economic laws are the same for all economic systems, then why opt for an Islamic economic system? *The answer is that while the formal principles of economic dynamics in all economic systems may be the same, the actual allocation of investment resources will be different, depending on exactly how these functions are performed in a particular economy.* The choice of policy instruments is constrained by what is 'permissible' in a given economic framework. Under capitalism, these functions are performed by the rate of interest; while in a socialistic economy a complete socialization of all means of production and the process of money creation makes interest rate redundant. It is used merelly as an arithmetical discounting device to determine the rank-ordering of investment projects. An Islamic society prohibits interest mainly on moral and ethical grounds. It is, therefore, a basic question as to how to translate this ethical principle into a viable, growing Islamic economic system. The present paper points to a way out.

Ethics and Economics

However, the answer to one question raises two more questions. Firstly, what is the relevance of an ethical principle to a purely economic question? This is deep philosophical issue, but it should be an acceptable proposition for many economists that ethical values are essential in making a unique choice from among a set of points, *all* representing an efficient allocation of resources. Fundamentally, ethics epitomize the common values of a society and determine the preference structures of the members of that society[37]. Different economic frameworks postulate different preference structures precisely because of the ethical norms which they accept as unchanging data. Hence a *wertfrei* (value-free) economics, advocated by economists like Lionel Robbins, is by and large a misnomer.

Human Margin

The second question relates to the fact that, while the prohibition of interest in Islam is total and unalterable, the exact manner of enforcing this commandment in modern societies is an open question, on which opinions can legitimately differ. At a

37. See, Kenneth Boulding, *"Economics As a Science"*, (1970). McGraw-Hill Book Co., London. He points out: "the process by which we learn our preference structures indeed is a fundamental key to the total dynamics of the society". p. 123.

philosophical level, this is what has been termed by Frithjof Schuon as the 'human margin'[38], to be determined by actual economic and social conditions prevailing in a society. It, therefore, follows that there is no point in adopting a rigid attitude on matters relating to the most appropriate sequential strategy to translate into imperfect, time-bound human institutions a Divine Message, which is both perfect and timeless.

This general point has a direct bearing on the widely-advocated policy alternative of profit-sharing. In the opinion of the present author this is a question on which there is all the room for debate and dsicussion. For instance it can be argued that economy-wide profit sharing, as a replacement of interest, is an illegitimate generalization of a principle, which can at best be applied in the case of small-scale industries, where the worker makes use of capital supplied by the capitalists: he shares in the profit according to a predetermined percentage, *but has nothing to do with the losses.* In the context of large-scale manufacturing industries, capital is not provided by just one person but by a host of sleeping (literally sleeping) partners who know nothing about the actual operations of the industry. Here profit-sharing becomes a much more complicated affair. It is not only between workers on the one hand and the capitalists on the other that profits have to be shared, but also among the stock-holders and the real owners of the firms, who also claim a reward for their entrepreneurial function. In technical language, it is the problem of 'imputing' total sales proceeds among wage-earners, capitalists, entrepreneurs and the stock holders - a task which is hopelessly difficult to perform, even at a theoretical level.

Even from an ethical point of view, no sanctity attaches to 'profits' as opposed to 'interest'. In the context of capitalism both can be - and to some extent, are - exploitative and morally reprehensible. In fact, profit, *as we understand the word today,* is the product of the Sixteenth Century Industrial Capitalism, in which employment for wages became the cornerstone of a civilization marked by a division of people between capitalists and the wage earners. This concept is entirely different from what it signified in the medieval days when the entrepreneurial, managerial and financial aspects combined in one person. It follows that no orthodoxy should be created on the notion that profits are somehow sacrosanct. Nothing could be a more dangerous inference.[39]

Institutional Constraints

In the analysis presented in this paper, two essential points have been made. The first point derives basically from the phenomenon of 'human margin' referred to above. Muslilm countries, like Pakistan, have been working for a long time with 'allien' economic systems like capitalism or some version of socialism. There is, therefore, the problem of devising an *economicallly and socially viable* sequential strategy to facilitate a smooth transition to an Islamic economic system. Any strategy

38. "Divine influence is total only for the scriptures and for the essential consequences of the Revelations . . . (However), it always leaves a "human margin" where it exerts no more than an indirect action, letting ethnic or cultural factors have the first word", Frithjof Schuon, *"Islam and the Perenial Philosophy"* (1976), p. 36, World of Islam Festival Co., Ltd.

39. Indeed Karl Marx made profits, not interest, the primary target of his criticism. According to him profits symbolized the exploitation of the labour by the capitalists. The new-classicals rejected this point of view; but, according to Joan Robinson, They never succeeded in producing an alternative more acceptable theory. See Joan Robinson, *Economic Heresies,* Ch. 3, (1970). London: Mcmillan Press Ltd.

which attempts a *precipitate* break with past, however inglorious and morally reprehensible, is doomed to failure. Even the Holy Prophet (peace be upon him) had taken an extremely cautious attitude in dealing with the social institutions he had 'inherited' from the past, which he rejected so vehemently. For instance, slavery was tolerated for a long time among Muslims even though it violated one of the basic messages of Islam-equality of all mankind in the eyes of God. This was done precisely because slavery was the only element of the 'services sector' - a most important component of the GNP at that time - and hence its immediate abolition would have created an economic crisis of the first order. However, all efforts were made to humanize this system to make it as compatible as possible with the basic egalitarian spirit of Islam.

Sequential Strategy

It has been noted in this paper that abolishing of interest by administrative fiat will sharply reduce saving and capital formation. Furthermore, a simple substitution of profits for interest on an economy-wide basis may in fact block the transition to an Islamic system by promoting allocative inefficiency, unemployment and, worst of all, a more unequal distribution of income and wealth. No democratic government can get away with such policies even in the name of Islam - because for the common man Islam stands for *al Adl,* which is based on the idea of an undifferentiated 'equilibrium', not only in the universe around but within human societies as well.

In the context of a full fledged Islamic economic system, it is clear that the government will have to play a central role both in the process of saving creation and in financing the replacement of depreciating capital stock. In situations off the steady-state, new investment will also have to be financed by the government. Furthermore, to reflect the scarcity price of capital and to facilitate its efficient allocation over time the government may also have to 'take over' the capital-goods sector, regulated by accounting or shadow prices, which will co-exist with market prices in the consumer-goods sector. This system can be made consistent both with the freedom of the individual in consumption and in the choice of the best occupation.

An Inconsistency

It may be objected that the ablition of interest is a divine commandment and so is also the respect for every individual in view of his theomophic nature. It may than appear that the pointing out of an inconsistency between the abolition of interest and the complete freedom of individual - which, in economic terms, *may mistakenly be taken to mean* laissez faire - amounts to saying that there is an inconsistency in the Divine Message. This is false reasoning, for Islam rejects unbridled individualism. It subjects individual actions to social responsibility; but man can take only limited responsibility. Hence unlimited freedom is both illogical and immoral. However, even at the level where such an inconsistency may appear in practice, it can be explained in term of the greater social benefits that an Islamically permissible curtailment of individual freedom would entail. True, the divine will demands perfection which leaves no room for any inconsistencies; yet, at the plane of human existence, this perfection remains an ideal, to be approximated in stages, with varying dgrees of success and with the imperfections that characterise all human solutions.

Structural Functionalism

The general approach taken in this paper is formally akin to, but not identical with, what sociologists refer to as 'structural functionalism'. This approach, originated by J. Piaget, contends that 'cognitive structures' or systems of concepts and proportions, colour etc. limit one's thinking. Such an approach has been termed 'conservative' because it is grounded in a philosophy of maintaining rather than transforming the present system - a criticism which may appear to apply also to the approach taken in this paper.

On the philosophical plane, there is considerable weight in this argument. It gains strength from the fact that the essential inputs and outputs of information, indeed only a conjecture, has been christened by Kenneth Boulding as the generalized 'Heisenberg Principle'[40]. Applying this general consideration to the problem in hand, it follows that as the process of 'Islamization' of existing systems gathers momentum - i.e. according to the Heisenberg Principles, as the inputs of Islamic information are changed gradually -, the existing economic system themselves may be altered and, along with them, the 'necessary functions', which keep them moving[41].

This point of view, while correct, does not invalidate the basic thesis of this paper; in fact, it reinforces it. During the Islamization process, which may be spread over decades, the institution of interest will only be gradually replaced, since it cannot be abolished arbitrarily through an administrative fiat. Our analysis provides a smooth way out of the present system, of which interest is a cornerstone, to one wherein it has no place whatsoever. Indeed, we have maintained that *it is only through the gradual but systematic applications of the Heisenberg Principle that we can hope to reach out to the Islamic ideal.*

True, we envision an Islamic economic society also as performing the very same functions that interest performs at present; but this is because, as human beings, we are all myopic and project the present in which the past is constantly reflected into the future. Human vision is not time-less; and, in addition to the present institutions which colour our perspective according to Piaget, time also enters in a significant way in restricting our view of what future has in store for us. Hence all meaningful discussions of the future can be conducted only in terms of the present. An Islamic society may come to perform different functions; but nobody can tell what these will be. All we can say is that the present functions will be performed differently-without interest.

The institution of interest in its most objectionable from will wither away only gradually, mainly through the income-equalizing effects of redistributive economic polocies. In the last analysis, an Islamic society will come into being only after a fundamental change in our ways of thinking. Islam requires man to raise himself from the morally debasing preoccupation with the acquisition of money goods to a

40. Kenneth Boulding, *Economics as a Science, op. cit,* pp. 120-121.

41. An example of such a process of 'Islamization' has been noted by Ann Lambton, *Landlord and Peasants in Persia,* (1953) London, Oxford University Press. She speaks of interaction between the actual conditions obtaining in Persia and Islamic theory, which "took sometime there to work out.... Ultimately, however, a new civilization was created; the unifying force of which was Islam". p. 16. Dr. Ziaul Haq has noted a similar interaction between social reality and idealism, in which both had to shift in order to accommodate each other. "In this process of Islamization the jurists not only rationalize and systematize the continuing practice [about share-cropping] but significantly mould it. ...". *Landlord and Peasant in Early Islam,* p. 39, *op. cit.*

'higher' plane of life - i.e. to a purposive life given creative activities. While the legitimate satisfaction of human needs and desires is made mandatory in Islam, the worship of money is denounced in no uncertain terms. Islam rejects the hypothesis that human happiness is a function of the possession of money alone. It therefore enjoins voluntary giving as means of promoting healthier habits of thought. When following the precepts of Islam, *the society as a whole,* conquers the self-defeating worship of money, which is both the cause and the effect of diminishing vitality of social systems, the basic reasons of inequalities of income and wealth will have been removed, laying the foundation of a true Islamic society based on *al Adl.* The solution of the problem of Islamization fundamentally lies in effecting structural, not just procedural, social change.

COMMENTS*

Dr.Mabid Ali Al-Jarhi *(Discussant)*

Dr.Naqvi's paper discusses the functions of the "rate of interest" in a conventional steady-state dynamic model. In his analytical framework, he presents a model which does not contain money, seeking to define those functions of the rate of interest independently of any particular institutional framework. Such an approach leads him to his equation (6).

It is obvious from his equation that his model is a barter dynamic model, in which transactions are absolutely costless. This type of model is common in the growth literature. It is free from transactions costs because it is underlined by the assumption of perfect markets, which entails perfect information.

In such models, rational individuals do not have any reason to use or to hold a means of exchange. Unless transactions become somehow costly, money would perform no function whatsoever. Its use will be irrational.

Looking at equation (11) of the paper,

$$i_t = \alpha + \beta - \frac{\phi''(X)}{\phi'(X)} X \qquad \text{(i)}$$

where i is the rate of interest, and α is the social rate of time preference. β is the rate of capital depreciation, and ϕ (X) is the social welfare function in which X is per capita consumption.

The question we pose to the author at this stage is what does "the rate of interest" mean in a *barter* model? Since money does not exist in the model, this rate cannot be linked to the price of liquidity generally known as the rate of interest. A sympathetic interpretation of the paper would say that i_t is the borrowing rate on "commodity bonds" issued by bartering agents. However, in a perfect-market model with perfect information, this would be exactly equal to the rate of growth (or the rate of return) of capital. This is so, because perfect information eliminates all default risks.

We can, therefore, see that the rate of interest in this model bears no relationship to the rate commonly linked to the price of liquidity. Equation (11), therefore, explains nothing in so far as the prohibition of Riba decreed by Islam is concerned.

When the author introduces money, he does that only informally. He hastily claims that "the rate of interest *has to be* higher in an economy with money than in one without money."[1] Such a conclusion is certanly erroneous and reflects grave methodological as well as analytical pitfalls. In order to introduce money in a non-trivial fashion, some reasons must be given as to why rational traders would use and hold money for exchange purposes. The author provides none whatsoever. In other words, the paper discusses money in a model which in reality is devoid of what Samuelson calls "social contrivance" or what Friedman calls "temporary abode of purchasing power".

* Comments on the old version of the paper.

1. Italics added.

Had the author resorted to a model containing some frictions which would have necessitated the use of a means of exchange, so that transactions costs are not zero, his methodology and results would have been quite different, as it will be shown later.

Dr.Naqvi's proposition that "a positive interest rate will exist *even* in a real dynamic economy"[2] can hardly be supported by his model. Samuelson has shown that in a dynamic model with two generations and positive rate of time preference but without the social contrivance of money, the "rate of interest" is negative.[3] The author's proposition that a positive rate of interest "will exist under *every* dynamic economic system"[4] is hardly acceptable even under the very assumptions of his model. Using the Fisherian distinction between the *real* rate and the *money* rate of interest, we can write

$$r_t = i_t + \frac{dp/dt}{p} \tag{ii}$$

where i is the real rate, r is the money rate and p is the price level.

If the monetary authority deflates the economy at a rate equal to the real rate of interest,

$$i_t = \frac{dp/dt}{p} \tag{iii}$$

so that

$$r_t = O \tag{iv}$$

Obviously, when the rate of deflation exceeds the real rate, the money rate of interest becomes negative. All this holds while keeping the assumptions of Dr.Naqvi's model including the trivial introduction of money.

A valid question at this juncture is whether the optimal rule of accumulation, as stated by Dr. Naqvi in his equation (11), will continue to be true in a dynamic barter model in which transactions are costly. The answer has been shown to be in the negative.[5]

Equation (11) in Dr.Naqvi's paper is based on the relationship shown in his equation (10), namely:

$$i_t = (V) \tag{v}$$

which means that the "rate of interest" must be equal to the rate of return on capital. However, the steady-state growth would require that:[6]

$$K = \psi\,(V) \tag{vi}$$

where K is the rate of growth of capital.

Let us define g as the rate of capital production[7], S as capital accumulation gross of transactions cost, T aggregate transactions cost and $\varkappa$ per capita transactions costs,

2. Italics added.
3. See: Paul Samuelson, "An Exact Consumption-Loan of Interest with or without the Scocial Contrivance of Money", *Journal of Political Economy,* December 1958.
4. Italics added.
5. See: Mabid Ali Mohamed Mahmoud Al-Jarhi, *The Optimal Supply of Money and Optimal Monetary Policies,* unpublished Ph.D. dissertation, the university of Southern California, June, 1975, Ch. VII.
6. Notice that we used K rather than V, which the author defines as investment.
7. Capital goods multiply at g rate per year.

which means that the "rate of interest" must be equal to the rate of return on capital. However, the steady-state growth would require that:[6]

$$\dot{K} = \psi' (V) + \frac{d\varkappa}{dv} + \frac{(S+V)}{SV\ eg} (\dot{T} + g - \dot{K}) \qquad \text{(vii)}$$

Clearly, the golden rule of conventional perfect-market models, which Dr.Naqvi uses, does not hold. Moreover, it can easily be shown that the model presented here by equation (i) is only a very special case of that presented by equation (vii).

If money were to be introduced in the viscons barter model alone, the change would still be significant. Besides, the customary steady-state rule will not be correct.

Let the generalized flat means of exchange be ϕ, the general price level be $\varkappa$, and the marginal cost of producing real balances be MC, we can then define.

$$Q = (\Phi / \varkappa)\ MC \qquad \text{(viii)}$$

if q and k are per capita value of Q and K respectively, it can be shown that

$$\dot{S} = \psi (v) - (\dot{Q} \frac{dq}{dk} + g \frac{d\bar{Q}}{dk} + \frac{d\varkappa}{dk}) + \frac{T}{e^{g}S} (\dot{T} + g - \dot{k}) \qquad \text{(ix)}$$

Again, equation (ix) shows that the golden rule of the model presented by Dr.Naqvi does not hold.

The importance of the above equation is that can be used to derive the optimal rate of growth of money, which will be equal to

$$\Phi'' = \frac{11}{(dg/dk)} [\psi (V) + \frac{T}{e^{g}S} (\dot{T} + g - \dot{k}) - (\dot{S} + \frac{d\varkappa}{dk} + \frac{dQ}{dk})] + (\dot{T} - \dot{M}C) \qquad \text{(x)}$$

While the results presented by equations (ix) and (x) can be scrutinized further, they are presented here for the purpose of demonstrating how the introduction of money into dynamic models can be properly dealt with.

It would be a useful exercise, if Dr.Naqvi would introduce frictions in his model which would justify the use of money, and see how results could be revised. He could then introduce money in order to see what monetary "rate of interest" must hold at the optimal rate of monetary growth.

2. Dr.Muhammad Anas Zarqa *(Discussant)*

It is much safer, in the realm of capital and interest theories, to be a critic rather than an author. Dr.Naqvi has faced the challenging job of postulating a model of growth from which he theoretically derives problems that a growing interest-free economy is likely to face. He has also presented some solutions. I shall first provide a critique before presenting some positive thoughts on the subject.

Even though I strongly disagree with most of Dr. Naqvi's analytical assumptions and results, I do admire the clarity, rigour and integrity of his presentation. For he has not swept any issues under the rug, rather, he has followed the logic of his assumptions to the (bitter?) end. I must apologise in advance for occasionally giving harsh criticism. For economics can also be a rough sport.

8. Al-Jarhi, *op.cit.* p.282.

i) *Outline of Dr.Naqvi's paper*

It will be useful first to outline the author's argument. He first presents a simple model of a growing economy from which he derives what is supposed to be the universal functions of interest rate in any growing economy. Since Dr.Naqvi clearly recognizes that the institution of interest must ultimately be eliminated in an Islamic economy, he asks: what alternative institutional arrangements and variables can an interestless economy resort to in performing the functions of the interest rate,which would no longer be there?

Dr.Naqvi quickly, or rather too quickly, dismisses the commonly accepted alternative among Muslim economists that profits and profit-sharing institutions acceptable to Islam can fully succeed interest. He thinks that such an alternative is worse than inefficient – it is not even feasible.

The main problem in an interestless growing economy is that it will not grow! This follows inexorably from the model, or so Dr.Naqvi believes. He also concludes that at zero rate of interest gross savings will be zero, net savings will be negative (because of depreciation) and the interestless community will eat up its capital stock, and its per capita income will decline rather than grow. To save society from that gloomy end, the public sector must come to the rescue by imposing savings on the reluctant community and undertaking the bulk of investment.

Dr.Naqvi does not spell out how the public sector is going to allocate investment efficiently without the help of the supposedly all-important interest rate. He seems to go along with the idea of a shadow price for capital, i.e., a shadow interest rate.

ii) *The assumption of certainty*

The main analytical problem with this paper is that it is based, like much of the Western Literature on capital theory, on the false assumption of perfect foresight *"certainty"*. This assumption is revealed in the statement and also equation 10, that the rate of interest must, in equilibrium, equal the marginal productivity of capital.

Now in the strange world of certainty, strange things happen. For instance, the profit rate and the interest rate become identical.[9]. Interest-bearing bonds and shares of common stock become one and the same thing, since future profits are known with certainty just like future interest payments. The so-called "socially necessary functions of interest" in a growing economy that Dr.Naqvi derives from his model are actually the functions of the profit rate in the same model. Similarly, the claimed impossibility of an equilibrium zero interest rate is truly a claim about the impossibility of zero rate of profit. In other words, whenever Dr.Naqvi derives *from his model* any conclusion, one can cross out the words "interest rate" and put instead "profit rate".

Thus, the writer cannot possibly derive from his model a single function which the

9. This simple conclusion hardly needs support by quotations, but here are some for those who need them. "Assuming perfect competition and sidestepping the important problems connected with uncertainty, ...we can strictlly identify the profit rate with the pure interest rate." (Samuelson, P.A.), "A Modern Treatment of the Ricardian Economy: II. Capital and Interest Aspects of the Pricing Process" *The Quarterly Journal of Economics,* Vol.LXXIII, No. 2 (May 1959,) 1959, p. 409 n).
In a world of "certainty and perfect markets", Patinkin writes, "the ratio of dividends paid by a stock (including net appreciation in the value of the stock) to the original price of the stock,... the ratio of the profit of a firm to the amount invested in it all have a common value, equal to the rate of interest ." (Patinkin, "Interest", in D.S. Sills, (ed.) *International Encyclopedia of the Social Sciences,* Macmillan.

interest rate performs and the profit rate does not. The analytical part of the paper should be modified accordingly, and its title should appropriately be changed to read "Profit Rate and Intertemproal Allocative Efficiency in an Islamic Economy Under Conditions of Certainty."

Having said this, I would nonetheless recommend that the patently false assumption of certainty be completely dropped, if possible. This assumption is not only unrealistic, but also un-Islamic for at least two reasons: Firstly, the Holy Qur'an emphasizes human uncertainty about future consequences of present actions:

> "Had I knowledge of the unseen, I should have abundance of wealth, and adversity would not touch me" (7 : 188). "No soul knoweth what it will earn tomorrow..." (31 : 34).

Secondly, many rules in the *Shari'ah* make sense only when uncertainty is admitted as a basic fact of life. To give one example: *Mudarabah* agreement is legitimate *Halal* when the financing partner *Sahib al-Mal* stipulates his share as a given percentage of prospective profits. It is illegitimate to stipulate it as a given percentage of the money advanced to the working partner. This rule makes sense in an uncertain world where profits are not known in advance. Islam considers it *Zulm* (transgression) to assure the financing partner of a fixed sum while the profits out of which it should come are uncertain. Now in a world of perfect foresight, this *Shari'ah* rule would seem superflous.

iii) *Other limiting assumptions:*

In addition to the crucial assumption of certainty, the model has several other limitations that should caution against drawing sweeping conclusions from it:

a) It assumes a single good (Y) which is used both for consumption and investment. This would preclude, among other things, introducing money in a more realistic fashion. Who needs money, and what for, in a world of one good that is both investible and consumable?

b) There are several crucial assumptions implied by the very simple utility function postulated by the author. I hope that he and others would reconsider it in the light of *Islamic* assumptions regarding the interdependence of utilities and the effect on utility of the distribution of consumption among individuals. Different utility functions would certainly lead to different definitions of the optimum accumulation.

c) The model assumes that the sole aim of public policy is to maximize the discounted utility of per capita consumption. This single-goal assumption must be critically examined in the light of Islam's insistence on achieving *multiple* social and individual goals. Even within Western economic thought, other goals have been suggested.[10].

It is unfair on our part to ask the author to undertake the impossible task of dropping all simplifying assumptions. It is fair, however, to ask him not to claim unwarranted generality for his results, nor to draw from a very simple model far-reaching policy conclusions.

10. See, for example: Hicks J.R., *Capital and Growth,* Oxford University Press, 1965, pp. 206-7.

iv) *The question of profits and profit-sharing*

Dr.Naqvi contends that the institution of profits and profit-sharing is *undesirable* during the transition to an Islamic interest-free economy and *unfeasible* afterwards as an allocative mechanism.

While fully sharing Dr.Naqvi's view about the Islamic undesirability of excessive concentration of income and wealth, I still feel that his conclusion about the undesirability of profits and profit-sharing is unjustified.

The main reason for the undesirability of profit-sharing, according, to Dr.Naqvi, is that it will lead to excessive concentration of wealth during the transitional period in which he assumes that all capitalist and non-Islamic institutions remain intact with interest being replaced by profit-sharing. This is a strange assumption, indeed. Had he taken the more realistic postulate that in the process of Islamisation several basic Islamic reforms are be introduced simultaneously, even if gradually, he would not have found profit-sharing detrimental to income distribution. It must always be borne in mind that when we Muslims talk about profits and profit-sharing replacing interest, we are considering profits in an Islamic context which (unlike the 'laissez'-faire prevailing in some Muslim countries, or the proclaimed socialism in others) may be characterized as follows:

a) The market is one important tool of allocation in an Islamic economy. But an Islamic society is goal-oriented and not profit-oriented: i.e., Islamic socio-economic goals, and not markets and profits, are the moving forces in society. Thus, the allocation of resources in general and investment in particular, will not be *dominated* by market forces.
b) Monopolistic practices and profiteering are not permitted.
c) Society is explicitly required in the Holy *Qur'an* to take measures to reduce excessive concentration of income and wealth. Hence, policies to swell corporate profits at the expense of consumers and wage-earners, which Dr.Naqvi rightfully criticises, are not sanctioned by Islam.
d) In addition to the comprehensive *Zakāh* system of transfer payments, society is responsible for providing a minimum standard of living for every member.
e) Both public and private ownership of means of production coexist in an Islamic society.

Within these limits, profits are definitely sanctioned by Islam, and Dr.Naqvi's statement to the contrary cannot be accepted.

We now come to Dr.Naqvi's argument that profits are not even feasible as an allocative mechanism, because in a competitive equilibriulm long-run profits are zero. This is certainly a slip that Dr.Naqvi will soon correct. By zero profits in this context economists only mean zero excess profits of the marginal firm. A firm earning a normal rate of profit in an accounting sense is said to be earning zero profits in an economic sense. Excess profits tend to be eroded in the long run by the entry of new firms into the industry.

If a competitive businessman happens to be earning zero or even excess economic profits in one year he can hardly take a nap. He may incur losses in the next year because of the ever-changing economic conditions; so he must be alert and keep running to stay in place. Thus, the *prospect* of profits and losses would continue to be effective in allocating resources in a competitive industry in both the short and long run. Furthermore, even in hypothetical long-run equilibrium where marginal firms are just breaking-even (earning zero profits), intramarginal firms are making positive profits. And forget not: every firm keeps trying not to become marginal nor to remain so.

v) *The two concepts of zero interest rate*

A certain economic fallacy recurs in the paper. This fallalcy, which is rather common among some economists, needs to be clarified. It boils down to the statement that we can reach zero interest rate only when we have capital saturation, i.e., capital is so abundant that its net productivity is zero. Zero interest rate, it is also alleged, implies cheap capital policy.

To clarify the matter, we must distinguish between two quite' different notions of the interest rate being equal to zero. Interest rate may reach zero as an equilibriulm value (call it equilibrium zero rate). Or it may reach zero by moral and legislative choice (call it moral zero rate)[11].

Equilibrium zero rate is what Western economists usually discuss. Thus Schumpeter held fast, against strong criticism, to the notion of zero interest rate in a steady state, and Samuelson[12] defended Schumpeter's view. Samuelson in his introductory text book[13] poses the question: "Is a zero (equilibrium) rate of interest possible?" The gist of Samuelson's answer is that under conditions of *perfect certainty,* this is not possible unless we have capital saturation. But under the realistic conditions of uncertainty, zero equilibrium rate is possible in the unfortunate case of severe recession.

Be that as it may, it does not answer the question of the feasibility of moral zero rate of interest that is required by an Islamic economic system. Is a moral zero rate feasible in a capital-scarce modern economy? My answer is: Yes, very much so. It is easier to explain that answer by analogy. Good agricultural land is scarce, and tends to be allocated to various crops (say, corn, wheat and opium poppy) such that the return to similar lands is equalized at the margin. Some people insist, on moral grounds, that no land should be cultivated under opium. Can the marginal return to land under upium become zero?

There are two approaches to the answer. The first would investigate whether equilibrium zero rate is achievable, and would conclude that it can never be, unless we are land-saturated (or opium-saturated, etc.).

Can a moral zero rate of return to opium land be reached voluntarily by opium-hating individuals or enforced by legislation even though both land and opium are scarce? Of course it can be, and it should be. Wouldn't such moral choice or legislation cause inefficiency in agricultural land use? Of course not. A new equilibrium will be reached where returns are equalized to scarce land under corn, wheat and other legitimate crops.

It should be clear that a legislative or moral zero rate or interest is quite consistent with very high (as well as very low) opportunity cost of real capital in the economy.

11. I am grateful to Dr.M. Nejatullah Siddiqi for calling my attention to this important distinction.
12. Samuelson, P.A., "Shumpeter as a Teacher and Economic Theorist" *The Review of Economics and Satics,* Vol. XXXIII, No. 2, May 1951, reprinted in Stiglitz J.E., *The Collected Scientific Papers of P.A. Samuelson,* M.I.T. Press, 2 vols., 1966, pp. 1151-6.
13. Samuelson, P.A. *Economics,* 10th ed., McGraw Hill, New York, 1976, pp. 605-6.

This opportunity cost is expressed in the market by the expected rate of return on real investments. Once the opportunity to lend and obtain a riskless rate of return (interest) is eliminated by administrative fiat, a new equilibrium configuration of rates of return on ventures of different degrees of risk is established. "In a capital-scarce economy" Dr.Naqvi asserts, "interest rate can never be abolished by administrative fiat." I would assert the contrary: in such an economy, it is only by fiat or moral choice that interest can be abolished.

vi) *A shadowy argument for using a shadow interest rate*

In cost-benefit analysis and in economic planning, it is recognized that market prices often deviate from or do not express correctly, the true marginal social costs and benefits. An effort is made to approximate the latter by the so-called "shadow prices" which are used, in lieu of market prices, in decision-making by public authorities.

Dr.Naqvi and several other Muslim economists think that since Islam prohibits interest, public authorities should rely on a "shadow rate of interest" for the allocation of real capital in an Islamic economy. The usually wrong argument by which such a conclusion is reached runs roughly as follows:

a) In an Islamic economy real capital has zero market price.
b) But capital is scarce and must command a positive price for efficient allocation.
c) The way out, so the argument goes, is to use a shadow (efficiency) price for capital.

But, (a) is wrong. The price of real capital in *any* economy whether Islamic, socialist or capitalistic is the (stochastic) opportunity cost of capital and *not* the rate of interest (the two concide only in the silly world of perfect foresight). The closest approximation to that opportunity cost is the rate of return on equity capital. So why use a shadow? Use the real thing!

There is however, a valid argument for using "a shadow price of capital." This is the usual argument that the market price (in this case the risky rate of return) may not express true social opportunity cost, so it is better for public authorities in their investment decisions to use a shadow *rate of return* instead. To this kind of argument, we can add that an Islamic economy may or may not need to use a shadow price of capital. It may need a shadow price for cement or shoe laces or capital *not because the institution of interest is eliminated,* but because of possible market imperfections. In other words, what an Islamic public authority *may* need is a shadow rate of return on equity if the market rate of return is distorted. What it *never* needs is a shadow rate of interest.

vii) *An interest-free Islamic economy is prone to growth*

Let us allay Dr.Naqvi's worries about the supposedly bleak growth prospects of an interest-free Islamic economy. This is best achieved by offering positive arguments as to why such an economy is prone to growth.

The basic ingredients for sustained growth are: saving, investment, and technical progress. All three ingredients are positively encouraged by Islam.

Saving (as well as moderation in consumption) is very much encouraged by Islam at the individual and collective levels (Dr.Monzer Kahf has elaborated well on this point in one of his papers to this Seminar). Furthermore, Islam discourages hoarding and encourages the utilization of savings through its moral code and through the imposition of *Zakāh* on assets.

Would a zero interest rate reduce savings to zero or at least discourage savings? Such a prospect, which worries some Muslim economists including Dr.Naqvi, is fortunately baseless. For, on the one hand it is quite wrong to think that savings go unrewarded in an Islamic interest-free economy. Islam prevents only the unethical type of reward (interest) while permitting a probable reward based on equity participation. On the other hand, the notion that people will stop saving if the interest rate is zero is wrong empirically, even in capitalist economies. Many people would continue to save even at effectively negative interest rates as has been well observed in these times of high inflation. Theoretically the effect of interest rate on aggregate savings is indeterminate.[14].

Coming now to the second ingredient of growth, namelly investment, we note that the Islamic legal system and cooperative spirit give strong support to the establishment of both *Ribā*-free financial institutions to channel individual savings, and various types of business to utilize these savings.

Dr.Naqvi seems to think that *Mudarabah* is the basic form of an Islamic business firm, and finds it unsuitable for organizing large modern corporations. The fact of the matter is that the Islamic legal system permits many other varieties of business organizations including limited liability large-scale companies that a modern industrial economy may need.[15]

The third ingredient of sustained growth is technical innovation. Islamic emphasis on lthe acquisition and utilization of knowledge needs no proof. When Muslims become conscious of their religion and message, as they once were, we would expect them to be active innovators.

Thus, a truly Islamic interest-free economy, far from failing to maintain its capital stock, has the systemic tendency to save, invest and innovate, hence to grow. To this theoretical reasoning we must add the evidence of history, which portrays Islamic economies as saving, accumulating and progressing economically.[16]

viii) *An interest-free Islamic economy is more stable*

A certain apprehension, expressed by Dr.Naqvi without a supporting argument, is that a profit-sharing economy is "highly sensitive to even small changes in the profit margin..." and that it is crisis-prone. Here again, Dr.Naqvi seems to be holding the wrong end of the stick. It is in the interest-based and not in the equity-based system that one has to worry more about instability. Let us see why.

First, many economists seem to agree that interest financing is one main destabilizing factor in capitalist economies. "When firms can raise outside finance direct from rentiers or through the banks, the system is liable to instability."[17] While

14. See Samuelson, P.A. (1976) *op.cit.*, p. 602 n.
15. See Al-Khayyat, *Al-Sharikat: ((Companies in Shari'ah and Common Law),* 2 volumes, Ministry of Auqaf, Jordan, 1970. In Arabic.
16. Samuelson wrote: (1951, *op. cit* "... I had occasion to review the various logical contradictions allegedly involved in his [Schumpeter's] notion of a zero rate of interest. None of the following stood up under careful logical analysis... the incorrect belief that at a zero rate of interest capital will necessarily not be maintained or replaced..." (p. 1555).
17. Joan Robinson, paraphrasing H. Minsky, in her "What are the Questions", *Journal of Econ. Literature,* 1977, p. 1331.

discussing the role of the stock market, Bach wrote: "... if rising stock prices have been heavily financed by borrowed money, a downturn in the market may precipitate a major collapse in stock prices as lenders call for cash, and may place serious financial pressure on banks and other lenders. *A high market based on credit is thus far more vulnurable than a "cash" market, and is more likely* to be a cyclically destabilizing force."[18].

If we consider the international economy, it is generally agreed that "hot" money movements are generally a destabilizing factor, moving as the do in response to minor changes in interest rates among other things. It is thus incorrect to say that the institution of interest is itself conducive to stability.

An equity-based Islamic economy, on the other hand, effectively discourages one potential source of instability, i.e., holding of large idle balances (through moral injunction against hoarding, and legislative taxing of such balances by *Zakāh*).

Profit-sharing and equity participation more often than not entail longer-term commitments that cannot be profitably undone in response to minor or transient changes in rates of profit. Hence, a profit-sharing system is intrinsically more stable vis-a-vis one based on interest.

ix) *An interest-free Islamic economy can invest efficiently*

Another supposedly indispensable function of the rate of interest is that it is essential for the efficient allocation of scarce investment resources. In stating this, Dr.Naqvi has uncritically followed the false lead of several prominent Western economists (e.g., Samuelson,[19] and Eckaus[20] among others). Can we hold the bull by the horns, so to speak, and show that an interest-free Islamic economy is able to invest effciently? I think, we can.

The robust rules for static efficiency in investment (i.e., robust in being invariant under realistic assumption) are essentially two. The first is that marginal rates of return on investment be equal in all industries. This condition would certainly be met in an Islamic system because Islam prevents barriers to entry and insists on unimpeded flow of goods, factors and information in all markets. As a matter of fact, Dr.Abu Sulayman[21] considered maintenance of "well functioning markets" to be one major aspect of the economic policies of the Prophet, peace be upon him.

The second rule for investment efficiency requires the use of discounting to take proper care of the time dimension of costs and benefits. I will show in a forthcoming paper[22] that (a) the process of discounting is entirely acceptable in Islam, and (b) interest rate is one possible discount factor which is unacceptable in an Islamic system. The other discount factor which is both positive and acceptable is the rate of return on alternative real investments.

It is thus clear that the interest rate is not necessary for static investment efficiency. As for dynamic efficiency, no robust rules beyond the need for discounting seem as

18. G. L. Bach, *Economics,* 9th ed., Prentice-Hall, N.J., 1977, p. 182. italics added.
19. Samuelson, P.A., *op.cit.*, (1978), p. 640.
20. Eckaus, R.S., *Basic Economics,* Little Brown & Co., Boston, 1972, pp. 40-42.
21. Abu Sulayman, A.H. "The Theory of Economics of Islam" in *Contemporary Aspects of Economic and Social Thinking in Islam,* American Trust Publications, Reprinted 1976, p. 59.
22. Zarqa, M.A., "An Islamic Perspective on the Economics of Discounting..."

yet to have been generally accepted.[23] As regards Dr.Naqvi's and other particular models of a growing economy that assign to the rate of interest a significant role but *disregard uncertainty,* we have indicated earlier their main defect. Such models[24] are color blind to the difference between interest and profit, hence cannot be used to claim for one any functions not true of the other.

We may safelly conclude, then, that no function unique to the interest rate has been proven to be necessary for an equity-based Islamic economy where the interest rate must be zero but where profit rates are positive. An equity-based economy hardly needs an interest rate, but an interest-based economy can hardly exist without equity.[25]

23. This is the conclusion of an eminent authority on the subject, E. Malinvaud: "Interest Rates in the Allocation of Resources", in *The Theory of Interest Rates,* F.H. Hahn & F.P.R. Brechling, eds., Macmillan, N.Y. 1965., pp. 236-39.
24. A prime example of which is J. Von Neumann model of a growing economy.
25. For, "a business cannot be financed entirely by risk-free capital (interest bearing loans). There must be a certain proportion of venture capital, or equity, to make the guarantee effective." R. Dorfman, *Prices and Markets,* 2nd ed., Prentice-Hall, N.J., 1972, p. 245.

SAVING AND INVESTMENT FUNCTIONS IN A TWO-SECTOR ISLAMIC ECONOMY

Monzer Kahf

1.

INTRODUCTION

The relationship between saving and investment is always based on the philosophical outlook of society. The same applies to all other forms of economic activity. Bot Max Weber and R.H. Tawney maintain that Capitalism arose subsequent to the change in European values regarding the ethics of thrift, work and cooperation.[1] Joan Robinson argues that all social sciences, and not only economics, are based on the ideology of the society, as their subject matter has a great deal of "political and ideological content."[2]

Although the ideological ground of any economic study is not usually spelled out, this paper openly confesses that it is an attempt to derive the saving and investment functions from the viewpoint of the Islamic ideology.[3] This paper will follow the analytical methodology known in economics, as the author believes that there is no inconsistency between Islam and a scientific method of studying man and the world. The purpose of the paper is to derive the saving and the investment relationships in an Islamic society.

The basic thesis of the present study can be summarized as follows. In a two-sector model of an Islamic economy, aggregate saving, as a genuine economic activity of human beings, is a function of the expected return of investment, *Zakāh* and religiously motivated factor of income redistribution. This is based on the evidence not only in the *Qur'an* and the *Sunnah*, but also in the contemporary behavioral studies. This paper will show that in an Islamic society, a nongovernmental,

1. Max Weber, *The Protestant Ethic and the Spirit of Capitalism,* (New York: Charles Scribner and Sons, 1958), and R.H. Tawney, *Religion and the Rise of Capitalism,* (New York: New Amercian Library, 1926 & 2954).
2. Joan Robinson, *Economic Philosophy,* (Chicago: Adline Publishing Company, 1962), page 23.
3. The term "ideology" is used in the meaning of the Arabic word "Aqeedah". It may be argued that this term has a Marxist connotation. But we are using it following the early Islamic tradition as expressed in the use of the term with its Islamic content, i.e., in "al-Aqeedah al-Tahawiyah" and "al-Aqeedah al-Salafiyah".

religiously motivated redistribution of income takes place. This results in increasing the aggregate consumption. The levying of *Zakāh* provides a means of penalizing idle funds. The prohibition of Ribā closes the door for all forms of gains that are accompanied either by a high level of liquidity or by absenteeism from the business activity. *Al-Mudarabah* (al-Qirad) as defined in the Islamic jurisprudence opens only one channel for the "waiting funds", i.e., through their commitment to the production process.

2.

SAVING AND INVESTMENT RELATIONSHIPS IN NON-ISLAMIC THEORIES

2 A. *Saving and Investment Functions in the Capitalistic Theory*

The neo-Classical theory considers saving, S, as a function of the rate of interest, r. Since interest is paid as a reward for the saver for abstaining from consumption, saving should increase with a rise in the interest rate and decrease with a fall in the interest rate. On the other hand, interest is a cost of investment. Therefore, investment, I, is a negative function of interest. The equilibrium rate of interest is depicted by the intersection of the saving and investment functions. It is always assumed that both saving and investment are sufficiently interest-elastic to permit adjustments toward a new equilibrium, should the rate of interest change. The equilibriulm provided by the rate of interest is a real one. Hence changes in the quantity of money brings about proportional changes in the monetary rate of interest only.[4] The neo-Classical saving and investment relationships are shown in Figure 1 where $S = S(r)$, $I = I(r)$ and the equilibrium condition is $S(r) = I(r)$. However, it should be noted that the rate of interest is determined by saving and investment in isolation from the rest of the economy.[5]

Although the rate of interest is determined in isolation from the rest of the economy, it plays a central role in the Classical theory as "the price of capital goods," and hence as the determinant of the allocation of income between consumptioln and saving (investment) on the one hand, and the allocation of resources between the production of consumer goods and the production of capital goods on the other.[6]

4. Edward Shapiro, *Macroeconomic Analysis,* (New York: Harcourt, Brace and World, Inc., 1970), 2nd Edition, pages 357-360.
5. The neo-Classical Marcroeconomic system of equations is as follows: For the labour Market
   (1) Demand for Labour: $D_L = D_L$ (W/P)
   (2) Supply for Labour: $S_L = S_L$ (W/P)
   (3) Equilibrium: $D_L = S_L$
   This determines the full employment level. Production function determines output, O, based on the amount of employment determined in equation
   (3) and a given capital stock, R, thus:
   (4) $O = O(K, L)$
   (5) Quantity of money equation: $M = OP$
   where V stands for velocity, M for quantity of money and P for price level.
6. Edward Shapiro, *op.cit.*, pages 361-362.

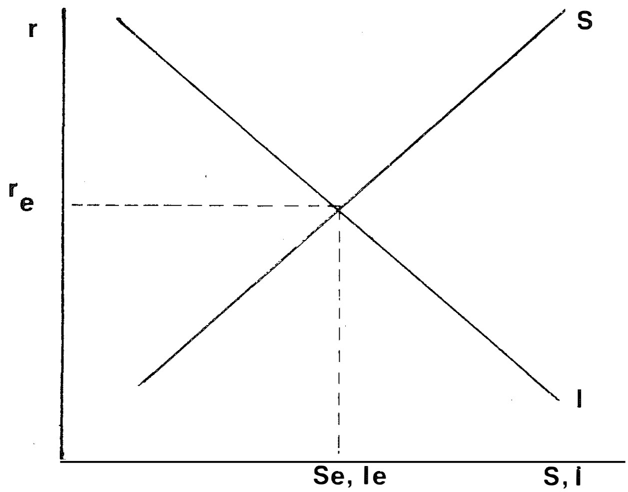

Figure 1

The Keynesian theory denies that saving is a function of the interest rate. It rather emphasizes the relationship between the level of income and its allocation. The propensity to save (which equals 1 minus the propensity to consume) depicts the saving-income relations in the Keynesian theory. It is further asserted that the saving function is interest-inelastic. But although the role of the rate of interest is played down on the saving side of the market, it is still important on the investment side.[7] According to the Keynesians, investment is a function of the expected rate of return on new capital in comparison with the rate of interest. The profit maximization assumption requires that the marginal efficiency of investment (expected rate of return) be equated with the rate of interest. Therefore, for the purpose of graphical and theoretical presentation, the relationship between investment and interest rate is equated with the relationship between investment and marginal efficiency of investment. This is a negative relation: interest being a cost of investment, an increase in the rate of interest results in a decline of investment and vice versa.[8]

Since the decision to save and the decision to invest are made by different parties and for different objectives in the Keynesian world, there exists no common concern between the two decision makers; nor does the capitalistic market system provide a mechanism for bringing these two decisions together, because of the lack of any market signal between them and of perfect and cost-free information about the expected behaviour of the consumers and their plans for allocating their income.[9]

2B. *Saving and Investment Functions in the Centrally Planned System*

The basic foundation of the theory of socialism is the substitution of the invisible hand of the capitalistic market system by a clearly visible hand. This visible hand

7. It might be fair to conclude that Joan Robinson may have had this in mind when she considered that Keynes exaggerated the role of interest rate." Joan Robinson, "The Second Crisis of Economic Theory," *American Economic Review*, Volume LXII, No. 2, May, 1972, page 4.
8. D.C. Rowan and Thomas Mayer, *Intermediate Macroeconomics*, (New Yourk: W.W. Norton and Company, Inc., 1972) pages 146-152.
9. Axel Leijonhufvud, *On Keynesian Economics and the Economics of Keynes*, (New York: Oxford University Press, 1968), pages 59-64.

takes the basic decisions of what, how and for whom to produce.[10] The "State Preference Function" in the centrally planned decision-making depends on several criteria including socialization of ownership, extensive development, and political and ideological priorities.[11]

Consequently, the saving and investment decisions are made by the central planning authority through the determination of prices and wages. Centrally planned economies are characterized by a high rate of forced saving, a strong preference for capital goods vis-a-vis consumer goods in production and a high level of bureaucracy.[12]

3.

SAVING AND INVESTMENT RELATIONSHIPS IN THE ISLAMIC TWO-SECTOR ECONOMY

3A. *The Assumptions of the Model*

The model presented in this section is based on seven basic assumptions. They are put forward in the following:

i) *The desire to save:* Saving is a positive behaviour that people naturally like; it is not merely an expression of abstention from spending, nor is it the residual of income after consumption.[13] The *Qur'an*, on more than one occasion, emphasizes that the desire to save is part of human nature. Verse 100 of *Surah* 17 states:

> *"Say: If ye had Control of the Treasures Of the Mercy of my Lord, Behold, ye would keep them Back, for fear of spending Them: for man Is (ever) niggardly!"*

This is stated as a fact of nature.[14] even if a person has unlimited sources of income and wealth, he would still like to save! Moreover, Verse 14 of Surah 3 adds that the desire to save and accumulate wealth is a natural drive like the sex drive.[15] It says:

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10. Gary M. Pickersgill and Joyce E. Pickersgill, *Contemporary Economic System,* (New Jersey: Prentice-Hall, Inc., 1974, pages 207-208.
11. Alan A. Brown and Egan Newberger, "Basic Features of a Centrally Planned Economy," in *Comparative Economic Systems,* edited by Morris Bornstein, (New York: Richard D. Erwin, Inc., 1969), reviewed edition, pages 100-102.
12. R.W. Davies, "Economic Planning in the U.S.S.R.", in *Comparative Economic Systems,* edited by Morris Bornstein, (New York: Richard D. Erwin, Inc., 1969) reviewed edition, pages 263-264.
13. Keynes argues that "saving means the excess of income over expenditure on consumption." Therefore, according to him, all one needs is to define and analyze the determinants of income and consumption. John M. Keynes, *The General Theory of Employment, Interest and Money,* 1936. This lis strongly argued by several other economists including Lange, Modigliani and Freedman.
14. Some people may argue that this verse describes disbelievers only. But al-Qurtubi stresses that the majority of commentators "al Jumhoor" take it as general. This is emphasized by the last sentence of the verse itself. See al-Qurtubi, V. 10, page 335.
15. Al-Qasimi says that the word "Nass" in this verse is general for all human beings since it is a noun of gender, see Tafseer al-Qasimi V. 4 page 804. Al-Qurtubi quoted that what appears to be the view of Omar bin Al-Khattab is that Allah is the one Who made these things beloved by men, al-Qurtubi, V 4, page 24.

> *"Fair in the eyes of men Is the love of things they covet; Women and sons; Heaped-up hoards Of gold and silver; horses Branded (for blood and excellence); And (wealth of) cattle And well-tilled land. Such are the possessions Of this world's life; But in nearness to God Is the best of the goals (To return to)."*

Other verses in the *Qur'an* put more emphasis on the desire to save as a part of human nature, such as:

> *"Truly man was created Very impatient; Fretful when evil Touches him; And niggardly when Good reaches him."*
>
> (Verses 19-21 of *Surah* 70)

and

> *"And violent is he In his love of wealth."*
>
> (Verse 8 of *Surah* 100)

Even the modern capitalistic consumption theory recognises savings as a psychological phenomenon which provides motives for saving so that saving can no longer be treated simply as a residual after deducting consumption from income. Modigliani and Brumberg studied four motives for saving; they are: the desire to increase the estate of one's heirs, [16] the desire to adjust income to irregular consumption; the precautionary motive and the motive caused by the uncertainty about present and future income.[17,18] Yet, Modigliani and Brumberg failed to discover the need to save for the mere satisfaction that is derived from being rich, which is referred to in the previous verses.

Therefore, the first assumption may be summarized as follows: In general and in principle, saving is a genuine and positive economic activity of men. People save because they like to be richer, as a precaution against future ambiguity about income and spending and for future consumption.

Thus saving may be considered as composed of three portions, i.e., saving for the accumulation of wealth and for bequeathing to heirs, S_A; saving as a precaution for future ambiguity, S_F; and saving for postponed consumption, S_C. The desire to save may be fulfilled by the satisfaction derived from these three portions. Thus saving, S, is determined by equation (1):

$$S = U(S_A, S_F, S_C) \qquad (1)$$

Although the desire to accumulate is rather natural, overdoing it is not natural. Thus the Islamic teachings condemn niggardiness and over-thriftiness. Accordingly, the *Qur'an* emphasizes moderation in saving.[19] And the Prophet (peace be upon him) suggested a concept of wealth which is consistent with a moderate combination

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16. Notice the saying of the Prophet Muhammad (peace be upon him) that states: "You would rather leave your heirs rich than leave them poor begging others", Reported by Al-Bukhari and Muslim.
17. Franco Modigliani and Richard Brumberg, "Utility Analysis and Consumption Function: An Interpretation of Cross-section Data", in Kenneth K. Kurihara (ed.), *Post-Keynesian Economics*, (New Brunswick: Rutgers University Press, 1954), pages 391-392.
18. Notice that these two motives are implied in certain sayings of the Prophet (peace be upon him). Such as the saying suggesting that one should keep sufficient food for one year and the saying exempting minimum savings of *"Nisāb"* from *Zakāh*.
19. See fro example Verse 37 of Surah 4:

    "(Nor) Those who are niggardly Or enjoin niggardliness on others, Or hide the bounties Which God hath bestowed On them; for We have perpared, For those who resist Faith. A Punishment that steeps Them in contempt."

    and Verse 24. of Surah 57:

    "Such persons as are Covetous and commend Covetousness to men. And if any turn back (From God's Way), verily God is free of all needs, Worthy of all praise."

of spending and saving.[20] This tendency to check saving among believers will be discussed in assumption 3 later on.

ii) The concept of consumption: Consumption of goods and services is fulfillment of the natural needs and desires of human beings. As such, the *Qur'an* refers to it is as an act of deriving enjoyment and satisfaction from what is in the world which is created to serve mankind.[21] Statistical studies suggest that consumption is a direct function of income.[22] The *Qur'anic* verses seem to agree with this,[23] and to add two propositions that impose limitations on consumption by prohibiting profligacy and extravagance.[24] This prohibition seems to create a concept of consumption which is not very familiar in contemporary economic studies. The purpose of the consumption activity in Islam is to maintain human life in a status best suited to fulfill its functions as a servant of God. This consumption is only a means for a Godly objective and the optimum quantity of consumption is that which allows the maximum of human time and human energy for fulfilling the obligation to God. The prohibition of profligacy and extravagance is reflected in an Islamic society by many habits and practices such as the "conservation of God's bounties", the "moderation in eating, drinking and clothing", the "avoidance of waste", etc.

The concept of consumption is in contrast with the concept of consumption in both Capitalism and Socialism. Both of these two doctrines take consumption as the ultimate and final goal of all economic activity and they consider the pleasing of

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20. The Prophet (peace be upon him) asked once: "Who among you like the wealth of his heir more than the wealth of his own self?" and he was answered: "none of us". Then he continued "Your wealth is what you use up and your heir's wealth is what you leave behind". Reported by al-Bukhari in al-Adab al-Mufrad. And on other occasion, he (peace be upon him) said: "You'd rather leave your heirs rich than leave them poor begging others".
21. Verses 32-34 of Surah 14:
    "It is God Who hath created The heavens and the earth And sendeth down rain From the skies, and with it Bringeth out fruits where with To feed you; it is He Who hath made the ships subject To you, that they may sail Through the sea by His Command; And the rivers (also) Hath He made subject to you."
    "And He hath made subject To you the sun and the moon, Both diligently pursuing Their courses; and the Night And the Day hath He (also) Made subject to you."
    "And He giveth you Of all that ye ask for. But if ye count the favours Of God, never will ye Be able to number them. Verily, man is given up To injustice and ingratitude."

    and Verse 15 of Surah 67:
    "It is He Who has Made the earth manageable For you so traverse Ye through its tracts And enjoy of the Sustenance Which He furnishes: but Unto Him is the Resurrection."
22. See, for example, Milton Freedman, *A Theory of the Consumption Function,* (Princeton: Princeton University Press, 1957).
23. Verse 7 of Surah 65 states:
    "Let the man of means Spend according to His means: and the man Whose resources are restricted. Let him spend according To what God has given him. God puts no burden On any person beyond What He has given him After a difficulty, God Will soon grant relief."
24. Verse 141 of Surah 6:
    "It is He who produceth Gardens, with trellises And without, and dates, And tilth with produce Of all kinds, and olives And pomegranates, Similar (in kind) And different (in variety): Eat of their fruit In their season, but render The dues that are proper On the day that the harvest Is gathered. But waste not By excess: for God Loveth not the wasters."

    and Verse 27 of Surah 17:
    "Verily spendthrifts are brothers Of the Evil Ones; And the Evil One Is to his lord (Himself) Ungrateful."

desires and wants of men as the final objective of life. Thus, while utilization of silverware and goldware is prohibited in Islam, it is one of the high pleasures of a capitalist or a communist.

Given the Islamic concept of consumption, consumers in an Islamic economy, derive utility from the consumption of goods and services; therefore they spend a part of their income on consumption. And one may venture to say that there exists such a wide variety of goods and services that one likes to consume within the attainable set of goods and services in the Islamic economy that a saturation point of consumption may never exist or may never be reached. Thus the desire to consume may be expressed by equation (2);

$$C = U(g_1, \ldots\ldots\ldots\ldots, g_n) \qquad (2)$$

where C is consumption and g_1 to g_n are the goods and services within the attainable set.[25]

iii) *Spending for the sake of God:* The concept of worship in Islam is extended to any useful doing that is intended for God's sake. One may walk, talk, love, eat and spend as acts of worshipping God. Thus, the utilization of one's income in the form of saving, consumption, taxes, etc. may well be undertaken for the sake of God.

Indeed, the *Qur'an* points out to one specific utilization of income as distinct from both saving and consumption and calls it "spending for the sake of God."[26]In general, spending for the sake of God means the use of one's material resources in the form of transfer payments to other individuals or organization for purposes that do not result in any personal satisfaction of the giver except that this is derived from the feeling that one pleases God.

Spending for the sake of God may be obligatory or voluntary. *Zakāh* is the major kind of obligatory spending for God's sake and it is left to assumption 6. Therefore, the use of the term, spending for the sake of God, is restricted throughout this paper to non-obligatory forms. These include two broad areas: (a) voluntary charity and giving to help spread the cause of Islam and defend the Muslims, and (b) voluntary charity and giving to help the needy, to build and maintain places of worships, and to promote the welfare of the society. Since all Muslims are called upon to spend for the sake of God, what are the determinants of the size of their spending for this cause? In other words, why do Muslims differ in the amounts they put forward in responding to this call?

The answer to this question lies in the piety of the individual, subject of course to the income constraint which will be discussed later. The more pious the person, the larger is the ratio of his income spent for the sake of God, and the less pious he is, the

25. The attainable set comprises all goods and services that are lawful according to the Islamic law.
26. See for example Verses 265 to 268 of Surah 2:

"And the likeness of those Who spend their substance, Seeking to please God And to strengthen their souls, Is as a garden, high And fertile; heavy rain Falls on it but makes it yield A double increase Of harvest, and it receives not Heavy rain, light moisture Sufficeth it. God seeth well Whatever ye do." Does any of you wish That he should have a garden With date-palms and vines And streams flowing Underneath, and all kinds Of fruit, while he is stricken With old age, and his children Are not strong (enough To look after themselves) — That it should be caught In a whirlwind, With fire therein, And be burnt up? Thus doth God make clear To you (His) Signs; That ye may consider."

"O ye who believe! Give of the good things Which ye have (honourably) earned, And of the fruits of the earth Which we have produced

"For you, and do not even aim At getting anything Which is bad, in order that Out of it ye may give away Something, when ye yourselves Would not receive it Except with closed eyes And know that God Is Free of all wants, And Worthy of all praise

"The Evil One threatens You with poverty And bids you to conduct Unseemly. God promiseth You His forgiveness And bounties. And God careth for all And He knoweth all things."

smaller is that ratio. Piety measures the degree of the depth of belief of the individual and the level of his commitment to the cause of *Allāh*. It is expressed by the proportion of the individual resources, time, human energy and material things the person spends for the worship of God and the promotion of His cause. This explains the differential response of the companions when they were asked by the Prophet (peace be upon him) to spend for the defence of the first Islamic society in Madina. Abu Bakr gave all the cash and mobile assets he had while Umar gave only one half of what he had. When asked what he had left for his household consumption, Abu Bakr answered: God and His apostle (will take care of them). Later on, Umar confessed that Abu Bakr was more pious than he, and mentioned this incident as proof. Accordingly, equation (3) shows spending for the sake of God, G, as a function of the satisfaction derived from the feeling of pleasing God, P.

$$G = U(P) \tag{3}$$

iv) *Balance and moderation:* The *Qur'an* describes Muslims as those in the middle. Islamic behaviuor, in all tracts of life is that of balance and moderation. The Prophet (peace be upon him), in a famous saying, announced that each of the things or people one deals with has a right of that person and one should give each of them its or his right. This principle of balance applies to all actions of a *Muslim* including worship. The *Qur'an* specifically describes the economic behaviour of a *Muslim* in the following two verses: Verse 67 of *Surah* 25;

> "Those who, when they spend, Are not extravagant and not Niggardly, but hold a just (balance) Between those (extremes)."

and Verse 29 of *Surah* 17;

> *"Make not thy hand tied (Like a niggard's to thy neck, Not stretch it forth To its utmost reach, So that thou become Blameworthy and destitute."*

v) *The prohibition of interest:* It is assumed that there is a legal ban on all kinds of interest in all loans and transactions. Interest is defined as any excess above the principal of loans and all other transaction that include the meaning of gain accured on "waiting savings". The prohibition of interest implies that savings not committed to productive activities are not rewarded by any means.

vi) *The imposition of Zakāh: Zakāh* is a duty on all forms of assets, holdings, equities and output. It aims at redistribution and recirculation of wealth. While commodities for personal use are not subject to *Zakāh*, all forms of wealth, idle, more productive or less productive are.

vii) *Two-sector economy:* The last assumption is that there are only two sectors, namelly, consumers and business. Consumers own the factors of production and receive their income periodically for the services rendered in the production process. They divided this income into consumption, spending for sake of God, and saving. Businessmen produce all goods and services in the society using land, labour, and capital. Capital is acquired from the accumulated savings of the consumers. The government's role is restricted to collecting *Zakāh* and distributing it, in addition to the traditional role of providing security.

3 B. *Derivation of the Functions:*

i) *Individual saving function:* Based on assunptions (i), (ii) and (iii), there are three possible uses of individual incomes in an Islamic society, i.e., consumption, saving and spending for the sake of God. Thus the income identity is:

$$Y \equiv S + C + G \tag{4}$$

where Y denotes income, S saving, C consumption and G spending for God's sake. In dividing his income among these three uses, the individual is influenced by the relative strength of the motives ujnderlining each one of them. Since each of consumption, saving and spending for the sake of God has its own independent motives in the rationale of the Muslim consumer, as shown in equation (1), (2) and (3), the analysis of one or two of them only is insufficient because the remaining uses cannot be derived from the income identity.[27] Such an analysis ignores the set of motives that underline the so-called "residual" and it can only give the ex-post magnitude of the alternative left out while it is the desired amount ex-ante that really matters in the analysis of consumers behaviour.

Therefore, a process of equilibrium between the three sets of motives should be sought in order to study the behaviour of the consumer under the first three assumptions of this paper. An indifference map needs to be developed in three dimensions whereby the points on each curved surface (i.e. half ball) represent different combinations of saving, consumption and spending for the sake of God that give equal satisfaction to the consumer.

This indifference map is shown in Figure 2.

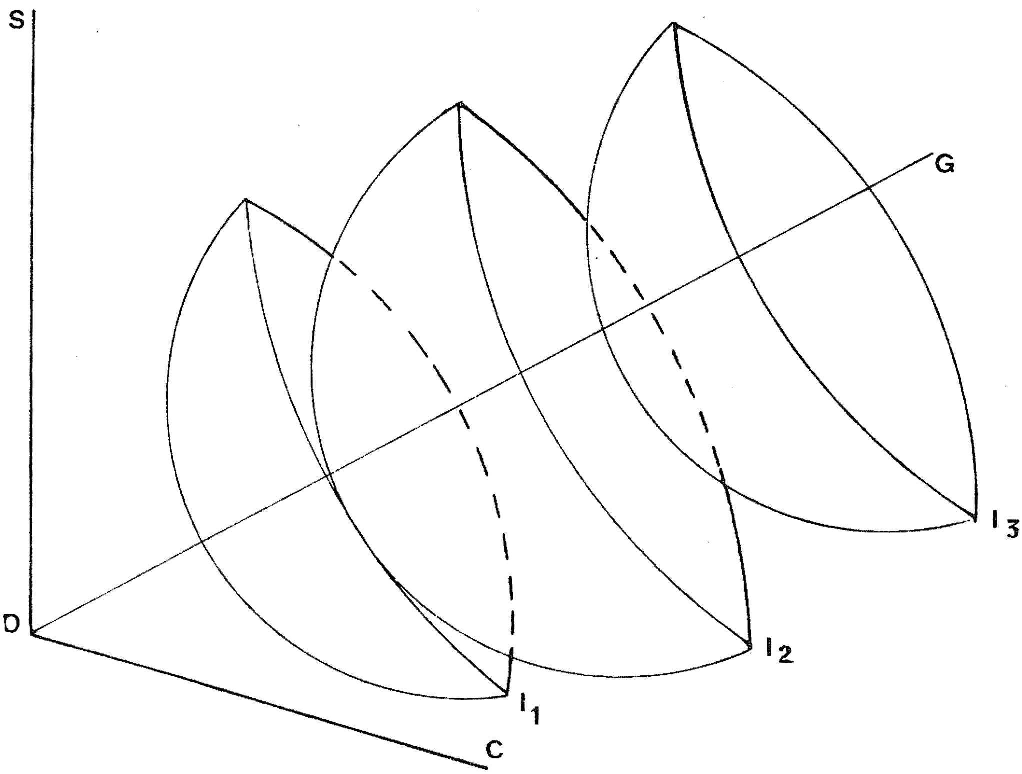

Figure 2: Indifference Map of Saving, Consumption and Spending for the sake of God.

27. This is the Keynes' approach in his derivation of the saving function from the consumption function because he considered saving as the residual of income after consumption.

The vertical distance between a point on a given indifference surface and the axis of saving, consumption and spending for the sake of God measures the amount of each of these three uses of income necessary to provide the consumer with the level of satisfaction denoted by the indifference surface. A shift of the point on the same surface gives another combination of saving, consumption and spending for the sake of God that produces the same level of satisfaction.

The shape of the indifference surfaces in Figure 2 is determined by the utilities of saving, consumption and spending for the sake of God as expressed in equations (1), (2) and (3). The immediate and first implication of this analysis is to invalidate the capitalist-cum-communist postulate of consumer behaviour that assets that the consumer is more happy the greater the current and future quantity of goods and services he has command of, and to substitute it by a more appropriate postulate that says that "the consumer is more happy the higher he attains on his indifference surface," because reaching a higher indifference surface may be accompanied by a reduction in saving and consumption as long as an increase in the spending for the sake of God produces more satisfaction than that lost by a reduction in saving and consumption. By the same token, the level of a consumer's happiness and satisfaction may be the same even with a substantial decline in saving and consumption when he moves along the same indifference surface to a point closer to the axes of saving and consumption, and farther from the axis of spending for the sake of God.

The trade-off between saving, consumption and spending for the sake of God is governed by the rates of substitution among them. Assumption 4 demands that the Muslim consumer should select a path of moderation in the allocation of his income to these three uses. This moderation can be translated mathematically into a negative relationship between these three alternatives, i.e., the more a consumer spends for the sake of God, the weaker the desire to save and consume. By applying this same reasoning on the three desires, the following relationships may be established:

$$\text{a)}\quad \frac{\partial G}{\partial S} < O,$$

$$\text{b)}\quad \frac{\partial S}{\partial C} < O, \quad \text{and}$$

$$\text{c)}\quad \frac{\partial G}{\partial C} < O. \qquad (5)$$

This means that the indifference surfaces are negatively sloped. To ensure the convexity of the curved indifference surfaces, the assumption of non-satiety is required. This assumption simply states that the consumer prefers more satisfaction to less satisfaction. It is basically derived from the belief that Muslims are commanded by God to do as much good as possible to themselves and to others. Thus, with the same utility derived from saving and consumption, for example, more spending for the sake of God is preferred to less spending for the sake of God. By applying the same reasoning on saving and consumption the convexity of the curved indifference surface is assured. Convexity of the curved indifference surfaces can be expressed mathematically by the negative second derivatives, i.e., declining rates of substitution among saving, consumption and spending for the sake of God. It thus follows: (a) the rate of substitutionof saving for consumption declines, as saving increases; (b) the rate of substitution of consumption for spending for the sake of God decreases, as consumption increases; and (c) the rate of substitution of spending for the sake of God for saving decreases, as the spending for the sake of God increases.

Let us now consider the income constraint. The size of individual income imposes a constraint on the volumes of saving, consumption and spending for the sake of God. In a three dimension diagram, this constraint is represented by a flat triangular surface. This flat surface reflects, in fact, the income identity of equation (4). The income constraint surface has also negative slopes with the following rates of transformation of saving, consumption and spending for the sake of God:

$$\text{a)} \quad \frac{\partial g}{\partial s} < 0,$$

$$\text{b)} \quad \frac{\partial s}{\partial c} < 0, \quad \text{and}$$

$$\text{c)} \quad \frac{\partial g}{\partial c} < 0. \tag{6}$$

The Muslim consumer is a utility maximizer because of his concern to do maximum good to himself in this life and in the hereafer.[28] Thus, the consumer's income should be divided among saving, consumption and spending for the sake of God in such a way that satisfies the conditions of utility maximization. These conditions are: (a) the three rates of substitutions be equal; (b) the three rates of transformation be equal; and (c) the rate of transformation equals the rate of substitution.

These three conditions are satisfied at the point of tangency of the curved indifference surface and the flat budget constraint surface as shown at the point E in Figure 3.

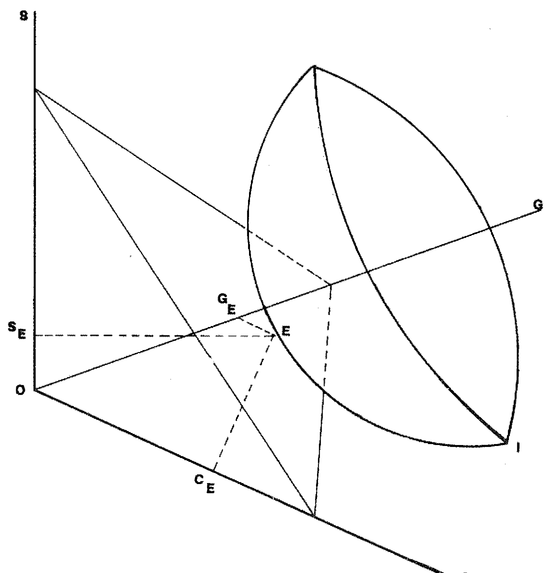

Figure 3: *The Equilibrium of the Muslim Consumer*

28. *It should be noted that the utility of a non-believer may not include the hereafter.*

The point E in Figure 3 depicts consumption OC_E, saving OS_E, and spending for the sake of God OG_E, at the equilibrium of the consumer.

Mathematically, the equilibrium conditions are:

$$\text{a)}\quad -\frac{\partial G}{\partial C} = \frac{\partial S}{C} = \frac{\partial G}{\partial S},$$

$$\text{b)}\quad \frac{\partial g}{\partial c} = -\frac{\partial s}{\partial c} = \frac{\partial g}{\partial s}, \text{ and}$$

$$\text{c)}\quad -\frac{\partial G}{\partial C} = \frac{\partial g}{\partial c}. \tag{7}$$

Recalling now the relationships expressed in equations (1), (2) and (3), the equilibrium functions of saving, consumption and spending for the sake of God may be expressed as follows:

a) $S = S(Y, A, F, C', g_1 \ldots\ldots g_n, P)$,
b) $C = C(Y, A, F, C', g_1 \ldots\ldots g_n, P)$, and
c) $G = G(Y, A, F, C', g_1 \ldots\ldots g_n, P)$. (8)

where S, C, G, Y represent current saving, consumption, spending for the sake of God and income, respectively; A is the wealth the consumer likes to accumulate for the desire to be rich; F is the amount he likes to spare for use in cases of inconsistency of income and spending; C' is the postponed consumption as the consumer sees it currently; $g_1 \ldots\ldots g_n$, the goods and services available for consumption; and P is the piety of the Muslim consumer. The utility relationships of A, F, C', $g_1 \ldots\ldots g_n$, and P are implied in their coefficients S, C, and G with respect to saving, consumption and spending for the sake of God.

However, the previous discussion reveals that saving is positively affected by the amount the consumer likes to bequeath, A, the level of his risk aversion expressed by F, and the amount he desires to save for future consumption. On the other hand, saving is negatively related to the piety of the consumer.

The function relation between income and each of saving, consumption and spending for the sake of God can be derived by depicting the equilibrium level of each of these variables at different amounts of income assuming the *ceteris paribus* condition for all the other areguments in the set of equations (8). The shape of these relation depends on the shape of the indifference surfaces.

At this juncture, the implications of *Zakāh* imposition and interest prohibition should be taken into account. Let us, therefore, plug in assumptions (v) and (vi) into the preceding analysis and study the repercussions. It is useful to assume the prices of g_1 to g_n all remain constant in order to avoid the effect of inflation.

When *Zakāh* is collected, accumulated wealth is taxed by the amount of *Zakāh,* but since people like richness and do not like becoming poorer (assumption one), they react in one of the following ways: (a) They increase their savings by at least the amount of *Zakāh* so that the collection of *Zakāh* does not pull their wealth below the desired level before the collection of *Zakāh.* (b) They attempt to invest their accumulated wealth in profitable projects. It should be noted, however, that the consumer would be willing to invest his savings only if his share of the expected rate of return on this investment at least equals the rate of *Zakāh.* But If that share is below the rate of *Zakāh* the consumer will be better off if he reduces his current savings to zero and uses all his income for consumption and for the sake of God. (c) A combination of (a) and (b) is always possible.

This reaction on the part of consumer does not mean that he is a *Zakāh* averter, but it does mean that he is a poverty averter, since he does not attempt to avoid the payment of *Zakāh* but he attempts to allocate his income and wealth in such a way that allows him to pay *Zakāh* without becoming poorer. Let us start with out first reaction of the consumer. It simply requires that the consumer in the Islamic economy will increase the ratio of saving to income as the expected amount of *Zakāh* that he has to pay increases. Thus there is a positive relationship between the amount of *Zakāh* and current saving. This means that the expected amount of *Zakāh* should be included in the individual saving function with a positive coefficient as in equation (9) below:

$$S = S(Y, A, F, C', g_1 \ldots\ldots\ldots g_n, P, Z)$$

where Z is the amount of *Zakāh* the consumer expects to pay during the income period, and $\frac{\partial S}{\partial Z} > O$. It should be noted that *Zakāh* and spending for the sake of God are partial substitutes but not full substitutes, Thus an increase in saving is financed by a reduction in both spending for the sake of God, and consumption.

The consumer, however, may react by investing his past savings in order to increase his income by an amount equal to the expected amount of *Zakāh* rather than by increasing his saving. This can only lead to a non-declining level of wealth if the differential between the expected return to him of this investment, Q, is not less than the expected rate of *Zakāh,* Z. Thus the saving relationship of equations (8) a) and (9) may be rewritten as equation (10) below:

$$S = S(Y, A, F, C', g_1 \ldots\ldots g_n, P, Z, Q - z) \qquad (10)$$

where $\frac{\partial S}{\partial (Q-z)} > O$ and Q–z is the differential between the expected returns to the owner of saving on the investment of his saving and the rate of *Zakāh.* The rate of *Zakāh,* z, is constant at 2.5/ and may, thus, be omitted and the rate of return to the owner of saving has a direct relationship with the expected rate of return on investment, R, as will be seen later. Thus we can substitute the latter for the former and rewrite equation (10) as equation (11) in the following:

$$S = (Y, A, F, C', g_1 \ldots\ldots g_n, P, Z, R) \qquad (11)$$

where $\frac{S}{R} > O$, which means that saving is positively related to the rate of return on investment.

When the amount of *Zakāh* expected to be paid on all the acculmulated wealth increases, the consumer will increase his saving in order to compensate for the resulting reduction of wealth, but he may not decrease his savings without violating assumption (i). On the other hand, saving is directly related to the expected return on investment. This follows from assumption (i) as well.

The prohibition of interest and the imposition of *Zakāh* make it imperative that wealth may be increased by the two methods mentioned above, i.e., saving and return on investment. This has two important consequences: first, waiting financial assets do not accrue any earnings but they are rather penalized; and second, earning can only be achieved through committing the financial assets (and actually all kinds of zakatable wealth) to the productive sector of the economy. Committing wealth to the productive sector may be done either by direct involvement in this sector or indirectly by assigning wealth to projects run by other people. The latter is referred to as *"Qirād"* in the Islamic literature. The *Qirād* is defined as the assignment of one's wealth to the productive sector through means of other people (entrepreneurs) in exchange of sharing in the return on that investment.

This effect of the prohibition of interest and the obligation of *Zakāh* makes the investment phenomenon a long-term one and minimizes (or perhaps eliminates) the short term aspect of it. In a non-Islamic economy, on the other hand, the presence of a positive interest rate and the absence of the *Zakāh* on wealth give room to the consumer to keep his savings in a liquid (or very mobile) form.

ii) *Aggregate saving function:* In the two-sector economy of this paper, producers do not save by assumption and there is no public saving because the government has no economic role. Therefore, the aggregate saving function equals the summation of the individual's saving functions. However, an aggregation of this kind may not be satisfactory if the effect of the distribution of *Zakāh* is not taken into consideration. *Zakāh's* distribution creates income for the recipients. This income is not generated by the producer's sector. In fact, seven out of the eight categories of recipients do not provide any service for receiving the *Zakāh* disbursement and only the category of the employees of the *Zakāh* administration provides labour services in exchange of the income they receive. The individual saving functions of these seven categories therefore have to be derived, before one can arrive at the aggregate saving function.

Inconsistency with the individual saving function of the *Zakāh*-paying consumer assumptions (i) through (iv) hold also for the *Zakāh* receiving-consumer. Thus his saving function will reflect the same arguments as in equation (8) with a minor change that arises from the usual definition of income.

One may define income as the flow of services of capital assets (including human capital). But in order to accommodate the *Zakāh* received by these seven categories, income, Y, has to be redefined as the flow of the services of capital assets and *Zakāh* received by categories of recipients that do not earn *Zakāh* by selling the services of their capital assets.

On the other hand, those seven categories of *Zakāh* recipients, in making their saving decisions, are subject to assumptions (v) and (vi) concerning the prohibition of interest and the imposition of *Zakāh* on savings. Thus the saving function of the *Zakāh*-receiving consumer is put together in the following equation:

$$S = S(Y, A, F, C', g_1 \ldots\ldots g_n, P, Z, R) \tag{12}$$

bearing in mind the redefinition of income. Notice that equation (12) is the same as equation (11). Therefore, without any loss of generality, the aggregate saving function can be found by adding together all the saving functions of the m individuals as shown in equation (13) below:

$$S_a = \sum_{i=1}^{m} S_i(Y, A, F, C', g_1 \ldots\ldots g_n, P, Z, R) \tag{13}$$

where S_a is the aggregate saving function.

iii) *Investmemt function:* In the two-sector economy, factors of production are combined together in a productive form by the entrepreneur; in other words, all investment in the economy is made by him.

The decision to invest depends on (a) the rate of expected return on investment and (b) its cost. The rate of expected return, R, is a factor of aggregate demand (consumption plus investment), life of the machine and the volume of its output are determined by the level of technology prevailing at the time the machine is manufactured and by the correlated skills of labour. These two factors may, therefore, be combined together as the level of technical know-how and referred to as T. From the point of view of the entrepreneur, who selects among different alternatives of investment at a certain moment of time, T is taken as constant. Consequently, the expected rate of return on investment may be written as:

$$R = R\ \{(C_e + I_e),\ \bar{T}\}$$

R = the expected rate of return on investment,
C_e = the expected demand for consumer goods, and
I_e = the expected demand for producer goods. (14)

The demand for producer goods, by its nature, is a derived demand, since these goods are only wanted for the production of other goods. Hence, relation (14) may be rewritten as:

$$R = R\ (C_e, \bar{T}) \qquad (15)$$

where $\frac{\partial R}{\partial C_e} > O$, which means that the expected rate of return is positively related to the expected volume of consumption.

The expected cost of investment from the point of view of the entrepreneur is the amount paid to the financier (the consumer) in order to persuade him to commit his savings to the production process. In the light of the preceding discussion, there are two markets where financial assets can be obtained, the common stock market and the *Qirād* market. The difference between these two markets is only a matter of degree. For in the case of stocks the entrepreneur has to relinquish much of his authority to the shareholders who carry more responsibility than the *Muqarids* (holders of *Qirād)*.

In the common stock market, no price is determined, but the profit is distributed under the name of dividends among the shareholders after the payment of rent and wages (including the managerial salaries). In the *Qirād* market, the price that is determined takes the form of a percentage of the realized return. The latter is not known at the savings are committed into investments. The difference between this percentage and the interest rate is obvious. Firstly, the rate of return to the *Muqarid* is not fixed but it varies with the degree of the performance of the project, whereas, the rate of interest is fixed for the saver. Secondly, since the *Muqarid* becomes a partner in business with the entrepreneur, any success or failure of the project reflects on the *Muqarid* as much as it reflects on the entrepreneur; whereas, in the case of interest, the lender ceases to have any concern about the success of the project after signing the loan contract. And thirdly, the *Qirād* market, by determining a ratio rather than a rate of return, imposes certain necessary limitations on the power of the entrepreneur by making him subject to the law of supply and demand rather than allow him to determine income of the other factors of production.[29]

29. In the neo-Classical theory of income distribution, the shares of labours, land owner, and money lender are determined in the labour, land and bond markets respectively, whereas, the share of the entrepreneur is the difference between these three on one side (cost of production) and the sale price, on the other side. The latter is determined in the goods market. Although the neo-Classical theory spends all its efforts to explain how, under the conditions of perfect competition and a continuous and

The equilibrium of the entrepreneur requires that expected rate of return on capital be the same in the common stock market and in the *Qirād* market after making due allowance for the difference in risk and management. Consequently, the rate of the cost of investment from the point of view of the enterpreneur may be looked at as:

$$Q = R \cdot q \tag{16}$$

where Q is the rate of cost of investment and q is the ratio of the share of *Muqarid* to total return on investment. Since q is always between zero and one, it relates the share of the *Muqarid* to the rate of return on investment in a positive way as noted earlier.

The ratio of the share of the *Muqarid*, q, is determined in the *Qirād* market. Two factors play important roles in this market. First, the savings of the consumers, as the supply of funds available for investment. And second, the entrepreneurial skills, E, that determine the demand of investment funds. Thus:

$$q = q\,(S, E) \tag{17}$$

The equilibrium size of investment in the economy is determined at the point where its cost equals its return, i.e.:

$$R = Q \tag{18}$$

Consequently, the equilibrium level of investment can be determined by equations (15) to (18) and put in its general form as shown in the following equation:

$$I = I\,(C^e, S, E, \bar{T}) \tag{19}$$

It must be noted that $\frac{\partial I}{\partial C_e} > O$ and $\frac{\partial I}{\partial S} > O$ which means that investent is positively related not only to the expected demand for consumer goods but also to the saving the consumer sector does.

iv) *The equilibrium of saving and investment:* The partial equilibrium of the two-sector Islamic economy is fulfilled when saving equals investment, i.e., when:

$$S = I$$

or

$$S\,(Y, A, F, C', g_1 \ldots\ldots g_n, P, Z, R) = I\,(C_e, S, E, \bar{T}) \tag{20}$$

A few points should be noticed in equation (20):

1. The saving function contains the expected rate of return on investment as one of its arguments, which implies that investment opportunities influence the rate of saving. Better expectations increase not only investment but also saving.
2. Saving and investment are determined inside the system and not outside it by certain authority of self proclaimed 'gods' such as the central planners.
3. The prohibition of interest brings into the investment function, a magnitude of saving with a direct relationship with investment. This could not be done

homogeneous-of-degree-one production function, only a "normal" profit is left to the entrepreneur, it, however, fails to bring these assumptions to the actual reality of life. Consequently, the share of the entrepreneur remains theoretically undetermined in any realistic capitalist market, and he remains the unquestionable 'god' of this market. The *Qirād* market imposes on the entrepreneur the law of supply and demand by making his share of income determined in two markets togehter, i.e., the market of goods and the market of the *Qirād*.

in the neo-Classical and Keynesian theories.

4. The system does not have any dichotomy between the decision to save and the decision to invest.

4.

CONCLUSIONS

In this paper, an attempt has been made to show the determinants of saving and investment in an Islamic economy. The government sector was excluded from this study for the purpose of pointing out the internal forces in the Islamic economic system and comparing them with other existing theories. This will help build an Islamic monetary theory that explains the behavior of saving and investment in the normal operation of the Islamic economic system.

What makes the Islamic economic system so unique is its ability to produce consistent and progressive behaviour on the part of the individual economic unit. The consistency of this behaviour was shown in Section 3. This is made possible by the elimination of interest and the imposition of *Zakāh*. The progressiveness of the system results from the same two assumptions about *Zakāh* and interest. While *Zakāh* collection makes it necessary for the wealth owners to increase their saving by at least the amount of *Zakāh* paid, the prohibition of interest makes it necessary for them to minimize resources held in liquid form. Thus as savings are increased idleness is reduced.

Moreover, the redistribution of income (and wealth) through the means of *Zakāh*, which intends to reduce the gap between the rich and the poor, is achieved without disturbing the mechanism of the economic system or the incentives to save, invest and produce quite unlike the central planning system.

This model, however, may not function properly if there are certain basic loopholes in the economic system of the country such as the co-existence of interest outside the banking system and interest-free banks (especiallly in the rural areas) in insurance transactions, and in government and municipal bonds or the lack of legal enforcement of or the prohibition of interest. Moreover, *Zakāh* should be defined in its broad sense as a tax on all forms of wealth (above the few known personal exemptions) and not as a duty on a few forms of wealth only. This is essential for the functioning of *Zakāh* as a leverage in the internal forces inherent in the Islamic economic system.

Finally, it is ironic to notice that the saving function derived in this paper does not assume a given level of commitment to Islam on behalf of the consumer since the variable P does not have to be high for the achievement of the basic implications of the functions of saving and investment. This, in fact, makes the system work even in the existing Muslim countries provided that assumptions (v) and (vi) are fulfilled.

FISCAL AND MONETARY POLICIES IN AN ISLAMIC ECONOMY

Monzer Kahf

1.

INTRODUCTION

Economic policy is an integral part of the normative approach to economic where objectives, tools and measures are all explicitly value-loaded. The major economic policy goals, usually mentioned by the western writers, include the domestic objectives of full employment and price stability and the external objective of equilibrium in the balance of payments. In the post-war years, economic growth as a policy objective has figured prominently in Western writings. There has also been a growing concern for the redistribution of income and economic development, especially among the communist and socialist writers. More recently, a new voice is rising in the United States and certain Western European countries to restrict the government's role in the allocation of resources and to raise the old banner of a policing government. However, the developing nations, in drawing the objectives of their economic policy, give top priority to economic development and economic independence.

The approach of the current study is theoretical. It, therefore, does not suggest any specific set of policy objectives but rather attempts to describe the instruments of economic policy as derived from the Islamic framework. It will be argued that an Islamic economy offers more, in terms of harmony and coherence of economic activity and in terms of policy instruments that are made available for achieving the various economic goals without reducing the economic incentives of the actors on the economic stage, than what has been repeatedly offered by free-market capitalism and centrally-planned socialism.

In what follows, Section 2 will described the mechanism concerning the fiscal and monetary policies in the capitalist and socialist systems, and Section 3 will focus on an Islamic economy, while Section 4 will discuss policy instruments. conclusions are prescribed in Section 5. In this study, a three-sector economy consisting of Consumers, Producers, and Government, will be assumed. The role and realm of reign of each will be specified, in addition to the set of assumptions that is derived from the Islamic economic system, which include, inter alia, *Zakāh*, prohibition of interest, moderation in consumption, the Islamic inheritance system, *Hisbah, Qirād,* and the co-existence of private and social ownership of the means of production. In this model of an Islamic economy, the prohibition of interest and the presence of *Qirād* bring investment expectations into the final spending function, so that variations in investment positively affect saving, thus narrowing the gap between investment and saving decisions.

Zakāh provides a major means of fiscal policy because it affects the allocation of resources, the level of aggregate demand and the distribution of income as well since the variations in the volume and the timing of collection and disbursement of *Zakāh* create variations in disposable income and fixed and circulating capital. The importance of this tool is enhanced by the relatively high ratio of *Zakāh* to income, since it is levied also on wealth.

Additionally, the size of "waiting monetary assets" is influenced. The prohibition of interest, of course, reduces the degree of freedom of the government in using such tools of monetary policy as the rate of discount and the open market operations. But then, the Islamic approach to the issue of "waiting monetary assets" is different, in that these assets are dealt with through *Zakāh* and a strict requirement of genuineness in business transactions. However, the central banking supervision and control over the money supply is not reduced but rather increased by the consideration of money as a "public utility", changes in which must not be left to the individual interests of monetary intermediaries (banks). The flexibility of *Zakāh* allows for the intensification of the development efforts. This is always backed by ethics and values of "construction and improvement" in Islamic teachings.

The last tool of economic policy has to do with the role of the government as an insider of the system rather than as an outsider. Such a government role is made available through its ownership of the major natural resources, and *al-Hisbah*. The distributive objective is built into the system by *Zakāh*, the State insurance, and the inheritance system. Thus, overaccumulation and excessive concentration of wealth is checked by forces that are working within the system itself.

2.

FISCAL AND MONETARY POLICIES IN NON-ISLAMIC SYSTEMS

This section will review the current state of the art in Western literature on fiscal and monetary policy in the capitalist and socialist systems.

2A. *Fiscal and Monetary Policies in the Capitalist System*

Since the time of Adam Smith, "laissez faire" has been taken up by policy makers not as a philosophy determining their attitudes toward government encroachment on economic life but as a slogan to be used when the need arises in the capitalist societies of Western Europe and North America. This is inspite of the fact that the doctrine of "laissez faire" was more influential in shaping the economic thoughts of academic economists.[1] This distinction is necessary to understand the rise of the "New Deal" of

1. Donald Winch, *Economics and Policy,* (London: Hodder and Stoughton Ltd., 1969), pp. 16-17.

Roosevelt at a time when many economists were still arguing that a balanced budget and monetary inaction of the government were the best choices for dealing with economic fluctuations and unemployment.[2]

The socialist elements in the West, such as the Fabians, Karl Marx and J.A. Hobson, were not able to change the theoretical framework of capitalist economists throughout the second half of the nineteenth century and the first quarter of the twentieth. Is was not until the works of J.M. Keynes that Reformism and Economic Liberalism started to invade the corner of economic policy in the thinking of professional economists. Therefore, the major and remarkable achievement of Keynes' *General Theory* lies in its ability to theorise the inability of the current capitalism to solve the problems of unemployment and instability without recurrent to monetary and fiscal methods.[3]

The IS-LM model is repeatedly presented by the Keynsians as a foundation for economic policy. This model is a mathematical formulation of the Keynesian theory of income and expenditure in which saving is a function of income, investment is a function of the rate of interest, and money is demanded for transactional, precautionary and speculative purposes. Thus the demand for money becomes a function of income and the rate of interest,[4] while the supply of money is controlled by the central banking system.[5]

The tools of economic policy, suggested by this theory, are usually classified into fiscal and monetary categories. Fiscal tools are changes in government expenditures and taxes. An increase in government expenditure is considered similar to an increase in investment since it injects more demand into the system, and vice versa. By the same token, an increase in taxes is similar to an increase in saving since it represents a withdrawal of demand from the system. A change in government expenditure and/or revenue affects income and employment through the multiplier process. It should be noted, however, that the effect of a change in taxes is smaller than that of a change of the same magnitude in government spending. For taxes bring about changes in the disposable income, a part of which is accounted for by adjustments in saving so long as the marginal propensity to save is positive while government spending directly affects the aggregate demand.[6]

Monetary instruments of economic policy are those that influence the rate of interest (e.g., rediscount policy and open market operations), the supply of money (e.g., open market operations and reserve requirements) and the rate of the monetization of transactions (marginal requirements). These instruments influence the volume of income and employment through changes in the equilibrium of the money market. Thus an increase in the supply of money (through open market operations or a reduction in the reserve requirement) raises the equilibrium level of

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2. *Ibid.*, pp. 235-241.
3. *Ibid.*, p. 234.
4. In a recent study, K. Alec Chrystal questioned the validity of considering the size of income as a representative of the volume of transactions not only in the internatinal market but also in the domestic market. See K. Alec Chrystal, "Demand for International Media of Exchange," *American Economic Review*, Vol. 67, No. 5, Dec., 1977, pp. 840-850.
5. Harry G. Johnson, *Macroeconomics and Monetary Policy*, (Chicago: Aldine Publishing Company, 1972), pp. 5-14.
6. *Ibid.*, pp. 15-19, and Edward Shapiro, *Macroeconomic Analysis*, (New York: Harcourt, Brace & World, Inc., 1970), pp. 270-287.

income. Likewise, a reduction in the rediscount rate increases the equilibrium level of income by reducing the rate of interest.[7]

It should be noted that both the IS-LM model and the proposed instruments of economic policy presuppose the existence of a certain level of capital and a certain set of goals. The model originates from the studies of depression and it implicitly assumes the existence of idle capital. Consequently, the size of capital does not act as a constraint on the growth of income. On the other hand, the model aims at suggesting a solution to the fluctuations in economic activity. It does not deal with the problems of economic development, the allocation of resources, and the distribution of income. Consequently, the IS-LM model, because of its preoccupation with the problem of fluctuations, is not capable of explaining all the dimension of fiscal and monetary policy in contemporary capitalistic societies, let alone those in the developing countries.

Historical developments since the end of the Second World War have introduced two new dimensions. First, the newly independent countries of Asia and Africa, the majority of which retained the framework of free capitalism inherited from the colonial era, were faced with the urgent need of accelerating their economic development. This brought about a shift in the goals of economic policy, with economic development emerging as an important objective in the capitalistic literature. Second, the experience of the Marshal Plan in Western Europe showed the possibility of a massive international transfer of capital. This pattern has been reinforced by the tremendous growth in the earnngs of the oil producing countries, which posed the question of development with abundant capital. Consequently, several growth and development models were developed during this period.[8]

What is interesting is that all theories and models of economic development insist on structural changes of the type that took place in Western society, which call for infrastructural capital, direct government planning and investment, etc. and not for such changes in the economic apparatus in a manner more conducive to development. Thus economic development policies of the Third World have become more vulnerable to the socialist ideology even in those countries that preserve the capitalist ideals. The use of fiscal and monetary policies is confined to the secondary role of coping with, and remedying the results of public investment.

2B. *Fiscal and Monetary Policies in the Central Planning System*

Fiscal and monetary policies are used in the Soviet Union as instruments for the fulfillment of the plan. The Union budget always reflects the priorities of the Soviet plan. Expenditures include the allocations to State enterprises in industry, agriculture, transportation and retail trade in addition to the administrative expenses of the government. On the other hand, taxes are used for a dual purpose: as a means of regulating the demand for consumer and producer goods by the individuals and the state enterprises, and as a source of income for the budget. To serve this dual purpse two basic forms of taxes are used in the Soviet Union, viz., turnover taxes and

7. Graphical and algebraic presentation of these effects (as well as the effects of fiscal policy) are always found in intermediate texts on macroeconomics and they are easily available to the student of economics. Therefore, there should be no need to reproduce them in this brief survey.
8. See for example, Benjamin Higgins, *Economic Development,* (New York: W.W. Norton and Company, Inc., 1968), chapters 3-8 on the theories of development.

enterprise profit taxes. Turnover taxes are levied at the wholesale level and are reflected in the consumer prices. Changes in the turnover taxes are meant to regulate the demand for commodities in accordance with the supply. Enterprise profit taxes serve as means of resource reallocation as well as tools for financial planning. The budget plays a basic role in regulating saving and investment in the Soviet economy since about one-half of the Soviet national income passes through it.[9]

Monetary policy is undertaken by the Gosbank (the State's only bank). It aims at monetary equilibrium and exercises monetary control over the fulfillment of the plan. The Gosbank holds deposits of individuals and state enterprises. All State enterprises are required by law to channel their revenues and expenditures through the Gosbank, thus enabling it to control the compliance of these expenditures with the plan. In addition, the Gosbank, through its credit policy, controls the volume of the demand deposits of the State enterprises. Furthermore, the Gosbank controls the issuance of currency in society.[10]

It must be noticed that fiscal policy in the Soviet Union is a principal determinant of the size and the structure of investment and that it is exercised through changes in the rates and the structure of the tax system as well as through the budgetary appropriation of expenditures. Monetary policy, on the other hand, is more of a control mechanism, whereby changes in the credit policy and the supply of money force the public enterprises to stay within the limits of the plan.

3.

THE ISLAMIC ECONOMY

3A. *Goals of Economic Policy*

Islam offers a system of economic freedom to the individual units within a social framework that recognizes the state as an indigenous economic unit, i.e., as an insider rather than an outsider. Thus it provides for a wide range of economic policy objectives that are approached through the internal dynamics of the system.[11]

At the beginning, we should distinguish between the set of structural goals of economic activity as seen in the Islamic system and the set of specific objectives of economic policy at certain moments of time of the development of an Islamic economy. The former is derived from the system itself and the latter is affected by the

9. Gary M. Pickersgill and Joyce E. Pickersgill, *Contemporary Economic System,* (New Jersey: Prentice-Hall, Inc., 1974), p. 266.
10. *Ibid.,* pp. 264-269, and R.W. Davies, "Economic Planning in the U.S.S.R," in Morris Bornstein, editor: *Comparative Economic Systems,* (Homewood, Illinois: Richard D. Erwin, Inc., 1969), pp. 260-262.
11. It must be appreciated that there are difficulties involved in visualizing an economic system, which is not put into practice in the contemporary context of technology and communication, and in comparing such an imagined system with other systems that have been in practice for many years like capitalism or socialism. In view of such difficulties, the derivation of the characteristics of an Islamic economy should be highly theoretical with more emphasis on the assumptions and their purity in relation to the Islamic ideology and injunctions. Additionally, in order to make a comparison between the Islamic model and the other models valid and meaningful, such a comparison should be made on theoretical ground only by theorizing the capitalist and socialist models of economic policy leaving the empirical implications of the three systems to a later time when some empirical observations and data are available.

specific circumstances in an Islamic economy at its different stages of development.

The long-term structural goals of economic activity may be summed up in three statements: the maximization of the rate of utilization of resources, the minimization of the distributive gap and the observance of the rules of the game.

The objective of maximization of the rate of utilization of resources aims ultimately at the full utilization of the natural and human resources available to the country. The natural resources of the Earth, both above and below its surface, are the gift of God. Their neglect implies thanklessness to Him as well as disobedience of His ordinance that: "It is He who has made the earth manageable for you, so traverse Ye through its tracts and enjoy of the sustenance which He furnishes."[12] In the *Qur'an* the search and the study of the gift of God is, by itself, a way to understand His Greatness: "See you not that God sends down rain from the sky? With it We then bring out produce of various colours and in the mountains are tracts white and red of varius shades of colours. Those truly fear God, among His servants, who have knowledge,"[13] and "Then look (and search) for the effects of the Mercy of God. He gives life to the earth after its death ...."[14] The enjoyment of the gifts of God and the best of the goods is one of the affairs of the believers: "Say, who has forbidden the beautiful gifts of God which He has raised for His servants, and the good of the things (which He has provided) for sustenance? Say: they are, in th life of this world, for those who believe."[15]

An Islamic government assumes the developmental responsibility for three reasns: first, it is required to guarantee a minimum standard of living for all its citizens;[16] second, it is bound to set aside part of its available resources to serve the world-wide call for Islam; and third, it is also bound to build a strong country and a strong society which can afford to sustain an effective ideological stand in the international affairs.

Minimization of the distributive gap as a major goal of the economic policy of the Islamic State, is derived not only from the behavioural injunctions of the *Qur'an* and the *Sunnah* concerning consumer's behaviour such as the prohibition of extravagance,[17] but also from two major Islamic principles, viz., the principle of equal dignity and brotherhood, and the principle of the reluctance of the concentration of wealth and incomes. These two principles are laid down in the *Qur'an* in verses like "0 mankind, We created you from a single (pair) of male and female, and made you into nations and tribes, that you may know each other."[18] In the process of talking about the distribution of some kind of wealth by the state, the *Qur'an* mentions several types of recipients without including the well-to-do among them. The reasons for this exclusion is: "in order that it may not, merely, make a circuit between the wealthy among you."[19]

This economic objective should be understood as a permanent target of economic

12. *Qur'an*, Chapter 67, Verse 15.
13. *Ibid.*, Chapter 35, Verse 27-8.
14. *Ibid.*, Chapter 30, Verse 50.
15. *Ibid.*, Chapter 7, Verse 32.
16. Monzer Kahf, "*The Islamic Economy*", The Muslim Students' Association of the United States and Canada, Plainfield, Indiana, U.S.A., 1978, pp. 50.51.
17. These injunctions work in the same direction as the above-mentioned objective, by reducing the range of the attainable set of goods.
18. *Qur'an*, Chapter 49, Verse 13.
19. *Ibid.*, Chapter 59, Verse 7.

policy and not only as a correctivce device in cases of major disturbances. An Islamic government is required to structure its economic policy so that it ends up, through the functioning of the market, with minimum distributive gap, not denying the differences in capabilities and inventiveness among individuals. This target can be achieved by the normal tools such as the educational system, the provision of equal opportunities, the distribution of *Zakāh*, etc.

The third structural objective is the observance of or compliance with the "Rules of the game" by the economic units. One of the integral parts of the political body of the Islamic society is "*al-Hisbah* Agency." Its role, as defined by Ibn Taymiah, is to practise control over the social activities of individuals, especially their economic behaviour, so that they observe what is good and abstain from what is wrong.[20] Thus the observation of the moral attitudes of the economic units and their improvement is a permanent objective of the policy making.

3B. *Strategic Objectives of Fiscal and Monetary Policy*

On the basis of the above broad structural goals of economic activities in the Islamic system, a set of specific objectives of the economic policy of the Islamic State may be determined. Such objectives, which are circumstantial to a great extent, may be numerous. Obviously, it will be neither feasible nor appropriate to consider every possible economic policy objective in this paper, which is limited in scope to fiscal and monetary aspects. In what follows attention is confined to macroeconomic objectives only, thus ignoring the set of objectives relating to the production of the natural resources, restrictions on foreign trade, observance of the moral values in the economic transactions and activities and pricing of goods and services, which fall by and large within the realm of microeconomics. Four main objectives are aimed at by the monetary and fiscal policies in an Islamic economy, viz., economic development, full employment, price stability and redistribution of wealth and income.

3C. *The Assumptions*

First, it will be assumed that the economy is composed of three sectors: Consumers, Producers, and Government. Consumers receive theire income by selling their services to the other two sectors and/or by accepting *Zakāh* distribution and other transfer payments from the government. Consumers own all factors of production and sell the services of labour, capital, land and entrepreneurship to the other two sectors. Income is used for purposes of consumption, individual spending for the sake of God, *Zakāh* and governmental taxes, and saving. Producers make investment decisions and sell their output to the other two sector. The producers' income is distributed among the owners of the factors of production after the payment of taxes. The government owns all natural resources and undertakes their extraction. It sells its output to the producers' sector. It also collects taxes and *Zakāh*, spends on its administrative and security activities, and distributes *Zakāh* and transfer payments among the recipients.

Second, it is assumed that *Zakāh* is levied on all kinds of wealth and savings owned by individuals, whether used in production (capital) or not (hoarding), and on certain kinds of outputs, according to the ratios, exemptions and specifications

20. Monzer Kahf, "*The economic Views of Ibn Taymiah,*" unpublished manuscript, December, 1976, p. 3.

known to Islamic Jurisprudence. *Zakāh* is collected by the state and distributed to the specific recipients that are mentioned in the *Qur'an*.

Third, since interest is prohibited from all transactions, it is assumed that saving is channelled into the production process either by the same savers or through partnership loans (*Qirād*) with other investors. In the case of the latter, the reward of the owner of assets (savings) is a percentage of the total net return of the project.

Fourth, saving is assumed to be a function of income, Y, desired amount of wealth one likes to bequeath, A, level of risk aversion of the consumer, F, his level of longsightedness in consumption, C', available consumer goods, $g_1 \ldots\ldots g_n$, level of piety of the consumer, P, the amount of *Zakāh* expected to be paid, Z, and the expected rate or return on investment, R. Thus: $S = S(Y, A, F, C', g_1 \ldots\ldots g_2, P, Z, R)$[21]. Saving is positively related to Y, A, F, C', Z and R, are negatively related to P, while the relationship between saving and the available consumer goods may be negative or positive.

Fifth, investment in the Producers' sector is assumed to be a function of the expected demand for consumption, C^e, saving, S, supply of entrepreneurship, E, and the state of capital and technology, $\bar{T}$;

$$I = I(C^e, S, E, \bar{T})$$

Investment is *directly* related to these factors.[22] It should be noticed, however, that the said investment function is basically different from the traditional investment function known in the neo-Classical and Keynesian theories. Ironically, both saving and entrepreneurship appear in the investment function of the Islamic theory.

In the Islamic three sector economy, the role of the state is not restricted to policing, collecting taxes, and spending on its administration. On the contrary, the role of the Islamic State includes taking investment and saving decisions in the areas pertaining to the extraction of minerals, energy and other natural resources from land, sea, and air. Consequently, aggregate investment consists of private-sector investment plus state investment. The revenue of the state consists of proceeds, from the sale of the output of the government enterprises and taxes. On the other hand, its expenses are composed of the current expenses of government plus the expenses of government enterprises.

Thus the role of the government under an Islamic economic system is generally larger than that under the mixed economies of twentieth-century capitalism prevailing in North America and Western Europe. It should be noted that the role of an Islamic government is implemented by means of economic policies relating, among other things, to investment and saving of the public enterprises. Although the macro fiscal and monetary policies do exert considerable influence on the public sector enterprises, the present paper will be restricted to studying the role and effectiveness of fiscal and monetary policy in the context of the private sector only.

Moreover, the *Zakāh* Fund collects and distributes *Zakāh* according to the rules and regulations known to Islamic jurisprudence. The rules and regulations governing the collection and distribution of *Zakāh* imply that the *Zakāh* Fund is ear-marked for specific purposes and that it cannot be used to finance the administrative expenses of

21. For derivation of the saving function, see: Monzer Kahf, *"Saving and Investment Functions in a Two-Sector Islamic Economy"* in this volume.

22. For derivation of the investment function, see: *Ibid.*

the state.[23] As was stipulated earlier, *Zakāh* is levied on the wealth of the individuals subject to *Zakāh* in the Islamic economy including industrial and real estate assets. It is also levied on the income, after certain exemptions, generated from the use of human and material capital. On the basis of this stipulation, it may be argued that the low *Zakāh* - GDP ratios of a 1-4 per cent given in the empirical studies of *Zakāh* in some Muslim countries suffer from gross underestimation, since these studies did not take into account *Zakāh* on ndustrial and real estate fixed assets.[24] If we include these assets, the ratio of *Zakāh* receipts to GDP may well increase to 8-10 per cent.[25] *Zakāh* may be collected in money terms or in terms of goods and commodities. By the same token, *Zakāh* may be distributed in the form of money, consumer goods or producer goods. The administrators of *Zakāh* may take into account the preferences and the priorities of economic policy in deciding on the manner and method of *Zakāh* collection and disbursement, and there is nothing in the Shari'ah that limits the authority of the *Zakāh* Fund in this regard.

Furthermore, the prohibition of interest affects the private sector and the government together. In the consumer sector, the prohibition of interest reduces the amount of monetary assets that are awaiting decisions concerning their use since they are prevented from receiving any reward on waiting assets. This effect is reinforced by the levying of *Zakāh* on waiting assets. The reduction in waiting monetary assets and the prohibition of interest-earning bonds eliminate an important source of

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23. It is noticed that *Zakāh* is collected and distributed by the state, but it cannot be used for payment of the expenditure of the government's administration, (except the *Zakāh* Fund) education, places of worship, public work, transprtation and communication, etc.
24. Reference is made specifically to the studies of Dr. Anas Zarqa on Syria and Dr.Abdin Ahmed Salama on Saudi Arabia. Dr.Zarqa in his paper presented at the annual conference of AMSS in Philadelphia, April 1976, estimated *Zakāh* in Syria at about 2-4 per cent of the total GDP, and Dr.Salama in his paper presented at the Seminar on fiscal and Monetary Economics in Islam, Makkah, October 1978, estimated *Zakāh* at 1-4 per cent in Saudi Arabia. Both studies did not estimate *Zakāh* proceeds from industrial fixed capital, business buildings and other fixed capital, rented residential housing, etc.
25. This is based on certain approximatins. For example, in a country like Saudi Arabia, where the major part of its industry is centered around oil and owned by the government which is not Zakatable, *Zakāh* is estimated at about 10 per cent of the total GNP of the private sector in the year 1394H. This estimation is based on the *Annual Report,* 1395 of the Saudi Arabia Monetary Agency, Kingdom of Saudi Arabia.

Private Sector G.N.P.	**10,215.0**	**million S.R.**
Monetary Assets (M_2)	7,483.2	million S.R.
Capital of Industrial Establishment	985.6	million S.R.
Estimated Capital (on the basis of Capital output ratio equals 5) of :		
— Trade Sector	11,929.5	million S.R.
— Finance & Real State	3,322.5	million S.R.
— Transport, Storage, etc.	13,728.5	million S.R.
TOTAL :	**37,449.3**	
Zakāh at 2.5 per cent	936.2	
Agricultural & Fishing Products	1,242.4	million S.R.
(Assume ½ irrigated by carried water and apply 7½ per cent for *Zakāh*)		
Zakāh on Agriculture and Fishing	93.2	
Total *Zakāh* for 1394	**1,029.4**	
Per cent of *Zakāh* to P.S. G.N.P.	10 per cent	

The above is only a rough estimation, as it does not take into account other *Zakāh* bases, e.g., private hoardings, interpersonal debts, jewelry, property abroad owned by citizens, etc.

instability in the Islamic market.[26] This meaans that demand and prices tend to be more stable in the Islamic market than in the capitalist market.

In the producer sector, the elimination of interest allows for investment to be more related to the real market forces of demand and supply of goods and services. On the other hand, it helps the distribution of income, also based on market forces in all the factor markets, by including the supply of and demand for entrepreneurial skills in the process of factor price determination.[27]

As regards economic policy, the elimination of interest reduces the repercussions of any initial changes in the supply of outside money (i.e., currency issued by the monetary authorities). More essential is the elimination of speculative demand for government bonds and securities. This demand is usually interest-elastic in the capitalist system. This relieves the money market from the effect of volatile changes in the bond market. By the same token, the elimination of interest reduces the power of the government by depriving it of such economic policy instruments as the rediscount rate and the issuance of interest-bearing treasury bills and bonds.

Thus, the functioning of an Islamic economy, by virtue of the assumptions stated earlier, is characterized by the following:

(1) The prohibition of interest and the presence of *Qirād* and *Zakāh* force the private-sector investor and saver to cooperate and provide a platform *(Qirād)* that makes their objectives consistent and coordinated. The profit-sharing arrangement benefits both the investor and the saver proportionally, while in the capitalist system the interests of investors and savers are contradictory because interest is a cost to one and benefit to the other. This coherence provides a better incentive for growth on the one hand and eliminates the dichotomy in decision making that exists in capitalism between saving and investment on the other.

(2) Among other tools that are available for the pursuit of the goal of income redistribution, *Zakāh* is the major and most direct measure as it is primarily designed for this purpose. However, *Zakāh* also serves the cause of development by raising the saving function with respect to income.[28]

(3) Price stability is achieved not only by active economic policy but also by the absence of interest and its substitution by a real (rather than monetary) phenomenon which is the *Qirād*.

These three characteristics are unique to the Islamic economic model.[29] They show its ability to put into action the inherent forces that work toward the achievement of the desired economic goals.

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26. Speculation on the interest rate and speculative transactions especially in the bonds market constitute the major source of instability in the capitalist market.
See: Robert Solomon, *The International Monetary System, 1945-1976,* (New York: Harper & Row Publishers, 1977, pp. 181-187.

27. Monzer Kahf, *Saving and Investment Functions in Islamic Economy, Ibid.*

28. *Ibid.*

29. One should perhaps add to these characteristics a fourth one based on the state control of natural resources industry. This puts the Islamic Government in a position to exercise an important role in policy making concerning production and employment. The objectives of economic policy are approached through the determination of the volume and composition of production and employment in the productive public sector. Furthermore, production and employment policy can be selective and oriented towards the poorer sections of the country and the population, thus serving the goal of reducing the distributive gap among people. Thus, for example, the Prophet (peace be upon him), after the battle of Hudaibiah distributed Ghana'im only to the Muhajireen and to the poor among the Ansar.

4.

FISCAL AND MONETARY POLICY TOOLS

An Islamic economy offers a wide range of instruments for economic policy. These instruments include, in addition to monetary and fiscal policies, changes in the prices of the output of government enterprises, allocation of investment in natural resources, the supervision over the normal operation of market forces and even the direct allocation of human and other resources in the private sector to different uses, if need arises.[30] Some of these tools are microeconomic tools while the others are macroeconomic. However, this part is devoted to the macroeconomic tools only.

4A. *Fiscal Tools*

(i) The collection and disbursement of Zakāh: The circulation of a considerable part of national income in terms of *Zakāh* from the haves to the have-nots creates a series of significant repercussions on the composition of aggregate demand as well as on aggregate supply. The *Zakāh* Fund is set in the middle of this circulation as the collector and distributor of *Zakāh*.[31] Evidently, the main purpose of this circulation is the redistribution of wealth and income, but this transfer of income creates changes in the composition of demand for commodities that satisfy the basic needs. Consequently, the composition of aggregate supply should change in the direction of more food, clothing and shelter and fewer luxuries.

Moreover, the economic authority should always determine the composition of the collection and distribution of *Zakāh*. Since *Zakāh* may be collected and distributed in terms of money, consumer goods or producer goods, changes in the composition at the end of collection or at the end of distribution influence aggregate demand and aggregate supply in addition to their composition. For example, at times of depression and unemployment, *Zakāh* may be collected and distributed in the form of consumer goods, thus forcing zero saving on the part of *Zakāh* receivers and emptying the shelves of *Zakāh* payers. On the other hand, in times of inflation, the distribution of *Zakāh* (and its collection) may take the form of changing the titles of ownership of current fixed capital, thus reducing its effect on aggregate demand to a minimum.

Moreover, *Zakāh* may be distributed in such a way that enhances capital formation (i.e., more capital goods and fewer consumer goods). In this way, it may offer greater employment and better income to the poor, instead of immediate satisfaction.

Thus *Zakāh* plays an essential role in the economic policy of an Islamic economic system. This fiscal tool serves not only the goal of redistribution of wealth and income, but also the goals of development and stabilization. Furthermore, it will be shown later how *Zakāh* may be used to implement the desired changes in the money supply.

(ii) Taxes: Zakāh is not the only tax that exists in an Islamic society. Other taxes

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30. Ibn Taymiah, *Al-Hisba Fil-Islam,* (Damascus: Dar al-Kutub al-Arabiah, 1967), pp. 19.
31. Abu Bakr, the first Khalifah, is reported insisting that the collection and disbursement of *Zakāh* be exclusively done by the state.

on income and property may be levied for several purposes. e.g., financing government activities, bringing about more equal distribution of income, stabilizing the economy, and financing its growth. These taxes may be levied according to needs and purposes. Therefore, changes in the volume of these taxes create changes in demand through changes in the disposable income.

(iii) Government expenditure: Changes in government expenditure affect the aggregate demand. The government by increasing its expenditure raises the disposable income of the private sector, and conversely, it reduces the disposable income of the private sector through reductions in government expenditure. It should be noted, however, that both the volume and the composition of these expenditures are very important. The achievement of the objectives of an Islamic economic system requires that government expenditure be oriented toward the egalitarian services such as education and health and the development infrastructures such as transportation and investment in human capital.

It should be noted that, in order to isolate the fiscal effect from the monetary effect, it is always assumed that the use of fiscal instruments is not done by changing the money supply. Therefore, the deficit created by an increase in government expenditure is supposed to be offset by changes in the saving of Government enterprises and the public debt rather than by changes in the money supply.

4B. *Monetary Tools*

As in the case of the fiscal policy, two sorts of instruments should be distinguished: overall instruments and selective instruments. The former, which include management of money supply and changes in the degree of monetization of economic transactions, influence the total demand for or supply of money, and the latter are discriminatory in that they favour or disfavour certain kinds of economic activities.

(i) Management of the supply of money: Changes in the quantity of money affect the rate of inflation as well as the aggregate demand, but the intensity of these two effects depends on the flexibility of prices, wages and production. Pouring too much money into a small economy that has a production bottleneck (such as shortage of skilled labour or difficulty in importing capital goods) would raise prices more than output, while an increase in the supply of money in an economy that experiences unemployment and idle production capacity would enhance production and stimulate recovery.

The supply of money may be changed by three means: management of currency, reserves requirement, and the credit policy of *Zakāh*. Changes in the quantity of currency circulating in th market effected directly by the monetary authority. Changes in the reserve requirement that commercial banks should maintain affect their lendings and hence, the volume of demand deposits (inside money). Changes in the credit policy of the *Zakāh* Fund need some eleboration.

Through the *Zakāh* Fund, an inflow of income comes from the *Zakāh* payers and an outflow of disbursement goes out to the recipients. This allows the Fund to perform a role that is very similar to that of a clearing house, thus, creating a large liquidity margin. This liquidity reservoir can always be used as a cushion for expanding credit. Consequently, the *Zakāh* Fund may not only distribute the *Zakāh* receipts but also create more demand deposits in society by playing a role similar to that of the commercial banks in creating money. This credit expansion may be used for the same purposes as *Zakāh,* and the monetary authority can use the changes in this credit as an instrument of its policy.

(ii) Changes in the demand for money: Measures that influence the demand for money may be taken to achieve the objectives of monetary policy by means of increasing (or descreasing) the degree of monetization of certain economic transactions. This can easily be done in the organized market such as the stock exchange whereby the monetary authority may alter the percentage of each transaction that should be paid in cash.

5.

CONCLUSION

The main purpose of this paper is to point out the two essential characteristics of the Islamic economy. These are (a) the existence of internal economic forces that work inside the system to bring it closer to its broad goals and (b) the flexibility it lends to the economic authority to use a variety of instruments in order to introduce the desired changes in the economy. These two characteristics are structural in the Islamic economic system in the sense that they are the result of its basic assumptions.

The internal forces of the system are put to action, because of *Zakāh* and the prohibition of interest, resulting in greater consumption of basic commodities (and less consumption of luxuries), higher investment, smaller divergence between investment and saving and more government involvement in the economy.

COMMENTS

1. Professor Ehsan Rashid *(Discussant)*

In an analysis which purports to be theoretical, one expects its author to be scientifically methodical in postulating the basic propositions and in deriving from them a generalized working of a model or system. On this test alone, this paper is seriously wanting. Perhaps equally seriously, the author has faulted in recapitulating the working of "capitalist" and "socialist" economic systems. First, I am not sure if a comparative analysis was even necessary. Second, and more importantly, the comparisons in the paper are between the practice of one system and the theory of another. A theoretical explanation of an economic system must relate its working to a set of axioms from which it derives its existence. Fiscal and monetary policy issues should have been compared and evaluated within that framework.

The review of fiscal and monetary policies in a capitalist system is at best elementary and incomplete. The IS-LM analysis is partial and is not related to the literature on economic growth in a capitalist economy. In particular, the reference to growth models reflects a poor view of theory. Fiscal and monetary policy issues in a capitalist system are by no means settled, if one looks at the controversies between the "Monetarists" and Keynesians". They reflect, among other things, how central and almost irreversible the role of the state in the economy has become. The description in the paper of a Soviet-type socialist system is even less satisfactory and it is certainly not on a theoretical plane.

Turning to the Islamic model put forward by the author, no one will argue with him about the long-run goals of economic policy in an Islamic society. However, these goals are by no means specific to an Islamic system. The role that the author assigns to the state is also significant. The five specific objectives listed by the author are obviously those which concern most poor countries today.

The author makes six basic assumption on which his "model" rests. They are a mix of axiomatic and non-axiomatic propositions presumably derived from the *Qur'anic* injunctions and the *Sunnah*. The division of the economy into Consumers, Producers and Government is fair as it is a convenient analytical device to develop a theory of economic relations in a society. The assumption that saving is a function of, among other things, the expected rate of return on capital seems redundant in an interest-free economy. The interesting question in this system would be about the alternative indicator of the expected rate of return on capital. The last assumption that Government would be the exclusive user (owner) of natural resources in an Islamic State is not self-evident in the *Qur'an* or the *Sunnah*. Even if this proposition is accepted, the assumption that agricultural land is owned by the individual and not by the state stands in clear contradiction.

The so-called three-sector model developed by the author is a description of relationship between the consumer, the producer and the Government in an economy in which interest has been abolished and replaced by *Qirād,* and *Zakāh* becomes a very potent instrument affecting saving, investment and redistribution of

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* Comments cover Dr. Kahf's both papers

income. The substitution of interest by *Qirād* (also called *Mudārabah*) is left unexplained, thus leaving the question open whether *Qirād* in an Islamic system can perform the same function which interest plays in the capitalist system, i.e., as a device for time preference between consumption and saving to the individual and for investment to the producer and the government. The role of *Zakāh* is rightly regarded as central in the hands of the state, though it does not become a source of revenue in which the Government has freedom to spend on anything it wishes: *Zakāh* is for a specific function.

The statement that interest is a major source of instability in a capitalist system and deriving from it the conclusion that in an interest-free system demand and prices will be more stable is simplistic and somewhat naive. One more serious question is that while *Qirād* allows profits to be shared equally (or proportionally) by the owners of capital and labour, the loss is to be borne entirely by the captalist. How will this provide a base for harmony between the two groups?

Elimination of interest reduces the role of the Government in the monetary sector, but its hands are strengthened by the fiscal instruments of *Zakāh* and othr taxes and by its ownership of natural resources. The most significant policy conclusion then is that in an Islamic system monetary policy is rendered impotent in influencing the stability of prices, the level of employment and the rate of growth. Presumably, elimination of interest will also affect significantly the extent to which internal or external debt is incurred. This aspect, important though it is, is not treated at all in the paper.

2. Professor Sultan Abou-Ali *(Discussant)*

It is said that one should not be shy on matters of both religion and knowledge. So I hope that Dr.Kahf would take the comments suggested here in a good spirit. A student reported that he was told by his teacher that one would enter paradise without judgement if one performs two things. When asked what these were, he replied that his teacher forgot one and he forgot the other. Now reading Dr. Kahf's paper one is struck, at the end of it, that there is neither a *model* nor a comprehensive fiscal and monetary policy of work. I shall try to substantiate this point by giving specific examples.

According to the author, *Zakāh* provides a major means of fiscal policy. But he does not demonstrate how. More important, the reference to "variations" in *Zakāh* collection, distribution and timing as a tool of monetary policy is questionable. I do not agree with the author that the "prohibition of interest reduces the degree of freedom of government in using .... open market operations" as a tool of monetary policy. Even in the absence of bonds this operation could be effectively practised with shares.

Reference has been made to freedom of banks with respect to the use of money in their own interests without supervision. Such a statement obviously ignores the role of the Central Bank. The author suggests that the distributive objective is already built into the system of *Zakāh,* implying that this will hold regardless of the actions of the State. This is not sustained by historical experience during the reign of Osman Ibn Affan when severe inequalities did exist regardless of these tools.

The section on fiscal and monetary policy in non-Islamic systems raises lots of question. But, I shall refrain from commenting on it, since we are mainly concerned with Islamic economics.

The goals of economic policy are listed by the author as: the maximization of the rate of utilization of resources, the minimization of the distributive gap and the observance of the rules of the game. Two comments are in order here. First, the author later on transposes these goals into the ussual goals of economic activities. Second, the third objective, namely the observance of the rules of the game, regardless of what it means, is never an objective but just a means to achieve certain goal(s).

The suggestions that the government owns all natural resources is questionable and that the government undertakes the exploitation of these resources is, to say the least, unnecessary. Other types of organization seem to be equally feasible and efficient in achieving the objectives of the Muslim society.

With regard to the variable explaining saving, I wonder if they would be able to explain the essence of the behaviour of savers. In particular, that the investment function is explained partly by saving is not readily acceptable. This would render the investment function indeterminate, and substantiation for its validity is certainly needed.

The prohibition of interest will it is alleged by the author, lead to a reduction in the amount of monetary assets and the speculative demand for money. This statement needs testing. One could think of several reasons why individuals would hold monetary assets as well as money for speculative purposes even in the absence of interest. Moreover, the reasons given by the author for the greater stability of an Islamic economy are weak. Nonetheless, market instability is not necessarily inconsistent with the absence of monetary assets.

The statement that demand for government bonds and securities is speculative is questionable. This would also apply to the assertion that in the capitalist system the interest of investors and savers are contradictory because interest is a cost to one and a benefit to the other. Investors would be ready to pay higher interest rates if funds are not available and the rate of expected profit is high.

The reasoning that government borrowing is likely to be limited compared to interest-based economics needs substantiation.

We are in a process of trying to build Islamic economics. This calls for the utmost care. My comments, in response to this call, might have been somewhat stringent. But I do hope I was not unfair to the paper.

GENERAL DISCUSSION

1. Dr. Ziauddin Ahmd underscores the possibility of using *Zakāh* flexibly to affect the composition of aggregate demand. He also stresses that *Zakāh* can be collected and contributed in kind, i.e., in the form of consumer goods, thus forcing a zero saving upon the *Zakāh* recipients.

   Dr. Ziauddin questions the assertion made by Dr. Kahf to the effect that the prohibition of interest would reduce the speculative demand for money.

   He further urges the author to reexamine the quantitative significance of *Zakāh* as a stabilizing device for reducing income inequalities. Dr. Ziauddin points out that it might be significant for Saudi Arabia, where *Zakāh* accounts for 10 per cent of the GNP, as claimed by the author, but questions its significance to countries like Pakistan, where it would hardly account for even 1 per cent of the GNP.

2. Dr. Mohammad Umar Chapra has two comments to make. The first comment centres around the model used by Dr. Kahf in his paper. Dr. Chapra finds this model too simplistic to achieve the objectives set forth by the author. He is of the opinion that the author has not convinced the reader that these goals would be achieved in a better way in the Islamic economy than in any other set-up.

   His second commet is concerning the computation of *Zakāh*. He remarks that the author's calculation of *Zakāh* in Saudi Arabia is unscientific, for it involves double and triple counting. He also points out that the *Zakāh* rate of 15 per cent on agricultural sector, mentioned by the author, is unrealistically high, and that the author has made arithmetic errors in averaging the *Zakāh* rates. Dr. Chapra also observes that the author has neglected *Zakāh* on the public sector, especially the oil sector and omitted *Zakāh* on gold holdings and on the balances of foreigners residing in Saudi Arabia.

3. Dr. Abdin Ahmad Salama comments that the *Zakāh* estimates given in Dr. Kahf's paper are so crude that they amount to no more than mere guess estimates. He feels that the author should have based his estimates on actual data-which required an empirical investigation which the author has not undertaken. In this regard, Dr. Salama stresses that the calculation of *Zakāh* on wealth would be extremely difficult.

4. Dr. Mabid Al-Jarhi's first comment is that it would have been better if the author had given his model a mathematical treatment. He then expresses dissatisfaction over the fact the author has made many assertions and generalizations without substantiating them. For example, it is pointed out that Dr. Kahf has asserted that the elimination of interest would permit investment to be related to real market forces and that it would reduce the repercussions on the domestic economy of any initial changes in the supply of outside money, but he has not shown how.

* General Discussion covers Dr. Khaf's both papers.

Dr. Al-Jarhi also points out a contradiction in th author's statements where at one point he has stated that the elimination of interest would reduce the power of the government by depriving it of such instruments as changes in Bank Rate, while at another point he has asserted that the government in an Islamic State could have access to a wide range of economic tools. Dr. Al-Jarhi feels that those two statements will have to be reconciled.

5. Dr. Erfan Shafey finds Dr. Kahf's two-sector version not significantly different from his three-sector version in that the latter does not contain anything 'new' that is not covered in the former. He thus questions the need for Dr. Kahf to write two separate papers.

   Dr. Shafey is critical of Dr. Kahf's suggestion that *Zakāh* be collected also in kind. This, according to Dr. Shafey, may be good economics but bad psychology. He questions the practicality of this suggestion by pointing out the burden it would place on the administration of *Zakāh* and the emplications it has for the disbursement of *Zakāh* fund, meaning that 100 per cent of the zakah proceeds would have to be spent on *"Amloon-a-Alaih"*.

   Dr. Shafey also finds the author's argument that the lowering of interest rate would encourage adoption of capital-intensive techniques and innovations, rather obsolete. For the main concern in the discussion was not innovation but capital rationing.

   He also makes three points. One of these is concerning full utilisation of human and material resources. Dr. Shafey asks whether this is really relevant at a time when consumption of resources is decried. Another comment is regarding the distinction between return on capital and interest. The author has emphasized that the productivity of capital and the legitimacy of the return on it are recognized in Islam, but Dr. Shafey remarks that interest has also been commonly recognized as a return on capital. He therefore urges that one should be clearly distingushed from the other, to avoid confusion. Finally, he criticizes the author's suggestion that 'al-Hisbah' agency be allowed to have control over social and economic activities of individuals.

6. Dr. Syed Nawab Haider Naqvi finds it extremely difficult to accept Dr. Kahf's presentation as a model in the strict sense of the word. For it lacks the technical attributes of a coherent model. To Dr. Naqvi, the 'model' presented by the author represents no more than an outline of the author's intentions. He is quite sure that the author would have arrived at different results had he worked out all the relationships and tested the stability and consistency of the system envisaged by him.

   Dr. Naqvi points out a couple of technical flaws in the author's model-building. One of these has to do with the concept of aggregate demand which has been defined in the model without taking into account the question of saving. The other one concerns the 'saving function' which has turned out to be a an identity that has nothing to do with the functional relationship that the author was trying to portray.

   Dr. Naqvi is also unhappy about the investment relation in the model. He critizes the author for treating investment as a function of expected rate or return, the calculation of which would always imply a rate of interest. He further notes that it will not be easy to judge the profitability of different projects.

It is Dr. Naqvi's considered opinion that open market operations cannot go in line with Dr. Kahf's thinking, if interest rate is to be abolished. Finally, Dr. Naqvi ventures to argue that *Zakāh* alone cannot ensure an equitable distribution of wealth, although it can help achieve this goal.

7. Referring to Dr. Naqvi's earlier comment on the investment function, Dr. Mohammad Sultan Ahmad Abou Ali points out that the expected rate of return which should not be confused with the rate of discounting.

8. Dr. Mahfooz Ahmad takes strong objections to the remark, made by some of the previous speakers, that Dr. Kahf's paper contains no model as such. Dr. Mahfooz argues at length that a set of mathematical equations does not necessarily constitute a model and that mathematics is neither sufficient nor necessary for model building. He says that he can see a clear model in Dr. Kahf's paper, although one may not agree with the author on certain specifications and relationships given in the model.

9. Dr. Nejatullah Siddiqi scrutinises the need for restricting the power of credit creation by saying that the reason given by Dr. Kahf--that the benefit from the God-given ability to create money and credit should not be confined to the private bankers - does not justify it. Dr. Siddiqi points out that institutional arrangements can be made to ensure that only a reasonable portion of the benefit accrues to private bankers, without having to deprive the banks of their power to create credit. Dr. Siddiqi observes that Dr. Chapra, in his paper, has also called for a severe restriction of the power to create credit, lest it would lead to a heavy concentration of economic power. Dr. Siddiqi believes that this problem can be taken care of by state regulations. He makes it clear that he is not convinced by these arguments aimed at depriving the commercial banks of their credit creation role.

   Dr. Siddiqi makes a number of points with regards to *Zakāh*. He says that the practice of including the capital of industrial establishments (machinery, buildings, etc.) in the *Zakāh* base is seriously open to question. Observing that Dr. Kahf has included fishing and agricultural products in the *Zakāh* base, Dr. Siddiqi point out that certain agricultural products may not be subject to *Zakāh*. He is also critical of the author's suggestion that, in times of inflation, the collection and distribution of *Zakāh* take the form of changing the ownership titles of current and fixed capital, so as to minimise the *Zakāh* effect on aggregate demand. Dr. Siddiqi finds this rather dubious, and questions the need for such a measure when one can achieve the same result by simply postponing *Zakāh* collection and distribution in such situations. He believes that one can justify such a postponement.

   Referring to the author's statement that the supply of money can be affected by (a) management of currency (b) reserve requirement and (c) credit policy of *Zakāh,* Dr. Siddiqi finds it too elusive. He conjectures that the author probably has envisaged a situation where the power of credit creation is restricted to institutions that are *Zakāh*-based. Dr. Siddiqi wishes that the author had elaborated. In particular, he wonders whether such narrowbased institutions would fully meet the credit requirements of society and whether they would remain viable.

Finally, Dr. Siddiqi shares Dr. Shafey's concern that the author was transplanting the institution of al-Hisbah without making any adjustment or modification. But he endorses the spirit that the state must intervene to check unfair practices that are detrimental to society.

MONEY AND BANKING IN AN ISLAMIC ECONOMY

M. Umer Chapra*

1.

INTRODUCTION

The present-day world is experiencing a number of economic ills including poverty of a large proportion of mankind, social and economic injustice, gross inequalities of income and wealth, high rates of unemployment, economic instability, inflation and erosion of the real value of monetary assets. All these maladies, in spite of being in conflict with the value system of Islam, are as prevalent in the Muslim world as elsewhere. No doubt they have a number of root causes. However, the failure to provide a stable and just money and banking framework has been one of the major contributing factors. No economic system can sustain its health and vigour or contribute positively to the achievement of its socio-economic goals without the support of a same and equitable money and banking system. Is it possible to design such a money and banking framework in the light of Islamic teachings?

This paper represents an effort to answer this and other pertinent questions. Section 2 provides the philosophical underpinning, arguing that the capitalist money and banking system has its own ideological setting and cannot serve the cause of Islamic socio-economic goals even if *Ribā* is abolished, unless some fundamental changes are introduced to set it in the ideological mould of Islam. In the light of these radical changes Section 3 provides the institutional setting which, though it may appear to be similar to the existing framework, is radically different in its scope and responsibilities. Section 4 discusses the management of monetary policy in the new setting, while Section 5 tests theoretically the proposed programme against the goals discussed in Section 2. Finally, Section 6 gives some tentative suggestions for the gradual transition of the money and banking framework in Muslim countries from its present setting to the suggested scheme for realizing the objectives of Islam.

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2.

THE PHILOSOPHICAL UNDERPINNING

The money and banking sector of any economic system does not operate in an ideological vacuum. It has its own philosophical background and objectives. Its institutions evolve gradually to perform the functions necessary for enabling the system to realize its basic goals and to perpetuate itself by surviving the recurring shocks of history. The capitalist money and banking system is also essentially an integral part of its parent ideology. It serves the objectives of capitalism.

There is nothing inherently wrong in borrowing institutions from other cultures, provided that they are modified appropriately to serve the goals of the guest culture. The question is whether the capitalist money and banking system, gradually adopted by Muslim countries over the last two centuries, can be made to serve the goals of Islam instead of those of capitalism without any fundamental reform. The answer could be positive only if it is assumed that the goals of capitalism and Islam are the same or that the capitalist financial institutions are ideologically neutral and do not help the system realize its "inherent" objectives.[1]

2A. *The Goals*

The money and banking system should, like other aspects of the Islamic way of life, not only contribute to the achievement of the major socio-economic goals of Islam[2] but also perform the functions that relate to its own special field. The principal goals and functions are as follows:

(i) Broad-based economic well-being with full employment and optimum rate of economic growth.
(ii) Socio-economic justice and equitable distribution of income and wealth.
(iii) Stability in the value of money to enable the medium of exchange to be a reliable unit of account, a just standard of deferred payments, and a stable store of value.
(iv) Generation of adequate savings and their productive mobilization within a framework which is consistent with the above goals.
(v) Effective rendering of all services normally expected from the banking system.

It may be asked at this point whether the goals of Islam, as stated above, are not the same as those of capitalism. On the surface they may appear to be the same, but in essence there is a fundamental difference arising from the differences in the roots

1. "All social life", as Galbraith has aptly put, "is a fabric of tightly woven threads". The economic, the political, the social, and all other aspects of life interact reciprocally upon one another and constitute an organic whole. According to Oscar Mongestern's theory of the "compressibility" of an economic system, there is a core or kernel of the economic system that if destroyed would necessarily lead to the end of all the rest of the system and that in organizations and systems possessing kernels there exist several kinds and degrees of interdependence (Cited by Michael Harrington in *The Twilight of Capitalism,* London: The Macmillan Press, 1976, p. 69.)
The word "inherent" has been used in the text because during the last century there has been a change in the "claimed" objectives of capitalism under the influence of socialism. However, in spite of the various adaptations to changing circumstances, the "core" of capitalism remains unchanged and capitalism continues to cater to the same objectives which are "inherent" in its basic philosophy and "intrinsic" to its nature.

of the two systems - the Islamic economic system is morally-based while capitalism is secularist and morally-neutral. The ensuing discussion should help to make this point clearer.

(i) Economic well-being with full employment and optimum rate of growth. Islam is not an ascetic religion. It takes a positive view of life, based on the belief that human beings are the vicegerents of God. Man must therefore lead a life that befits his status, and the Divine Guidance embodied in Islamic teachings is intended to help him in the realization of this objective. It is designed to make life richer and worth the living, and not poorer, full of hardships. Hence, Muslim jurists have unanimously held the view that the welfare of the people and the relief of their hardships are the basic objectives of the *Sharī'ah*. This view, when applied to the economic aspect of life, implies economic well-being through satisfaction of all basic human needs, removal of all sources of hardship and discomfort, and improvement in the quality of life. In fact, any struggle intended to fulfil basic human needs, to remove misery and to make life a blessing has been equated by Islam with an act of virtue. Thus full and efficient employment of human resources is an indispensable goal of the Islamic system, as it helps realize the objective of broadbased economic well-being and also imparts to human beings the dignity demanded by their status as God's vicegerents. Full and efficient employment of material resources is also essential, because according to Islam all resources in the heavens and the earth are meant for human welfare and need to be exploited adequately, without excess or wastefulness, for the purpose for which they have been created.

While a high rate of economic growth should be the natural result of policies leading to full and efficient employment of human and material resources and broad-based economic well-being, it is not of prime importance if it entails the production of inessential or morally undesirable goods and services, excessive and overly rapid use of God-given resources at the expense of future generations who are equal owners of these resources, and degeneration of the moral or physical environment. A high rate of growth is only essential to the extent to which it contributes to full employment and broad-based economic well-being, but beyond this its importance would have to be carefully weighed against all its other implications.[3]

(ii) Socio-economic justice and equitable distribution of income and wealth: The goals of socio-economic justice and equitable distribution of income and wealth are an integral part of the moral philosophy of Islam and are based on its unflinching commitment to human brotherhood. The capitalist conversion to socio-economic justice and equitable distribution of income, on the contrary,is based not on a spiritual commitment to human brotherhood but on expedience arising from group pressures. Accordingly, the system as a whole, particularly its money and banking

2. For a range of the views of various Muslim scholars on the subject, see, M. Nejatullah Siddiqi, "A survey of Contemporary Literature on Islamic Economics" (Paper presented at the First International Conference on Islamic Economics held in 1976 at Mecca under the auspices of King Abdulaziz University) pp. 23-26.
   See also, M. Umer Chapra, (a) *The Economic System of Islam* (London: The Islamic Cultural Centre, 1970), pp. 4-18, and (b) "The Islamic Welfare State and Its Role in the Economy" in K. Ahmad and Z.I. Ansari. *Islamic Perspectives* (Leicester, U.K.: The Islamic Foundation, 1979) pp. 195-221.
3. For an excellent discussion of the Islamic concept of economic development, see K. Ahmad, "Economic Development in an Islamic Framework" in Ahmad and Ansari, *op.cit.*, pp. 223-240

arrangement, is not geared to these goals, and glaring disparities of income and wealth continue to be generated. Nevertheless, because of the influence of socialism and political pressures, some of these inequalities are being partly reduced by taxation and transfers. In contrast, Islam tries to uproot the causes of gross inequalities at their source, also using *Zakāh,* taxation, and transfers as additional measures to reduce inequalities even further to bring about a distribution of income which is in conformity with its concept of human brotherhood. Hence it is essential that the money and banking system and monetary policy are so designed that they are finely interwoven into the fabric of Islamic values and contribute positively to the reduction of inequalities.

(iii) Stability in the value of money: Stability in the value of money should be an important goal in the Islamic frame of reference, because of the unequivocal stress of Islam on honesty and fairness in all human dealings and the adverse effect that inflation tends to have on social justice and general welfare. Inflation implies that money is unable to serve as a just and honest unit of account. It makes money an inequitable standard of deferred payments and an untrustworthy store of value, and enables some people to be unfair to others, even if unknowingly, by stealthily eroding the purchasing power of monetary assets. It thus imposes a welfare cost on society by reducing the efficiency of the monetary system. It tends to pervert values, rewarding speculation (discouraged by Islam) at the expense of productive activity (idealized by Islam) and intensifying inequalities of income (condemned by Islam). Moreover, inflation conflicts with a *Ribā*-free economy, because it corrodes its raison detre of social justice. Although Islam urges justice to the borrower, it does not approve of injustice to the lender. Inflation undoubtedly does injustice to the *Ribā*-free lender by eroding the real value of *Qard Hasan*.

It may be suggested that in the current world-wide inflationary climate the Islamic imperative of socio-economic justice could be satisfied by indexatin, or monetary correction, of all incomes and monetary assets including *Qard Hasan*. Proper monetary correction would, however, require the indexation not of income or monetary assets but of purchasing power, which is determined by the consumption and investment pattern of individuals. Socio-economic justice would hence require the indexation of income and monetary assets by the use not of one universal index but of several indices based on different expenditure patterns. In contrast with this, widespread index-linking of incomes and monetary assets based on even one universal index has not been found to be feasible, because of the complexities involved and the high administrative costs of implementation. Hence indexation of only some incomes and monetary assets has been tried. The widest use of indexation has been in the field of wages, salaries and pensions. Indexation has also been tried for some financial assets (e.g., bank loans and deposits, and Government bonds), taxes, rents and mortgages.[4]

4. S.A.B. Page and S. Trollope, "An International Survey of Indexing and its Effects", *National Institute Economic Review,* November, 1974, pp. 46-59; see also: E.V. Morgan (ed.) *Indexation and Inflation* (London: Financial Times, 1975), pp. 7-10; and H. Giersch, *"Index Clauses and the Fight against inflation."* Chapter 1, pp. 1-23 in H. Giersch et.al., *Essays on Indexation and Inflation* (Washington, D.C.: American Institute for Public Policy Research, 1974).

While indexation might help ameliorate partially the inequities arising from inflation, it is not a cure for inflation. It may, in fact, tend to accelerate inflation.[5] It may well be self-defeating, unless inflation is on the decline and remedial monetary, fiscal and incomes policies are being adopted.[6] It seems, therefore, that while indexation may be feasible to a limited scale and may be resorted to as a temporary sedative for the pain of inflation, the policy alternative, which would best conform to the norm of socio-economic justice emphasized by the *Sharīʻah*, is price stability and not indexation.

Indexation of *Qard Hasan* has so far been rejected by the *Fuqaha* because they generally consider it similar to *Ribā* in its essence. Their opposition to indexation of *Ribā*-free loans is also defensible on economic grounds because, even though it is proposed with the innocent objective of doing justice to the *Ribā*-free lender, it has the potential of initiating gross injustice to the borrower.[7]

While inflation is in conflict with Islamic values, prolonged recession and unemployment are also unacceptable, because they bring misery to certain sectors of the population and act counter to the goal of broad-based economic well-being. A recession also tends to increase uncertainty and discourages investors from undertaking risks associated with projects that earn a return over many years. Hence in the interest of achieving the overall objectives of Islam, it should be considered obligatory for the Islamic State to eliminate or minimize economic fluctuations and to stabilize the value of money.

A generally accepted principle in capitalist economies is a trade-off between unemployment and inflation. In the context of Islamic values, such a trade-off is questionable, for Islam rejects both unemployment and inflation. Moreover, it is doubtful whether it is essential to have inflation to achieve full employment or to have unemployment to avoid inflation.[8]

In the Islamic system both unemployment and inflation are undesirable, and both need to be eschewed even though this may require a fundamental change in economic relationships. If aggregate demand is to be contained or lowered to avoid inflation, then in the overall interest of social justice and broad-based economic welfare a value judgement needs to be made about which demand should be

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5. William Fellner, "The Controversial Issue of Comprehensive Indexation" in *Essay on Indexation and Inflation,* op. cit., pp. 63-70. See also, G.D. Jud, *Inflation and the Use of Indexing in Development Countries* (New York: Praeger, 1978), p. 144.
6. R.Jackman and K. Klappholz, "The Case for Indexing Wages and Salaries" in T. Liesner and M. King (eds.). *Indexing for Inflation* (London: Institute of Fiscal Studies, 1975), pp. 20-25. See also Fellner, *op. cit.*
7. This may be visualized by looking at the rates of inflation in seven Muslim countries (Egypt, Indonesia, Pakistan, Saudi Arabia, Sudan and Turkey) during 1973-1977. The weighted average compound rate of inflation in these seven countries (weighted in accordance with their gross national product) was 20.5 per cent per annum as against 12.2 per cent in the world. If indexation of loans was introduced in these countries the amount payable at the end of 1977 on the principal of 100 borrowed at the beginning of 1973 would have been 254.1, more that two-and-a-half times the principal. For some individual countries it would have been even higher. Even though these years may be characterised as high inflation years in a historical perspective, the higher amount would be payable by the borrower once the principle of indexation has been accepted and given religious sanctity regardless whether the period concerned is a high or low inflation period.
8. A number of doubts have been expressed about the validity and usefulness of the Philips curve which sets the relationship between rates of inflation and unemployment. See. Thomas, "Changing Views of the Philips Curve", Federal Reserve Bank of Richmond *Monthly Review,* July 1973, pp. 1-13; Charles N. Henning, *et. al., Financial Markets and the Economy* (Englewood Cliffs, N.J. 1975), pp. 350-54; and Morgan Guaranty Trust Co. of New York, *World Financial Markets,* February, 1978, p. 3.

contained or reduced and how. In a value-oriented system it would be indefensible to allow demand to expand in inessential directions to attain a high rate of economic growth and, if this generates inflation, it would be equally indefensible to try to control it by reducing aggregate demand in a general, across-the-board manner by creating human unemployment.

Similarly, full employment must be ensured even if this demands a restructuring of production and designing of suitable technology. Hence it would be essential to regulate aggregate demand, restructure production, design a suitable technology and have an appropriate mix of monetary, fiscal and incomes policies in order to avoid both inflation and unemployment and to ensure broad-based economic well-being with a realistic rate of economic growth.

(iv) Mobilization of savings: The goal of mobilization of savings is essential because Islam categorically condemns hoarding of savings and demands their productive use for the realization of the socio-economic goals of Islam. Nevertheless, it is not possible for every saver to employ his savings productively. It would therefore be in the nature of fulfilling Islamic teachings if efficiently-organized financial institutions mobilize idle savings and channel them efficiently into productive uses. Such institutions should be properly equipped to be generally able to meet the genuine, non-inflationary needs of both the public and the private sectors.

However, *Ribā* or interest has been prohibited by Islam and neither the saver nor the user of savings is allowed to receive or pay *Ribā,* defined by the *Fuqaha* as a predetermined positive rate of return on savings or loans. Profit, which may be positive or negative and which is not predetermined,[9] is recognized by the *Fuqaha* Hence in the interest of implementing Islamic teachings, it is necessary to organize a banking system which mobilizes savings and yet operates on the basis not of *Ribā* as in the capitalist system, but by sharing the net outcome, be it profit or loss.

Moreover, if the economy is unable to generate adequate demand that would ensure gainful employment of idle physical and human resources, then the system should be able to bring about a sufficient monetary expansion within a non-inflationary framework.

(v) Rendering other services: The system should not only be able to mobilize savings effectively and allocate them efficiently for their optimum productive use to meet the needs of a growing and healthy economy, but also be able to develop primary and secondary money markets, render all banking services to the public at least as efficiently as the existing banking institutions and fulfill the non-inflationary financial needs of the government.

The development of both primary and secondary markets is essential for efficient mobilization of financial resources. While the existence of primary markets is needed for providing financial resources to those who can employ them productively, the existence of secondary markets is essential to help savers and investors "liquify" their investments whenever they feel the need to do so. The absence of a secondary market would compel savers to hold larger balances for precautionary motives thus increasing hoardings and reducing the rate of economic growth by preventing savings from performing their natural role.

9. Abd al-Rahman al-Jaziri, *Kitab al-Fiqh 'ala al-Madhahib al-Arba'ah* (Cairo: al-Maktabah al-Tijariyyah al-Kubra, 1938), Vol. 2, pp. 245-59 and 283-4.

2B. *Some Fundamental Reforms*

The range of objectives mentioned above would call for a fundamental reform of the economic system in general and the money and banking framework in particular. While this reform would include the abolition of *Ribā* as an indispensable element, it would also include the introduction of some essential changes in the economy and the banking system. Some of the essential reforms, without which it would be difficult to achieve the socio-economic objectives of Islam, are briefly indicated below.

(i) Avoidance of wasteful spending and conspicuous consumption: Moderation is the core of the Islamic message which emphatically discourages extravangance and conspicuous consumption. However, in keeping with its universal and rational approach to problems, Islam has enunciated *qualitative* and not *quantitative* restrictions on consumption. The expenditure should be befitting a Muslim who is morallly conscious and humble at heart.

Since Islam wishes to foster social equality and brotherhood, any behaviour pattern that destroys or weakens these values must be avoided. All expenditures undertaken with the intention of showing off or displaying pomp and grandeur and reflecting arrogance have the effect of widening, rather than narrowing, the social gulf between the rich and the poor, and have been condemned by Islam. Said the Prophet (peace be upon him): "God does not look at those who wear clothes reflecting arrogance".[10] "God has revealed unto me to teach you to be humble so that no one wrongs others or shows arrogance".[11]

While wasteful spending has been discouraged, hoarding of savings has also been unequivocally condemned by the *Qur'an* as well as by the *Sunnah*. God-given resources are meant to be used for one's own benefit (within limits prescribed by Islam) as well as for the benefit of others, thus fulfilling the very purpose of their creation. Leaving them idle without using them for rightful consumption or for fostering the common good through welfare contributions (e.g., *Zakāh, Sadaqāt,* etc.) or for productive investments has been condemned by Islam. "And there are those who bury gold and silver and spend it not in the way of God; announce to them a most grievous penalty" (the *Qur'an*, 9:34). The Prophet (peace be upon him) disapproved of leaving productive resources idle, saying: "Let him who owns land cultivate it himself; if he does not cultivate it himself let him have his brother do so".[12] Khalifa Umar also used to exhort Muslims, saying: "He who has money let him invest it, and he who has land let him develop it"[13].

The money and banking system should be so organized and regulated that wasteful spending is not promoted, and savings are mobilised and channelled into socially productive uses. Under no circumstances should it encourage or facilitate the production or consumption of goods and services that carry a lower priority in the Islamic value system. The deposits used by banks to advance loans belong to society and should be so allocated that they help finance the production and distribution of

10. Muhammad bin Isma'il al-Bukhari, *al-Jami' al-Sahih* (Cairo: Muhammad Ali Subayh, n.d.), Vol. 7, p. 182; Abu al-Husayn Muslim al-Nisaburi, *Sahih Muslim* (Cairo: 'Isa al-Babi al-Halabi, 1955), Vol. 3, p. 1651: 42; and Abu Abd-Allah Malik bin Anas, *al-Muwatta* (Cairo: 'Isa al-Babi al-Halabi, 1952), Vol. 2. p. 1192: 3606.
11. Abu Dawud al-Sijistani, *Sunan Abu Dawud* (Cairo: Isa al-Babi al-Halabi, 1952), Vol. 2, p. 572.
12. Muslim, *op. cit.,* Vol. 3, p. 1176:88
13. Muhammad Husayn Haykal, *Hayat Muhammad* (Cairo: Maktabah al-Nahdat al-'Arabiyyah, 1963), Vol. 2, p. 229.

all essential needs of society before funds are made available for other purposes. The capitalist virtue of abstaining from making value judgements should have no place in the Islamic system. There is no escape from values which have been prescribed by the *Qur'an* and the *Sunnah*. Hence the capitalist criterion of equalizing the marginal rate of return on all investments to attain "efficiency", irrespective of the social priority of goods, tends to bring about a lower than "optimum" production of essentials, because scarce funds get diverted to the production of luxuries.[14] "Efficiency" needs to be understood within the context of the overall ethos of the value system and not just of the variable of interest and profit.

The values of avoiding wasteful expenditure and using resources efficeintly in accordance with Islamic values apply not only to individuals but also to the government, and more so because governments use resources which are provided to them by the people as a trust to be used for the welfare of the people in accordance with Islamic teachings. The criterion for undertaking any government expenditure should be that the total sacrifice made by society in providing the resources is at least offset by the positive contribution to general social welfare and the realization of the socio-economic goals of Islam.

(ii) Increased equity financing: The obligation to abolish interest would make it indispensable that there be primary reliance on equity capital and little dependence on borrowed money in an Islamic economy. The Islamic economy would thus have to be essentially equity-based, compared with capitalism which is predominantly loan-based and in which a vast superstructure of finance is usually raised on a small foundation of equity capital in the style of an inverted pyramid.[15] Business in an Islamic economy would have to rely on equity for mustering additional financial resources. All financial needs of a permanent nature, whether for fixed or working capital, would have to come out of equity and not from borrowings from banks; it is not of material significance whether this increase in equity is by way of joint-stock companies or partnerships. Resort to borrowing should be allowed only to the extent of bridge-financing and temporary shortages of funds resulting from seasonal peaks in business. Under normal circumstances, there would be no justification for medium

14. The definition of luxuries and essentials need not remain constant through space or time as it will necessarily be determined by the general wealth and standard of living of the Muslim society. The important point to be borne in mind is that even though Islam does allow some differences in consumption levels in accordance with the status and income of the individuals, wide gaps in consumption levels are to be discouraged and reduced by appropriate direct and indirect means. The criterion for distinguishing luxuries from essentials should hence be the "availability within the means of the majority."

15. See a report on Japan appearing in the *Economist* of February 25, 1978, p. 97. It reports that Eidai, a top plywood producer in Japan had debts closer to 1 billion and a paid-up capital of only 32 million. This is of course an extreme case. Elsewhere the position is significantly better but even then it does present the picutre of an inverted pyramid. In the U.S., of the total funds of 178.9 billion raised by domestic non-financil private sector, only 10 billion or 5.6 per cent constituted equity capital (See, *Federal Reserve Bulletin,* January 1978, Table A44). Data supplied by the Federal Reserve Bank, Washington, indicate that the equity to total financing (equity + debt) ratio for the private non-financial sector was .383 in 1952 but declined to .245 in 1977.
According to data published in Table A 211 of Vol. 11 of the *OECD Financial Statistics,* the ratio of equity to total finance (equity + debt) for the private non-official sector was .209 in Japan (1976), .224 in Italy (1975), .406 in France (1975), .671 in U.K. (1975), and .380 in Germany (1975). Total debt in the above ratios included short-term plus long-term loans from affiliates and financial institutions but did not included trade credit. If trade credit is included, the ratio of equity to total financing would be even smaller.

or long-term borrowing in an Islamic economy. Dependence on borrowing implies that either the owner of the business is not willing to share the ownership and the fruits of his expanding business with others or that the lenders are not willing to share in the risks of business and wish to have a predetermined positive rate of return, both of which constitute undesirable traits in a Muslim society.

There is no doubt that the jurists have recognized *Mudārabah.*[16] However, a deeper analysis of the concept of *Mudārabah* reveals that it is essentially an investment-management agreement. The *Sahib al-Māl* (capital contributor or investor) is basically not the lender but the owner of the business to the extent of his share in the total financing of the business. The *Mudārib* (manager or entrepreneur) manages the investment funds placed at his disposal by the *Sahib al-Māl* in accordance with the *Mudārabah* agreement. *Mudārabah* is a form of equity which is temporary in nature and is liquidated as soon as the objectives are realized. The liability of the *Sahib al-Māl* is limited to the extent of his capital and no more [17] In accordance with the rationale behind the prohibition of *Ribā,* the manager of *Mudārabah* funds is not entitled to a fixed return for his management services irrespective of what happens to the business. If there is a profit, he shares the profit in an agreed proportion as a reward for his managerial and entrepreneurial services. If there is a loss, he gets no reward, and his loss amounts to the opportunity cost of his services. However, he shares the loss if he has a share in the equity of the business, but only to the extent of his share because losses according to the *Fuqaha* constitute erosion of equity. This fits perfectly into the rationale of the Islamic model of *Ribā*-free economy and implies that the spirit of business relationship preferred by the *Shar*ʿ*ah* is "investment-management" and not "borrowing-lending", taking into account the modern connotation of these terms.

Equity-financing in place of loan-financing will help eliminate the possibility of a large superstructure of finance being raised on a narrow equity base. It would help bring about a wide dispersal of ownership of business and contribute substantially to the realization of the goal of equitable distribution of income and wealth. It may, however, be remarked that even when ownership is widely dispersed, the large number of small shareholders may have neither the ability nor the inclination to participate in the decision-making process. This tends to lead to the concentration of power in the hands of a few persons in large enterprises. Since competition tends to be inadequate, particularly when the enterprises are very large, and regulations can be circumvented, the general tenor of business in an Islamic economy should preferably be small and medium-scale. "Big" business should be allowed only when necessary in the larger interest of society. In such cases, the state should intervene more effectively, to safeguard public interest and to ensure that vested interests do not exploit the "bigness" for their private benefit.

(iii) Reducing the power of banks: In the capitalist framework, society's resources mobilized by banks are utilized by them for enriching a few families. One of the

16. For a detailed treatment of the subject of Mudārabah and Sharikah in Islam, see, Al-Jaziri, *op. cit.*, Vol. 3, pp. 34-93; Ali-Khafif, *Al-Sharikah fi al-Fiqh al-Islami* (Cairo: Dar al-Nashr li al-Jami'at al-Islamiyyah, 1962): and M. Nejatullah Siddiqi, *Sharikah wa Mudarabah kay Shar'i 'Usul* (Lahore; Islamic Publications Ltd., 1969).

17. See, ʿAbd al-Aziz al-Khayyat, *Al-Sharikat fi al-Shari'ah al-Islamiyya wa al-Qanun al-Wad'i* (Amman, Jordan: Ministry of Awqaf, 1971), Vol. 2, pp. 132-3.

primary reasons why banks tend to become the centers of control under capitalism is that capitalists who operate through a bank "obtain access to other people's capital".[18] "The Rockefellers and Mellons can thus control corporate empires of far greater worth than their own personal fortunes" and, "it is not surprising that the wealthiest and most powerful capitalists operate through banks".[19]

The inverted pyramid of power in the banking system arises from the low equity base, on top of which rest "primary" deposits that support a substantially large volume of "derivative" deposits. The equity of banks in the capitalist banking system is usually very small. Shareholders of all U.S. commercial banks holding equity worth $73.1 billion (stocks worth $16.4 billion plus surplus, undivided profits, and reserves against contingencies worth $56.7 billion) in 1976 had control of total assets worth over $1,040 billion or fourteen times as much.[20] People who had real control over these assets owned a substantially smaller proportion of the total stock of 16.4 billion.

The net income of banks from their operations may tend to be no more than "normal" for the ordinary stockholder, but the "privileged" few who control bank operations derive considerable personal benefits through various clandestine methods which are difficult to check and control. Through their immense economic power they are also able to exercise political and social influence which makes them among the most powerful members of their society.

The equity capital of banks in the capitalist system tends to provide generally less than even the infrastructure needs of commercial banks except where an equity/deposits ratio is legally prescribed. In contrast to this, banks in an Islamic economy, if they are to remain in the private sector, should operate on a substantially larger and more widely-owned equity base with a view to dispersing the controlling power of total bank assets over a larger and more broad-based sector of society. No single family or group should be allowed to hold more than a certain maximum proportion of total shares and no holding companies should be allowed in the banking business. Moreover, members of the board of directors or management of banks should not be allowed to become directors or managers of other businesses, to avoid concentration of power in society. This will help disseminate the power wielded by the banks, reducing concentration of wealth in the hands of a few families.

In the existing system, the power to issue currency is exercised by the central bank, while the power to "create" deposits is enjoyed by the totality of commercial banks with some indirect controls exercised by the central bank. Hence total deposits consist of "primary" deposits which provide the banking system's reserves held in the form of cash or deposits with the central bank, and "derivative" deposits arising from the process of commercial bank credit extension. In the US, "primary" deposits amounted to 129.3 billion in 1976, and constituted only about one-sixth of total deposits. This implies that "derivative" deposits constituted five-sixths of total deposits.

Derivative deposits thus constitute a major part of total money supply (currency plus deposits) in the capitalist system. The creation of these deposits gives rise to a

18. D.M. Kotz, *Bank Control of Large Corporations in the U.S.* (Berkeley: University of California Press, 1978), p. 143.
19. *Ibid.*, p. 149.
20. See, Federal Deposit Insurance Corporation, Annual Report, 1976, pp. 239-42.

subsidy or "seigniorage" (the difference between the return on, or purchasing power of, created money and the costs incurred in its creation) from society to the commercial banks.[21]. The question is: who should benefit from this subsidy? In the existing system, the subsidy goes directly or indirectly to three groups: (a) the banking public, through the provision of a number of banking services free of charge; (b) "privileged" borrowers from banks, through the lower rate of intrest, the loss to society being the difference between the opportunity cost of created money to society and the "prime" rate of interest; and (c) the bank stockholders, through increased profits.[22] The poor and the needy people of society and the non-banking public get no direct benefit from deposit creation.

It can be argued that in the social welfare-oriented value system of Islam, the power to create money should be considered a social prerogative and, therefore, the net income from money creation should be used for general welfare and particularly, for improving the lot of the poor people.[23] There are two ways in which this may be arranged.

Firstly, bank credit should be used for broad-based economic welfare by being directed to an optimum number of borrowers for the production of goods and services required for satisfying the needs of the mass of society. The criteria for its allocation, as of other God-given resources, should first be the realization of the goals of Islamic society and then the maximization of direct nominal profit. This would, of course, necessitate value oriented planning in accordance with values and goals of Islam and dovetailing the commercial banking system into the plan for its efficient implementation.

Secondly, the total of derivative deposits rather than just central bank credit to commercial banks should be cnsidered as *Mudarabah* advances to commercial banks. If commercial banks are nationalized, the total net income will go to the public exchequer automatically. If the commercial banks continue to remain in the private sector, the net income arising from "derivative" deposits should be passed on to the state after allowing for the *Mudarabah* share of commercial banks, determined in accordance with an agreed formula. This entire income should be used by the state

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21. K.E. Boulding and T.F. Wilson (eds.) *Redistribution Through the Financial System: The Grants, Economics of Money and Credit* (New York: Praeger Publishers, 1978), pp. xxiii and 4. The reader may wish to read a number of papers in this book for enlightenment on the subject.
22. See, T.F. Wilson "Identification of measurement of Grant elements in monetary policy" in Boulding and Wilson, *op. cit.*, p. 48. The author also argues that "seigniorage is a grant giving the producers (or "creators"), of money or to whom the grant has been transferred, command over resources in the economy", p. 38.
23. Dr. Anas al-Zarqa', Professor of Economics at King Abdulaziz University argued during the course of the Seminar that "created deposits" were in the nature of Fay' (wealth attained by Muslims without struggle) because no serious effort has been involved in their creation. Hence their benefit should be distributed in accordance with the following verse of the Qur'an regarding Fay': "Whatever Allah restored to His Messenger from the people of the towns is for Allah, his Messenger, the near of kin, the orphans, the needy and the wayfarer, so that it does not circulate among your rich" (59:7). It may be added that after the death of the Prophet (peace be upon him) the practice of the Khulafa al-Rashidun was to utilize the entire amount of Fay' for the benefit of the orphans, the needy and the wayfarer. There have been differences in the interpretation of this *ayah*. While Imam Shaf'i felt that the amount of Fay' should be spent equally on the five heads, the Messenger being replaced by general welfare, Imams Abu Hanifah, Malik and Ahmad felt that the amount should be spent on the general welfare of all Muslims (For details see the commentary on the ayah in Abul A'la Mawdudi, *Tafhim al-Qur'an* (Lahore, Pakistan: *Idarah Tarjuman al-Qur'an,* 1971), vol. 5, p. 392). Whatever the interpretation, if the principle of Fay' is applied to the creation of deposits, it could help bring about greater general welfare with more equitable distribution of wealth.

for social welfare projects, particularly those benefitting "the orphans and the needy" so that, in the words of the *Qur'an*, "wealth does not circulate among your rich" (59:7).

The objection could be raised that the proposed scheme could have the effect of making banking unprofitable and hence unattractive. This objection is not valid. Of the three beneficiaries from credit creation, the one to bĕ affected most will be the privileged "prime" borrowers who will have to pay a higher rate of return in the form of profit to the banks because their productivity is "claimed" to be higher. Hence the net residual rate of return of such "privileged" borrowers will be smaller by the difference between the rate of *Mudarabah* profit they will pay to the banks in the Islamic system and the "prime" rate of interest they pay to the banks in the capitalist system. Of the other two beneficiaries from credit creation, the users of bank services may continue to benefit to the extent to which the benefit derived by them is accompanied by a high rate of social return. For example, checks may continue to be cashed freely if this benefits society generally through the spread of the banking habit and the mobilization of savings. However, to the extent to which the benefit from bank services is confined to individuals or firms and is not widespread, the users should be made to pay the cost of these services. The normal stockholders of banks should be able to get a reasonably attractive rate of return and the *Mudarabah* ratio of profit-sharing on derived deposits can be adjusted to ensure this. The only sufferers from the proposed scheme will be (a) the "privileged" borrowers and users of those bank services which yield private benefit but have a low, or no, social return and (b) bank stockholders to the extent to which they earn a higher than "normal" rate of return on their equity. The general public would benefit through a more goal-oriented allocation of credit as well as through the *Mudarabah* profit diverted to the state.

(iv) A sane stock market: A greater resort to equity financing in the Islamic economy will necessitate a more efficient organization of both primary and secondary capital markets to enable businesses to raise funds without difficulty and to provide liquidity to investors who cannot, or do not wish to, hold the equity they have acquired. Development of an extended primary market will be difficult if a secondary market is not developed simulatneously. One of the first essentials for this purpose would be to bring about rational behaviour in stock prices with reasonable rates of dividend to inspire investors' confidence in stocks and shares. Stock markets as they exist in the capitalist world, with erratic movements in stock values and low rates of dividend, do not offer an attrative let out for investors. They tend to make interest-bearing bonds with no risk of capital loss increasingly more popular.

A number of factors generate erratic and unhealthy movements in stock prices. One of these is destabilizing speculation. What specific remedial measures need to be taken to eliminate unhealthy speculation? This is a separate subject beyond the scope of this paper. However, the abolition of *Ribā* will help eliminate speculation based on funds borrowed from banks for speculative purposes. In addition, it would be necessary to regulate all dealings in the stock markets in the light of Islamic teachings to eliminate all those unhealthy practices which create destablising conditions or hurt the public interest.

Even though the proper organization of stock markets for increased equity financing of businesses is a key element in the reorganization of an economy along

Islamic lines, this subject has unfortunately received scant attention from Muslim scholars and increased research needs to be encouraged.

It seems that only through an introduction of these fundamental changes could the banking system be made to serve the socio-economic goals of Islam. A mere replacement of *Ribā* by profit-sharing will not serve the purpose although it could itself be welcome as it would help provide the necessary experience in *Ribā*-free banking and could also set the way for bringing about the other major reforms later. Nevertheless, it must be borne in mind that such institutions, operating on a small-scale in a hostile interest-based capitalist environment, with lack of conviction on the part of the ruling 'elite' in the workability of the Islamic system, may find it difficult to survive. The failure of such institutions, if it happens, should not be construed as failure of the system because such institutions operating in an un-Islamic environment do not represent the system but only the struggle of an embryo to survive in hostile surroundings without support systems.

2C. *Some Problems of Islamic Banking*

Such a system of banking poses a number of problems and difficulties, some of which may at first sight appear to be insurmountable. It may be useful to indicate some of the major problems that Islamic banking is likely to face, to evaluate the nature and significance of these problems, and to discuss the possible ways of solving them.

(i) Losses incurred on deposits: Interest-free banking system, it might be argued, may tend to discourage savers from depositing their savings in banks because they would naturally like to have a positive rate of return and would not like to see their savings being eroded by losses that a profit-sharing banking institution may experience. This could no doubt be a genuine problem, but it would not be unique to the Islamic banking system because even in the capitalist interest-based system there has been erosion of deposits through bank losses and failures.

With respect to demand deposits, which would give no return, the problem could be solved by a system of deposit insurance which guarantees the safety of demand deposits from any loss that the bank may suffer. Some elements of such a system of deposit insurance are discussed later. With respect to time and savings deposits, the problem would still remain because of losses suffered by businesses financed by banks on the *Mudārabah* basis.

It is sometimes argued that banks may not have the relevant data and the technical know-how to evaluate the profitability of thousands of businesses they could be financing. This is not a valid objection because even in the capitalist system banks have to evaluate the soundness of businesses to which they are lending, because if borrowers suffer losses the banks may lose the interest as well as the principal. To determine the soundness of the borrower, the capitalist bank has to take into account not only the character and integrity of the borrower, his business acumen, experience and capital resources but also the purpose of the advance, the nature and prospects of the business, and the source of repayment.[24] This is because a sound bank loan should be collectible from the anticipated income or profit of the borrower rather than from the liquidation of any collateral that may be pledged. The proper function

24. See, L.C. Mather, *The Lending Banker* (London: Waterloo and Sons, 1966).

of collateral is to minimize the risk of loss to the bank in the event of the borrower failing to realize, for reasons which neither the bank nor the borrower can foresee, sufficient resources to repay the loan with interest.[25] Hence even in the capitalist banking system there is no escape from estimating the expected income which determines the "self-amortizing" nature of the loan.[26]

However, in the capitalist banking system the bank need not have an interest in the income of the borrower beyond that necessary for the self-amortization of the loan. But in the Islamic system the determination of the exact amount of profit earned by the *Mudarib* would be necessary to calculate the bank's "share". The Islamic bank would therefore face a dual risk: (a) the "moral" risk which arises from the *Mudarib* declaring a loss, or a profit lower than the actual, because of lack of honesty and integrity; and (b) the "business" risk which arises from the behaviour of market forces being different from that expected.

The "moral" risk may tend to be high in the beginning when the system is newly established. However, when the users of bank funds realize that their ability to secure funds from banks depends on the profit that their business generates, there should be a substantial decline in the tendency to cheat banks. Hence market forces would have the effect of almost eliminating such a risk. Moreover, a system of random audit of users of bank funds (discussed later) could be introduced to serve as a deterrent to entrepreneurs who contemplate cheating the banks.

The business risk is also a problem for the portfolio manager of the capitalist bank because he, too, has to be constantly aware of the quality of his entire portfolio and to guard against loss through market failure. Such a risk could be minimized by the Islamic bank as is done by the capitalist bank, through proper "scenario planning"[27] and diversification of its *Mudārabah* portfolio by maturities as well as by sectors of business. If the bank diversifies its porfolio properly there is little likelihood of a 'net' loss except in rare circumstances. To meet such a contingency, the Islamic bank could be required to build a "loss-offsetting" reserve from its annual profits.

(ii) Short-term loans: A second problem of the Islamic banking system could be that all financing may not be amenable to profit-sharing: for example, call loans, overnight loans, day loans, and loans of very short maturity. In such cases, it is not possible to have any profit-sharing arrangement because of the difficulty of determining profit for such short periods. In this connection there will be conflict of interest between the borrower who would be happy to borrow an interest-free amount with a small service charge, and the lender, particularly the institutional lender, who would be reluctant to lend money, though for very short periods of maturity, to a borrower who he knows will profit from this loan even though it is

25. Howard Cross, *Management Policies for Commmercial Banks* (Englewood Cliffs, N.J., Prentice Hall, 1962), pp. 196-98.
26. In essence, the "anticipated income theory" of commercial bank loans as developed by Prochnow, in contrast with the earlier "self-liquidating" and "shiftability" theories of loans, emphasises the earning power of the borrower as against the liquidity or transferability qualities of bank assets. This implies that the ultimate ability to liquefy borrowers obligations is embodied in the earning power of the borrower or credit taker rather than in the ability to shift assets in the market place (See, H.V. Prochnow, *Term Loans and Theories of Bank Liquidity,* New York, 1944, pp. 401-11; and H.V. Prochnow and H.V. Prochnow Jr., eds. *The Changing World of Banking,* New York, 1974, pp. 166-7).
27. See, S.P. Bradley and D.B. Crane, *Management of Bank Portfolios* (New York: John Wiley 1975).

difficult to determine the extent of the profit. Since the risk of non-payment is associated even with such loans, it is probable that such short-term loans may not be forthcoming in an Islamic system. Most financing of a very short-term nature would hence have to be made a part of the overall *Mudārabah* agreement. For the balance of the very short-term financinng needs, a built-in arrangement, as discussed later, would have to be made in the Islamic system to the mutual satisfaction of both the borrower and the lender.

(iii) Instalment credit: A third problem is that of consumer credit and loans for such projects as house building and cottage industries. With respect to consumer credit, it may be pointed out that Islam does not encourage (as discussed earlier) a high consumption economy like that of capitalism. Resorting to unnecessary purchases for demonstration purposes to keep up with the Joneses, is not a value of the Islamic system. Therefore, some of the instalment credit may not be necessary. The rest, which is considered necessary for realizing Islamic objectives, could be arranged by the dealers on a *Mudārabah* basis from financial institutions with whom the dealers share a part of the increased profit which results from the increased sales generated by the instalment plan. Instalment purchases of socially necessary goods, like taxis, sewing machines, and cottage industry equipment, which are in keeping with Islamic values and goals, could be arranged through financing from specialized credit institutions established by the Government or altruistic organizations (discussed later).

House-building finance need also not create a problem because the lending institution could share in the rent determined on the basis of the rent on similar property. For example if a loan of SR 200,000 is extended to a home-builder for a house costing, say, SR 300,000, the lending institution would get two-thirds of the imputed rent on such housing. The rent will be paid on the unpaid portion of the loan which will keep on declining as the loan is gradually amortized. Also associated with long-term house-building finance is the question of the financier's share in the appreciation or depreciation of the property value. This question has received little attention in the literature and needs full discussion in the light of the *Sharīʿah*.

(iv) Government borrowing needs: A fourth problem of the Islamic banking system would be the satisfaction of a part of government financial needs by borrowing from the private sector. This could be necessary not only for financing projects which are amenable to profit-sharing but also for projects which are not so amenable. A number of public works projects have a high rate of social return, but it is not possible to determine the economic return because it may not be feasible or desirable to price the service rendered by such projects. Most public works projects and all defence projects are not amenable to pricing, and though some projects (like educational and health projects) could be priced to recover the total cost, it may not be considered desirable to do so, because of the Islamic emphasis on social welfare and equitable distribution of income and wealth.

The importance attached earlier to price stability will also prevent the state from resorting to inflationary financing. Even if the governement eliminates, or substantially reduces, wasteful and unproductive spending, there may still be a need for government borrowing to finance some of its social welfare projects which have received considerable emphasis in Islam but for which sufficient resources may not always be available through taxation. How will this be arranged in the absence of interest (which is prohibited), profit-sharing (which may not always be feasible and inflationary financing (which is not desirable)? This question will be considered later.

(v) Allocation of resources: An objection often raised is that the Islamic banking system may not be able to bring about an optimum allocation of resources. The reason for this is that interest is a price and like all prices it performs the function of allocating "scarce" loanable funds among the "infinite" users of such funds in an objective manner on the basis of ability to pay the price. If the demand for, or supply of, loanable funds changes, a new equilibrium is reached at a different rate of interest.

This objection assumes that, in the absence of interest, loanable funds will be available "free" to borrowers, the demand will thus be infinitely large and there will be no mechanism for equating demand with supply, and also that, in the absence of an objective criterion for allocation of resources, scarce financial resources will be used inefficiently to the detriment of society. This objection carries no weight, because the fundamental assumption is baseless. Funds will not be available "free" in the Islamic system. They will be available at a cost and the cost will be the "share" in profit. The rate of profit will hence become a criterion for allocation of resources as well as the mechanism for equating demand with supply. The greater the *ex-ante* rate of profit in any business, the greater the supply of funds to that business. If the *ex-post* profit for certain businesses is consistently lower than the *ex-ante* profit, such businesses may face difficulty in raising funds in the future. Therefore, while *ex-ante* profit will be important immediately, the *ex-post* performance will be crucial for the future success of the business in raising funds. This is not the same as interest. The interest-oriented lender does not share the risk of the business financed. He is assured of a predetermined rate of interest irrespective of the net outcome of the borrower's business. The *Sahib al-Māl* in the Islamic system shares the risk of business and is not assured of a pre-determined return.

The rate of profit will tend to be a more efficient mechanism for allocation of resources than interest. The "equilibrium" rate of interest is only a text-book phenomenon. In reality such a "market clearing" rate does not exist and instead there are a host of rates and the function of allocating resources optimally is not performed efficiently. The rate of interest tends to be a "perverted" price and reflects price discrimination in favour of the rich-the more "credit-worthy" the borrower, the lower the rate of interest and vice versa. The result is that "big" business is able to get more funds at a lower price because of its "higher" credit rating. Thus those who are most able to bear the burden, because of their bigness or claimed "higher" productivity, bear the least burden.

In contrast, medium and small businesses, which may sometimes be more productive in terms of contribution to the national product per unit of financing used and at least equally "credit-worthy" In terms of honesty and integrity, may be able to secure relatively much smaller amounts at substantially higher rates of interest. Therefore, the rate of interest reflects not the "objective" criterion of productivity of the business but the "biased" criterion of "credit rating". This is one reason why, in the capitalist system, big business has grown bigger beyond the point dictated by economies of scale and medium and small businesses have been throttled by being deprived of credit. Does this indicate an optimum allocation of resources or an efficient banking system?[28]

Instead, if credit is made avaialbe on the basis of profitability as a criterion, then small, medium and big business would stand on an equal footing. The higher the rate of profit the greater will be the ability to secure funds. Big business, if it is really more profitable, should pay a higher and not smaller rate of return to the lending institutions, thus benefitting the small depositors, who in the capitalist system, are the worst sufferers because they receive an extremely low rate of return on their deposits. In sharp contrast with this, the business having a "higher" credit rating because of its claimed greater productivity and profitability is able to get funds at a relatively cheaper rate compared with the profits that big businesses make from the use of these funds - thus contributing to monopoly power, inequalities of income, and concentration of wealth.

It is not possible to rectify such inequalities adequately through the tax system without coming to grips with the basic causes of inequalities. The Islamic system, through the elimination of interest, introduction of profit-sharing and a broad-based use of bank resources, should be able to redistribute profits from big business to depositors and small enterprises, thus removing one of the major causes of inequalities.

Hence the charge that an interest-free economy would be unable to allocate resources optimally is baseless. In fact the Islamic system of profit-sharing should be able not only to bring about greater efficiency in the allocation of resources but also to reduce the concentration of wealth and power.

3.

THE INSTITUTIONAL SETTING

The above discussion has provided the gist of what should be the objectives and mechanics of the Islamic banking system. It is now necessary to discuss the institutional framework that would incorporate the fundamental changes suggested, help achieve the socio-economic objectives of the Islamic society, and solve the problems indicated above. Although the proposed framework may outwardly appear to be the same as that in the capitalist system, in essence it is different because the objectives, mechanics, powers and the scope and responsibilities of these institutions would be entirely different.

The proposed network of institutions consists of a) the central bank, b) the commercial banks, c) non-bank financial institutions (NBFIs), d) specialized credit institutions, g) Deposit Insurance Corporation (DIC), and f) Investment Audit Corporation (IAC). These institutions, with the scope and responsibilities suggested below, would form an integral part of the system and none could be dispensed with if the objectives discussed above are to be realized. The commercial banks, the NBFIs and the specialised credit institutions are together termed financial institutions in this paper.

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28. The reader may wish to see the brief but thought-provoking paper on the subject by Dr. Ziauddin Ahmad (State Bank of Pakistan, Karachi), entitled "Economic Rationale of the Prohibition of Interest in Islam", distributed by the author privately.

3A. *The Central Bank*

The central bank should be the pivot of the Islamic banking system. It should be an autonomous government institution responsible for the realization of the socio-economic goals of an Islamic economy in and through the money and banking field. It should act as banker to the government and the commercial banks. It should guide, monitor and regulate the commercial banks, the non-bank and specialized financial institutions, the Deposit Insurance Corporation and the Investment Audit Corporation without jeopardizing the autonomy of these institutions.

Since the honest and efficient fulfillment by the central bank of its crucial and pivotal role would be difficult without a strong and competent man at its helm of affairs, it would be necessary that the governor of the central bank should not only be a man of great integrity and high calibre but also have a deep understanding of the *Sharī'ah* and the technical aspects of his field. He should enjoy the status of a Minister and should be appointed for a sufficiently long period by parliament on the advice of the government.

The central bank should determine annually the desirable growth in money supply (M) in the light of national economic goals including stability in the value of money. This target growth in M should be reviewed quarterly, or as often as necessary, in the light of the performance of the economy and the trend of prices. To the extent to which the desired growth in M demands the creation of a given amount of high-powered money (M_0) the central bank should do so and make this available partly to the government and partly to the commercial banks and the specialized financial institutions established for granting loans to small businesses and self-employed people, who may deserve to be supported for socio-economic objectives but who are unable to secure funds from commercial banks. The proportion of M_0 diverted by the central bank to each of these three sectors will, like the total of size of M_0, be determined by economic conditions, goals of an Islamic economy, and the dictates of monetary policy.

The part of M_0 made available to the government should be an interest-free loan. The part of M_0 made available to the commercial banks should be treated as *Mudārabah* advance and the profit realized therefrom by the central bank should be made available to the government to be used, as indicated earlier, for projects designed to eradicate poverty. This profit would automatically become available to the central bank if it shares the profits on "derived" deposits. The part of M_0 made available to specialized credit institutions should also be a *Mudārabah* advance and be used mainly for financing the activity of self-employed people, small industries and businesses unable to procure funds from commercial banks or the NBFIs.

To ensure the autonomy of the central bank, it should be assured of an independent source of income to finance its expenditures. It should be allowed to raise income through (i) service charges levied on the government and the commercial banks for various services rendered to them and (ii) returns from the investment of statutory reserves maintained by the commercial banks.

The central bank should be the sole institution responsible for implementing the country's monetary policy. For this purpose it should use whatever instruments and methods are necessary and are not in conflict with the teachings of the *Sharī'ah* (discussed later in the section on monetary policy).

3B. *The commercial Banks*[29]

Since the activity of commercial banks is based primarily on the use of public funds, it is essential that public interest rather than individual or group interest be served by them. This point, in addition to the abolition of *Ribā,* should be among the principal differences between Islamic and capitalist commercial banks. The Islamic banks should use all deposits which come from the public for serving the public interest and realizing relevant national goals.

In the overall scheme being discussed in this paper, the various objectives discussed above could be realized regardless of whether the commercial banking system is nationalized or left in the private sector. Nationalized commercial banks may help ensure the realization of larger public interest and also enable the entire profit to be diverted to the public exchequer. However, since privately-owned commercial banks may be more efficient, they should not be ruled out, provided that their equity base in substantially enlarged and broadened and they are properly regulated to ensure that they serve the public interest and do not lead to concentration of wealth. It is also possible to have a mix of publicly and not publicity - and privately - owned commercial banks.

Whether nationalized or not, it would be desirable to have a number of commercial banks to prevent concentration of power, to avoid the risk of commercial banks becoming too cumbersome and inefficient, and to ensure efficiency in their operations and improvements in their services through competition. However, while a single monoplistic banking institution is to be avoided, the unit banking system of the U.S. style, with a few giants wielding enormous power and a large number of stunted dwarfs, is also undesirable. The ideal solution would be to have a number of medium-sized banking institutions which are neither so small as to be uneconomical nor so big as to exercise enormous power.

A substantial part of commercial bank resources will come out of equity capital. In addition, they should accept demand as well as *Mudārabah* (time and fixed) deposits. Demand deposits may, like their counterpart in the existing system, be withdrawn on demand, be fully insured, and earn no return. The rationale behind demand deposits receiving no share in profit is that they would be fully insured and, according to the *Sharī'ah,* a share in profit is not admissible without a share in risk. Absence of return on demand deposits may help induce savers to get into equity (including *Mudārabah* deposits) thus reducing the dependence of businesses on borrowed funds, as is desirable in an Islamic economy.

Mudārabah deposits would imply purchase of "temporary" shares in the equity of the bank when a deposit is placed, and sale of those shares when the deposit is withdrawn. Such depositors will have a share in the profits of the bank (and also losses, if any). The depositor's share in profit will be based on his average balance over the period of profit distribution (quarter, half year or annum). The *Mudārabah* depositors must be represented on the bank's board of directors by representatives of the depositors and/or nominees of the central bank.

29. A number of books have been written on the subject. For a comprehensive list of references in English, Arabic and Urdu the reader may wish to see M.N. Siddiqi, *Contemporary Literature on Islamic Economics* (Leicester, U.K.: The Islamic Foundation, 1978), pp. 35-38. For a sampling of works in English, see, M.N. Siddiqi, *Banking Without Interest* (Lahore: Islamic Publications, 1973), M. Uzair, *An Outline of Interestless Banking* (Karachi: Reihan Publications, 1955); and Arab Republic of Egypt, *The Egyptian Study on the Establishment of the Islamic Banking System* (Cairo: 1972).

The creation of deposits by commercial banks, as discussed earlier, may be recognized in the Islamic system provided that (a) appropriate measures are taken to ensure that the creation of derivative deposits is in accordance with the non-inflationary financing needs of the economy, and (b) that the 'seigniorage' realized from derivative deposits benefits society as a whole and not a vested interest group.

The commercial banks should provide *Mudārabah* financing (in the nature of temporary participation in equity) on investment-management basis to *Mudaribs* either directly or indirectly through the NBFIs. For the sake of convenience and ease, the banks may also provide overdraft facilities and financing for extremely short-term periods to their *Mudaribs* and other clients to offset their funds in transit or to take care of seasonal or unforeseen shortages of liquidity. Such accommodation may be provided to *Mudaribs* as part of the overall *Mudārabah* arrangement, and, on a limited scale, to other clients against a service charge.

The commercial banks in the Islamic system should render, with or without a service charge, all other banking services for which they are known. As indicated earlier, there may be no service charge where large social benefits are involved in bank services, for example, in the cashing and clearing of checks. However, a service charge should be levied where the benefit is derived mainly by the particular individual or firm.

Only commercial banks should be allowed to accept demand deposits and to cash checks. This is essential in the interest of effective check on the ability of the private sector to create money and to ensure that private institutions other that commercial banks do not exercise this privilege. The corollary of this conclusion is that financial institutions other than commercial banks should be required to hold their own liquid funds in commercial banks and to make major payments through checks drawn on these banks.

Since mobilization of savings would be an important value of the Islamic system, because of the rich contribution this is capable of making toward the welfare of the society, it would be desirable to inculcate the banking habit among the masses. One of the means towards this end would be to declare that no payments beyond a certain amount would be adjudicable unless made by means of a check. This should help draw savings into the banking system and enable their use for the welfare of the *Ummah*.

The total of all deposits placed with commercial banks may be utilized by them in the following manner.

(i) Cash: Cash may absorb about 10 per cent of their deposit liabilities and may include not only cash in vault but also cash items in the process of collection and demand balances with other banks. The actual size of bank cash will essentially be determined by the development of the banking habit, the use of cash in the country, and the time taken in clearing checks in the process of collection.

(ii) Statutory reserves: The commercial banks should be required to hold a certain proportion, say, 10-20 per cent, of their demand deposits with the central bank as statutory reserves. This statutory reserve requirement may be varied by the central bank in accordance with the dictates of monetary policy.

The rationale behind a statutory reserve requirement only against demand deposits is that the *Mudārabah* deposits are treated in this scheme as a part of bank equity and, since there is no statutory reserve requirement against other forms of equity, there is no reason why *Mudārabah* deposits should be subject to such a requirement. The objectives of monetary policy may be accomplished by controlling the high-powered money at the source, as discussed elsewhere in this paper.

The funds thus received by the central bank may be invested by it to derive income for covering its expenses, including the reimbursement of commercial banks for the cost of mobilizing statutory deposits. Since interest-bearing government securities will not be available to the Islamic central bank, unlike its capitalist counterpart, the Islamic central bank will have to find alternatives for investment. It may be preferable that the central bank does not invest these funds directly but makes them available to the commercial banks and other financial institutions on the basis of *Mudārabah*. However, it may withhold from investment whatever funds it considers necessary for management of monetary policy.

(iii) The Government: A certain proportion of commercial bank demand deposits up to a maximum of, say, 25 per cent, should be diverted to the government to enable it to finance socially beneficial projects in which profit-sharing is either not feasible or desirable. This will be in addition to the amount diverted to the government by the central bank for expanding the monetary base (M_0) to attain a certain desired rate of growth in money supply.

The rationale for this is that, since the funds available to banks through demand deposits belong to the public and the banks will not pay any return on these deposits, which will also be fully insured and thus involve no risk of loss, a part of the benefits should go to the public. The best way of doing this is to divert a part of the total pool of resources thus realized to the public treasury to finance socially necessary projects without any interest burden on the public exchequer. This proposal implies that commercial banks are the agents of the public for mobilizing the society's idle resources, which should be used mainly for social benefit and which may also be used partly by the commercial banks for private benefit depending on the extent to which the society permits them to do so in the larger social interest.

It will thus be possible to make funds available for financing projects having large social benefits but small or no direct measurable economic return which could be used for profit-sharing. As discussed earlier, this amount should be utilized by the government only for those projects which will be of widespread benefit and which will help achieve the Islamic goals of eradicating poverty, social and economic justice and equitable distribution of income and wealth.

The amount so diverted should be considered as a *Ribā*-free loan to the Government against which it will issue non-interest bearing securities, which, because of the absence of any return, will tend to be non-marketable. These securities should carry a maturity date and be redeemed by the government as they mature, to ensure that the government recognizes the difference between resources raised through taxes and borrowings and does not rely on this source of borrowing excessively. The government should, however, pay a service charge on this amount equivalent to 25 per cent of the operational cost of banks in mobilizing demand deposits and rendering the services related to these deposits. This service charge would not be in the nature of *Ribā* because the government would only be reimbursing the commercial banks on a pro-rata basis for costs incurred by them in acting as agents in mobilizing the idle funds of the public. In addition to paying this service charge, the government should also bear, on a pro-rata basis, the costs of running the DIC and IAC and other such institutions, as these costs constitute a part of the total cost of running the banking system. Since the government shares a part of the benefit, it should also bear a part of the cost. Such payments will ensure that the cost of *Ribā*-free borrowing by the government from the banks does not become a buden on the public, and that the government does not get finances without sharing at least proportionately the operating costs of the banking system.

It may be argued that the existence of non-marketable securities in commercial bank portfolios will deprive the central bank of an important instrument of monetary policy. This objection would be valid only if the growth in M is not regulated at the source. However, if the central bank keeps the monetary base (M_0) under control, the necessary minor adjustments in M could be brought about by changes in statutory reserve requirements, *Mudārabah* advances from the central bank to the commercial banks and, if necessary, credit ceilings.

(iv) Mudārabah advances: The balance of the funds left with the commercial banks - about 45-per cent of demand deposits and all of *Mudārabah* deposits - may be used by them mainly for Mudārabah advances to businesses either directly or through the NBFIs. A part of their funds may also be used by them to provide short-term accommodation against a service charge to their regular customers with whom no *Mudārabah* agreement has been reached. The service charge should be equal to the actual (or estimated) cost to the bank of providing the service to the customer.

A social welfare dimension may be introduced in *Mudārabah* advances as well. The advances should be extended to promote employment and economic growth in accordance with Islamic values. These advances should not be allowed to promote concentration of wealth or conspicuous consumption. They should go to as large a number of entrepreneurs as possible in industry, agriculture and commence to support increased production and distribution of goods and services for meeting essential domestic needs or for export. The goal should be to make *Mudārabah* credit available in reasonable amounts to a large number of entrepreneurs. *Mudārabah* banking should under no circumstances create Rockefellers or Mellons or promote socially undesirable consumption or investment. For this purpose, *Mudārabah* advances would have to be finely woven into the country's socio-economic plan.

Mudārabah banking, which is not only *Ribā*-free but at the same time also social-welfare oriented, is no doubt a challenge to Muslim bankers. Initially such banks will face problems, but with ingenuity and creativeness it should not be difficult to solve these problems.

3C. *Non-Bank Financial Institutions*

The term NBFIs is being used here to denote investment trusts, credit unions and a range of other investment management institutions. They would mobilize savings through equity and *Mudārabah* deposits and make them available to prospective investors. They may also manage special funds placed with them by their clients and help businesses secure equity or *Mudārabah* financing. These institutions would thus play the intermediary role of helping savers find profitable avenues for their saving and helping entrepreneurs find funds for expanding their businesses.

Such institutions should in general be privately-owned. Some of them may be of a general nature while others may specialize in specific economic sectors: for example, housing construction, agriculture, industry, and trade (domestic as well as foreign). The NBFIs would thus differ from each other according to their field of activity and the nature and maturity of funds placed with them for management. The common feature of all these institutions would be that they would acquire part of their funds from their stockholders, part from commercial banks and part from *Mudārabah* (but not demand) deposits and special funds placed with them for short, medium or long-term management. They should be medium-sized institutions with a sufficient and widespread equity-base to guard against concentration of wealth and power. They should be properly regulated to ensure fairness in their dealings and safety of the depositors' funds. They should have a representative of the central bank and/or the depositors on their board of directors. A properly organized stock market along Islamic, non-speculative lines would be an essential auxiliary to these institutions.

The NBFIs will basically act as investment trusts and use the funds they have received to acquire equity in other businesses (without having a controlling share) and to extend *Mudārabah* advances. The *Mudārabah* financing will only meet the temporary capital needs of the businesses financed. Medium or long-term needs should be financed by the businesses concerned through increase in equity. The NBFIs may itself acquire the increased equity or serve as an intermediary to bring together financiers and entrepreneurs-which it is well qualified to do, because of its intimate knowledge of the market. It is this bringing together of financiers and entrepreneurs which forms the crux of this scheme, as it will serve to spread ownership of business and reduce concentration of wealth.

The profits earned by the NBFIs should be allocated among their equity and deposit holders, in accordance with a certain predetermined formula, after providing for reserves which will have to be built to serve as a cushion for net losses which may be incurred in certain years. The NBFIs may also be allowed to build a "profit stabilization fund".

The existence of a large number of medium-sized NBFIs should, through competition among them, induce greater efficiency in the management of *Mudārabah* funds and also honest reporting of profits. More *Mudārabah* funds may get diverted to institutions whose performance has been better, thus ensuring the transfer of real economic resources to their most efficient uses. In the interest-oreinted capitalist banking system, the depositor plays a passive role in the efficiency of the banking system, because banks normally pay a more or less uniform rate of interest which is considerably smaller than both the interest earned by them and the profits earned by the borrowing enterprises. This results in a tendency to provide funds to larger borrowers with a "high" credit rating and to serve the "vested" interests of bank-controlling families, contributing substantially to unhealthy concentration of income and wealth.

Since the NBFIs will be under the market compulsion to declare a competitive rate of return on their shares and *Mudārabah* deposits, there will be a natural urge on their part to demand from the users of their equity and *Mudārabah* financing a high rate of efficiency in the use of funds. Thus it is not realistic to assume that in an interest-free banking system the *Mudaribs* will cheat the NBFIs by declaring lower rates of profit. If any *Mudarib* resorts to such practice he will tend to deprive himself of *Mudārabah* financing. Since such financing may be an important source of funds for most businessmen, agricultural and industrial entrepreneurs, they could hardly be expected to resort to such a self-defeating policy.

To reinforce further the above-mentioned deterrent against dishonesty in declaring profits to the NBFIs, the accounts of firms financed by NBFIs could be made subject to a random audit by the Investment Audit Corporation (IAC). The IAC may also audit the accounts of customers specifically referred to by the NBFIs, particularly those with whose profit reporting they are not satisfied. The IAC could also audit the accounts of firms referred to it by any of the firm's financing partners. Exposure to such audit should serve to keep the users of equity and *Mudārabah* funds on the alert.

However, there is one factor which will almost certainly act against honesty in the reporting of profits to or by the NBFIs. This is the unrealistic tax system with unduly high tax rates forcing businesses to maintain two sets of accounts. Hence it would be necessary to rationalise the tax system so that it does not have a built-in incentive to cheat the Government, the banks, and the NBFIs.

The suggested scheme of NBFIs could be suspected of leading to a concentration of wealth similar to that brought about by banks in capitalist societies. The danger of concentration through the inverted pyramid of loan-equity financing and the availability of large resources to privileged borrowers will have been removed. However, the danger of concentration of power attained by NBFIs would remain, but this could be substantially reduced by a number of measures.
Firstly, the number of NBFIs should be large and none should be allowed to expand beyond a certain limit determined by the central banks. Secondly, they should be required to provide financing to a large number of entrepreneurs and not to provide more than a small proportion of their resources to any one business or family. Thirdly, they should not be allowed to acquire a controlling stock in any business. Fourthly, none of the NBFIs' directors should be allowed to become a director in any other business. Fifthly, their effort should be to bring financiers and entrepreneurs together so that they do not themselves hold the equity for a long period. And lastly, their own equity should be broadly distributed so that any specific individual or family or group does not have a controlling ownership in these institutions. Other specific measures may be adopted by means of well-conceived and properly enforced laws to ensure that the NBFIs do not lead to concentration of wealth and power.

3D. *Specialized Credit Institutions*

Both the commercial banks and the non-bank financial institutions will be profit-motivated institutions even though within the social welfare framework of Islam. Hence small agriculturists, cottage industries operators, artisans, taxi and truck drivers, etc. who may need to be encouraged and supported by credit availability, may be left out. The Islamic injunction of reducing inequalities of income and wealth may necessitate the extending of credit to such sectors as well. For this purpose specialized credit institutions should be established by the government or altruistic organizations to extend either *Mudārabah* advances or *Qurud Hasanah*. Resources may be provided to such institutions by the central bank out of the newly created high-powered money as indicated earlier. They should finance their expenses from the *Mudārabah* share in the profit or the service charge levied on their *Qurud Hasanah*.

3E. Deposit Insurance Corporation (DIC)

Mudārabah banking, if allowed to take root, should prove to be as viable as the capitalist banking system. But it is possible that demand depositors who will not be sharing the profit of the *Mudārabah* banks, may be apprehensive of the apparent, though not real, risk of erosion of their deposits through losses suffered by the *Mudārabah* banks and may prefer to hoard their savings. Since this is not desirable, it would be helpful if demand deposits are protected against such risk. A deposit insurance scheme should, therefore, be an integral part of the Islamic banking system. A deposit insurance corporation (DIC) should be established to insure demand deposits at the commercial banks.[30] The corporation should not, however, insure *Mudārabah* deposits at either the commercial banks or the NBFIs.

Would this discourage *Mudārabah* deposits in favour of demand deposits? The prospect of losses on corporate securities has not reduced investments in corporate securities in spite of the unhealthy and destabilizing speculation in stock markets. Since fixed-income, interest-oriented earning assets will just not be available in an Islamic economy, the alternative to *Mudārabah* deposits and equity will only be demand deposits yielding no return. Moreover, for reasons given earlier as well as because of the establishment of a profit-stabilization fund, *Mudārabah* deposits would be preferable to demand deposits, as they could normally be expected to earn a positive return. However, even if it is assumed that demand deposits will be preferred the volume of investment funds will not decline because these funds could be utilized productively by the government and the banks.

The DIC should be an autonomous, non-profit government-sponsored organization operating under the supervision of the central bank. Its capital should be wholly provided by the commercial banks. It should be self-sustaining with no budgetary appropriations from the government, except in the initial phase when it may receive an interest-free loan from the government, to be repaid out of reserves by the DIC over a period of years. This will be a service rendered by the government to the banking system, partially in return for the interest-free loans it will be receiving and partly due to its obligation toward the establishment and success of the Islamic banking system.

The DIC income should consist of (a) assessments on all commercial banks at the rate of a small percentage of the average total of demand deposits after allowing for certain exclusions and deductions, and (b) income from investments of its reserves. The government should pay the premium on the proportion of demand deposits it obtains as an interest-free loan and the central bank should pay the premium on statutory reserves. Premium rates should be on a "straight" assessment basis with rebate allowed for good performance to encourage healthy banking practices. The deposit insurance fund accumulated through such assessment would be available to meet future deposit insurance claims and related losses. Its adequacy to meet these future requirements would depend upon the soundness of the insured banks and adverse factors such as unfavourable general economic conditions.

Initially, the limited means at the disposal of the DIC would compel it to set a limit on the amount of deposits it insures. This fits into the scheme because the DIC will be

30. The suggestion for deposit insurrance has already been made by some Muslim scholars. See for example, M.N. Siddiqi, *Banking Without Interest* (Lahore 1973), pp. 45-47; and A. Najjar, *Al-Madkhal ila al-Nazariyyat al-Iqtisadiyyah fi al-Manha al-Islami,* (Beirut, 1973), pp. 125-53.

able to provide coverage to all small depositors. The limit may be raised later when the reserves of the DIC have risen sufficiently, provided this is considered to be in the interest of serving the socio-economic objectives of Islam.

Since the DIC would be a non-profit organization financed by the commercial banks themselves, it will be a truly mutual or cooperative insurance company. It would hence be fully acceptable even to those who find certain types of commercial insurnace unacceptable from the *Sharīʿah* point of view.

3F. *Investment Audit Corporation (IAC)*

This should also be a government-sponsored organization constituted in the same manner as the DIC. Its main objective should be to audit the accounts of Mudaribs who have obtained funds from others directly or through commercial banks and NBFIs, whether in the form of equity or *Mudārabah* advances. The objective is to safeguard the interest of financial institutions, depositors, and equity holders. Since it is not possible to carry out the audit of all the users of public funds, the IAC may carry out the audit of a random sample of *Mudāribs* or those specifically referred to by Ashab al-Mal, financial institutions or investors. Such audit will keep the users of equity and *Mudārabah* funds on their guard and create a deterrent to under-reporting of profits, provided of course that, as mentioned earlier, the structure of tax rates is rationalized.

The creation of IAC would save the individual financial institution the need to hire a large staff of auditors. It will thus create substantial economies in expenses for all financial institutions. It will also provide an assurance to investors, who provide their funds directly to businesses that, in case of need, they will be able to have the accounts properly examined by a qualified, impartial institution.

All the expenses of IAC will be shared by the financial institutions in accordance with some formula which may be based on a general charge on their total *Mudārabah* advances and equity investments and a specific charge on the special cases audited for them. Individual investors referring any specific business for audit may be charged a service fee depending on the nature and extent of audit required.

The creation of IAC would answer the major, though invalid, criticism against the Islamic banking system that it would require each banking institution to hire a large staff of auditors and would make bank management very expensive. In the absence of such staff, it is argued, the banks would not be able to determine the accuracy of accounts. The market forces, as argued earlier, would automatically take care of this problem, but nevertheless, the creation of IAC would further safeguard the interest of investors.

4.

MONETARY POLICY

Given the abolition of interest and the non-availability of interest-based tools of discount rate and open-market operations, the variable in terms of which monetary policy should be formulated in an Islamic economy is the stock of money rather than the level of interest rates. The immediate target of monetary policy should be to make the supply of money consistent with the needs of the economy at full employment with stable prices and balanced ecónomic growth. The objective should be to ensure that monetary expansion is neither "inadequate" "nor excessive" but in step with the capacity of the economy to supplly goods and services.

While this strategy does recognize the importance of regulating the stock of money for attaining the economy's goals, it does not imply that monetary policy alone can ensure the realization of the desired goals. All other state policies, including fiscal and incomes policies, must converge in the same direction and make a positive contribution.

Since monetary expansion depends primarily on the availability of high-powered money, the central bank will have to adopt measures to regulate the flow of high-powered money. The three main sources of high-powered money are government fiscal deficits financed by borrowing from the central bank, central bank credit to the commercial banks and balance of payments surplus depending on the extent to which it is monetized domestically. It has already been indicated that the central bank should determine annually the desirable growth in money supply (M) in the light of national economic goals. To the extent that the desired growth in M demands the creation of a given amount of high-powered money (M_0), the central bank should do so and make this available to the government, the commercial banks, and the specialized financial institutions.

This necessarily implies that in the Islamic system, as in any other system, the existence of harmony between the government and the central bank in their commitment to a consistent set of objectives would be indispensable. In addition, there would have to be mutual cooperation between them for the realization of these goals. Unless the government is determined to have price stability as an indispensable goal of policy and to regulate its spending accordingly, it would be impossible to have an effective monetary policy.

It is not being claimed here that private demand for money can be forecast accurately. All that the proposal implies is that, given the capacity of the economy to generate a certain rate of real growth, the central bank can and should estimate, within a margin of error, the target range of growth in money supply. Since projections may not always turn out to be true, the target would always need to be kept under review and revised in the light of changing circumstances. Central bank credit availability to the government and the financial institutions would need to be changed in the light of changing circumstances. It may also be possible to consider the simpler Friedman rule of adopting a fixed annual rate of growth in M in keeping with the secular growth in output to avoid the frequent 'tinkering' which is otherwise necessary.[31]

If high-powered money is appropriately regulated at the source, the non-availability of the instruments of discount rate and open market operations should not create any problems in the management of an effective monetary policy. The necessary minor adjustments in the ability of commercial banks to create money may be brought about by way of (a) changes in central bank credit available to commercial banks, (b) the use of statutory reserve requirements to freeze or release whatever portion of commercial bank reserves is considered necesssary in the interest of monetary policy, and (c) a ceiling, if necessary, on total commercial bank

31. Milton Friedman. A Program of Monetary Stability (New York: Fordham University Press, 1975), pp. 90-91.

credit to the private sector to ensure that monetary expansion is consistent with that considered desirable.

However, the regulation merely of the total volume of monetary expansion, though necessary, would not be sufficient to realize the overall goals of an Islamic economy. It would be necessary also to ensure that its sectoral distribution is consistent with the national plan and that its distribution among businesses is equitable and in harmony with the Islamic goal of socio-economic justice. Dependence on blind market forces may not be conducive to the attainment of this objective. The central bank would have to play a more active and positive role. It would be futile to look for guidance in this field in the practice of capitalist central banks. The Islamic central bank will have to be innovative in this field and explore the possibility of achieving its goals through appropriate guidance, selective credit controls, incentives, penalties and intervention. It would be its ideological responsibility to ensure that (a) sectoral allocation of credit is consistent with the goals of an Islamic economy: (b) the benefit of credit goes to an optimum number of businesses in society; and (c) credit allocation leads to production and distribution of goods and services needed by the mass of society. Such a value-oriented redistribution of credit is indispensable in an Islamic society because credit comes out of funds belonging to the public and should be allocated to help realize general social welfare.

Thus the tools of monetary policy in an Islamic economy will consist of:

1. Determination by the central bank of desirable growth in high-powered money and making this available to the government, the commercial banks and the specialized financial institutions.[32]
2. Availability of a certain proportion of demand deposits to the government on payment of service charge equivalent to the cost of mobilizing these deposits and rendering the related services.[33]
3. Statutory reserve requirements whereby commercial banks are required to hold a proportion of demand deposits as statutory reserves.[34]
4. Ceilings on total credit to ensure that total deposit expansion is within the range considered desirable for achieving the target growth in M.
5. Selective controls to ensure that total credit as well as its distribution is in accordance with the country's welfare-oriented plan and the goals and values of Islam.

Even if it is possible to control inflation in an Islamic economy, will it be possible to overcome a recession? What if prospects for making profit are dim and the commercial banks and the associated private sector are not willing to expand their *Mudārabah* investments? It is, of course, true that the central bank can only make its credit available, it cannot force the private sector to invest when business prospects are not bright. Under such circumstances the government can always review its

32. The total size of high-powered money created by the central bank as well as the proportion allocated to each of the three claimants will be determined by the goals and state of the economy and the dictates of monetary policy. The share going to the government will be an interest-free loan while the shares going to the commercial banks and the specialized institutions will be *Mudārabah* advances.
33. The proportion of demand deposits used by the government may be varied in accordance with the dictates of monetary policy. In a period of recession, the government may use a higher proportion than that in conditions of full employment.
34. The proportion of these used by the central bank for income earning purposes may also be varied in accordance with the dictates of monetary policy.

expenditure programme and arrange to spend a greater proportion of the desired increase in high-powered money through its fiscal deficit.

The external sector can no doubt create movements in money supply through capital flows. These movements may be due to a number of reasons which it is not possible to examine in this paper. The most disturbing capital movements are the 'hot' speculative capital flows, and these should not be a problem for an Islamic economy. For Muslim countries having a strong balance of payments position, there would be little likelihood of hot capital inflows arising from interest rate differentials, because demand deposits would pay no interest and time deposits would not only be equity-oriented and committed for relatively longer periods but also accepted by financial institutions only if they could be gainfully absorbed in a profit-sharing framework. Hot money inflows due to prospective currency appreciation could be discouraged by disincentives, taxes and controls. The mandatory price stability in an Islamic economy should also help minimize current account deficits and the resulting currency depreciation and capital outflows.

5.

THE MODEL AND THE GOALS

The question now is how the proposed scheme of money and banking will help an Islamic economy achieve its goals.

The money supply will be regulated by the central authority in accordance with the needs and goals of the Muslim society. The growth in M will be regulated to foster the goal of attaining a high but realistic rate of growth within the context of price stability. This target growth in M could be achieved by generating the required growth in high-powered money through a combination of fiscal deficits and central bank lendings to financial institutions. There could, however, still be a relative "excess" or "deficiency" in monetary expansion because of the effect of a number of variables which are difficult to predict or control. Such excesses or deficiencies could be evened out with the help of central bank *Mudārabah* advances to commercial banks, statutory reserve requirements and ceilings. In addition to regulating the size of the monetary stock, the central bank would also try to influence the allocation of credit so that it is consistent with the goals of the economy, particularly the goal of socio-economic justice and equitable distribution of income and wealth.

The created money or the "seigniorage" resulting from it will be transferred to the public exchequer, to be utilized for financing projects which help eradicate poverty, attain a high rate of economic growth and low rate of unemployment, and further socio-economic justice. Thus the implementation of this scheme will help reduce concentration of wealth to the extent to which it is brought about by the commercial banking system.

The government financial problem would also be solved partly because, firstly, additional resources in the form of created money or "seigniorage" will be made available to the government and, secondly, a certain proportion of all commercial bank demand deposits will be directed to the government. The service charge on the latter will be considerably smaller than the heavy interest burden in the interest-based system which makes the rich richer, through interest receipts, and the poor poorer through additional taxes levied to service the public debt. Moreover, since a preponderant part of the financial needs of businesses will come out of equity, there will be no fixed interest element to be added by firms to the cost of goods. This will help bring about a just distribution of the total profit between the borrower and the lender (*Mudārib* and *Sahib al-Māl* in the Islamic framework). It need not, however, necessarily bring about a reduction in price which will be, under normal circumstances, determined by market conditions, and will include the market-determined (positive or negative) return on total equity.

The need to participate in profits and losses would compel financial institutions to be more cautious and to provide financing to the most "productive" users who could provide a high rate of profit. This is not so in interest-bearing loans because the rate of interest is lower for "prime" borrowers. The allocation of resources will, therefore, be optimal, and a part of the higher profit will go to society through the central bank's share in the profits of the commercial banks on "derivative" deposits. In the capitalist banking system, the ability of the "prime" borrowers to get funds at a "lower" rate of interest has a built-in tendency towards concentration of wealth and a less than ptimal use of funds.

Moreover, since the banks and the NBFIs would participate in profits and losses, the success of the business financed would be dear to them and they would not behave like bankers "who are willing to lend umbrellas when it is not raining but withdraw them as soon as it starts raining". Therefore they will not contribute to business failures in the way that the interest-based commercial banks unconsciously do.

Thus it appears that the proposed scheme would operate to the advantage of the economy and help the Islamic State realize its short as well as its long-run social and economic objectives.

6.

THE TRANSITION

By what procedure and time-table could the capitalist banking system prevailing in Muslim countries be replaced by the interest-free Islamic banking system? It would be a mistake to try to achieve the transition in one stroke over a very short period of time. Such an attempt could suffocate the whole system and do great damage to the economy and ultimately to Islam. The transition should be gradual and by stages running over a sufficiently long period of time. There should be no qualms about this, because Islam has enjoined the use of understanding and wisdom in the enforcement of Islamic teachings and the Prophet (peace be upon him) has by his own example encouraged gradual transition. However, what is absolutely indispensable at the very initial phase is that the Muslim Government rekindles the flame of its own commitment to Islam, takes all appropriate measures to raise the moral consciousness of society, and improves business ethics in accordance with the moral code of Islam. Although this is unavoidable, the establishment of the Islamic money and banking system need not wait until a morally conscious ideal Muslim society has been brought into existence.

The first step that needs to be taken is to establish the institutional framework indicated above, which includes: orientation of the commercial banks into the new system, establishment of the auxiliary institutions, namely, the NBFIs, the DIC and the IAC, and the rationalization of the country's tax system. These auxiliary institutions should be established under government patronage and encouragement. The second step which would need to be taken simultaneously with the first one is to raise substantially the equity/loan ratio in the economy to undo the existing capitalist pattern. All businesses-corporations, partnerships or sole proprietorships - should be required to increase gradually the equity proportion of their total finance and to reduce their dependence on loans such that all their fixed and working capital needs are met out of equity. This will help spread the ownership of business in society and reduce concentration of wealth. However, a necessary counterpart to this step is the reorganization of the stock market along non-speculative Islamic lines such that stock and share values change rationally as dictated by economic factors and not erratically under the influence of irrational speculative forces. The third step would be to eliminate interest from government-sponsored specialized institutions operating in various sectors of the economy. The fourth step, would be to convert gradually *all* (irrespective of whether the banks are of domestic or foreign origin) interest-oriented financial institutions into profit-sharing institutions. It seems that the best way to accomplish this would be to compel all financial institutions to bring about a certain percentage decrease in their interest-based loans and a corresponding percentage increase in their profit-sharing loans until the total transformation has taken place over, say, a period of ten to fifteen years.

It seems that such a time-table would be more practical than any attempt to force the accomplishment of the target instantly. The conversion process requires not only experience on the part of financial institutions as well as business firms but also solutions to many unforeseen technical problems which are bound to arise during the process of conversion. Problems will also be faced by the DIC because of lack of experience and know-how in the field of deposit insurance suggested for the profit-sharing banking sytem. Moreover, it is better to slow but steadily successful than to be hasty and unsuccessful. It must be realized that success of the attempt will vindicate the strength of Islamic principles while any failure will only tend to hurt the reputation of Islam.

The interest-bearing domestic debt of the government should be amortized by the government over its period of maturity. Newer loans may be raised in the manner suggested in the model in such a way that the 25 per cent ratio of interest-free government securities portfolio is attained over a period of 10 to 15 years, i.e., the period indicated for the transformation of the banking system. If the total domestic indebtness of any Muslim government to the commercial banks is higher than what the 25 per cent of demand deposit liabilities would allow, it would need to undertake a programme of fiscal discipline to amortize the excess over the 15 year period. Government debt to the private sector, other than that to the banks, should be converted into a profit-sharing arrangement where feasible, and where it is not feasible or desirable to do so, the debt should be gradually retired or offset by means of interest-free loans from the rich.

The question of the foreign debt will still remain. Interest on such debt will need to be paid as a necessary evil. However, the Muslim country concerned should feel itself under an economic and moral obligation to borrow only what is absolutely indispensable. It should amortize the balance of the foreign debt over a period of, say, 15 years. Unfortunately, the debt of some Muslim countries is undesirably high and incurred partly for financing wasteful expenditures. If such borrowing is avoided, the foreign debt need not be too high. If the Muslim country's economy is run honestly and efficiently with healthy monetary, fiscal and incomes policies by a government committed to the Islamic economic system, there is no reason why it would not be able to reduce its dependence on foreign borrowing and attract an increasing volume of equity capital to reduce substantially the proportion of interest-based loans.

COMMENTS

Sultan Abou Ali *(Discussant)*

1. At the beginning allow me to commend this paper for the substance it contains and the multiplicity of issues which it raises. A comprehensive review would take a long time. Consequently I shall try to concentrate on some main issues. The parts on which I shall not comment mean that I am in general agreement with their content.

2. The first part of the paper delineates the main goals of Islamic society and tries to see the role of money and banking in achieving these goals. These goals may be summarized as follows:

   (a) eradication of poverty
   (b) attaining a high rate of economic growth
   (c) low rate of unemployment
   (d) fostering socio-economic justice and
   (e) stability of general economic conditions especially the level of prices.

   These goals are more or less the same in all societies Muslim or otherwise. The basic difference is the articularity of means and objectives behind these goals in the Muslim community. In this respect we agree with the author that Islamic money and banking should not be understood as capitalistic system minus *Ribā*. This, however, should not be understood to mean that we should reject all existing institutions just because they did not grew in an Islamic setting. The human knowledge is a common heritage and we should benefit from it as our former Muslim scholars did with philosophy and physical sciences.

3. Inflation is undoubtedly harmful to the society espcially when it is spiral. To state however that *"inflation tends to 'corrupt' society and to destroy its humanitarian values"* is rather a strong statement. It is known that some inflation may enhance growth especially when there are idle resources.

4. One point I would like to single out in this respect is the injustice inflicted by inflation upon *Ribā*-free lender. This is the injustice inflicted by inflation upon *Ribā*-free lender. This is undoubtedly true when taken as such. This raises the following question: Could we safeguard the *Qard Hasan* in times of inflation from errosion. I would like to introduce for your consideration the idea of indexation of interest free loans. We all know that physical loans 1 kilogram of wheat or corn should be returned the same without any increase. In a monetized economy with diversity and specialization the interest of the lender could be safeguarded through indexation. The amount of the loan could be related to a physical unit according to the lender's preference. The borrower will borrow on the same terms. The principal of the loan will be redeemed indexed whether it will be more or less to the unit chosen with no interest.

5. The proposition regarding house building finance would seem plausible but with one difficulty regarding capital appreciation. The redemption of the loan will be

on the basis of the nominal amount while its real value might be appreciating. Is this acceptable?

6. In respect of resource allocation we agree that *"interestless"* society could optimally allocate its scarce loanable funds among projects according to the highest expected rate of return and other techniques for project evaluation. This also could be preferably achieved on a program and not on a project by project basis.

7. On the subject of banking as a source of inequality the remedy suggested by the paper is public ownership. This proposition it is stated is *"desirable"* though not indispensable for the model. Three basic points may be interjected here.

   First: economic inequalities in the society are a result of several factors and not only due to the banking system.
   Second: the correction of these inequalities could be achieved through allocative as well as distributive instruments.
   Third: the terms of trade between efficiency and equity considerations (if they exist) and their effects on the total welfare of the society should be assessed.

   In view of these factors and the experience of public enterprises in many developing countries it seems to me that public ownership of banks is a less efficient solution.

8. Another point raised in this respect is the capital structure of the bank. Increasing the equity/loan ratio would be acceptable if individuals of the society are willing to bear higher risks. Even in a Muslim community we shall find a sizeable portion of people who are not ready or able to accept such risks. It is an obligaion incumbent on the Muslim society to devise for those people a system which would afford for them both incomes and liquidity with high degree of certainty and of course in conformity with the general Islamic principles.

9. The author suggests greater reliance on equity for mustering additional financial resources rather than borrowing. This is a good proposition. The only question which needs more discussion on this point is the effect of such measures on capital deepening in the society. This comment also applies to the suggestion of a sane stock market. But does purchase of equity out of borrowed funds negate its sanity? More important in an Islamic society is borrowing limited to finance basic needs or could it be for financing other purposes such as purchase of equity? Does not this limitation curtail competition and the drive for achievement in the society and consequently retrads its growth? We also question the objective of not permitting the sale of stocks before being kept for a certain period unless there are extraordinary conditions. We however agree on forbidding the sale of stocks which are not in possession of the person to comply with *Shari'ah.*

10. Furthermore, if banks are allowed to accept deposits from the public why should they not be allowed to acquire stocks out of it? The proposition that commercial banks should not be allowed to create deposits is equivalent to 100% reserve ratio to deposits. This proposition negates one of the main functions performed by commercial banks in the present capitalist system. Such a suggestion could be accepted if the Muslim community had achieved a high degree of development and would prefer to avoid the dangers of hyper inflation. It will not be sustained,

however, if growth considerations benefit the society greater than equity considerations.

11. With respect to credit creation, I would like to differ with the author in limiting this function to the central bank. In his model, as in the present day organisation as admitted by the author the central bank is the pivot of the Islamic banking. It is the institution which controls and manage the monetary policy. How could it perform this function if it is the organ which creates money. Moreovr if the central bank cannot manage and control the creation of credit when it is done by the commercial banks we wonder how the situation will be when it plays the double role?

12. It seems to me that a fundamental assumption in the paper is that inflation is basically a monetary phenomenon. This assumption is not generally accepted theoretically nor substantiated by th experience of many countries I am afraid that the proposed organisation may enhance inflation.

13. The third institution in the network is the Non-bank Financial institutions. The definition of this group is not quite clear to me. They are meant to be *"a range of institutions that would mobilize savings and idle funds to make them available to prospective investors"*. According to this definition they would be specialized banks (whether agricultural, industrial, foreign trade, etc.). A usual example of NBFI is insurance companies. Such institution in the regular course of their activities would mobilize substantial amount of funds.

    The paper also requires that *"such institutions should be privately owned"*. I fail to see the reason for this.

    On the CD to be issued by the NBFI the scheme of redemption suggests repayment of nominal value at expiry date and the coupon *"when the profit has been declared"*. We may ask here what will happen if the NBFI incur losses? This suggestion may also raise some doubts about the existence of *riba*. A better organization may be shares instead of CD's. These shares would be traded in the financial market and the appreciation or depreciation would be reflected in the value of the shares. This is the case of investment trust companies.

14. If the NBFI has no profit sharing agreement with an applicant it may still grant credit to its regular customrs against a "service charge". I feel uneasy about the terms *"service charge"*. Unfortunately in not a few cases *riba* has been practised under this term. But whom are we deceiving? The order of magnitude of their service charge deserves consideration. I might suggest that this should not exceed 0.5%.

15. The *"profit stabilization fund"* suggested is a common practice among shareholders. When this is also applied to a guaranteed minimum rate of profit to deposit holders it needs further consideration. Deposit holders are tied to the company by a time horizon while this is not in principle the case with share-holders. Appreciation or depreciation of assets would be reflected on share-holders. The GMRP for deposit holders would be a form of *riba* since they do not bear any risk.

16. The fourth group in the model is the Deposit and Loan Insurance Corporation.

It is a good idea to extend security especially for small investors. The type of organisation of this group deserves further research and discussions. With regards to the powers to be granted to the DLIC it seems to me that the provision that commercial banks insure their deposits and loans should be optional and not compulsory especially if the premium is to be fixed by DLIC themselves as suggested by the author.

17. The third part of the paper summarizes the issues with respect to monetary policy and we have already commented on them. Three additional comments however are in order. *First* this is with regard to the simplicity of the suggested model. The stability which would result from the model may be due to the limitations imposed on the money supply and the simplicity of the proposed financial market. We would like to see some assessment of the effects of this simplicity on growth as compared to a more elaborate and specialized system. *Second* there seems to exist a bias against loans in the model. This bias could not be substantiated by *Qur'anic* principles to the contrary we can find many instances where *Qur'an* mentions loans. *Third* regarding speculation in the stock market a reasonable amount of it is useful. Its complete elimination might lead to stagnation as well as its excess will lead to destruction. We should not forget that trade is to some extent speculative but we never asked for its abolition.

18. In conclusion the paper contains excellent insights especially with respect to social justice and the elimination of the concentration of wealth. A main feature of the model is to minimize the size of financial assets. These assets are one source of inflation in the industrialized countries. However capital deepening through the expansion and diversification of financial assets and institutions could give the developing countries a big push in real terms at its early stages of development. Since most of the Muslim countries are developing countries and capital short the suggested model needs a reconsideration to rectify this matter.

Dr. Syed Nawab Haider Naqvi

The main thrust of Dr. Chapra's paper states a basic truth: the money and banking system as practised in the capitalist world is not ideologically neutral and will not become Islamic just by the abolition of *Ribā,* and if I may add, with the addition of profit-sharing. This calls for a fundamental restructuring of the banking system. This point of view, at a general plane, must be accepted as axiomatic. After all, economic entities, like mathematical structures, are complete, self-sufficient units. Elements of one system cannot be arbitrarily transplanted onto another system. To take an example from elementary mathematics: it is universal truth in Euclidian geometry that the sum of interior angles of a tringle is equal to the right angles. This truth is completely false in the context of non-spherical geometry. What holds for mathematics holds even more for social sciences, where social organisms tend to reject antibodies with great vehemence. But this is not to say that different economic structures, of which the banking systems are only a part, will have nothing in common.

There is yet another point in Dr. Chapra's paper: he takes full cognizance of the fact that money is a public good - not a "pure" public good - and hence its creation cannot be left to the whims of the "invisible" hand. It must be consciously controlled. This observation is part of a general principle, not noted by Dr. Chapra, of the theory of public goods. According to accepted principles of fiscal economics, the existence of public goods provides a valid case for state intervention.

So far so good. But then comes the question of relating the banking sector to the processes of saving and investment. As for saving generation, Dr. Chapra clearly states that the channelling of the savings be directed by some State financial institution. According to Dr. Chapra, profit-sharing and equity participation will provide the mechanism for such channelling. And it is on this point that I must differ from Dr. Chapra. For he apparently does not carry his own thinking to its logical conclusion. The process of money creation cannot be carried on in a vacuum. To think of public control of money creation, without a corresponding control of the production sector is bound to lead to contradictions, both at a theoretical as well as at the practical level. This is particularly so in the field of the capital goods sector. In a capital-scarce economy, capital goods are a public goods *par excellence.* Hence the creation and the allocation of capital goods must also be the responsibility of the state. At any rate, this follows directly from Dr. Chapra's point of view on the allocation of savings through a central authority. If savings are allocated through a conscious process, so must investment, which, in a dynamic set up, being simply the derivative of capital stock with respect to time, must equal saving in order to avoid excessive business fluctuations. Dr. Chapra does not seem to be aware of this basic implication of his analysis. The implication that the so-called 'invisible hand' of the free markets (do they exist!) operating through the saving nexus, goes out of the window. And no tears need be shed by Muslim economists on the demise of the invisible hand. After all, Adm Smith, whose brain child it was, is not our Adm!

I am certain that Dr. Chapra, if only to remain logical must agree with my earlier submission that the allocation of capital goods should be done by the state planning authority in order to ensure an optimal allocation of resources as well as to adequately reflect the scarcity price of capital.

Now I come to the second point: and this is regarding the profit motive. This is the hobby-horse of Muslim economists; but, with due respect to the sentiments of my colleagues, I will keep on flogging it whenever I get a chance of doing so. Dr. Chapra says that "the higher the rate of profit the greater will be the ability (of investors) to secure funds". This rule cannot be applied optimally. What would prevent the monopolists and the oligopolists - who infest the developing countries as a general rule - from "cornering" most of the investible funds? What will happen to the marginal investor - not earning anything more than normal profits as defined by Marshall and accepted since then by the economics profession as a reward to the entrepreneurial contribution? Not earning any excess profits, by comparison with his intramarginal competitors, he would surely be the most starved creature on earth because Dr. Chapra's rule will not let him get his due share. And the fact that he is operationally efficient would not matter. Besides, are the largest private profits a sure-fire indication of social profitability? It is not necessarily so, as every undergraduate who has studied the theory of "market failure", knows well. If it were so, then Adam Smith's invisible hand would have been doing everything and anything. Unfortunately, it has never done so, and economists have known this since the time of A.C. Pigou.

I am afraid an exlusive reliance on (private) profitability will put a discount on projects with a long gestation period, where the private sector being myopic may not fully anticipate potential benefits and over-emphasize the cost of such projects. Hence such activities will be under-expanded, leading to a sub-optimal intertemporal allocation of financial resources. Thus even according to Dr. Chapra, profit-sharing cannot be the sole, or even the most important principle of allocation because the policy objectives mentioned by him may be defeated. A socialization of the banking system has clear implications for the productive system: it also must be controlled, though the private sector and the profit motive cannot be completely supplanted. A dovetailing of the processes of money creation and saving and investment is inevitable if avoidance of excessive inflation should become the main plank of an Islamic ordering.

At the end, I wish to point out that a complete conversion of the banking system to an equity-sharing and profit-sharing basis, as he has suggested, is most likely to make the economic system excessively crisis prone. Any crisis originating either in the productive sector or in the banking sector will be transmitted fully and in fact in a magnified form throughout the economic system. Furthermore, replacing the investment portfolio by a single element, i.e., equity participation, will prevent the bankers from minimizing the risk, particularly in situations of extreme uncertainty.

I therefore suggest that Dr. Chapra had better take a hard look at the clear implication of his analysis, which is essentially correct as far as it goes, for the processes of saving and investment. As a competent economist, he must take his argument to its logical conclusion, if only to avoid contradictions in a general equilibrium framework where the optimal amount of money created must be determined simultaneously with the optimal level of saving and investment.

GENERAL DISCUSSION

1. Dr. Mohamed Omar Zubeir (in his response to an earlier suggestion made by Dr. Sultan Abou Ali that compensation be paid to the lenders based on changes in the value of a basket of goods) points out that the principle of indexation is not allowed in Islam. To support his point, he narrates a Hadith according to which one should pay back kind by kind, i.e., a ton of sugar by a ton of sugar, a ton of wheat by a ton of wheat, and so on. He agrees that transaction is greatly faciliated by the introduction of 'value' but he asserts that the emphasis in the Hadith is laid on the word "kind". Dr. Zubeir says that he would welcome the interpretation by Islamic jurists in this regard.

Besides, Dr. Zubeir explains, indexation cannot ensure that the value of the debt remains constant over a period of time. For a ton of sugar lent now would not have the same value a year from now, as its relative value with respect to all other commodities in the basket would change after one year, while the preferences of the lender may also be different a year later. Dr. Zubeir, however, concedes that indexation would minimise changes in the value although it would not eliminate them completely.

Dr. Abou Ali then responds with a hypothetical example: suppose A wants to borrow a kg. of sugar from B who has only a kg. of wheat to lend. A, then, borrows from B a kg. of wheat which is exchanged in the market for sugar that A wants. Eventually, A returns a kg. of wheat to B. Dr. Zubeir then makes it clear that Islam does not require the guarantee that the value of the principal would remain unchanged, and that the value is unlikely to remain unchanged. He also reiterates that the lender's preference schedule may well be affected by the introduction of substitutes.

Coming to the question of the nationalisation of banks, Dr. Zubeir stresses that this can be considered only as a last resort in an Islamic framework. He asserts that it would be closer to the Islamic spirit of freedom, if the banks can function properly and efficiently in the hands of the private sector. He draws attention to contemporary experiences which have shown that nationalised industries often run into serious difficulties.

2. Dr. Ziauddin Ahmad finds Dr. Chapra's paper thought-provoking and is impressed by several new issues which have been raised by the author. He is particularly intrigued by the proposition aimed at stripping the commercial banks of the power of credit creation, which is the most distinguished feature of the commercial banking system. He observes that such an idea is being proposed for the first time and welcomes it, if only for the reason that it provides an opportunity to ponder on such an important issue before it is taken up seriously by any Muslim country. But he makes it clear that he is not in line with Dr. Chapra on this point.

Dr. Ziauddin has two points to make. First, he thinks that the author has confused 'system' with the 'operation of the system'. For, the author has proposed to create a money and banking system which is non-inflationary and which helps realise Islamic goals.. Dr. Ziauddin stresses that it is not the system but the way in which system is being operated that really matters.

Dr. Chapra's point that capitalistic money and banking system is an integral part of the capitalistic ideology is unacceptable to Dr. Ziauddin, for the author has not specified the objectives of the capitalistic ideology. In this context, Dr. Ziauddin poses the question: can it be deduced that the basic objective of the capitalistic system is to create inflation and income inequalities? Dr. Ziauddin does not think that capitalism inherently creates inflation and income inequalities and recalls that income inequalities in many capitalist countries have gone down. Why they have not gone down to a level acceptable to Islam, is a separate question. The answer may be that these countries did not want income inequalities to be brought further down, but it would be theoretically possible for these countries to bring income inequalities to any level by activating an appropriate set of policies. Similarly, inflation can be contained through appropriate policy measures. Dr. Ziauddin cites the example of post-war Germany where the rate of inflation was only 1 to 2 per cent for more than a decade. The point Dr. Ziauddin is driving at is that it is not the system but the way it is operated that really matters.

The second point made by Dr. Ziauddin is in relation to the author's suggestion that the power of credit creation should be taken away from commercial banks. He notes that the author has given two reasons for this: (i) a small group of families control the vast resources and (ii) the directors usually draw substantial benefits. To Dr. Ziauddin, these arguments are not valid enough to warrant such a drastic move. It is pointed out by Dr. Ziauddin that (a) the commercial banks' power of credit creation is not unlimited in any case, (b) the commercial banks are subject to close supervision and control by the central bank and (c) the possibility of abuse by the directors can be minimised, if not eliminated, by appropriate measures, as is indeed the case in several countries including Pakistan.

3. Dr. Mohammad Ariff does not think that there is anything un-Islamic about Dr. Chapra's proposal to nationalise the commercial banks. But he questions the need for it. He contends that it is perfectly legitimate for commercial banks to create credit even within the Islamic framework, and that concentration of wealth is not a valid excuse for stripping the commercial banks of their power of credit creation.

Dr. Ariff points out that a 100 per cent reserve requirement will reduce the banks into no more than huge safety-deposit vaults. As regards the author's recommendation that the central bank should take over credit creation, Dr. Ariff observes that the author has failed to show how this function can be performed more efficiently by the central bank. He also questions the implications of this for monetary policy: if the central bank were to create credit through deficit financing, it would mean that monetary policy cannot operate independently of fiscal policy.

Struck by the clear distinction that the author has drawn between commercial banks and non-bank financial institutions, Dr. Ariff wonders if it is consistent with the money and banking model envisaged by the author. For the radical changes, especially the elmination of the power of credit creation proposed by Dr. Chapra, will blur the differences between these two types of financial institutions in an Islamic economy.

4. According to Dr. Monzer Kahf, the distinction drawn between a loan-based economy and an equity-based economy is the most salient point in Dr. Chapra's paper. Dr. Kahf is in complete agreement with the author on this. He emphasizes that the capitalist banking system cannot be Islamised by simply replacing interest with profit sharing and that there ought to be radical changes in the structure of the banking system. He points out that the Qur'an draws a distinction not between *Ribā* and 'Loan' but between *Ribā* and 'business'. The point that Dr. Kahf is driving at is that the Islamic economy is one based on equity - an economy where *Qirād* and *Mudārabah* relationships can thrive. He wishes that Dr. Chapra had paid more attention to these relationships in his paper.

   Dr. Kahf sees no reason why the nationalisation of commercial banks should have anything at all to do with the elimination of interest or the reduction of the loan base. Also, he wonders whether a 100 per cent reserve requirement, which the author speaks of, would permit the commercial banks to hold commercial stocks and shares as their reserves. He thinks that this would imply some credit creation, in spite of Dr. Chapra's design to deprive the commercial banks of the power to create credit.

   Dr. Kahf considers indexation as a form of *Ribā-al-Fadal* and says that *Ribā-al-Fadal* should be given as much emphasis as *Ribā-al-Nissiah* is. He sees no justification for indexation in Islam. His argument is that it would inflict losses on the borrower if the loan is kept in liquid form. He thinks that the attempt to compensate one party for erosion in the value of money is unfair and unjust, and it will be redundant if everybody were to be compensated for the sake of justice. He also thinks that no banker will like the idea of interest being replaced with indexation, now that the rate of inflation exceeds the rate of interest paid on deposits.

5. Dr. Mohammad Saqr draws attention to the implications of letting the central bank enjoy the monopoly of credit creation in an Islamic economy. That this will place more resources at the disposal of the government which can then undertake social welfare projects, as the author has suggested, seems to bother Dr. Saqr. His main worry is that it will be difficult to distinguish between investment and social welfare projects, now that the government is free to create as much credit as it wants. His fears that it will be dangerously inflationary. While Dr. Saqr conceeds that the power of credit creation in the hands of the commercial banks is the main source of maldistribution of income, he expresses concern that the transferring of this power to the central bank would create other problems which are no less serious. He raises the question: who will regulate the regulators?

6. Dr. Mabid Al-Jarhi finds that most of the restrictions which Dr. Chapra has placed on the stock market in an Islamic economy are unnecessary, as the elimination of interest would render the stock market relatively stable. His reasoning is that fluctuations in the stock market in a capitalist economy are associated with volatile expectations based on changes in the rate of interest.

   Dr. Al-Jarhi's second point concerns the demand and supply of money in an Islamic economy. He suspects that the demand for and supply of money will be inter-related in a *Mudārabah* system.

7. Dr. Mahfooz Ahmad points out that no bank would advance a total sum five times the deposits received, as the author has mentioned. According to Dr. Mahfooz, advance deposit ratio is normally less than one. He concedes that the fractional reserve ratio system allows the banks to create credit but he also stresses that this does not mean that the banks' earnings are five times larger than what they are paying on the deposits.

   Dr. Mahfooz raises an objection to the idea of depriving the commercial banks of the power of credit creation. He argues that this would mean that the banks will be left with almost nothing to operate with.

A PROFILE OF *RIBĀ*-FREE BANKING

Mohammad Mohsin

1.

INTRODUCTION

Some pundits of Islamic Economics who obviously seem to have been influenced by the tremendous growth of modern banking are of the opinion that Islamic Banks can function with a low rate of interest. After differentiating between 'usury' and 'interest', they claim that a low rate of interest is just in line with the spirit of *al-Qur'an.*[1] And there are some Islamic jurists and economists who are of the view that it is the "compound interest" and not the "simple interest" which is forbidden in Islam. That Islam has prohibited interest regardless of the form or the rate has been made unambigiously clear in *al-Qur'an* and *al-Hadith.* It is also clear that the distinction between "usury" and "interest" found in the English language is completely alien to the Islamic ideology.

However, doubts have been raised about the viability and ability of Islamic Banks to function free of interest. Can the newly established Islamic Banks co-exist, compete and survive with the modern banks based on interest? or will the Islamic Banks ultimately concede to world financial pressure? What should be the *modus operandi* of Islamic Banks for inter-bank dealings as well as in performing other banking functions?

These questions are not new but are posed in a novel setting. The purpose of this paper is to answer these questions; and to define and state the scope of *Ribā*-free banking in the context of modern banking and financial practices. It will also be shown that a socially, economically and financially viable model of *Ribā*-free banking based on sound banking principles can be carved out.[2]

A model of *Ribā*-free banks must, however, meet two basic requirements. First, it should be based on the Islamic shari'ah, and second, it must meet all the requirements of sound banking.

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1. Ulgener, Sabri F., "Monetary Conditions of Economic Growth and the Islamic Concept of Interest", *The Islamic Review,* Vol. 52, No. 12, pp. 4-7. Also see: Austroy, Jackques, "Non-Muslim Scholar Approach to Islamic Key Problems - Economic Development, *Islamic Review,* Vol. 56, No. 2-3. February - March, 1968, pp. 30-31."

2. In this study the abbreviations RFB is used for *Ribā*-free Bank (Islamic Banks or banks without rate of interest). The term "modern banks" is used for interest-based counterparts.

2.

SHARĪ'AH FRAMEWORK OF *RIBĀ*-FREE BANKS

In terms of the *Sharī'ah Ribā*-free banking will be based on the principles of *Mudārabah,* or "mutual funds" where the share-holders, depositors, investors, borrowers and employees of the bank will be sharing the fruits of the system. The guiding principles of operation shall be based on the Qur'anic injunction: "Allah permitteth trading and forbiddeth usury". [3]

"Trade" covers all types of spot transcations in finance, commerce, agriculture and industry including manufacturing and distribution. While Islam has encouraged such trade, it has prohibited gambling, extravagance and usury.

The present analysis is based upon the interpretation that Islam forbids all types of interest compound or simple, and that the RFB will neither accept nor pay even the lowest rate of interest whatsoever. But this should not be taken to imply that Islam forbids business on credit. Indeed, Islam prescribes a code of conduct for such credit transactions. For example, the following verse lays down a moral constraint on the part of the lender:

> "And if the debtor is in straitened circumstances, then (let there be) postponement to the time of ease; and that ye remit the debt as alms giving would be better for you if ye did but know"[4]

At the same time *al-Qur'an* directs to ensure safety and security in credit transaction as is evident from the following:

> "O ye who believe! When ye contract a debt for a fixed term, record it in writing. Let a scribe record it in writing between you in (terms of) equity. No scribe should refuse to write as Allah hath taught him, so let him write, and let him who incurreth the debt dictate, and let him observe his duty to Allah his Lord, and diminish naught thereof".[5]

It is clear, therefore, that interest-free credit transactions with adequate safety are permitted in Islam.

It is, however, claimed that interest is such a key factor in all money transactions that people will not "save" and in any case will not part with their liquidity in the absence of interest payments. To what extent saving function is independent of the rate of interest cannot be discussed here. Suffice it to mention that in view of the present usage of interest rates in the financial system, it is observed that modern banks strive to earn profit mainly by making loans and by investing in such securities as government or private bonds. In the process, each bank acquires a portfolio of earning assets including bonds, promisory notes and other instruments, which yield

3. Translation of *Al-Qur'an* 2:275. Ayahs quoted in this study are from the translation: Pickthall, Marmaduke - The Meaning of the Glorious *Qur'an* - Vol. I & II - The Islamic Literature Publishing House, Basavangudi, Bangalore-4 (Idian), 3rd Edn. 1952.
4. Translation of *Al-Qur'an* 2:280.
5. Translation of *Al-Qur'an* 2:82.

an interest income. The banker's choice between "loan" and investment security is a function of "rate of return" and "risk" differentials.

How, then, will it be possible for the RFB to assume "risk" and at the same time deny to itself any expectation of "rewards" or to expect a rate of return without the assumption of risk? In what manner will it cover its costs and earn compensation for the use of funds of others? What should be its *modus operandi* without rate of interest?

In finding solutions to these problems, it should be made clear that Islam fully appreciates the existence of all forms of natural and economic risks in 'trade' and in all types of business activities. But it insists that the 'risk' and 'return' must be equitably shared by all the participants in the productive process.

Modern financial institutions, for safeguarding the interest of various ranks of depositors, have encouraged the use of different types of 'privilege securities' where a class of capitalist is protected against the vicissitudes of business. Islam's denial of interest means that both capitalists and entrepreneurs, whose services are productive and essential, must assume risk and share rewards equally. It does not deny the existence of 'risk' but it encourages its widest diffusion throughout the entire society. This difference in approach, as will be shown in Section 5 of this study, has important bearing on the generation and distribution of economic surplus in a country.

The other part of the problem is related to the feasibility of a banking operation without the use of rate of interest. Is it possible to select assets without rate of interest, especially where the entire world economy is polluted with several structure of rate of interest? To reject the rate of interest is one thing: but to deny rate of interest to others who do not subscribe to the ideology is quite another.

There is certainly a way out. In the first instance, in a 'trading' operation which is quite different from a 'loan' operation, the RFB can be an active or sleeping partner in business without any prior claim on the surplus of the venture. In other words, it is possible for the RFB to enter into various forms of profit-sharing joint ventures.

In the case of loan transaction, the RFB will be allocating the 'risk' and 'reward' among all the member of the group. Thus, the depositors, the borrowers, the shareholders, employees and the RFB itself will be sharing the 'risk' and 'rewards' in proportion to the contribution made by each member of the mutual fund. From this fund it will grant interest-free consumption and business loans. But the borrowers in the group will not be penalised for the use of funds. In fact, the entire group shall bear the cost and shall be benefitted by the improved productivity of the users of capital. As will be shown in Section 4, this can be made possible by several 'Deposits' and 'Loans' Schemes.

It is important to note that Islam has not illegalised all those transactions from where fixed income may accrue without labour. It has made lawful those incomes which accrue from the rent of property including agricultural land. The RFB will, therefore, be free to buy, sell or rent land and buildings and undertake the construction of residential and commercial property. But it will not enter into 'speculation' or 'forward dealings' of any sort. In all avenues of business activities, the RFB will emphasize 'spot' transactions.

Further, as part of its business activity, the RFB will be charging commission and fees for the banking and non-banking services such as use of safe vault, trusteeship, remittances, collection, foreign exchange transmission, etc. These charges will be basd on actual cost of service without any element of 'interest'. Nonbanking activities have become an integral part of modern banks. The RFB will fully exploit the new avenues in non-banking business which have no element of interest rates.

In these several ways, with a given characteristic distribution of its liabilities, the RFB will attempt to structure its portfolio of assets in such a manner as to yield the greatest return, subject to its accepted 'constraints'. Its assets will be divided into two broad classes-earning and non-earning assets. Its earning assets will consist of loans and investment. Its non-earning assets will consist of the total resources which will be partitioned into required reserves (secondary) and excess reserves (primary).

Modern banks make a selection of assets from the available menu of investment material according to their ability to assume risk. The RFB will choose investment avenues according to its own liability characteristics within the framework of the *Sharī'ah*.

Having considered the broad *Sharī'ah* framework within which the RFB can operate, we shall now turn to the details of the *Ribā*-free banking principles which are discussed in the next section.

3.

PRINCIPLES OF RIBA-FREE BANKING

A prudent bank will attempt to minimise risks. But the rate of return is directly related to the 'degree of risk'. Commercial banks are quite sensitive to investment risks because their capital cushion is very thin.[6] Consequently, their investment policy has the following chief characteristics: (a) no item of less than first rate quality; (b) maturity staggered with the average length of deposits; (c) the bulk of funds to be invested in treasury issues, with ample diversification; (d) both the total and average maturity of the fund kept down to a point consistent with the size of the buffer provided by the bank's capital funds in general and its investment reserves in particular. This policy is adopted to insulate the funds against any possible investment risk, irrespective of the composition of deposits.[7]

A similar strategy shall be followed by the RFB, as its operation will not be free from 'risk'. The RFB will look upon its assets as providing first for the safety and availability at all times of the deposits entrusted to it and second, for the best earnings on its capital funds, consistent with such safety and availability. With a view to minimise the investment risks, the RFB will diversify its investment in terms of different types of securities, different firms, different industries and different geographical areas.

The allocation of the resources of the RFB among various categories of assets will be related to the characteristics of its deposits liabilities, i.e., their relative permanence, composition, concentration, pattern of seasonal and other fluctuations, etc.

In the choice of securities modern banks are aided by legal regulations. The purpose of statutory regulations is to safeguard the interest of depositors and shareholders and also to prevent the banks from entering into 'undesirable' social

6. Robinson, R.I., *The Management of Bank Funds,* Mc-Graw Hill Inc. (New York) 1961, Chapter 4-5.
7. Rodkey, R.G., *Sound Policies for Bank Management,* Ronald, (New York;) 1960, pp. 122.

activities. But an important feature of the banking legislation is that there is no uniformity. In the US itself, legislation differs from state to state. These variations are made according to the social, economic and financial circumstances of the countries. But in all countries, within imposed molecular structure and a pedestrian operating technology, banks have found ways and means of participating in money markets without significant statutory constrictions.

The molecular structure of the RFB will be based on the *Sharī'ah*. The RFB shall follow a 'matching policy', just like the modern commercial banks, in the procurement of assets to match the nature of liabilities.

The Islamic Sharia'ah insists upon the institution of a socially optimal banking strucutre. This will be based on the following four criterion: (a) productive efficiency; (b) allocative efficiency; (c) absence of exploitation of depositors, borrowers and other clients; and (d) its adaptability to change with the demand for banking.

Productive efficiency means that the RFB will be operating on commercial principles, maximising its profits. It also means that the social cost of its banking service should be equal or less than the social cost of producing the same service in modern banks.

Allocative efficiency requires that its loan structure does not give rise to inflationary conditions by encouraging extravagance. The loans granted must be safe and secure, especially since the RFB will be using the savings entrusted to it by the depositors without generating funds itself. Allocative efficiency also implies that the overall allocation of resources in the economy should not have any adverse effects on account of the loans being interest-free.

These macro considerations apart, allocative neutrality is needed to ensure a judicious distribution of earnings in the micro sense among depositors, shareholders, borrowers and employees. The RFB will make a fair allocation of profit between all the participants in the flow of funds - depositors, borrowers, shareholders - and will retain a portion of it for its own expansion and growth. In addition, under the profit-sharing scheme linked with salary, a part of the profit will be allocated to the employees.

The third desideratum can be considered a derivative of the second. It will preclude exploitation of the borrowers, depositors, consumers of banking services and the employees of the bank - exploitation usually associated with discriminatory interest rates charged by modern banks. All borrowers will be assessed on their ability to repay the principal. In other words, all the 'admitted' borrowers of the RFB will be treated at 'par'. Thus, the RFB could never behave like a discriminating monopolist. This is a safeguard associated with name and intrinsic nature of business that emerges from the accepted framework of its organisation.

Finally, the RFB must be able to meet the changing technological and economic needs. With the effective mobilisation of savings, greater responsibilities will be imposed on the RFB which requires that resources flow into areas of relative scarcity so as to accelerate economic development. The investment policy of the RFB must be sensitive to changing needs so that it does not in any way impede stable economic growth. This requires that RFB should take shortest possible time to adjust its operation in response to changes in public demand.

4.

A MODEL OF RIBA-FREE BANKING

Within the stated dimensions, the model suggested here specifies the following: range of activities, capital structure, distribution of profit and constitution of the Board of Directors of the RFB.

4A. *Range of Activities*

The main activities of the RFB can be broadly categorized into (i) mobilisation of savings and (ii) investment of funds.

The RFB must, in the first instance, direct its efforts to mobilising savings, not only to accumulate resources but also to change the 'passive forms of savings' in a less developed economy[8] by educating and motivating the masses because:

> "Saving is also a habit, which can to some extent be created by propaganda... people can be persuaded to save in their own individual or family interest."[9]

Thus with a view to catering for people of different ages and income groups and of varying tastes and habits the RFB will be offering a variety of savings schemes. A few are mentioned below:

(i) Demand Deposits: Demand or Sight Deposits are the commonest type of deposits offered by banks in all countries. No interest is paid on these deposits. Charges are levied to meet the cost of the service. Some large banks insist on the maintenance of a minimum balance. The RFB will also levy charges and impose other conditions which are practised by other local banks.

(ii) Profit-Earning Deposits: These will be of two types: i.e., deposit received under the Joint Venture Plan, and deposit received under 'Unit Investment Plan'. Under the Joint Venture Plan, the deposit will be received for a term of 'trading period' which may be defined as one ranging from a week to a year or several years. Those depositing under this plan will share the profit and losses of the RFB only for that trading period. The 'trading period' can be extended at the request of the depositor. The 'Joint Venture Account' holder shall be entitled to a pro-rata share of profit on the basis of effective average balance maintained by him during a specific 'trading period'.

Under the Unit Investment Plan, the depositors will be required either to deposit a lump sum or to make a regular contribution. The deposit made under the Unit Investment Plan will be treated as part of capital of the bank, but it will be refundable at the option of the depositor after the expiry of a stipulated time. The pro-rata profit will be paid to the depositors either in cash or credited to the 'Unit-Investment Plan'.

(iii) Saving-cum-Housing Plan Deposits: A person with specific income can

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8. Duesenberry, J.S., *Income Saving and the Theory of Consumer Behaviour,* Harvard University Press (Cambridge) 1952, p. 9.
9. Lewis, A.W., *The Theory of Economic Growth,* George Allen & Unwin Ltd., (London,) 1966, p. 228.

become a member of the Saving-cum-Housing Plan Deposit Scheme. Under this scheme, in exchange for a monthly subscription, the RFB will give loans to construct or purchase a house. The RFB may also construct houses as per specifications of the clients. The member will be refunding the principal amount in monthly instalment without any rate of interest. But he will be required throughout his membership of the scheme to pay a monthly sum into the 'Unit Investment Plan' explained above. He thus becomes eligible to share in the profits of the RFB and enjoy the advantage of holding double assets at the same time - a house plus Investment Units.

Having considered mobilisation of savings, we shall now turn to the investment of funds so mobilised. The distribution of assets into primary, secondary and earnings reserves is a function of the volume and types of deposits attracted by a bank. The composition of assets of the RFB will therefore be conditioned by the liability characteristics of deposits mobilised, the *Sharī'ah* and the availability of investment opportunities. The investment outlets for the RFB include loans, direct investment, and non-financial business.

(i) Loans: The lending of money is regarded as one of the essential functions of a modern bank. But every bank has its own lending policy and procedure. In the case of the RFB, a number of possibilities exists: (a) lendings to those business concerns in which it has profit-sharing interests; (b) lendings to firms and families under Credit Plan linked with the Unit Investment Plan' and (c) lendings to consumers and business concerns under 'Check-Credit Plan', credit card scheme, etc.

The RFB may provide loans to business concerns on a profit-sharing basis. Alternatively, interest-free loans may be linked to the Unit-Investment Plan discussed earlier. The 'Unit Investment Plan' in this case would act as a 'Revolving Fund' were all members contribute their respective share to a joint fund from which they are allowed to borrow. The RFB may extend a line of credit under the 'Check-Credit Plan', were credit is posted to the Customer's Check-Credit Account. The RFB may also provide a line of credit in the form of a credit card which will enable the holder to buy goods and services from approved merchants. The RFB will not be charging any interest but it will be asking the borrower to become the member of the 'Unit Investment Plan'. A service charge will be imposed on the borrower on the amount of credit utilised (withdrawn) by him.

(ii) Direct investments The direct invesments of the RFB will take the form of equity participation in companies with limited liability and dealings in real estate.

The RFB will be seeking profit-sharing opportunities preferably in companies incorporated with limited liability. In case the profit-sharing opportunities are not available at home, the RFB can serve as a feeder bank to the bigger institutions such as the multi-lateral, bilateral and regional Islamic Banks.

In view of the limited investment opportunities in developing economies, it may be necessary for the RFB to invest in real estate. The RFB can acquire land and construct housing colonies and commercial property.[10] It will be retaining full control over these investments. A part of the real estate can be maintained for rental income and the rest can be sold under 'saving-cum-housing' scheme described above.

10. Mohsin, Mohammad, *Investment of Life Insurance Corporation Funds,* Aligarh Muslim University, 1966, pp. 223.

(iii) Non-Financial business of the RFB: Income from non-financial business transactions accounts for an increasingly significant proportion of the total earnings of modern banks. This is an area where the RFB can be more venturesome, as there is an enormous scope for it within the *Sharī'ah* Framework. Its non-financial business will include consignment, joint venture, factoring, management consultancy, counselling in trade, trust business, safe deposit, and other banking and agency services.

The RFB can enter into consignment business under an agreement with the exporters. Consignment agreements are short-term arrangements where goods are despatched to an agent (say the RFB) for sale, but the ownership of such goods remains vested in the name of the sender (consignor).

When the RFB, as agent, effects a sale, the property and the ownership of goods are transferred to the buyer. Thus the goods will not at any time be the property of the RFB which will however, receive payment for the goods from the buyer. After deducting any expenses incurred together with its own commission, the RFB will remit the balance (the net proceeds) to the consigner. In order to reduce risks involved in the transactions, the RFB can simply take factoring or enter into joint ventures, as explained below.

In factoring, the lender (the bank) underwrites the extension of credit by purchasing the accounts or notes receivable of his clients, typically without recourse to them for any credit losses. Consequently, the factor must take the responsibility for approving credit on sales made by manufacturers and merchants. The customers of these companies are notified that their accounts have been purchased and are payable to the factor on due dates, usually within 60 days. In modern banking, the factor's compensation consists of a commission (usually 1 per cent to 1½ per cent) based in the face value of the purchase receivables and interest.[11] In the *Ribā*-free system, the terms, conditions and commission rates can be modified after eliminating the interest element. In addition to assuming the role of collecting money, the RFB may also enter into a joint venture with the exporter or the supplier of goods. A joint venture is regarded as partnership for a specific transaction, and/or for a specific term, where the resultant profit or loss is shared in the porportion agreed upon.

The venture may take the form of development and exploitation of a patent, where the RFB will be contributing capital for expenses and experiments. More often than not, the RFB venture will consist of trading transaction, e.g., buying a consignment of importd goods.

'Trading' either by consignment, factoring or joint venture involves more risk than the simple 'loaning' which is carried on by the modern banks. The liability structure is accordingly designed to permit assumption of risk, vis-a-vis deposit pattern. But to ensure safety RFB will take following protective measures:

In the first instance, under no circumstances should the RFB indulge in hoarding, speculation and forward transactions, which are prohibited in Islam. Secondlly, its trading should be restricted to products which have stable demand and form the necessities of life, thus avoiding those commodities which are prone to violent price fluctuations. Finally, it would be wise on the part of the RFB to diversify its trading activities. For diversificaion of funds among several consignments and ventures helps spread the risks, although it does not eliminate them.

11. Shay, Robert P. and Greer, Carl C., "Banks Move into High Risk Commercial Financing", *Harvard Business Review*, November/December 1968.

The RFB will have to develop its own technical, managerial and financial expertise which will provide an important input into decision-making on non-financial business matters. This pool of expertise can also be tapped to provide consultancy services to the business clients of the RFB at a fee.

Similarly, for real estate management, a full cadre of architects, engineers, legal experts and real estate managers will be required. The services of the same staff can be utilised in the running of the banks trust business, i.e., the management of the property of others.

Rental from safe deposit vault constitutes an important source of income for the modern banks. The RFB can easily offer this service, as it will amount to fully utilizing the capacity of the watch and ward establishment which it will have to maintain in any case. The RFB can also offer a number of other usual banking services such as remittances, transmission of money by wire and cable, collection, exchange of foreign currency, etc. These services will carry fees without any interest element.

The RFB can extend its operations internationally by linking itself with the already existing multi-lateral and bilateral Islamic Development Banks (IDBs)[12] which provide interest-free loans and outright grants to finance specific development projects. In some less developing countries IDBs have been successful in establishing enterprises on a profit-sharing basis. There will be room for partnership for RFB in such joint ventures. In addition, a 'consortium' of IDBs can be set up to finance various projects thereby proportionately reducing the financial risk of each participating member.

4B. *Optimal Capital Structure of the RFB*

Given the range of activities described above, it is possible to determine the capital structure of the RFB. The question of capital adequacy is important because the RFB has been conceived in this study as an aggressive, growth-oriented institution. The RFB requires adequate capital to meet the growing demand of the clientele and to earn profits for its share-holders.

The operating efficiency of a bank is governed not only by the volume of capital but also by its composition. A bank's capital fund normally consists of capital stock, surplus, undivided profits and reserves. In addition, the capital of the RFB will also include the trading balances of 'Unit Investment Plan' and 'Joint Venture Account'. The capital structure should conform to the ratio of capital to 'risk assets' and the degree of risk.

The proportion of assets held in the form of required reserve is determined by the existing legal reserve requirements against commercial bank's demand and time deposits. Given the *de jure* and *de facto* status of the majority of its liabilities, and given that the bank cannot predict with certainty the future deposit flows, loan demands and actions of the monetary authority, the RFB will have in its portfolio of

12. IDBs can enter into profit-sharing arrangements in setting up new concerns, although the social and political conditions in developing countries may limit the scope for profit-sharing. This might be overcome if IDBs concentrate on the hatching of new enterprises which will eventually be passed on to local interests. IDBs can also sell technical, financial and managerial consultancy services, Moreover, IDBs can introduce the "credit card plan" for the import of capital goods financed by them. This plan will not only ensure effective control on the use of funds, but also generate additional income in the form of commissions from the exporters.

assets a stock of liquidity to act as a buffer against changes in these factors. The RFB may hold this stock of liquidity in the form of excess reserves which will act as an immediate source of liquidity, enabling the RFB to minimise the adjustment problems associated with the re-structuring of its portfolio.

However, experience shows that the commercial banks' exposure to the liquidity demand of small- and medium-sized depositors is, under most circumstances, modest in proportion, predictable in time and, therefore, manageable. Specially in respect of demand deposits, the commercial banks have observed that ordinary money claims (withdrawals) against demand deposit simply roll around the community from one account to another. This indicates that if the RFB could attract a balanced panel of depositors from various economic strata of society and geographical sectors in its area of operation, it could safely re-lend the funds to industry, agriculture and the government on a long-term basis.

4C. *The Distribution of Profits*

It was indicated earlier that the RFB will be operating as a mutual fund and that its profit will be distributed among all the participants. Joint Venture Account depositors, Unit Investment Plan depositors, shareholders, and employees will have claim on the profits of the RFB. The shareholders will have a right to expect a reasonable distribution of the bank profit, after all others have been paid their respective share of profits in proportion to their contribution to the system. It is to be expected that the dividend rate as well as the share of each participant in the system will vary from time to time.

Modern business firms contribute to the employees' provident funds. These funds grow with interest payments credited every year. The RFB employees and other executives will not be deprived of any such benefit simply because the bank cannot enter into any such transactions based on interest. The RFB may offer the following schemes to its employees: (a) Pension Plan linked with Unit Investment Plan; and (b) Profit-sharing Plan with benefit paid in cash or deferred until retirement.

Under the Pension Plan the employees will receive a number of actuarially computed Units which will be a source of income to him in the future. Such funds are contributory, where the employees will pay their share in cash.

In the Profit-sharing Plan the employee will be sharing in the profit of the RFB. He can withdraw the annual profit in cash or he can purchase the 'Units' from the 'Unit Investment Plan' or he may resort to a combination of both. The Profit sharing Plan should offer the employees a continuing incentive to improve the efficiency of the organisation and to increase the profits.

4D. *The Inter-Bank Relation:*

Although banks actively compete with each other, they are mutually dependent upon each other. Banks must have an agreed plan for inter-bank services, especially the following: (a) collection of checks, drafts, notes, trade acceptance, commercial papers, bonds, and other items; (b) investment information and advice, buying and selling of securities; (c) international transfers; by wire or cable and information and aid on foreign transactions; (d) credit information and assistance on loans, including participation in loans; and (e) supply of currency and loans. In addition to these commonly used services, banks frequently give specialised help and assistance to correspondent banks on such matters as appraisals, tax information and advances operating equipment and procedures, training of officers and employees, trust service and other activities.

Inter-bank services and relations are based upon mutual understanding and regard. They are tailor-made and work by crediting and debiting items on each other. Hardly any cash passes on between the banks. the RFB can establish such bank relations without any deviation from its principles.

4E. *The Constitution of Board*

The RFB in this study has been conceived as an institution which will ensure allocative efficiency. This cannot be attained fully without proper balance of control. This calls for a 'balanced' Board representing the various interests such as depositors, borrowers, other consumers of bank services, shareholder, Government, the central monetary authority, etc.

A balanced board, as outlined above, will ensure wide representation from each category of shareholders, each category of depositors and each category of employee.

4F. *Summarised Model of the Ribā-Free Bank*

The RFB model can be condensed in the form of an Income Statement and Balance Sheet item.

MODEL OF INCOME AND EXPENDITURE STATEMENT OF
THE RFB OPERATING EXPENSES:

Salaries and Wages and Other Employees Expenses Expenses on Account:
- Consignment
- Factoring
- Joint Venture
- Trust Business
- Real Estate Department
- Trade and Management Consultancy
- Safe Vault
- Other Banking Business Expenses

Total Operating Expenses

OPERATING INCOME:

Income from:
- Consignment
- Factoring
- Joint Venture
- Trust Business
- Trade and Management Consultancy
- Safe Vault
- Other Banking Business
- Commission from merchants
- Other commission

Total Operating Income (excluding investment income):

Investment Income:
- Dividend from Profit-sharing
- Rents from Housing Projects

Total Income
SURPLUS : Income minus Expenses

PROFIT AND LOSS APPROPRIATION ACCOUNT

- Depositors share in profit
- Borrowers share in profit
- Bank Employees' share
- Reserve Fund
- Shareholders Dividend
- Retained Profit

BALANCE SHEET

1. Capital, Reserve and other Liabilities
   - Authorized Capital
   - Issued and Paid-up Capital
   - Allotted as follows:
     - Government
     - Multilateral & Bilateral
     - Islamic Development Banks
     - Other Regional *Ribā*-Free non-banks
     - Open to public subscription, individuals and institutions

   - Long-Term *Ribā*-Free Loans from the Government
   - Capital Account Balance from Unit Investment Plan
   - Capital Account Balance of Mutual funds
   - Reserve Funds and other Reserves.

   - Deposits:
     - Demand Deposit
     - Joint Venture Account
     - Unit Investment Plan
     - Housing Plan Deposit
     - Government Deposit
     - Inter-bank Deposit

   - Trade Creditors under:
     - Factor Accounts
     - Joint Ventures
     - Consignment
     - Other Trading Operations

   - Borrowings from other Banks
   - Miscellaneous Liabilities

Profit & Loss Account as per last Balance-sheet
TOTAL LIABILITIES

2. Property and Assers:
   Cash in Hand and with Central Monetary Authority of the country
   Balance with other banks
   Advances to Debtors under:
      Consignment
      Joint Venture
      Factoring
      Other Trading Accounts

   Loans and Investment:
   Loans:
      Housing Plan Schemes
      Charge Account Scheme
      Check Credit Plans
      Other Business Loans
      Other Consumption Loans

   Investment:
      Profit-sharing Interests
      Real Estate Project
         (a) Residential
         (b) Commercial

   Other Assets:
      Premises
      Furniture and Fixtures

   Other Miscellaneous Assets:
      Gold + Silver
   Non-banking Assets
   Profit and Loss
TOTAL ASSETS

SUMMARY AND CONCLUSION:

In this study an attempt has been made to present a viable model of Interest Free Commercial Banking. The model assumes that interest in every firm and at any rate is prohibited in Islam. Substitute for rate of interest is suggested not by crude and subtle maneoeuvers to circumvent the prohibition of interest on loans by such devices used in the past as *Bay'al-Wafa* or *Mukhat'tarah,* but by drawing from examples set out by the Prophet (peace be upon him), i.e., resorting to such business partnership as *Muzar'ah, Musaqah, Mugharsah,* and *Qirād/Mudarabah.* The various deposit schemes and investment outlets suggested in this model are based on those methods and practices which are approved by the *Sharī'ah.*

Interest rate in modern banking is said to perform two important functions, i.e., as a means of attracting deposits and as a criterion for determining the investment activities. But empirical studies indicate that there is no direct relationship between the rate of interest and volume and form of personal savings.[13] It now appears that the success of any financial institution in the mobilisation of savings depends upon its ability to meet the taste and requirements of the people.[14] Besides, capital market itself is highly imperfect where 'product differentiation' is based upon salesmanship, advertisement and personal approaches. In such a market it will be possible for the RFB to devise saving schemes distinctly different from those offered by modern banks.

Similarly, the structure of modern commercial banks consist partly of profit-yielding assests such as equities and partly of interest-yielding assets such as debentures and loans. This, again, is related to the banks' circumstances and preferences. In some countries the government has prescribed rules governing the portfolio structure. Banks have on their own, however, avoided marketable securities, since the marketable corporate securities in general, and the ordinary shares in particular, carry additional risk of valuation. This risk is absent in the case of loans, the duration of which can be tailored to match the term of the banks' liabilities and hence their preference for loans.

There is, however, no uniformity in the ratio of loans to equities. It depends on the availability of different types of investment opportunities and also on the circumstances of the banks. There is no standard mixture which can be imposed on the RFB.

In short, the high proportion of interest in the operating income and expenditure flows of modern banking is mainly due to the peculiar nature of the exchange economy which encourage the use of interest and the preference of the banks to indulge in transactions involving buying and selling of *money* at a *price*. Even in an exchange economy, it will be possible for the RFB to select such 'income' and 'expenditure' flows which do not involve the use of interest. It can blend, in other words, its own mixture of 'commission', 'fees' and 'charges' by performing such functions and services without the interest component, without in anyway violating any sound banking principles. The RFB must, however, ensure that the funds do not remain idle. The funds should always be put to work. At the same time, liquidity should be taken care of, and accordingly adequate areas of 'secondary assets' must be found after a careful identification of the nature of the transaction.

Keeping in view the additional constraints involved in interest-free banking, several savings schemes for the RFB have been suggested in this paper. They include Demand Deposits, Joint Venture Plan, Unit Investment Plan and Housing Scheme. Each of these schemes has distinctive character and differ from those offered by modern commercial banks. In this regard, it is imperative to create as much diversity as possible through product differentiation to suit taste and needs of various income and age groups.

Savings mobilised by the RFB will be its liabilities and it must bring in corresponding assets to: (a) meet the *de facto* and *de jure* requirements of cash, (b)

13. Kuznets, Simon, "International Differences in Capital Formation and Financing" in *Capital formation and Economic Growth* - National Bureau of Economic Research (New York) Princeton University Press, Princeton, 1955, pp. 47.
14. Gonner, E.C.K., *Interest and Saving*- Macmillan (London,) 1904, p. 6.

fulfill the expectations of the depositors and borrowers, (c) cover the administrative cost of the banking and non-banking operations (d) yield a surplus to satisfy the depositors and (e) contribute to its reserve for future expansion and growth. These objectives have to be realized within the framework of the *Sharī'ah* and should be consistent with the stage of economic development of the country.

Modern commercial banks solve these problems by dividing their assets into three categories - i.e., primary reserves, secondary reserves and earning assets. Primary reserves consists of cash, balances with central banks, etc. to meet the day-to-day requirements. They are seldom maintained in amount much larger than necessary for routine operations.

Secondary reserves consist of short-term, low-risk and highly marketable obligations that can be converted into cash quickly. Besides ensuring liquidity, the secondary reserves, which mainly consist of treasury bills, also yield some income.

It is true that the RFB cannot have such a wide option to keep all its resources profitably committed in the short period, because government securities and commercial papers are interest-bearing. In fact, short-term loaning will not be easily available the RFB. We have, therefore, suggested short-term trading in consignment and joint ventures as appropriate sources of income for the RFB. These, however, entail greater risks than loans, but simultaneously the prospects of earning profits are good.

In the management of earning assets which will be a source of medium and long-term investments, the RFB will be in a relatively comfortable position. The avenues of investment suggested here include direct investment in business based on profit-sharing, direct investment in real estate, and business, consumption and housing loans linked with the Unit Investment Plan. It, however, appears that direct investment will be primarily in real estate - housing and commercial property - rather than in profit-sharing business, the scope for which is at present limited.

In this manner it has been shown that a viable model of banking without rate of interest can be designed. But there are illusions such as the following passage:

> "The crux of the problem is that, after allowance is being made for such elements as the premium of risk, the objections against interest reduces itself in the final analysis to what economic theory call pure interest, i.e., to an intangible factor. Each time when attacked this factor could freely move in any direction, trying to disguise itself as premium of risk or as a normal profit, with the loan act being changed to trading act. That is why most of the experiments up to the present time focussed attention on limiting rather than eliminating interest. To construct a model of an economy where interest does not exist while the premium of risk and normal profit are tolerated, and then to call it an 'interest-less economy' would be too naive an experiment to rely upon seriously".[15]

15. Ulgener, Sabri F., *op. cit.*

It cannot be denied that under the modern capitalist system and exchange economy it is hard to conceive a banking system without rate of interest; but it is not impossible. However, our task has been made difficult not by the actual prevalent circumstances, but on account of the wrong interpretation of economic values. For example, in carving out a model for an interest-free banking we must make a distinction between 'trading' and 'loaning' operations and between 'real investment' and 'financial investment' and we should be aware of the type of risk associated with them in a static as compared with a dynamic economy.

For example, in consignment business and short-term joint ventures, the RFB will be engaged in actual trading. If the venture is successful, it earns a profit; and if unsuccessful, it bears the losses. Modern commercial banks, in financing trading operations through commercial papers, insist upon a prior claim; interest free banking being residual claimant wait till all charges are paid and a real surplus emerges out of the trading activity.

Besides, the loaning operation of modern banking and the trading operation of the RFB have different social and economic consequences. Loaning operations encourage stock hoarding and speculation. Since expected price increases enhance the profitability of the borrowing firm, the banks risk rating in such cases will be reduced, and the banker will be prepared to renew the loans for further stock hoarding even at reduced rates of interest. Consequently, this expected price-profit spiral suits the lending policy of the commercial banks. In a market economy when the conditions become 'too bad' such tendency is controlled by the direct intervention of the central bank.

In contrast to this, the RFB is not allowed to 'hoard' or 'speculate' in trading. This is likely to produce a better influence on the general price level in the economy. Thus its trading operation must be distinguished from the loaning operation of modern banks in terms of both economic and social implications.

Likewise, an economic analysis be intelligent enough to draw a distinction between 'real investment' and 'financial investment' and the type of risk and rewards. It appears the critics of interest-less economy have failed to draw this obvious distinction. Financial investment simply involves a financial transaction to facilitate real investment. The risk involved in such transaction is related to the paying capacity of the borrower. But the users of capital who borrow to make real investment are not sure of the outcome of their investment decision. In this manner, both 'interest' and 'profit' represent compensation for the assumption of risk, paid out of the surplus generated from the productive process. There is, however, a fundamental difference in their nature and as a factor of economic cost.

Besides, interest and profit have different implications for economic growth. The development process itself has an element of 'uncertainty' and 'risk'. The users of capital who raise funds for real investment are not certain about the result of their investment activities, yet the contractual nature of loan requires that the borrower must pay a fixed rate of interest irrespective of changes in his paying capacity and without knowing the result of his efforts. This prior commitment undoubtedly constrains the productive process. The significance of interest, profit and their relationship within the development process has been very well explained by Schumpeter[16] as follows:

16. Schumpeter, Joseph, A, *The Theory of Economic Development,* Oxford University Press, (New York,) 1961, pp. 210.

"Interest is not, like profit for example,
a direct fruit of development in the sense
of a price for its achievements. It is on
the contrary rather a brake - in an exchange
economy a necessary brake - on development,
a kind of 'tax' on entrepreneurial profit"[16].

According to same time of thinking, profit or economic surplus is itself a temporary phenomenon in a dynamic economy,[17] while interest is a permanent charge that flows to a particular class of people.

Islam recognises the productivity of capital but at the same time does not allow its prior claim on productive surplus. It insists upon a fair distribution of risk and reward. The fixed rate of interest charges on a surplus, the origin of which is temporary and uncertain, can create serious impediments in growth process. In contrast, profit acts as a stimulant to growth, and

"without development there is no profit
and without profit no development (and)
in capitalist economy ... without profit
there would be no accumulation of wealth."[18]

It should be clear, therefore, that by eliminating interest, the Islamic doctrine of distribution of economic surplus ensures uninterrupted growth and steady accumulation of capital.

The preceding analysis drives home the point that the RFB will be able to compete with its rival modern banks in the mobilisation of savings and the purchases of assets. Apparently, those who advise us to "codify interest-bearing loans by treating them as new norms"[19] are not aware of the tendencies related to the changing practices of banking and the ability of the RFB to design its product which can be differentiated in the 'imperfect market'. In a competitive market, the RFB will be distinguished for combining economic and social aspects of money transactions. This is possible to attain without imparing the financial viability of the bank in any way.

The RFB must take adequate safeguard that its interest-free loans do not in any way instigate inflationary tendencies in the economy. Borrowing should encourage 'thrift'. Thus it is suggested that, in granting loans, the borrower should ultimately become a saver in the group, if not immediately, at least at the time of repayment of loans. This will be arranged through 'Unit Investment Plan'. The RFB, while meeting the current needs of the borrower, will also establish an 'asset' in his favour so that he may be better off in the future.

However, the operation of the RFB will not be free from problems. But the problems are, in fact, opportunities in disguise. As it is, these opportunities permeate the entire fabric of the RFB. One of its problems is proliferation, especially arising on account of the non-availability of suitable investment opportunities without rate of interest. But problems of this nature can be solved through continuous search for investment opportunities.

17. *Ibid.*, pp. 130
18. *Ibid.*, pp. 154.
19. Austruy, Jacques, "A Non-Muslim Scholar's Approach to Islamic Key Problems - Economic Development" *The Islamic Review and Arab Affairs,* Vol. 56, No. 2-3, February- March 1968, pp. 31.

COMMENTS

Dr. Mohammad Uzair (Discussant)

Prof. Mohsin's paper on *Ribā*-Free Banking is a very detailed 'profile', perhaps more detailed then the word 'profile' would suggest. He has chosen the term '*Ribā*-Free Banking' in place of 'Interest-free Banking', presumably because the word '*Ribā*' has been used in *al-Qur'an.* However, there is a conceptual problem. Some translators, including the ones that Prof. Mohsin has cited, have translated the word '*Ribā*' as 'usury' rather than 'interest'. In the English language the term 'usury' has been usually employed to mean 'excessive' or 'compound' interest rather than the 'normal' or simple interest. Prof. Mohsin himself has mentioned the point of difference in this connotation.

He has also made it clear that according to him interest in all forms is forbidden. However, he has used the term *Ribā* which has been interpreted by some scholars to mean 'compound' or excessive' interest. Perhaps the term 'Interest-free Banking' would have been more pertinent and desirable, because by this time the term has gained currency and acceptance in the current literature on the subject. This is, perhaps, a matter of semantics, but it is mentioned here mainly as a precautionary observation.

Prof. Mohsin has gone into great detail about the operations of the *Ribā*-Free Bank or the RFB, as he calls it throughout his learned paper. He has given a very elaborate picture of various types of business activities in which the RFB might engage itself. In fact, Prof. Mohsin has gone even into such details as the prospective shape of the Balance Sheet and the Income Statement or Profit and Loss Account of a RFB, However, no illustrations have been used. That would have made the presentation of balance sheet and income statement more meaningful. The effort is laudable, meticulous and impressive. An important conceptual point in this regard is that Prof. Mohsin has extended the principle of profit-sharing to include not only depositors or customers but also the employees of the bank. Perhaps, there may be some conceptual justification for including the employees in the profit-sharing in the sense that the original literature in 'Fiqh' refers to Rabbul Maal (Owner of Capital) and Amil (One who uses it) in the context of Mudarabah. However, there is a room for difference in this respect, because the basic Mudarabah is between the owners of the capital, the owners of the banks and the ultimate users of the capital. Perhaps the bank employees in an Islamic society would not be different from the employees of other enterprises engaged in manufacturing or other fields of business.

The scheme of bonus which is prevalent in business enterprises, financial as well as non-financial, is in a way an arrangement to share the profits. The question arises: will the employees of banks in the RFB system be entitled to a bonus like the employees of other businesses or will they be treated differently? My own view is that, perhaps, the extention of the profit-sharing principle to include the employees is not necessary or obligatory.

There are various kinds of banking institutions, i.e., Investment Banks, Development Banks and Commercial Banks. In any discussion on banking, unless otherwise specified, the term 'banks' usually refers to 'commercial banks' rather than 'investment banks' or 'development banks'. Prof. Mohsin seems to combine all three in one RFB. This seems to be both unfair and unnecessary. Many developing Muslim countries have already got Investmetn Banks and Development Banks operating as specialised institutions. There is no reason why investment Banks and Development Banks should not be permitted to continue to operate separately, especially since it will be a lot easier for these two kinds of banks to operate on an interest-free basis than it will be for the commercial banks in the transition phase. In fact, the Investment Banks and Development Banks can take a lead in the process of transforming the modern banking into interest-free banking.

According to Prof. Mohsin, the earning assets of the RFB fall into two broad categories:(1) loans which come under the lending scheme linked with th Unit Investment Plan, and (2) direct investments. Under the first category he includes the "Unit Investment Plan" loans to business concerns, the Charge-Account plan or the Credit Card Scheme. The second category includes direct profit-sharing arrangements with companies having limited liabilities, and real estates. Prof. Mohsin also mentions 'non-financial' activities including consignment business, factoring, joint ventures, technical assistance and consultancy, trustee business, safe deposit vaults, etc.

A brief look at this wide spectrum of activities would show that the RFB, according to his 'profile' or thinking, is going to be a very complex business. We will discuss some of the problems associated with some of these activities. The Unit Investment Scheme belongs to investment banking rather than commercial banking. To say that interest-free banking must operate Unit Investment Plan is going too far. After all, the distinction betweeen the investment banks and commercial banks has to be maintained, and to force commercial banks to do investment banking is questionable. The Unit Investment Plan partakes of the character of Mutual Funds or Investment Trusts which are regarded as non-bank financial intermediaries. Likewise, trust banking scheme is a developed field in the United States. It is not likely that most of the developing Muslim countries would see a flourishing business in trust banking in the foreseable future.

As mentioned earlier, Prof. Mohsin has given a very detailed exposure of various kinds of business activities which can be undertaken by the RFB. He has made it obvious that he is very familiar with the American financial institutions. In an attempt to underscore the economic viability of the RFB, he has included in the purview of banking almost every kind of financial services rendered by various kinds of institutions in the United States. As is well known, there is a clearcut distinction between banks and other financial intermediaries. To include all the activities which are the functions of non-banking institutions within the ambit of the RFB is perhaps far-fetched.

Prof. Mohsin mentions factoring and real estate business as examples of such non-banking activities. But it is not certain that there will be enough room for 'factoring'. Real estate, on the other hand, is not only a specialised business but is also an unsafe business for commercial banks as we know them today. Investment in real estate is appropriate for insurance companies which have long-term funds. It appears that Prof. Mohsin has been influenced by studies on insurance business. This is evident from some of the references he has cited. If the RFBs operate by and large as commercial banks, which I think they have to, activities like real estate business are contra-indicated.

In the case of factoring, the 'factor' or 'credit collector' charges an amount as remuneration in proportion to the amount to be collected on behalf of the clients. That there is a time dimension to it implies a predetermined rate of return or remuneration over a time period, for which there is no room in the RFB. Similarly, in the case of 'Charge Account' or 'Credit Cards' scheme, suggested by Prof. Mohsin, there is a certain percentage, usually 1 per cent of the amount of credit involved associated with a certain time span, usually one month. This for all practical purposes is also a kind of interest. Thus on the whole, some of the schemes suggested by Prof. Mohsin particularly 'factoring' and 'charge account' scheme would amount to retaining interest.

The proposition that the RFBs should engage in 'joint ventures' presents a point for pondering. To prove the economic and business feasibility of the RFB as commercial banks we do not have to resort to extremely unusual types of activity. Assistance from commercial banks in the new enterprises at the formative stages in the form of investment either on the basis of profit-sharing or buying equity shares and stocks is an accepted practice in many countries. However, joint ventures on a long-term basis is an unfamiliar, and perhaps even unadvisable, business activity. No doubt the history of German banking has shown a close linkage between banks and industrial enterprises, but this development in Germany took palce in the context of a peculiar set of circumstances, Moreover, this practice of German banks was subject to the criticism that it led to a heavy concentration of economic power in the hands of the banks and to the creation of 'cartels'. Thus, the RFB's participation in joint ventures may not be consistent with the present-day emphasis on public control of business and anti-trust measures. After all, undue monopolistic power in the hands of banks would also be objectionable from the Islamic point of view.

Another unusual field of activity for the RFB suggested by Prof. Mohsin is the consultancy business. In the modern world consultancy is a highly developed and sophisticated and independent business activity. Whether the RFB should or can successfully handle consultancy business is an open question. It is true that large commercial banks do maintain large research departments not only to guide the management but also to provide information service to the clients. However, to carry on large scale consultancy as a part of the main business operations of the proposed commercial banks under the RFB system would be far-fetched.

Prof. Mohsin speaks of 'non-banking services of the banks'. I thought he was referring to subsidiary services of the banks. But, he also refers to 'non-financial activities of the banks'. The relevant question is: should we or should we not attach so much importance to non-banking or non-financial services of banks in the context of the RFB? Prof. Mohsin has spent space and time more on these non-banking or non-financial services than on banking services. This I find questionable. Moreover, must we prove the viability and feasibility of interest-free banking by converting the banks into something that resembles a modern departmental store carrying all kinds of items in one huge building? We have to prove the viability or feasibility of interest-free banking in the present-day world in such a manner that banks remain as they are understood to be at present. Deviations in the bank's objectives and functions must be minimised so as to eliminate interest from all transactions. In other words, the difference between modern and Islamic banks should be found in the technique or principle of operation, i.e., substitution of interest by profit-sharing, and not in the nature of business and functions, which characterises commercial banks.

The way Prof. Mohsin has squeezed all 'non-banking' services of financial intermediaries prevalent in the United States in an interest-free banking system poses two other fundamental questions. The first question relates to the feasibility or advisability of transplanting peculiar American institutions and businesses in Muslim countries which are in different stages of economic development. It is true that about seven Muslim countries have per capita incomes comparable to sixteen most developed countries of the West, and at least four Muslim countries (Kuwait, Libya, UAE, and Qatar) have per capita incomes exceeding those of the advanced countries of the West.

Most of these rich Muslim countries have relatively small populations with a limited scope for large-scale operations. Limited market size also means limited room for division of labour and specialisation. It is questionable whether these countries are ready for the most sophisticated non-banking financial institutions to be transplanted into their banking system. Even if this were feasible, hypothetically speaking, what about the rest of the Muslim countries whose number exceeds forty? I strongly feel that the institutional framework of any business should be allowed to evolve itself, given the peculiar set of circumstances - geographical, historical, cultural, social, etc. Artificial transplanting of institutions would almost amount to fixing a jet engine to a bullock-cart.

The second question revolves around the administrative aspect. The process of transformation of modern banking into an interest-free banking has to be administratively practicable. As a former teacher of Business Administration, I feel that Prof. Mohsin's scheme involves serious administrative problems as well. If he is talking about the creation of department-store-like banking, it has to be applicable and practicable not only for new institutions but also for existing ones. Many Muslim countries have had well-established banking institutions for almost three-quarters of a century. The average age of the bankers manning these banks would be around forty. It is really practicable to re-train or, what is worse, to replace these bankers by new ones who can run all the new businesses in vogue in USA in their respective developing countries? I have my doubts. In fact, I feel it is likely to create a great deal of administrative problems. Thus, on both the counts, Prof. Mohsin's scheme of complex banking business, introduced along the change in the principle or technique of replacing 'interest' by 'profit-sharing', would lead to unnecesary complexities. From a strategic point of view, too, it will not be desirable to do so.

Prof. Mohsin refers to the allocative function and role of banks. But he neglects some important aspects of the allocative role of the commercial banks, e.g., 'inter-sectoral' and 'regional' allocations. Most of the developing countries, where the *Ribā*-Free Banking is likely to be introduced, require a balanced economic growth. The central bank and all leading agencies and institutions in these countries have to maintain a balance between sectors and between regions in the larger economic interest of the country. The nature of the commercial banks' businesses is such that every single investment or loan made by them has repercussions on sectoral as well as regional allocations of the nation's financial resources, Commercial banks, therefore, either under the guidance of the central bank of the country, or on their own, have to observe this aspect of their allocative role. The allocation of the financial resources actually belonging to others has to be made in a judicious manner from the socio-economic point of view. On the whole, Prof. Mohsin has not paid much attention to the socio-economic responsibilities of the banking system. This is an important aspect keeping in view the role of the banks as well as the thinking of the experts on banking in most developing countries and even in some developed countries. The omission is especially noticeable because he goes into the question of judicious allocation of profits in banking in the micro and macro sense, and even speaks of allocation of profit among the the employees of the banks.

Prof. Mohsin says that interest-free banks can 'co-exist' and 'compete' with the present-day banks. This raises a fundamental question of some interest to the participants of this Seminar. The question is as to what would be the strategy for Muslim countries interested in introducing interest-free banking. Would it be desirable to establish one interest-free bank or RFB in each country to serve as a 'model' leaving the rest of the banking sector as it is? This is the approach of 'co-existence'. The other alternative is to work out a detailed strategy for a phased programme of gradually transforming the entire banking system. This approach is ideologically oriented. My personal view is that there is no harm in establishing 'model' banks, but that alone is not enough, the reason being that the creation of one or even a couple of 'models' does not, conceptually speaking, absolve the governments of the Muslim countries of their obligation to inject Islamic principles into banking. Moreover, even this 'clean' and 'pure' 'model' bank inevitably has to deal with other banks and, of course, the central bank. This raises conceptual and ideological objections.

My approach is that side by side with establishment of 'model' banks - whether commercial or investment or development banks - each country should initiate a phased programme of partial reforms for the entire banking system into an interest-free one. This, in my opinion, is a realistic approach. If the participants agree, this could form one of the recommendations of this historic Seminar on Monetary and Fiscal Economics of Islam. May *Allah* bless us all.

GENERAL DISCUSSION

1. Dr. K. T. Hosain remarks that Dr. Mohsin's description is lucid but his arguments are not well fashioned. According to him the strength of the paper lies in the fact that it presents a model which can be operated in a society which is not predominantly Muslim.

He expresses disappointment, as the author has not discussed in his paper the role and contribution of the RFB in the process of economic development. To Dr.Hosain, this represents an important issue for Muslim countries most of which are underdeveloped. He also expresses some doubts as to whether strict supervision and control of banks suggested by the author, would work efficiently in practice.

Finally, Dr. Hosain points out that the *Qur'anic* principles may be implemented with greater ease internationally than at the personal level. However, he does not elaborate. The point he is trying to drive at is that international development banks may be more feasible than the RFBs as conceived by Dr. Mohsin.

2. Dr. Nejatullah Siddiqi raises a methodological point. He is particularly struck by the situation posed by the author where interest-free banks and interest-bearing banks coexist. He is of the view that it would have been instructive had the author studied the interactions of these banking institutions. He notes that the vision given by the author in this regard is extremely blurred.

Dr. Siddiqi also points out that Dr. Baqr-as-Sadar has also adopted this methodology but claims that the whole issue has been thoroughly confused and urges the house to discuss both the situations.

Finally, he suggests that a reasonable time-table be drawn to phase out interest-bearing banks.

3. Dr. Syed Nawab Haider Naqvi poses the question whether we should opt for a complete change in the whole banking system right from the beginning or go for a gradual towards an interest-free system. He says that assumptions of these two approaches need to be examined before a choice can be made. The first approach, which calls for a complete change, assumes that everything about the system has been discussed and that it is completely viable. Dr. Naqvi thinks that it would be dangerous to assume so in the absence of facts and figures. The alternative course of action would then be to discuss different sets of alterntives which would bring about a gradual transformation of the existing structure.

Dr. Naqvi then goes on to impress upon the participants the need for a device that would reflect the scarcity price of capital. He notes that the inability to interest to fully reflect the scarcity price of capital in capitalist economies has led to the computation of the shadow price of capital. He however finds nothing unique about it. He then urges Muslim economists to search for an answer which is acceptable in Islam. He, however, feels that equity participation is not the answer as it would make the system crisis-prone.

Dr. Mohamed Ariff expresses serious doubts about the viability of interest-free banks which "coexist" with interest-bearing banks in societies where non-Muslims have a strong hold on the banking sector. He makes a specific reference to Malaysia where the banking sector is dominated by non-Muslims and where the bulk of the banking transactions is accunted for by non-Muslims. The question Dr. Ariff poses is: will the interest-free banks, set up by Muslims, survive the competition from the well-established banks on interest?

5. Dr. Mabid Al-Jarhi suggests that, instead of studying interest-free banking in a total Islamic environment, it would be more worthwhile if we conceive interest-free banking in the contemporary situation and spell out the problems that are likely to be faced. Dr. Al-Jarhi mentions short-run placement of funds as one of the immediate problems as no return on the basis of *Mudarabah* can be calculated. He does not rule out the possibility of the Islamic banks establishing holding companies, but he cautions that commercial activities may land the banks in difficulties. He says that arrangements must also be made to ensure that the central bank does not require the Islamic banks to place some of the their funds in interest-bearing government securities.

Finally, Dr. Al-Jarhi takes to task those who believe in interest-rate mechanisms and at the same time suggest a gradual reduction in the interest rate. He points out that the proponents of this argument forget that a continuous reduction in the interest rate would mean a restructuring of the banking system and of the saving-investment mechanism. He thinks that this would produce a different mechanism to replace the existing one based on interest rate.

CENTRAL BANKING OPERATIONS IN AN INTEREST-FREE BANKING SYSTEM

Mohammad Uzair

1.

INTRODUCTION

There is a great deal of consensus that banking without interest is not only desirable but also feasible. Brief outlines of plans to introduce interest-free banking have been prepared and presented by several scholars, including the present writer who was the first student of economics to have made the attempt.[1] As far as commercial banking operations are concerned, a reasonably clear and elaborate framework has emerged by now. Some countries have even started a few banks that operate without interest. We should go further and envisage an Islamic economy which operates an interest-free banking system in its entirety. A logical question then arises as to what would be the shape of things as far as central banking is concerned. A central bank occupies a unique position in the banking system of a country, and plays an important role in the implementation of plans and policies. Although in some countries the agencies performing the functions of a central bank are known by nomenclatures other than 'Central Bank' as such (e.g., SAMA of Saudi Arabia and Currency Board of UAE), their functional and operational contents are basicallly the same.

In what follows, we will assume that all the commercial banks are operating on '*Mudarabah*' basis in the country. We will further assume that the main change to be introduced is elimination of interest from the banking system and that other changes are only incidental.

We will first discuss the functions of a central bank before we deal with changes and adjustments that will have to be introduced in the detailed functioning of central banks in an interest-free banking system. Our focus will be on those central banking operations that are peculiar to interest-free banking, although other operations will

1. *See Mohammad Uzair, An Outline of Interestless Banking* (Karachi: Raihan Publications, 1955) a series of eight articles published in monthly *Voice of Islam* (Karachi) 1956-1957. Some of these articles were translated into Arabic and Published in the Middle East.

also be discussed somewhat briefly for the sake of completeness. Finally, we will discuss certain aspects of monetary policy because it constitute an important part of the central banking operations. Our basic approach in the following analysis will be to first dispose of the relatively simpler matters, and then move on to the relatively difficult or complex problems.

2.

THE ROLE OF CENTRAL BANK IN SECULAR AND ISLAMIC SYSTEM

2A. *Functions of a Central Bank*

It is quite logical to have a perspective of operations of a typical central bank before we take up the changes and adjustments in them in the light of interest-free banking. We will, therefore, begin with a look at the standard functions of a central bank, as laid down in the general text books. The central bank of a country performs the following functions:

1. Issue of currency.
2. Preservation of internal position and value of the currency of the country.
3. Preservation of external value of the currency.
4. Control and regulation of credit in the country.
5. Acting as lender of last resort.
6. Promotion of banking development in the country.
7. Adviser to the government in economic and financial matters.

These important functions of central banking will be discussed in detail. Some economists classify the central banking operations as regulatory and promotional.[2] While 'regulatory' functions are universal for all the countries, the 'promotional' role of central banking is particularly important for developing countries.

Elimination of interest would leave most of these functions unchanged. For example, its monopoly in the issuing of currency will be there whether or not the banking system of the country operates on the principle of interest, since this is a delegated responsibility from the government of the country. In most countries the government directly issues only the basic unit of the currency of the country as a token of its sovereignty, whereas the currency notes of higher denominations are issued by the central banks on behalf of the government of the country and as its agent. Thus, this central banking function would continue to be performed by the central bank even in an interest-free economy. In many countries central banks are divided into two clear departments or divisions, i.e., Issue Department and Banking Department, with two separate balance sheets drawn up by the central banks. The Issue Department will remain by and large unaffected by the introduction of interest-free banking.

Similarly, preservation of internal and external values of the currency of the country would logically continue to be the responsibility of the central bank. Allied

2. See for example, V.V. Bhatt, "Some Aspects of Financial Policies and Central Banking in Developing Countries". *World Development* Vol. 2, No. 10-12, October 1974, p. 59.

with this is the function of regulation of foreign exchange and control thereof, depending on the economic situation of the country and the institutional framework therein. Countries with highly favourable balance of payments and immense export potential would have a very simple machinery for exchange control involving a minimal responsibility for a central bank in this field, while countries with acute balance of payments difficulties and severe export constraints will have a more elaborate and complex exchange control mechanism involving a great deal of work for the central bank of the country in this particular field. Be that as it may, the elimination of interest will not make much difference as far as this function of a central bank is concerned.

The role of the central bank as Adviser to the Government in economic and financial matters is also universal irrespective of the details of the lines along which the commercial banking may be operating. Being placed at the apex of the monetary and financial machinery in the country, the central bank is logical choice as the adviser to the government of the country, especially because some of the functions performed by it are responsibilities delegated by the government. It must, however, be conceded that the details of the advice rendered by the central bank are likely to be different in an interest-free system compared to the present system, in view of the fundamental differences in the two banking systems.

2B. *Changes in Funcltions and Instruments of Central Banking Operations*

The elimination of interest will significantly alter the three main central banking functions, namely:

1. Credit control and regulation
2. Acting as lender of last resort
3. Promotion of banking development in the country.

Taking the simplest one first, the promotion of banking development is very relevant in the context of interest-free banking. In the changed framwork, the objective of banking development will be to promote interest-free banking. It will be an additional responsibility of the central bank in an Islamic society to facilitate and assist not only the growth of new banks operating without interest but also the process of transformation of conventional banks into interest-free banks. This would call for financial, technical and personnel aid and assistance from lthe central bank.

Since the central bank is both an adviser and an agent to the Government, it will have to operate as a catalyst in the growth and development of interest-free banking. Indeed, this promotional role of the central bank would augment its regulatory role so that it would achieve greater success in establishment and management of an interest-free banking sector in an Islamic economy.

As the lender of last resort, the central bank may have to discharge its economic and technical responsibility like a profit-making organization operating along business lines, or it may operate purely as a regulatory body without giving much importance to profit motive. Lending of funds to the commercial banks is usually meant for purpose of supplementing the liquidity, or imporving the ratio of deposits to credit; the central bank can make funds available generally required by the banking system without charging any interest thereupon.

Here comes a policy question. Does the Government want its central bank to mainly discharge its functions and responsbilities of a technical nature? If the answer is yes, it is not necessary for the central bank to make profits and operate as a purelly business institution. If the answer is no, meaning that the government desires that the central bank operates as a self-financing business institution earning some profits as well, the business viability and profitability of the central bank will have to be ensured. This may be done by stipulating in the legislation governing the central bank and the commercial banks that the central bank would hold 25 per cent - or any other stipulated percentage - of the capital stock of all the commercial banks operating in the country. By the virtue of holding the shares of the commercial banks operating under its jurisdiction, the central bank will have a permanent source of revenue and profit in the form of dividends received from the commercial banks.

Under this arrangement the business viability of the central bank is guaranteed and its function as the lender of last resort is enhanced. Now that its revenues are secured, the central bank can decide whether to lend or not to any commercial bank strictly on merit and in the larger national interest of the country. This would ensure that the central bank will act not as a 'seller' of money to the commercial banks motivated by profits, but strictly as the 'lender of last resort' in the real sence wherever and whenever it technically deems fit.

The central bank's equity participation in the commercial banking sector is not very unusual. In the case of United States where the central banking structure was superimposed on the commercial banking system at a later stage, i.e., in 1913 by President Woodrow Wilson, it was provided that the central banking system would come into existence with the financial help of the commercial banks described as 'Member banks'. In that country the entire capital of the Federal Reserves Banks (12 of them for different regions of the country) is subscribed to and owned by the commercial banks.[3] Thus, the share holding relationship between the central bank and the commercial banks already has a precedent. What is proposed here is not the Amercian pattern of commercial banks holding capital stock of the central bank, but the opposite which requires the central bank to hold equity interest in commercial banks. This is all the more logical as it would enable the central bank to act independently.

Central bank's holdings of shares of the commercial banks will have several advantages:

1) Since the central bank by virtue of its equity share, will automatically get a part of the profits of the commercial banks in the form of Dividends, the need for interest payments to the central bank from the commercial banks on the latter's borrowings from the former will be obviated.
2) It will provide an additional lever to the central bank in controlling and regulating the activities of the commercial banks in the overall national interest. The nominees of the central bank of the boards of directors of the commercial banks, regardless of whether they are privately-owned or state-owned, will ensure that the instructions of the central bank are complied with.
3) It will give the central bank a stake in the success and healthy development of the commercial banks. Such a close link between the central bank and the commercial banks will prove to be all the more important in fostering a healthy growth of the interest-free banking system as a whole. If the commercial banks face any

3. *The Federal Reserve System: Purposes and Functions* (Washington) Federal Reserve System, Board of Governors, 1954, p. 70.

problem in the transition period because of the new experiment it will be as much of a concern of the central bank as that of commercial banks themselves.

2C. *General Methods of Credit Control*

One of the most important functions of the central bank is the control and regulation of credit, through which it can influence the country's economic activity and liquidity position. Elimination of interest and credit and their substitution by equity participation would alter the means and not the ends.

We shall now discuss how the central bank will perform these functions in an interest-free environment. Conventional credit control devices may be classified into two categories: Quantitative (or General) and Qualitative (or Selective) methods. First, we shall consider quantitative ones which includes:

1. Official Bank Rate at which the central bank makes loans to the commercial banks;
2. Open market operations; and
3. Variations in the reserve requirements and/or other liquidity requirements.

A brief discussion of relative efficacy of these instruments of credit control is in order before we proceed to examine the status of these methods of credit control in an interest-free banking. Bank Rate represents one of the oldest intruments of credit control. The basic approach of Hawtrey is that it is not the *level* of rate of interest but the *degree of rise or fall* in Bank Rate which matters. Furthermore, in his opinion, the Bank Rate mechanism works through psychological manifestations which affect the traders' decisions to hold more or less stocks or inventory. According to Hawtrey a constant change in Bank Rate is required to initiate a psychological change and to counteract the psychological attitudes of the traders or businessmen. Hawtrey says:[4]

> "....It is a change in Bank Rate, rather than the continuance either of a high rate or of a low rate which produces an effect. But the effect produced may be either strictly limited, a temporary retardation or modification of whatever movement is in progress at the time, or it may be encouraged. The starting point of a big new movement amplified by the inherent instability of credit, the vicious circle of expansion or contraction whether the effect is to be large or small depends often on a psychological response. The rise or fall of Bank Rate is required to counteract expectations."

The trouble with this approach is that it requires a constant and continous manipulation of Bank Rate. This may create problems of instability in the economic conditions of the country, as is aptly pointed out by Professor Bain who writes:[5]

> "It seems to me that sharp changes in rates of interest in financial markets may be just as disruptive as sharp changes in the markets for goods and services. If supply and demand schedules in financial markets are inelastic in the short-run, the changes in short-run equilibrium interest rates could indeed be sharp -- so sharp as to weaken existing financial institutions. To avoid this it may be desirable to constrain credit flows so that substantial increases in demand are

4. R.G.Hawtrey, *A Century of Bank Rate,* (London: Frank Gass & Co., 1962) pp. 273-274.
5. A.D. Gilbert, R. Sedgwick (Ed.) *Monetary Theory and Monetary Policy in the 1970's: Proceedings of the Sheffield Money Seminar* (London: Oxford University Press, 1971), p. 162.

choked off by rationing rather than by changes in explicit interest rates. I am aware that this procedure is open to the objection that it fails to maximise welfare in the usual Pareto sense, but suggests that conventional social welfare functions omit some of the costs of changes which are important in reality."

The question about effectiveness of Bank Rate has occupied the attention of experts in banking. Even in Britain, where bank rate has been given a high importance, opinion is divided. There are many British economists who have expressed their doubts about the relationship between Bank Rate and saving-investment situations.[6] It is often argued that, to be effective, changes in Bank Rate should be substantial, however, major or substantial changes in interest rates can have serious repercussions on cost structure. Besides, substantial increases in Bank Rate in Britain during the 1970's did not accomplish impressive results and the rate had to be brought down again in that country recently.

Bank Rate or Discount Rate, as it is called in the United States, has never been considered as the major instrument of credit control in the Amercian banking circle. There have been doubts expressed about the interest-elasticity of credit demand and the responsiveness of credit demand to the changes in the official Discount Rate:[7]

> "There are several reasons for believing the bank borrowing is not likely to be strongly responsive to discount rate changes. For one thing, in the United States there is a 'tradition against borrowing' by bankers that makes them reluctant to borrow from the Reserve Banks or to stay in debt for a long period (presumably to avoid giving the impression of weakness). This tradition antedates the Federal Reserve authorities, who took the position that the discounting privilege is for meeting, special or emergency needs, such as unexpected drains of cash or abnormally heavy loan demands."

In addition, the possibility of the psychological effects of changes in Bank Rate producing perverse results has been highlighted by some writers:[8]

> "The standard view is that rate increases will depress expectations, make bank lending more cautious, and thus reinforce tight money. But it is also possible that they might stimulate borrowing in anticipation of further rises. It is also possible that a rise in the discount rate may be interpreted as confirming bullish, or even inflationary forecasts, and therefore, serve to accelerate business expansion plans instead of retarding them."

In the final analysis, the usefulness of this instrument would depend on the extent to which price can regulate the demand automatically. In real life, however, there are situations where price may not necessarily regulate the demand in the desired manner. Price elasticity of demand varies from time to time and from place to place. If the rate of profitability is high, a change of one or two percentage points in the rate of interest may not necessarily deter or prevent the borrowers from borrowing from their respective banks. Even Hawtrey recognised profits as the "source of economic activity, the motive power."[9] In certain situations a rise in Bank Rate may not check the demand for credit but may affect the cost of production, thus causing or

6. See, for example: R.S. Sayers, *Central Banking after Bagehot,* (London: Oxford University Press, 1958) p. 84.
7. See: C.R. Whittlesey, A.M. Freedman, E.S. Herman, *Money and Banking Analysis and Policy* (New York: Macmillan Co., 1963) pp. 245-246.
8. *Ibid.* p. 247.
9. R.C. Hawtrey, *op. cit.,* p. 274.

aggravating, 'cost-push inflation.'

The instrument of open market operations also may have limited applicability depending on how poorly-developed the money market in an economy is. In most of the developing countries the scope of these operations is much more limited than is the case with the developed countries. This is especially so in most Muslim countries, where the money market is too little developed to permit any large scale open market operations. That changes in Bank Rate by themselves do not accomplish the desired results is bad enough; that the scope for open market operations to supplement Bank Rate changes is also limited in these countries is even worse.

One may suggest that substitutes or alternatives for open market operations can be found in interest-free banking system. One theoretical possibility is that in an interest-free banking system the central bank may resort to trading in the shares of public limited companies, state-owned enterprises or government-sponsored corporations. But trading in stocks and shares differs in nature and effect, from open market operations which concentrate on liquidity-oriented government bonds or treasury bills. Besides, such trading may also introduce other distortions. And it is not necessary-conceptually or operationally - that we develop some institution to replace open market operations simply for the sake of it.

As regards the instrument of reserve requirements, changes in reserve ratios may be partially effective in checking the expansion of credit. If the pressure on demand for credit is substantial and the banks continue to lend accordingly, the mere fact that obligatory and statutory reserves of the central bank are a couple of points higher may restrict the overall volume of credit in the economy to a sizeable extent. This places some sort of a physical limitation on expansion of credit. This is especially true of developing countries where other quantitative methods have limited applicability.

2D. *Selective Methods of Credit Control*

Where as the general or quantitative category of instruments tries to regulate the volume of the overall credit, the selective or qualitative category aims at regulating the flow of credit in certain directions where the credit expansion is likely to create speculative conditions, or add to the inflationary pressure in the economy, is not easy. Seldom do we find a situation in the economy where the flow of credit is universally high or low in all the sectors of the economy. This is why even in the developed countries like the United States selective methods of credit control are often resorted to although it openly violates the "laissez faire" principle. The selective or qualitative instruments are looked upon in the United States not only as a supplement to general or quantitative credit control devices but also as independent tools of credit control for specific purposes.

The American monetarists realise that the selective methods of credit control amount to interference with free market operations for which there is a great respect in the U.S. At the same time, they also recognize the efficacy of selective methods of credit control in certain situations. They also agree that in certain situations these methods of credit control are more effective and useful than the general or quantitative methods of credit control, as these are "much more direct in their incidence than the general controls which rely upon pressures resulting from stringency or ease of member bank reserves."[10]

10. C.R. Whittlesey, A.M. Freedman, E.S. Herman, *op. cit.*, p. 255.

Use of selective methods of credit control has been recognised also by the British economists as a potentially effective method of credit control. Professor Sayers, for example, recommends the use of selective methods of credit control especially the regulation of (a) credit margins allowed in stock exchange speculation, (b) the terms of consumer credits and (c) the terms of real estate mortgages, by the central bank.[11]

In many developing countries it has been observed that the use of selective methods of credit control yields the same results as the general methods of credit control would. This is so because in the event of an overall expansion of credit, the bulk of the expansion would be concentrated in a few sensitive or speculative sectors in the economy. Any measure which hits directly at credit flow into these sectors would therefore reduce the overall volume of credit substantially. As mentioned earlier, quantitative credit controls may or may not prevent the growth in some specific sectors experiencing a very high profitability but they would unnecessarily reduce the availability of credit by raising the cost of credit in certain other sectors where there was no reason or intention to control or restrict the flow of credit.

Importance of selective methods of credit control cannot be over-emphasised. These are practised in both developed and developing countries. More often than not the selective credit controls take the form of 'instructions' issued by the central bank to the commercial banks regarding 'margin requirements' or such other conditions on which credit can be granted to certain sectors or for certain purposes. Sometimes the instructions may even completely prohibit loans for certain purposes. Conversely, the instructions of the central bank may be to encourage the commercial banks to make loans for certain purposes or in certain regions. All these may be done through either formal instructions or informal advices from the central bank to the commercial banks, and moral suasion is often practised, especially in the developing countries.

Use of selective credit controls in an interest-free economy would assign a distributive or allocative role to the central bank in addition to the promotional and regulatory roles referred to earlier. Certain sectors vital for the overall national interest may not receive due attention of the banks either because they are more difficult to handle or because they are less lucrative than the industrial and commercial sectors. Many central banks in developing countries have offered special incentives for allocating more credit facilities to agricultural and small business sectors, which are normally not very attractive to the commercial banks. Among the various incentives offered by the central banks is the 'refinancing' scheme which makes special central bank credits available to the commercial banks to match the special credits extended by the commercial banks to the lagging sectors. In this way the commercial banks gain access to additional funds from the central bank on somewhat concessional terms. In an interest-free banking system, the central bank may first give directives to the commercial banks, under the scheme of selective control of investments and moral suasion, and then supplement these directives by adopting the refinancing scheme. As for the rate of return on the funds specially made available to the commercial banks for certain specific purposes in the national interest, there are two possibilities. One possibility is that the central bank makes these loans available free of cost. This would be especially relevant where the central bank holds a certain percentage of the share capital of the commercial banks as

11. R.S. Sayers, *op. cit.*, p. 131.

suggested earlier. The other possibility is that the central bank enters into a profit-sharing arrangement with the commercial banks which will then give the central bank a part of the profits earned on these investments made with central bank funds. The profit-share ratio of the central bank may be reduced to a relatively low level, which would then be a substitute for the present-day practice of offering loans at concessional rates of interest. Yet, another possibility is that the central bank directly lends to these specific sectors by offering loans free of cost or by accepting a very small share of the total profits as suggested above.

In an interest-free banking system, the central banks may have to place greater reliance on the selective methods of credit control in the overall national interest. This does not, however, mean that the general methods of credit control are completely irrelevant in an interest-free banking system. Among the three methods of credit control discussed earlier, the open market operations will require fundamental changes to become applicable in an Islamic set-up. At the moment the open market operations consist primarily of the treasury bills and some other government bonds which are all interest-bearing. Naturally, this will have to be changed. Treasury bills may perhaps continue because this gives to the government treasury an instrument for short-term borrowing. These are known as 'near-cash' items, since the rate of interest on these is very nominal and very low, and the range of fluctuations in its prices is narrow.

In an interest-free banking system, the entire public debt management philosophy and mechanism will have to be changed. The long-term government bonds apart, the treasury bills bear only a nominal rate of interest. Perhaps, the normal service charges or administrative expenses might be applied if treasury bills are to continue. Afterall, even in the present-day system, the rate of interest on these is so low that, for all practical purposes, out of the three components of interest (i.e., basic rate of interest, risk premium, and administrative expenses) the first two are not relevant and the nominal rate of interest is equivalent to the third component.

In the case of treasury bills, since the first two components are more or less absent, what is relevant is only third component, which is not an interest in any strict economic sense. It may, therefore, continue as 'administrative expenses' or 'transaction allowance'. Thus there may be a scope for open market operations in treasury bills even in an interest-free banking system. However, on the whole, the use of treasury bills will perhaps be much less significant in an interest-free banking system. As for the government bonds of longer maturity, the public debt philosophy and mechanism need to be revised. In a truly Islamic society, people may lend to the government either without interest or on the basic of profit-sharing, depending on the type of public debts and the purpose thereof. Moreover, there may be perhaps no pressing need for public debt if the fiscal policies of the government are revised and reorganized. The issue, however, is beyond the scope of the present discussion on central banking.

The 'general' instrument of reserve requirements is aimed at ensuring a certain degree of 'solvency' by forcing commercial banks to set aside a portion of their total resources or funds in the form of reserves. As maintenance of liquidity is one of the basic concerns of the central banks in any economic system, this method of liquidity regulation will continue to be used in an interest-free banking system as well.

3.

MECHANICS OF CENTRAL BANKING IN AN ISLAMIC ECONOMY

3A. *Profit Sharing Ratio as a Substitute for Bank Rate:*

In interest-free banking, where the commercial banks are operating not on the basis of interest but on the basis of profit-sharing, Bank Rate as a tool of credit control is completely irrelevant. A new tool of credit control suggested here as a possible substitute is the Profit-Sharing Ratio.

The central bank will have to determine the ratio on the basis of which commercial banks will share their profits with their clients. Similarly, the ratio of profit sharing between the commercial banks and their depositors may be regulated by the central bank, partly for the sake of regulating the volume of banking activity and partly for maintaining some degree of uniformity. By revising this ratio from time to time, the central bank will be able to exercise a control over the commercial banks' profit-sharing investments. However, in interest-free banking the volume of profit-sharing investments will not expand as it would in the case of an interest-based banking system which has an inherent weakness for permitting the volume of credit to expand beyond proportions justified by the real economic growth. It is this inherent defect of the banking system, attributable to the institution of interest and the 'separation of capital from enterprise', which is partly responsible for the occurance of severe business cycles and fluctuations in the level of economic activity.[12]

In an interest-free banking system, money supply and level of economic activity will be governed by profit-sharing arrangements between the banks and their clients on the one hand, and the banks and their depositors on the other. Thus the central bank will have to regulate: (a) "Investors' Share Ratio"; and (b) "Depositors' Share Ratio". The "Investors' Share Ratio" will be aimed at regulating the level of economic activity in the economy, while the "Depositors' Share Ratio" will be directed mainly at influencing the money supply. The impact of the "Investors' Share Ratio" upon business decisions is direct, whereas that of the "Depositors' Share Ratio", arising from a pro-rata distribution of "Depositors' Shares", is indirect on business activity through the effect on incomes and spending. The term "Depositors' Dividend" can be used for "Depositors' Share" as a substitute of "Rate of Interest on Deposits."

To ensure the competitiveness of commercial banks some degree of freedom may have to be grantd to individual commercial banks. Although competition in the banking industry is mainly based on "quality of service" or efficiency, some nominal variations in terms and conditions is not uncommon. The solution would then be that the central bank sets a permissible range for profit-sharing ratios which will not only provide some scope for competition among the banks but also ensure some degree of uniformity.

As mentioned earlier, the central bank may resort to "selective controls" so as to favour certain sectors or certain regions in the interest of the balanced economic growth in the country. The central bank can accomplish this objective in interest-free set-up partly through adjustments in the profit-sharing ratios of the commercial

12. See, fro example, F.A. Von Hayek, *Monetary Theory and Trade Cycle,* (London: Routledge Co., 1933) pp. 189-190.

banks so as to give preferential treatment for some sectors or regions, and partly through "moral suasion."

We shall now turn our attention to the question of service charges which are legitimate even in an Islamic system. The service charges could however vary either because some banks are less efficient than others which have a lower cost of operations or because some banks are smaller than others which enjoy greater economies of scale. If these variations are due to differences in efficiency levels, the service charge may form a basis for inter-bank competition. If, however, the variations are due to differnces in either scales of operation or years of "experience", the interest of the smaller or newer banks will have to be safeguarded by the central bank. The central bank may, therefore, want to regulate the service charges of different banks so as to maintain some degree of uniformity between banks by prescribing a narrow range within which the commercial banks can compete with each other without endangering the relatively smaller or newer banks. Some kind of approximate uniformity with respect to the service charges is desirable. This may be accomplished either through unilateral action by the central bank or through an inter-bank agreement under the auspices of the central bank.

3B.*Mechanics and Operations of Changes in Profit-Sharing Ratios*

Under our scheme of interest-free banking the agreed ratio of profit-sharing would be applicable not to the principal but to the actual return or income generated by the use of invested funds. And, the return of capital cannot be pre-determined. What will be contractually agreed would be the ratio of sharing out of an undetermined flow of income. Thus the amount actually available to either party could not be determined in advance in an interest-free system.

A question may arise whether it is *feasible* or *desirable* for the central bank to regulate the profit-sharing ratios. Let us first take up the question of *feasibility*. As mentioned in the beginning, we are presuming the existence of an interest-free economy. This means that there are numerous parties going to numerous commercial banks in the country, for either making deposits or seeking investment funds. Naturally, the commercial banks entering into profit-sharing agreements with these parties would opt for various ratios of profit-sharing depending upon the specific details of each case. When there is a large scale operation of profit-sharing investments by the commercial banks, the contents of the contract forms would become standardised with the passage of time. Theoretically the basis of profit-sharing could vary over a wide range from case to case. In actual practice, however, as the system gets going, the range of profit-sharing ratios for most of the agreements would also be somewhat narrowed and standardised. Although technically each contract would be signed by the two parties, namely banks and the clients seeking investment prticipations with the banks, the nature of contract and the terms and conditions would be somewhat similar for most of the typical cases. For all practical purposes, most of the ratios agreed upon would be within a reasonable range of ratios, constituting a central tendency. Unusual terms and conditions would be observed and applied only in very unusual cases and not in the typical ones.

In day-to-day operations, only certain banks will have to be filled in for finalising the profit-sharing contracts available in the form of printed stationery. These banks would pertain to the name and details of the client, the specific ratio of profit-sharing ratio and the amount of the investment funds. The contract between the banks and the depositors would be even simpler, in as-much-as the terms and conditions of profit-sharing would be standardised to only three or four categories. Thus it would be clear that for all practical purposes the details of the contract would be standardised, and the various alternative kinds of contract forms would be readily available as printed stationery, if the country is operating on an interest-free basis. In the light of the position discussed above, the regulation of the profit-sharing ratio would not only be feasible, but also be fairly simple.

Let us now consider the *desirability* of regulating the terms and conditions of the contract. It may be mentioned once again that the central bank of a country is an agent of the government (*Sultan* or *UlulAmr* in the terminology of Islamic jurisprudence) of that particular country. There can be no doubt about the desirability of the government being held responsible for seeing to it that no unfair agreement or contract is entered into. Sometimes a desperate client may agree to certain conditions of profit-sharing which are unfair to his own interest, with the banks taking an undue advantage of the desperate client. Likewise, small depositors may not be able to bargain with the banks regarding terms and conditions of profit-sharing. It is the responsibility of the central bank, as an agent of the government to ensure that justice and fair play operate in an interest-free economy. Thus it is not just desirable but even imperative that the central bank regulates the profit-sharing ratios at both ends.

Let us now see how the central bank will, in practice, regulate these profit-sharing arrangements. Suppose that the central bank figures out that the terms and conditions are so unfavourable for the clients that fewer clients are approaching the commercial banks than is necessary in the national economic interest. The central bank may accordingly revise the Investors' Share Ratio in favour of the clients, which the commercial banks will abide by. The central bank may fix a particular ratio for all investment participation agreements between the commercial banks and the central banks, or alternatively it may prescribe different ratios for different purposes so as to penalise or favour some activities. In certain cases the central bank may prescribe a permissible range of Investors' Share Ratios, which may be varied to suit the needs of the changing situations.

Similarly, the central bank may prescribe a standard Depositors' Share Ratio which may also be adjusted from time to time in the national economic interest. Thus the central bank may revise this ratio (a) in favour of the depositors in order to encourage the inflow of deposits and (b) in favour of the commercial banks in order to discourage the outflow, in an attempt to influence the liquidity in the system.

3C. *Monetary Policy and its Problems*

No discussion on central banking is complete without a reference to monetary policy. It is the monetary policy formulated by the central bank which provides the basic framework for banking and financial operations in a country. We will first discuss briefly the monetary policy in an interest-free system of certain banking before we proceed to focus on certain specific problems associated with monetary policy. The major objectives of monetary policy of the central bank in an interest-free banking system will be bascially the same as those that are found elsewhere, viz:[13]

1. To promote a sustained and balanced economic growth in the country.
2. To maintain economic stability, so as to avoid inflation and recession.

3. To maintain stability in the external value of currency.
4. To promote an equitable distribution of income and wealth.

The functions and operations of a central bank in an interest-free banking system will have to be considered in the light of these objectives of monetary policy. Needless to say, the maintenance of a balance between objectives without any internal conflict is not quite as simple as may seem at the first sight. The central bank may have to formulate a rather delicate policy mix. Since central banking is still in the formative stages in most of the Muslim countries, any change-over to an interest-free system may not be difficult.

There are certain other issues pertaining to central banking and monetary policy which merit at least a brief discussion. These issues are broadly two in number:

1. Relationship of monetary policy with other economic policies of the government such as fiscal and commercial policy and the possibility of conflict among these various policies.
2. The question of autonomy of central banks, especially vis-a-vis the relationship with the government.

Let us first look at the possibilities of conflict between monetary policy and other economic policies. Formulation and implementation of monetary policy is the responsibility of the central bank, under the overall guidance of the national economic policy as laid down by the government of the country. However, monetary policy is not the only policy in the economic sphere, in which the overall objectives of national economy are reflected. There are other economic policies of the government, which also influence the economy and help achieve the overall national objectives. Mention may be made of two such policies, namely fiscal and commercial, which have a very direct bearing on the economy.

i) *Fiscal policy:* It has been observed that in many developing countries money markets and banking institutions or other financial intermediaries are not so highly developed. The implication is that the effectiveness of the monetary policy will be somewhat limited in these countries. Fiscal policy is said to be more effective in showing quick results, as its impact is much quicker and more direct than that of the monetary policy. Revision of tax rates, imposition of new taxes, or withdrawal of some of the existing taxes, can have a more direct and immediate effect on the economic decisions of businessmen and other individuals. The difference created by fiscal policy in money terms may be more significant than the marginal difference in the monetary policy such as Bank Rate, variations in reserve requirements, etc. In fact, the monetary policy had lost its glory under th Keynesian Revolution, a glory which was reinstated recently by Friedman and his disciples. The modern preference for a monetary policy may be explained by the fact that it is neutral and independent of political considerations, whereas fiscal policy is bound to have a political angle as it is prepared by the politicians. This obviously is not the place for a debate on the superiority of either policies. The purpose here is just to point out that in developing countries, by and large, fiscal policy occupies an important place in the overall economic policies.

There is a possibility of conflict between the monetary policy formulated and

13. In the case of a more developed country, an additional objective of monetary policy is to promote the importance of the international financial centres located in the country. In due course this objective may become relevant for some of the oil-rich Muslim countries if they are able to develop themselves as centres of international finance.

implemented by the central bank and the fiscal policy formulated and implemented by the treasury. Thus the fiscal policy may be in conflict with an anti-inflationary monetary policy, if the former aims at increasing the development expenditure or at transferring resources from the rich to the poor, which would add to the inflationary pressure. This calls for clarity of objectives and policies and close and effective coordination between them.

ii) *Commercial policy:* Overall volume of imports and exports, their composition, and the changes in both of these are directly affected by the commercial policy pursued by the government. There is a possibililty for the monetary policy and the commercial policy in the country to move in opposite directions, with the central bank adopting a restrictive policy and the Ministry of Commerce following an expansionary policy or vice versa. The scope and extent of conflict between the monetary and commercial policies seem to be much less than that between the monetary and fiscal policies. The extent of any such conflicts or the ease with which they can be resolved will depend largely upon the institutional framework and the degree of coordination among various policy-making wings or agencies of the government.

Such potential policy conflicts pose a problem to the central bank in its policy-making process. No uniform guidelines or formmulae can be prescribed, since the nature of the problems and hence the optimum policy mixes are likely to vary from country to country. The details of the solutions will partlly depend on the institutional framework and setting in a particular economy. From the point of view of interest-free banking, or the Islamic precepts, there is nothing sacred or sacrosant about any particular kind of institutional framework. The nature of institutional framework prevailing in a country depends on various historical, political and geographical factors which may be mostly value-neutral. However, the overall guideline is that there should be minimum scope of conflict. What detailed arrangements need be made to secure this objective is a question of mechanics rather than policy.

3D. *Autonomy of Central Banks*

An important question related to the monetary policy is the question of autonomy of the central banks. The issue has assumed greater importance in the advanced countries which have a well-established tradition of independent central banking. In these countries, the development of central banking has been more or less along the independent lines, with 'autonomy' with respect to both day-to-day operations and policy decisions. In the United States, for example, the Federal Reserve System is completely independent of the executive wing of the government, reporting directly to the legislature, or the Congress. The purpose of autonomy is that the central bank can operate with objectivity and without any fear of political interference. The autonomy issue has manifested itself in the Rules-Versus-Discretion controversy in the United States. The main concern of proponents of Rules is the elimination of possible political intervention by the government. Whereas the supporters of Discretion take a pragmatic view of practical operations of a central bank. In between these two extremes lies the grey area which is relevant to real and practical life.

In the United Kingdom the Bank of England has enjoyed great autonomy, operating more or less as an independent institution, even in respect of policy making. Nevertheless, the need for co-ordination between Bank of England and the Chancellor of the Exchequer has been stressed in the Radcliffe Committee's report, which implies some erosion of the autonomy which the Bank of England has traditionally enjoyed.

In most developing countries, the central banks are under th control of the government whose interference in policy matters and day-to-day operations of the central bank is not uncommon. This is especially so if the banking system is completely nationalised. The implication of all these is that the commercial banks may be subjected to dual control and regulation by the central bank and the government. This may create problems in the formulation and implementation of monetary policy from time to time.

As mentioned earlier, the institutional framework of a country would reflect various historical factors, cultural patterns, national genius, and the administrative philosophy of the country. From the Islamic point of view, what really matters is the basic principles, and not the shape, of the institutional arrangements. Thus there is no need for a uniform kind of institutional arrangements in all the countries. The system of interest-free banking, therefore, permits variations in the institutional framework. However, the following guidelines with regard to the quesion of autonomy of the central bank are in order:

1. Since the central bank is supposed to control and regulate the commercial banking system, it must have operational autonomy in its day-to-day functions.
2. Since the central bank is supposed to be an adviser to the government as well, its views and opinions should be given due weight and importance by the government.
3. Since the central bank is an agent of the government, its policies should be prepared and formulated within the broad framework of the national economic policies.
4. Since there are dangers of policy conflicts, there is a need for some kind of coordination among the various policy making agencies of the government.

3E. *Some Unresolved Issues*

We have analysed and discussed above the various aspects of central banking operations in an interest-free banking system. Most of the fundamental problems relating to operations of central banking have been covered in the limited space and scope of the paper. There are, however, a few questions of lesser importance which need to be resolved. In what follows, we will concentrate on three unresolved issues.

i) *Public debt:* In an interest-free economy, the substitution of 'profit-sharing' in place of 'interest' does not go very far with regard to public debt, the proceeds of which are not necessarily invested by the Government in profitable activities. The management of public debt is generally the responsibility of the central bank of the country. There are two aspects to it: first, it is a means of raising funds for the government over and above taxation; and second, public debt instruments, which are riskless, are bought and sold through open market operations to bring about adjustments in liquidity position. In an interest-free system there may or may not be a need for public debt. But it will be desirable that some public debt continues even in an interest-free banking system so that the government and its agent, the central bank, will have an instrument with wich the liquidity of the economy can be measured.

The question now arises as to what would be the shape of public debt in an economy where interest-bearing securities cannot exist. One extreme possibility is that public debt may be without any return on government bonds and treasury bills, on the assumption that members of the general public and financial institutions make funds available to the government out of their sense of responsibility and patriotism. Since such a possibility is clearly far-fetched, a return on the public debt of some sort must be devised. Applying the principle of "opportunity cost" would mean that the government offers a rate of return to the holders. The rate of return may be based on the concept of "opportunity cost" which would then be equivalent to the general rate of profitability in the normal business activity prevailing in the country. Thus a weighted average of profitability of the public limited companies can be a basis for determining the "opportunity cost" and hence the rate of return on public debt.

A formula can be devised in such a way that the rate of return available on public debt for the preceeding year would be the average rate of profitability (or some per cent of the average rate of profitability) prevailing in the country. Another variant would be to link the rate of profit on the public debt with the rate of profitability of the state-owned or government-sponsored enterprises and corporations. The latter approach seems to be more realistic, since the profitability of public enterprises would be more relevant in the context of public debt. This would also make the profitability calculations a lot easier since the entire gamut of the public limited companies is not included.

ii) *Reserve requirements and money supply:* There is a controversy regarding the reserve requirements in an interest-free banking system. Some economists have been thinking of a 100 per cent reserve requirement as a check against credit expansion by the commercial banks. Such a requirement will however impose unnecessary rigidity which will cripple the entire system. Flexibility in this regard is essential for the central banks in an interest-free economy to exert their influence. In certain situations it may be desirable to permit creation of more investible funds in the economy; and in certain other situations a curb on creation of money may be desirable. There is no reason, therefore, why a 100 per cent reserve requirement should be the corner-stone of the central banking policy in an interest-free economy. There are both pro and con arguments about a 100 per cent reserve requirement which can be found in Western literature. We will, therefore, not engage in the controversy about a 100 per cent reserve requirement.

Capacity of the banking system to create money supply through credit creation will be somewhat limited in an interest-free banking system. On a more fundamental level the separation of 'capital' and 'enterprise' as two different factors of production is the basic of present-day banking system. In an Islamic economy, there is no distinction between 'capital' and 'enterprise', which shall therefore be treated not as two different factors of production but as one. [14] Thus in an equity-oriented

14. See for example, Mohammad Uzair, "Some Conceptual and Operational Aspects of Interest-free Banking", a paper read in the First International Conference on Islamic Economics held in Makkah in February, 1976.

economy, 'capital' in the sense of 'finance capital' will cease to be a separate factor. This merging of capital and enterprise into one single factor would technically and operationally place a limitation on the capacity of the commercial banks to create credit and increase money supply in the economy. Thus the fear of unnecessary and unbridled creation of credit can be ruled out, although the central bank can determine the actual volume of money supply by regulating the profit-sharing ratios. However, it would not be necessary or desirable to completely eliminate the possibility of money creation by the commercial banks. In countries where the process of monetization is still in the initial stages there may be a case for additional creation or generation of money supply. However, the ultimate authority would rest with the central bank to permit or not to permit creation of money supply. Thus the real power of money creation will be shifted from the commercial banks to the central bank in an interest-free economy.

iii) *Non-banking financial intermediaries:* It is important to consider the role of non-banking financial intermediaries or institutions in an interest-free economy, since these institutions can affect the aggregate money supply directly or indirectly. Some of them are comparable to the commercial banks in the sense that they accept deposits. Since these are not full-fledged commercial banks, they remain outside the jurisdiction of the central bank. The implication is that these non-banking financial institutions may undermine or defeat the central bank's policies and strategies.

The problem, however, is not a serious one in most of the developing countries where such non-banking financial institutions are few and unimportant. These partake of the character of either development banks or investment banks. Some of the development banks may even accept deposits. The investment banks on the other hand sell investment instruments or financial assets which are in a way substitutes for deposits in commercial banks. Moreover, they play an important role in the overall savings and investment pattern of the economy, Naturally, these institutions, not being commercial banks, are excluded from the purview of the central bank.

In many countries such as Pakistan, these non-banking financial institutions are owned and controlled by the state. By the virtue of being owned and controlled by the government, these non-banking financial institutions tend to follow the guidelines provided by the government itself, though not necessarily by the central bank of the country. Thus although the central bank has no jurisdiction over these institutions their activities are subject to the regulation by the government. Where these non-banking financial intermediaries are privately-owned, neither the central bank nor the government can exercise any control over them.

In such situations, there is a need for some form of control or supervision either by the government or by the central bank. The government may create a department or section, such as Controller of Investments, which can deal with these institutions. Alternatively, the central banks may have a separate division to control and regulate these non-banking financial institutions. Anyhow, the number of such non-banking financial institutions and size of their turnover are not large enough to pose a serious problem in this regard in most developing countries, However, these institutions may develop in Muslim countries in due course. The advantage of late start would be that the government can lay down from the very beginning a framework for direct or indirect regulation of these institutions.

4.

CONCLUSIONS

The overall monetary policy objectives of the central bank are universal irrespective of whether it is an interest-free system or not. The major objectives include (a) promotion of sustained and balanced economic growth; (b) maintenance of econmic stability in the country; and (c) maintenance of stability in the external value of currency of the country. However, the primary concern of the central bank in an interest-free economy will be to promote and strengthen the interest-free banking system.

Quite a few functions and operations of central banking can continue as before without any change, even after the introduction of interest-free banking. - e.g., the issuing of currency, and the maintenance of the internal and the external value of the currency. It is in the sphere of regulation and control of credit that major changes will have to be introduced. Instruments of control like Bank Rate and 'open market operations' will be the ones where most adjustments are required to suit the interest-free banking systèm. However, instruments like 'reserve requirements' to regulate the liquidity position in the economy through banking system, can continue to be applied in an interest-free system as well.

The main responsibility of the central bank will be to regulate the profit-sharing ratios which govern the financial transactions between the commercial banks and their clients and between the commercial banks and the depositors. Thus the central bank would control and regulate the "Investors' Share Ratio" (e.g., 2/3 or 3/5) on the one hand and the "Depositors' Share Ratio" (e.g., 1/3 or 1/4) on the other. The commercial banks in turn will distribute the "Depositors' Share" as "Depositors' Dividend" among the depositors on a pro-rata basis. In a way, this regulatory function will take place of Bank Rate in the present-day system. A pragmatic approach will be for the central bank to prescribe a narrow range within which the 'ratios' may vary from bank to bank and case to case. Moreover, the central bank may vary the prescribed ratios from time to time as the situation may demand.

Since the commercial banks frequently borrow from the central bank either to supplement their funds or to improve their liquidity position, and interest is paid to the central bank thereupon, a substitute arrangement without interest has to be evolved. The solution suggested here is that the central bank of the country owns and holds a certain percentage of capital stock of each commercial bank operating under its jurisdiction. In this way the central bank will be compensated from any loss of revenue due to elimination of interest. Morever, in absence of interest considerations, the central bank of the country can decide, purely on merit of the case and on a dispassionate basis, whether or not to lend or how much to lend to commercial banks in their day-to-day operations.

The central bank may like to prescribe a range for the 'service charges' which the commercial banks impose on their clients, so as to protect the interest of relatively smaller or newer banks operating in the country.

Greater reliance may have to be placed on 'selective' methods of control rather than 'general' methods in an interest-free system. Experience of certain countries has proved the efficacy of the 'selective methods' in as much as it hits directly at the point where a change is desirable. Similarly, 'Moral Suasion' can also be a useful instrument of control. Sometimes the central bank may use the technique of re-financing to encourage flow of investible funds into priority sectors of activities.

Operational autonomy, and to some extent, policy-making autonomy, are essential for central banks even in an interest-free banking system. However, some coordination among the various policy-making agencies of the government is desirable, to avoid conflicts with fiscal and commercial policies. The details of the institutional framework are bound to vary from country to country depending on historical factors, administrative traditions, cultural patterns, and so on. Any rigid prescription of institutional details is neither necessary nor desirable.

There are a few questions relating to central banking, which remain somewhat unresolved. One such question is the position of public debt in an interest-free banking system. Presumably, there will be some need for public debt even in an Islamic economy. A possible solution is to determine the rate of return on the principle of 'opportunity cost', which means the average profit rate earned by the public limited companies or preferably the state-owned enterprises and government-sponsored corporations. Another unresolved question is the controversy of 100 per cent reserve and the related question of the power to create money. The controversy about a 100 per cent reserve is very old and no conclusive answer has yet been found. Be that as it may, the power of the banking system to create money need not and should not be eliminated. The central bank should have the final and ultimate authority with regard to creation of money supply. As regards the role of non-banking financial intermediaries, it appears that the problem is not a serious one, in view of the fact that they are so few and unimportant in most Muslim countries. In countries where these non-banking financial intermediaries are state-owned, it will be relatively easy for the governments to control and regulate them. If there are a few privately-owned financial intermediaries in Muslim countries, they would be still in the initial stages of development, and bringing them under the control of the central bank or the government would not be difficult.

COMMENTS

1. Dr. Mohammad Nejatullah Siddiqi *(Discussant)*

The paper covers traditional ground and fails to make significant progress in the task of elaborating the detailed structure of central banking and spelling out in detail the monetary policy in an Islamic framework. However, it has the virtue of justifying the various proposals made, by citing the practices prevalent at present. Dr. Uzair's endeavour is also commendable as being the only one made in this Seminar to grapple specifically with the issue of central banking in an Islamic framework.

It would have been instructive if the author had elaborated upon the use of profit ratios for controlling the supply of money, which he merely touches on. Would it work equally efficiently in conditions of inflation as well as in those of deflation? What are the likely effects of these changes on savings on the one hand and productive enterprise on the other? Similarly, the potentialities of 'moral suasion' as an intrument of policy have received only a passing reference, whereas they deserve an extended treatment in the context of the Islamic economy based on mutual consultation and cooperation. One would also wish that the way in which the central bank would serve the broader socio-economic objectives of the Islamic society, was analysed in detail. The author seems to recommend that the central bank hold 25 per cent of the capital assets of the commercial banks not only to control credit but also to earn profits for the central bank. The revenue argument is at best secondary. As regards the first objective, one wonders why the author takes no notice of the suggestions made earlier, such as the Refinance Ratio vide *Banking Without Interest.*

Sale and purchase of shares of the public enterprises as a means of open market operation ought to have received the attention of the author.

Lastly, the study fails to discuss the non-bank financial intermediaries, the central bank's ability to regulate their activity and the interaction between these institutions and the banks. In fact, the very shape and structure of these institutions consequent upon the abolition of interest has yet to be discussed thoroughly.

2. Mr. Jaferhusen I. Laliwala *(Discussant)*

It is very pertinent to note that though the central bank is the agent of the government, its emergence is actually the result of market forces. When the economy progresses the absolute demand for loans increases, necessitating a corresponding increase in credit creation. But credit creation and loan finance by the banks is limited by the cash reserves at the disposal of the banks. The cash-reserves of the banks are limited by the availability of the high-powered money in the economy. So there must be some mechanism by which the supply of high-powered money may be increased whenever more credit creation and loan-financing are required in the economy. That mechanism is provided by the central bank. This constitutes the main reason for the emergence of the central bank, although there are other important reasons as well. So no model of interest-free banking would be completed if it does not incorporate the central bank's role in supporting the interest-free banks and serving other wider Islamic goals. This very vital task has been undertaken by our learned brother Dr. Mohammad Uzair.

The functions of the central bank are to issue currency, maintain price stability and the external value of the currency, control an regulate credit in the economy, act as a lender of last resort for the banks, promote banking development, work as the government's bank and functions also as an adviser to the government in economic and financial matters.

For the promotion of banking development in the country, the Islamic central bank, as the author points out, would provide financial assistance from time to time and technical guidance and personnel assistance.

The learned author correctly points out that the instruments for credit control and regulation would have to be changed, as the Islamic banks will be interest-free, sharing profit with the entrepreneurs who have sought financial assistance from the banks and with the depositors who would receive "Depositors' Dividend" on a pro-rata basis. In place of interest charge on the borrowers, i.e., investors, "Investors' Share Ratio" would have to be fixed by the central bank. In the same way, in place of interest on deposits in banks, depositors would be given "Depositor's Dividend" on a pro-rata basis in accordance with the "Depositors' Share" to be fixed by the central bank. According to the author, these two ratios will be the main instruments of credit control and regulation in the Islamic banking system. Here the author does not envisage any freedom for the banks to enter into separate contracts with the investors and the depositors. Perhaps, the best course is to fix a maximum limit for "Depositor's Share" and a minimum for "Investor's Share Ratio".

But, what about the Bank Rate or the Discount Rate of the central bank? The author looks upon the Bank Rate in the modern capitalist economy not as an instrument of control of credit but as the source of income for the central bank to meet its expenses. He therefore stipulates that the Islamic central bank holds a certain percentage say 25 per cent, of the capital stock of each commercial bank, so that "the central bank will be compensated for any loss of revenue because of elimination of interest." So here the author does not see the necessity of the Islamic central bank evolving devices like the "Refinance Ratio" as some other writers on Islamic banking have done. Interest represents not only a source of income, but also a regulatory device for the central bank. In its absence banks will press for more credit from the central bank, giving rise to inflationary pressure. Unless some sort of "Refinance Ratio" along Islamic lines is developed to replace the bank rate or the discount rate the central bank will be groping in the dark. It will be disastrous to have an important indicator of the market situation abolished without it being replaced by an Islamic instrument.

In the Islamic model commercial banking, banks share profits with the entrepreneurs who have been given financial assistance by the banks, but if the entepreneurs who have been given financial assistance by the banks, but if the enterprneur has incurred losses, he will not share the losses, which will have to be born by the depositors. This can be represented in another way also. Investors seeking financial assistance from the banks get their managerial fees or commission by way of sharing the profits, if profits are acquired, but when losses are incurred, the investor is not given any management fee or commission and so naturally he does not share in any losses. It is not clear whether the investor is investing only the bank's capital or along with bank's capital he is investing his own capital as well. If the burden of loss on this combined capital were to fall only on depositors, some additional incentive besides "Depositor's Dividend" should be given to the depositors so as to maintain a suitable credit-deposit ratio. It would have been better if the author had evolved some instrument for the Islamic central bank to apply, in order to persuade the depositors to place their savings as deposits in the banks, He also does not discuss the role of time deposits and their relationship with the instruments of credit control of the central bank.

The learned author discusses the efficacy of the open market operations policy of the central bank in less-developed Muslim countries where the scope of the open market operations is very limited. In such situations, changes in the reserve ratio and selective credit controls would prove to be more effective, according to the author. The policy of selective credit control has been much misued in the less-developed countries, but if rightly applied it hits at the trouble spots, while general quantitative measures hit at all spots including those where there is no trouble. The author makes a valid case for selective credit controls and the instrument of reserve ratios in an Islamic banking system. But we must tread tardily and cautiously before suggesting any drastic measures, as there is many a slip between the cup and the lip in practice.

The author refers to the range of 'service charges' to be realised by the banks from their clients and prescribed by the central bank. But he does not clarify anything regarding these clients and he does not devote sufficient space to this problem, which requires further elucidation.

The author goes on to discuss the problem of autonomy for the central bank. There are two types of autonomy-operational autonomy and policy-making autonomy. In an interest-free banking system, policy-making autonomy for the central bank is necessary. But there is the possibility of conflict between the fiscal policy of the Government and the monetary policy of the central bank. For example, when the Government resorts to deficit financing, some portion of the highpowered money created in the process is deposited in the banks which will be inclined to lend more unless the central bank makes its monetary policy stringent. Similarly, the commercial policy of the Government may come into conflict with the monetary policy of the central bank. So some sort of coordination is required between the monetary policy of the central bank on the one hand and the fiscal policy and the commercial policy of the government on the other.

On the treasury bills of the government, the author does not mind stipulating low service charges. A low rate of interest on treasury bills may be construed as a service charge. He does not discuss in detail the problem of long-term bonds of the government. The learned author also does not discuss measures for controlling the activities of the non-bank financial intermediaries. It is of interest to note in this context that the Radcliffe Committee Report (of U.K.) and Gurely and Shaw and other writers have insisted on the control of the entire liquidity structure rather than only the money supply, if inflation is to be controlled.

All in all, there is no doubt that Dr. Mohammad Uzair has made a valuable contribution in the real Islamic spirit by writing a very scholarly research paper on the "Central Banking Operations in an Interest-free Banking System", for which he deserves to be congratulated.

GENERAL DISCUSSION

1. Dr. Syed Nawab Naqvi complains that the author has quite unnecessarily repeated so many times in his paper the existing literature on banking. He thinks that the author ought to have concentrated on new areas instead of dwelling on the mechanics of Islamic banking.

   Comparing Dr. Uzair's paper with Dr. Chapra's paper, he observes that Dr. Uzair, unlike Dr. Chapra, takes it for granted that all the paraphernalia will remain the same. As Dr. Naqvi sees it, the problem of portfolio selection does not arise so much in Dr. Chapra's paper, since the state is assumed to be creating and allocating investments, and similarly the question of risk minimisation is not so important since Dr. Chapra has specified a scheme of deposit insurance. Dr. Naqvi thinks that these problems arise significantly in the system presented by Dr. Uzair who however fails to tackle them adquately. Dr. Naqvi believes that profit-sharing alone cannot help minimise the risk and therefore emphasises the need for economists to devise a whole range of devices which the commercial banks can use in practice.

2. Dr. Mohammad Sultan Abou Ali raises a question regarding the ratio on the basis of which the commercial banks share the profits with their clients. He thinks that it would amount to *Ribā* if this ratio were to be fixed by the central bank. He then goes on to say that the profit-sharing ratio should be allowed to vary between banks and between ventures, to be determined by market forces and not by the central bank.

   Dr. Abou Ali also raises the issue of inter-bank activities which he considers to be extremely important. He regrets that Dr. Uzair's paper failed to shed light on the inter-bank relations and the role of the central bank in supervising inter-bank transactions within the framework of an Islamic banking system.

3. Dr. Mohammad Umer Chapra acknowledges that Dr. Uzair is one of the pioneer writers on Islamic banking and that Dr. Uzair's present paper represents a pioneering effort in the field of Islamic central banking. But he thinks that the present paper has been written in a hurry. A scholar of Dr. Uzair's calibre and commitment to Islam should have been able to produce a much more thought-provoking paper than the one presently being discussed.

   Dr. Chapra finds some of the author's statements difficult to accept. For example, he does not agree with the author that the overall operation of the monetary policy of a central bank in an interest-free banking system will be more or less the same as that which is universally accepted, irrespective of the details of the eco-system prevailing in any country. Dr. Chapra argues that the Islamic central banks have to perform certain functions which are significantly different from those performed by the central banks under capitalism. He thinks that the central banks in the Islamic system are also concerned with such socio-economic objectives as equitable distribution of income and wealth and not merely with the availability and cost of credit. He takes the author to task for not paying attention to these aspects of Islamic central banking.

   Dr. Chapra does not think that a simple substitution of interest rate by profit-sharing is all that is required, as the author seems to believe. He is of the view that the manipulation of profit-sharing ratio by the central bank would amount to changing the contractual relationship in the economy, which is not desirable. He believes that it is possible to influence and control credit in so many ways without having to interfere with contractual relationships, and wishes that the author had concentrated on these.

4. Dr. Mohammad Saqr points out that changes in the profit-sharing ratio as an instrument of credit control are not permissible from the legal and the *Sharī'ah* points of view. He says that profit-sharing is a contractual agreement between two parties - i.e., *al-Mudārib* and the financier. Dr. Saqr emphasizes that this contractual relationship, according to Fiqh, can only be changed by mutual consent and not by a third party such as the central bank. He also warns that such an intervention by the central bank would amount to terminating the *Mudārabah* agreement. He also raises another objection on the ground that charges in the profit-sharing ratio will upset the operation of the whole economy.

5. Dr. Ziauddin Ahmad responds to some of the comments made by the previous speakers, in defence of the author. He believes that some of the circiticisms levelled against the profit-sharing ratio were caused by misunderstanding due to inadequate explanation by the author. He thinks that variations in the profit-sharing ratio can be used not only on an across-the-board basis to influence the general credit condition but also on a selective basis with an element of discrimination so as to bring about changes in inter-sectoral allocations. Thus for instance, the profit-sharing ratio may be tilted in favour of the entrepreneurs for investment in those fields which are to be encouraged, and in favour of the banks for investment in those sectors which are to be discouraged. Dr. Ziauddin thinks that there is nothing un-Islamic about this.

   Referring to a point made by Dr. Abou Ali, Dr. Ziauddin says that fixing the profit-sharing ratio in advance does not make it *Ribā* in another form. He explains that it is the profit-sharing *ratio* that is fixed and not the profit *rate,* variability of which is still maintained. He points out that this is what the *Mudārabah* concept is all about.

6. Dr. Nejatullah Siddiqi thinks that it is necessary to split the issue of variations in the profit-sharing ratio into two parts - i.e., (a) whether it is desirable, and (b) whether it is legal. He explains that two persons are free to enter into a profit-sharing arrangement, agreeing on a certain ratio of profit-sharing, and one must respect it because it is a matter of legality and not a matter of efficiency. However, Dr. Siddiqi is also of the view that there is nothing in the Islamic jurisprudence to prevent the Sultan from ruling that a certain ratio should not operate. He seems to think that advisability of such a move will depend on actual circumstances and ultimate ends. He points out that in the context of central banking we are concerned not only with money supply but also with a number of socio-economic goals such as distributive justice. He suggests that it would be advisable to set a range within which some manoeuvrability may be allowed.

7. Mr. J.I. Laliwala intervenes to reiterate a point he had made earlier with regards

to the maximum and minimum limits for profit-sharing ratios. He thinks that this suggestion of his falls in line with what Dr. Siddiqi has just said. His main argument is that it will provide some flexibility.

8. Dr. Mabid Al-Jarhi first makes a general comment that it is necessary to determine the policy instruments within the monetary policy framework of an Islamic economy before the question of the central bank is discussed.

He then goes on to make his specific point with regard to profit-sharing. He says that although profit-sharing is a purely contractual arrangement, it is influenced by the supply of funds available for *Mudārabah:* larger the supply, the lower the share of the profit accruing to the financier. He seems to think that it would be better for the central bank to influence this ratio indirectly by affecting the supply of such funds than to tamper with the ratio arbitrarily. He suggests two ways in which the central bank can affect the supply of *Mudārabah* funds: (a) it may set aside a portion of its funds which will be deposited with the Islamic banks for purpose of *Mudārabah* investments and (b) it may float profit-sharing bonds proceeds from which will be made available to the Islamic banks for investments on a *Mudārabah* basis.

Finally, Dr. Al-Jarhi points out that the author has not touched on the monetary policy in relation to external equilibrium.

INFLATION AND THE ISLAMIC ECONOMY: A CLOSED ECONOMY MODEL

Muhammad Akram Khan

1.

INTRODUCTION

This paper attempts to answer two basic questions. First, what are the possibilities of inflation[1] being experienced in an Islamic economy?[2] Second, in case inflation is experienced, what are the possible remedies to fight it in an Islamic economy?

The basic hypothesis of this paper is that an Islamic economy, under normal circumstances, has a set of built-in stabilizers which provide a cushion against possible fluctuations in the price level. But this is not to suggest that an Islamic economy is inflation-proof, for such a suggestion would be naively self-flattering and unrealistic. General price level is a complicated phenomenon arrived at by the interaction of innumerable human and institutional factors. The possibility of aberrations in the behaviour of any set of economic agents can never be ruled out. That economic fluctuations are not completely alien to an Islamic economy is evidenced by historical experiences. During the life time of the Prophet (peace and blessing be upon him) a general rise in prices was experienced,[3] and during the *Khilafah* of Umar bin-al-Khattab, the Islamic economy experienced a famine.

As the topic suggests, the problem of inflation is to be discussed in the framework of an Islamic economy. But the *Sharī'ah* has not prescribed any final and detailed

1. The present writer is aware of the ambiguity that surrounds the term 'inflation'. Here it has been taken in the common place meaning of a general price rise. For the sake of simplicity, the discussion of various types of inflation is also being omitted. The question raised here is general, covering all types of inflation.
2. An Islamic economy is to be distnguished from "Muslim" economies of the present day. In a rigorous sense, an Islamic economy is an aggregate of economic relationships derived from the *Qur'an* and the *Sunnah* in a perspective of total application of the *Sharī'ah* in all walks of life. In this sense, at present there is no economy in the world which can be termed 'Islamic' as the *Sharī'ah* has not been put into practice in *toto* anywhere. Therefore, the forthcoming analysis has been conceived in a hypothetical economy and cannot be tested empirically.
3. *Kitabul Bayu:* Sunan Abu Dawud al Sajistani, chapter "Fi Tasier", Sunan al Tirmidhi, chapter "Fi Tasier", and Sunan Ibn Majah, chapter "Tijarah".

design of an Islamic economy. It has laid down the basic principles, leaving details to be decided in the temporal context. There is, therefore, no single codified model of an economy, which can be termed 'Islamic'. But any model can be treatd as 'Islamic' which has been conceived in the overall framework of the *Sharī'ah*. Therefore, the number of possible models of an Islamic economy can be infinite, depending on the local conditions and the mode of application of the *Sharī'ah*. Thus there may be genuine difference of opinion on matters of detail. But there is nothing sacrosanct about these models.

The analysis of inflation has been conceived by the present writer within the concept of an Islamic economy which will be made clear presently. Keeping in view the basic principles of the *Sharī'ah,* an attempt has been made to lay down the basic framework of the Islamic economy, within which the problem of inflation has to be analysed. It is in this perspective that th problem of inflation is discussed in this paper. As stated earlier, there is nothing divine about this vision of the economy. But the subsequent analyses can withstand the test of authenticity, if the design of the economy as visualised by the present writer is accepted as valid. Needless to say, the analysis may well be entirely different if the design of the economy is altered.

In section 2, the various built-in stabilizers have been discussed. However, discussion of these stabilizers has been restricted to avoid digression. Section 3 has been devoted exclusively to a discussion of measures in case inflation appears in an Islamic economy. Admittedly, the third section has been conceived on the unrealistic assumption of a closed economy. The question of international inflation and the apparatus an Islamic economy would require to hedge it, calls for a much bigger exercise than the present one. It is hoped that Muslim scholars will accept this challenge and try to hypothesis on the Islamic theory of intenational inflation.

It is further assumed that an Islamic economy would provide institutional arrangements to educate people in the teachings of the *Sharī'ah.* The *Sharī'ah,* for most of its regulations, has trusted the individual conscience and only in rare cases, where social pressure fails to elicit the desired behaviour pattern, allows the state to interfere. As the present day Muslim societies are far away from the ideal Islamic State, Muslim governments will be required to assume exceptionally large responsibility to provide such social infrastructure that may achieve the desired behaviour profile for most of the population. Therefore, the present analysis may look overly mechanistic where the state's 'big-brotherly' role seems to be curbing the individual's freedom and initiative. But this may be true for the transitional period. With the passage of time social institutions may be sufficiently strengthened and people may be adequately groomed in the *Sharī'ah* so that some of the proposed regulatory devices may become redundant.

2.

BUILT-IN STABILISERS

2A. *Credit Structure*

Without entering into the controversy over the causes of inflation, it may be safely argued that during inflation credit expands to abnormal limits. How far an Islamic economy is susceptible to inflationary pressures would therefore depend on the kind of credit structure envisaged.

i) *Ribā-free banking:* The fundamental credit institution of an Islamic economy is one based on a system of *Ribā*-free banking, as *Ribā* in all its forms has been forbidden by the Shari'ah.[4] There is, however, no universally accepted model of *Ribā*-free banking in existence. Different models have been proposed by Muslim economists but most of them are summary proposals and only a few of them have delved in any detail.[5] However, there is a near-consensus that *Ribā*-free banking has to be based on the principles of *Shirkah* and *Mudārabah.*[6] In the absence of an agreed model, it is difficult to base our analysis of inflation on any one set of proposals. However, for facility of reference, and due to its comprehensive treatment, we have adopted the model proposed by Dr. M.N. Siddiqui. [7] He has proposed to base *Ribā*-free banking on the principle of *Mudārabah.* Briefly, the savers will keep their savings in the bank in either of two accounts: current account or *Mudārabah* account.

The holders of current account shall not be entitled to any return from the bank while the *Mudārabah* account holders shall be entitled to a return subject to the profitability of investments. They shall not be allowed to draw the money except on the expiry of the term or after prior notice. The term shall consist of a minimum period of three months. The bank shall invest the surplus funds (deposited in both accounts) on the basis of *Mudārabah* for a minimum period of one term. The bank shall prepare a quarterly statement of position and settle accounts with the investors and the depositors. A part of the total deposits shall be set aside for *Ribā*-free *(Qard Hasan)* loans to business and individual users. The percentage to be set aside for this purpose shall be decided by the central bank.

On top of this structure, there will be a central bank, which would act as the lender of last resort, controller of creditor and issuer of the legal tender. The central bank will have powers to control the money supply and affect the direction of credit.

This is a bare summary of Siddiqui's proposal. It is evident that the *Ribā*-free bank will have only two channels to extend credit: *Mudārabah/Shirkah credit and Ribā*-free *(Qard Hasan)* credit. The former type of credit has certain pre-requisites: Firstly, the bank must be sure of the profitability of the business. Secondly, the credit cannot be extended for a period of shorter than 3 months (which in our case is the minimum accounting period). The first pre-requisite is observed by the present-day commercial banks as well. But the second requirement is hardly necessary for the modern commercial banks as credit can be extended on interest for any length of time. It can be for very short periods, and interest can be calculated and charged on pre-determined rates. But *Mudārabah* credit cannot be extended unless the duration of credit is sufficient to give results of investment, which means that the possibility of extending credit for speculative purposes will be considerably reduced.

This is in contrast with modern banking where credit is extended for speculative

4. Al-Quran (2:275, 278-80).
5. See, for example, M. N. Siddiqui, *Banking without interest,* Lahore: Islamic Publications, 1973; Irshad, S.A. *Bila Sood Bankari,* Karachi: Maktaba Tehrik-i- Musawat, 1965; Siddiqui, Naeem, *Muashi Nahumawarion Ka Islami Hal,* Karachi: Maktaba Chiragh Rah 1958; Qureshi, D.M., *Bila Sood Bankari,* Lahore; All Pakistan Educational Congress, *n.d.* Muslehuddin, *Banking and Islamic Law,* Karachi: Islamic Reserach Academy, 1974,etc.
6. cf. Muslehuddin, *op. cit.* pp. 94-95. He disagrees with the idea of basing *Ribā*-free banking on *Mudārabah.*
7. Siddiqui, M.N. *Banking without interest,* op. cit.

purposes as well. As a matter of fact, most of the speculative activity in stock markets is carried out with borrowed funds. These funds are obtained from banks, accepting houses, discount houses and other financial intermediaries which provide finance for short period of time. In the case of *Mudārabah* credit, it seems obvious that credit for speculative purposes will not be available.

The second channel is *Qard-Hasan.* As the name signifies it is a form of credit which intends to do some good to the borrower who is in distress or provide him liquidity for contingencies. It will be un-realistic to think that *Ribā*-free bank will be inclined to grant *Qard-Hasan* for speculative purpose, as the incentive for *Qard-Hasan* is more human than economic.

If the above analysis is correct, it will be realistic to assume that expansion of credit for speculative purposes will be restricted to a great extent. In normal cricumstances the velocity of credit will be at a low pitch.

Does this mean that the *Mudārabah* credit will never lead to an over-expansion of credit? It would be naive and unrealistic to think that it never will. Surely, it may happen if at any time the banks become over-optimistic and start extending credit on easy terms. But there is hardly anything that can be done to influence the bankers' expectations. However, it is more probable that, in the light of the stock exchange structure and the market mechanism (discussed below), the *Ribā*-free banker shall not be inclined to over-extend credit. Moreover, the control instruments, discussed in Section 3 of the paper, shall also be available to check expansion of credit to undesirable limits.

The above analysis also does not deny the inflationary character of the *Qard-Hasan* facility. As the *Qard-Hasan* does not carry any cost, there will, naturally, be a strong pressure on the banking system to extend it in large doses. But this possibility can be countered by such measures as reducing the proportion of *Qard-Hasan* funds, rationing credit, and levying excise duty on each loan application to be processed, details of which shall be discussed in Section 3 of this paper.

ii) *Speculation-free stock exchange:* One of the major sources of instability in the present-day economy is speculation on the stock exchange which provides a happy rendezvous the jobbers and brokers. Almost all of the major monetary crises of the capitalist world can be traced to the activities of speculators and financiers. In each case, credit was expanded to abnormal limits to finance speculative activity, until a 'selling spree' broke the spell and the resulting crisis ruined millions. Speculation on the stock exchange has been a potential source of aggravating cyclical conditions in the economy. Speculation and investment, on the face of it, are similar activities. Both involve buying of share-stock of business concerns. But in their ultimate objective they are poles apart. While speculation is "the purchase and sale of an asset in the expectation of a gain from changes in the price of that asset,"[8] investment means "purchase of any asset" or "expenditure on capital goods".[9] In the former case the objective is merely to derive any gain from shifts in the price level, whereas in the latter, the purpose is to participate in the productive activity. The speculator by developing ingenuity in the market trends tries to get some benefit. He does not add any utility to the production process.

8. Cootner, P.H., "Speculation, Hedging and Arbitrage", *Modern Encyclopaedia of Social Sciences,* London: Macmillan, 1968.
9. Bannock *et.al*, *Penguine Economic Dictionary,* 1975.

Speculation has three main sources: interest-bearing credit, future market, and determination of prices of shares and stocks by market forces. The first is categorically forbidden in the *Qur'an*. The second has been prohibited by the Prophet (peace be upon him) (see footnotes 44-48 *infra*). The third is a mjaor instrument by which speculators stay in the stock exchange. Basically, Islam is not opposed to free market for anything, but since it leads to speculative activity it requires to be regulated.

Should we accept that a modern-day Islamic economy should not have a stock exchange? This obviously is an unworkable proposal. A stock exchange plays a vital role in the provision and allocation of capital in the economy. It provides a platform for buying and selling of share stocks. An Islamic economy also requires these facilities. Therefore, it is necessary to provide a stock exchange which denies access to speculators but guarantees its useful role for the economy. This can be achieved by making speculation an unattractive business.

A set of proposals formulated by the present writer in an earlier paper, [10] contains the following salient features.

1. All those buying and selling practices which are prohibited in the *Sharī'ah* are to be legally banned. Thus short-selling, 'contago', 'option sales' and 'futures markets' are to be disallowed. Instead, each transaction must involve physical transfer of stock bought by a person. This contrasts with the present-day practice of stock exchanges where titles are not transferred immediately and in many cases sales are made 'short' in anticipation of procuring the stock and then delivering it at some future date.[11] The proposal for an Islamically regulated stock exchange does not provide for jobbers and brokers. Instead, agents of companies may be authorised to buy and sell the shares which are physically available.
2. The sale price of the share is to be regulated on the basis of their 'intrinsic value' and not 'market value'. By 'intrinsic value' is meant the value of shares as represented by the assets of the business enterprise. If we look at the balance sheet of a company, we see that on one side share capital, credits and accumulated profits are shown. The other side depicts assets of the business. The former side, in fact, is a statement of sources of funds and the latter an application of these funds. The balance sheet is affected by whatever the business does. The value of assets appreciates when profits are made and depreciates when losses are incurred. Share capital is nothing more but a representation of a company's assets. If the business is earning profits, its assets will grow and if it is bearing losses its assets will decline. In both cases the value of its shares should rise or fall. Any rise or fall in the value of share-capital must therefore be represented by a change in the value of its assets. Any other manner of price-regulation of the value of share stock is unrealistic and untrue. The 'intrinsic value' of a share, therefore, can be calculated in the following manner:

   Intrinsic value of a share = Share capital (par value)
   \+ Loss (if any)
   \+ Accumulated profits/Reserves
   − Accumulated loss, divided by Total Number of Shares.

10. Khan, M. Akram: "Stock Exchanges: Their functions and need for reform", *Criterion*, Karachi, Vol. 7, No. 1, Jan. 1972, pp. 28-38.
11. Ferris P., *The City*, Penguine, 1965.

It may be argued that if the book-value of assets of a company are depreciated to zero over years, the 'intrinsic value' of share capital will become zero or negative. This is a fallacious argument. Firstly, if the book-value of the assets which are physically in running condition is depreciated by the business concern, it is only engaged in creating 'secret reserves.' These reserves are to be included in the above formula under the term "Accumulated Profits." Secondly, we have suggested calculation on the basis of credit side of the balance sheet which ignores liabilities. A calculation based on all assets may be misleading to the extent that these assets represent borrowed funds as well. Thirdly, it is a known practice in business to revalue assets periodically, especially during inflation. Finally, regulations can be framed so as to prescribe uniform bases for valuation of assets.

3. There is also a proposal that visualises standardisation of balance sheets. In addition, it calls for certification of balance sheet by public accountants.

In the light of these proposals, a speculation-free stock exchange is possible. The activity in the stock exchange will then reflect only genuine buying and selling of shares. The artificial heat generated by speculation, it is hoped, will be effectively eliminated.[12]

Ribā-free banking and a speculation-free stock exchange are two main institutions which even out, to a large extent, the instance of instability from an Islamic economy. To say the least, if speculation generates inflationary pressures, in spite of these safeguards, an Islamic economy has the essential apparatus to withstand it. Another major source of instability is the international monetary system which, however, falls outside the purview of the present paper.

2B. *Demand Pattern*

The demand-pull theories of inflation propound that an excess of aggregate demand over supply generates inflation in lthe economy.[13] It is of interest to see if the aggregate demand can exceed the aggregate supply in an Islmaic economy.

i) Consumer behaviour: There are detailed instructions in the *Shari'ah* for the consumer. Normally, he is required to practise *'Iqtisad'*[14] (moderation) in his day-to-day spending. There is a definite list of articles which are *Harum*, and no money can

12. The objection that the regulation of share prices are contrary to the freedom available to the people in respect of all other assets is not valid in respect of shares, because of the following reasons:
    a) Other assets are most often bought in a definable form and the buyer can examine their quality, quantity, etc. But the buyer of a share buys an entitlement to a part of the assets of a business, his part being undefined in respect of those assets (i.e., he cannot say which particular asset he has bought). To safeguard him from any fraud or mis-statement, the deal has to be regulated by defining its exact value in terms of balance sheet figures. The Shari'ah has not allowed the sale of indefinite articles.
    b) If prices are allowed to be fixed in the market, where all sorts of speculations interact, there is a possibility that well-informed intermediaries will bid up prices artificially, which is prohibited in the Shari'ah. This possibility of collection to bid up prices artificially is greater in the sharemarket than in any other market as the goods being bought are not open for inspection. There is a wide area of blindness; hence the buyer needs a greater protection than in respect of other goods.
13. See, for example, Trevithik & Mulvery: *The Economics of Inflation,* London: Martin Robertson, 1975.
14. Al-Quran (25:67) (17:29).

be spent on them.[15] Similarly, a life of *Tana'um* (luxury) is not desirable.[16] A consumer is not allowed to indulge in *Israf*[17] or *Tabdhir*.[18] He is ordained to lead a simple life.[19] This was amply demonstrated by the Prophet (peace be upon him) himself. Throughout his life, he lived a rough, rigorous and simple life. His companions too lived like him. His life is a model for all Muslims.[20] So simple living devoid of *Israf, Tabdhir* and *Tana'um* is expected to keep the level of aggregate demand restrained. This may be compared favourably to a western consumer, who aspires for all the luxuries of life.

Institutional arrangements can be made to discourage luxurious and wasteful living, in conformity with the teachings of the *Qur'an* and the *Sunnah*. Thus the production and distribution of all those articles of use which are either prohibited or disfavoured in Islam will be banned in an Islamic economy. (However, in the case of luxuries, rare exceptions can be allowed.)[21] Moreover, the availability of instalment credit which has faciliatated the expansion of consumer demand in western capitalist

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15. Some of the *Haram* activities mentioned in the *Qur'an* can be referred to in (2:188), (3:161), (5:33, 38), (4:10), (83:1-3), (31:6), (24:33), (2:275-280).
16. (a) Ornaments (for men) and utensils made of these metals are prohibited. See, Salib Muslim: *Kitabul Libas*, H. 4, 5; Sahih Bukhari: *Kitabul Janaiz*, Chapter 2, *Kitabun Nikah*, Chapter 71, *Kitabul-ashriba*, Chapter 28, *Kitabul-marda*, Chapter 4, *Kitabul-libas*, Chapter 45-47, 53, *Kitabul-aiman wan-nudhur*, Chapter 6, and *Kitabul itisam bil kitab wan sunnah*, Chapter 4; Sunan Abu Dawud al Sajistani: *Kitabul libas*, Chapter 8, and *Kitabul Khatam*, Chapter 1, 3; Sunan al-Tirmidhi: *Kitabul libas*, Chapter 13, and *Kitabul Janaize*, Chapter 53, and *Kitabul zinah*, Chapter 63-65, 73, 96, 97, 100, 110, 114; Sunan Ibn Majah: *Kitabul at'ima*, Chapter 40; Muwatta Imam Malik: *Kitabulubsith-thiyab-lil-Jamala-biha*, Hadith 4; Musnad Ahmad b. Hanble: Vol. 1, p. 81; 92, 93, 104, 105, 114, 116, 119, 121, 123, 126, 127, 132, 133, 137, 138, 146, 377, 380, 392, 397, 401, 424, 439, Vol. II, p. 60; 72, 94, 107, 109, 119, 146, 153, 163, 179, 211, 468; Vol. III, p. 14; Vol. IV, p. 171; 195, 260, 284, 287, 299, 427, 443; Vol. V, p. 272; 278, 359; and Musnad Abu Dawud Tayalisi: Hadith 103, 182, 386, 396, 746, 2452.
    (b) For prohibition of paintings, photography, sculpture as professional activities and rearing of dogs as luxury - see: Sahih Muslim: *Kitabul Libas*, Hadith 22, 25; Sahih Bukhari: *Kitabul libas*, Chapter 25; Sunan Abu Dawud al Sajistani: *Kitabul Adab*, Chapter 52; Sunan Ibn Majah: *Kitabul Libas*, Chapter 16; Musnad Ahmad B. Hamble: Vol. I, p. 20, 26, 36, 37, 39, 46, 49; Vol. II, p. 329, 337, Vol. III, p. 23, 101, 281; Vol. IV, p. 5, 145; and Musnad Abu Dawud Tayalisi: Hadith 2217, 2264.
    (c) For prohibition of silk, see:
    Sahih Muslim: *Kitabul Libas*, Hadith 119, 122; Sahih Bukhari: *Kitabul buyu*, Chapter 40, *Kitab bad'il khalq*, Chapter 7, 17, *Kitabul anbiya*, Chapter 8, *Kitabul maghazi*, Chapter 12, *Kitabun Nikah*, Chapter 76, *Kitabul Ijara*, Chapter 88, 92, 95; Sunan Abu Dawud al Sajistani: *Kitab Tahara*, Chapter 89, *Kitabul Libas*, Chapter 45; Sunan al-Tirmidhi: *Kitabul adab*, Chapter 44; Sunan al-Nisai: *Kitabut - tahara*, Chapter 167, *Kitabus Said Wadhabaih*, Chapter 9, 11, *Kitabuz zunah*, Chapter 130; Sunan Ibn Majah: *Kitabul libas*, Chapter 44; Sunan al-Darim: *Kitabul isti'dhan*, Chapter 37; Muwatta Imam Malik: *Kitabul-isti'dhan*, Hadith 6, 8, 7; Musnad Admad b. Hanble: Vol. I, p. 80. 83, 85, 104, 107, 139, 146, 148, 150, 277; Vol. II, p. 305, 308, 390, 478; Vol. III, p. 90: Vol. IV, p. 28, 29, 30; Vol. V, p. 203; Vol. VI, p. 142, 246, 330; and Musnad Abu Dawud Tayalisi: Hadith 110, 627, 1228, 1425.
    d) For prohibition of artificial wigs on hair and luxurious expenditure on make-up by ladies, see :
    Sahih Muslim: *Kitabul Libas*, Hadith 170, 171, 172, 173, 174, 178, 179, 181, 182; Sahih Bukhari: *Kitabul buyu*, Chapter 25, 113, *Kitabul tafsir il Quran*, Surah 59, Chapter 4, *Kitabul tibb*, Chapter 36, *Kitabul Libas*, Chapter 82-87, 96; Sunan Abu Dawud al Sajistani: *Kitabul Libas*, Chapter 8, *Kitabul tarajjul*, Chapter 5; Sunan al-Nisai: *Kitabuz-zinah*, Chapter 20, 23-26, 90; Sunan al-Tirmidhi: *Kitabul adab*, Chapter 33; Sunan al-Darimi: *Kitabul isti'dhan*, Chapter 22; Musnad Ahmad b. Hanble: Vol. I, p. 83, 87, 107, 121, 133, 150, 158, 251, 330, 409, 416, 430, 433, 443, 448, 454, 462, 464, 465; Vol. II, p. 21, 319, 339; Vol. IV, p. 134, 135; Vol. VI, p. 250, 257; and Musnad abu Dawud Tayalisi: Hadith 390, 401, 1825.
    (e) Prohibition of sale of singing girls has been declared: it alludes to prohibition of the so-called cultural activities involving singing and dancing. See:
    Sunan al-Tirmidhi: *Kitabul buyu*, Chapter 51; *Kitab Tafsirul Quran*, Surah 31; Sunan Ibn Majah: *Kitabut-Tijarah*, Chapter 11; and Murnad Zaid b. Ali: Hadith 1005.
17. *Al-Qur'an* (6:141), (7:31), (25:67).
18. *Al-Qur'an* (17:26-27).
19. Sahih Muslim: *Kitabul Libas*, Hadith 63; and Sunan Abu Dawud al Sajistani: *Kitabul Libas*, Chapter 42.
20. *Al-Qur'an* (33:21).
21. See Sahih Muslim: *Kitabul Libas*, Hadith 41, 43, 45; Sahih Bukhari: *Kitabul Jihad wal-Siyar*, Chapter 91, *Kitabul Libas*, Chapter 29; Sunan Abu Dawud al Sajistani: *Kitabul libas*, Chapter 10; Sunan al-Tirmidhi: *Kitabul libas*, Chapter 2; Sunan al-Nisai: *Kitabuz zinah*, Chapter 111; Sunan Ibn Majah: *Kitabul libas*, Chapter 17; Musnad Ahmad b. Hanble: Vol. III, p. 122, 127, 180, 192, 215, 252, 255, 273; and Musnad Abu Dawud Tayalisi: Hadith 1972, 1973.

economies will be considerably reduced in an Islamic economy, since no interest can be changed on such credit. Then it may not be to the advantage of the seller to sell goods on credit unless he has access to *Qard Hasan* for this purpose.

The *Shari'ah* has discouraged living beyond one's means.[22] A consumer is required to live within his means as far as possible. He is provided *Qard-Hasan* to meet his necessities only. In no case is a person granted Qard Hasan to provide for himself comforts or luxuries. The *Shari'ah* has not allowed a person to undertake pilgrimage or even to sacrifice a goat on *Eid-ul-Adhha*[23] with borrowed funds. How can it tolerate a person indulging in the purchase of comforts with borrowed funds?

Seen in this perspective, it can be hoped that the possibilities of aggregate demand outrunning aggregate supply would be minimised.

ii) Artificial demand creation: One of the mainsprings of excess aggregate demand over aggregate supply is the institutional arrangement of artificial demand creation through sales promotion efforts and *Ribā*-laden instalment credit. The present-day sales promotion efforts through radio, TV and press commercials as well as mail order business appeal to the baser emotions of the consumer. Demand is artificially created for 'new' products by dint of vigorous advertising campaigns without imparting proportionate utility to the consumer.

Advertising is a tool which has been misused widely by the business world. In an Islamic economy, it will have to be stripped of its negative aspects. The sales persuasion based on incorrect[24] or incomplete [25] information has been categorically prohibitd by the Prophet (peace be upon him). Similarly, appeals to one's baser self have also been condemned in the *Shari'ah.* Advertising activity will be regulated in an Islamic economy to make it a useful tool for educating people and promoting sales and its use to create demand artificially by concealment of facts or by creating a tantalizing effect on the nerves will be banned. The present writer has the following vision in this regard.

An Islamic State will establish a central advertising agency with its regional branches. All the advertising copies shall be approved by the advertising agency in respect of content, appeal, media and cost. The contents must contain all the essential information about the product including the harmful effects. The appeal of the advertisement should be conceived in the framework of Islamic value. Motives like sex, *Hirs, Iktinaz,* self-pride, etc. should not be appealed to, nor should an appeal to induce people to live a life disapproved by the *Shari'ah* be allowed. The cost of the advertisement will have to be limited to a fractional percentage of the factory cost of producing each product so that the consumers are not burdened with high advertisement costs.

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22. Musnad Ahmad b. Hanble: Vol. I, p. 323.
23. Al-Marghinani, *The Hedaya,* (Eng: Trans. Hamilton, C.), Lahore: Primier Book House, p. 592.
24. (a) The Prophet (peace be upon him) has prohibited the sale of goods by false vows. See: Sahih Muslim: *Kitabul Iman,* Hadith 255; Sahih Bukhari: *Kitabus Saum,* Hadith 1; Sunan Abu Dawud al Sajistani: *Kitabul aqdiya,* Chapter 21; Sunan al-Tirmidhi: *Kitabul Ahkam,* Chapter 13; Sunan Ibn Majah: *Kitabul Ahkam,* Chapter 31; MuwattaImam Malik: *Kitabul aqdiya,* Hadith 5, 6, 7; and Musnad Ahmad b. Hanble: Vol. I, p. 248, 315, 323; Vol. III, p. 305; Vol. V, p. 278.
    (b) For prohibition of cheating in business, see: Sahih Muslim: *Kitabul buyu,*Chapter 56; Musnad Abu Dawud Tayalisi: Hadith 1881.
25. Sahih Muslim: *Kitabul Iman,* Hadith 186, 187; Musnad Ahmad b. Hanble: Vol. II, p. 16, 53, 142, 150, 183, 185, 217, 224, 306, 329, 417, 488; Vol. IV, p. 46, 54; and Musnad Abu Dawud Tayalisi: Hadith 1828.

The advertisement function, thus regulated, will be a servant rather than a master of the consumers. It can be expected that the present pressure of consumer demand will not be built up in an Islamic economy when consumers are granted essential sovereignty to make their own decisions.

The Islamic pattern of consumer demand in general, and the absence of institutional arrangements that create demand artificially for consumer goods in particular, would have a moderating effect on the growth of aggregate demand in an Islamic economy, thereby lending some stability to the general price level.

2C. *Employer-Employee Relations*

The focus of cost-push theories of inflation is a wage-hike unaccompanied by a proportionate rise in labour productivity.[26] In the capitalist economies of the West, industrial strife has generated a vicious wage-price spiral. It has been suggested that until wages are stabilized either through negotiations or an 'income policy' there are little chances of controlling inflation.

The pattern of employer-employee relationship in an Islamic economy is such that there is hardly any scope for wage-demands as commonly experienced in capitalist societies. The rights and obligations of the employees and employer have been defined by the Prophet (peace be upon him) himself. He has raised the status of the worker by saying that the best of earnings is obtained through one's own hands.[27] Moreover, the employer and the employees are brothers. The employers should treat their brethren with kindness and grant them similar facilities of life as they themselves are getting. They should be provided with proper working conditions congenial to their health.[28] On the other hand, employees have been instructed to be the well-wishers of their employers. They have been advised to put in an honest hard work for day's wages and not to steal anything from the employers.[29]

In the matter of wages, the policies of the first four *Khalifas* are a major source of guidance for us. They accepted it as the state's responsibility to provide a minimum standard of living for everyone.[30] This included food, clothing, and shelter.[31] In an Islamic State of modern times, wages wll have to be regulated on this principle so that no employee gets less than a socially acceptable minimum. And the minimum, these days, can be defined to include medical care and education as well, besides food, clothing and shelter. Of course, the question of wages cannot be detached from the productivity of the worker. Therefore, a formula of what may be termed as a 'just

26. See footnote 13, *supra*.
27. For excellence of labour, see Sahih Bukhari: *Kitabul buyu,* Chapter 15; Sunan al-Nisai: *Kitabul buyu,* Chapter 1; Sunan Ibn Majah: *Kitabuttijarat,* Chapter 1; and Sunan al-Darimi: *Kitabul Buyu,* Chapter 6.
28. For rights of labour, see Sahih Muslim: *Kitabul Aiman,* Hadith 58, 60; Sahih Bukhari: *Kitabul itq,* Chapter 15, 18; Sunan Abu Dawud al Sajistani: *Kitabul Adab,* Chapter 123; Sunan al-Tirmidhi: *al-Birru was-Silah,* Chapter 29-31; Sunan Ibn Majah: *Kitabul adab,* Chapter 10; Muwatta Imam Malik: *Kitabul Istidhan,* Hadith 40-42; Musnad Zaid B. Ali: Hadith 937; Musnad Ahmad b. Hanble: Vol. I, p. 12; Vol. II, p. 90; Vol. IV, p. 35; Vol. V, p. 168, 173, 250, 258, 377.
29. For duties of labour, see Sahih Muslim: *Kitabul Iman,* Hadith 284; Sunan al-Darimi: *kitabun-nikah,* Chapter 46; Sahih Muslim: *Kitabul Aiman,* Hadith 63, 65; Sahih Bukhari: *Kitabul itq,* Chapter 16; Sunan Abu Dawud al Sajistani: *Kitabul adab,* Chapter 124; Muwatta Imam Malik: *Kitabul ist'dhan,* Hadith 4; and Musnad Ahmad b. Hanble: Vol. II, p. 18, 20, 330, 402.
30. See Sunan Ibn Majah: *Kitabus sadaqat,* Chapter 9, and Musnad Ahmad b. Hanble: Vol. V, p. 267, 293.

wage', which recognises individual differences in productivity as well as 'needs', can be arrived at.

Besides guaranteeing a just wage, employers have also been instructed to treat their employees with kindness *(Ihsan)*. They are asked to subsidise those products for the employees which have been produced by them.[32] Thus for example, the workers in a textile mill may be sold the cloth of the mill at subsidised rates.

Social security to the employees is provided through the national scheme of *Zakāh,* which takes care of the poor, the needy and the debtors. The employees of the Islamic State, if provided a cover against emergencies or the burden of debts, will take a relaxed view of their relations with their employers. The tension which is often generated by economic pressures and the jealousy of the economic status of the employers will subside to a considerable extent.

Through a long-term educational process, the economic values of Islam will be inculcated in all the economic agents. These values uphold *Qana'a,*[33] *Tawakkul,*[34] *Sabr,*[35] in high esteem and condemn *Hirs,*[36] *Shuhh,*[37] and *Iktinaz.*[38] Moreover, Muslims are supposed to be well-wishers of each other,[39] never perpetrating *Zulm* on anyone[40] and giving precedence to others over one's own self.[41] These values, when fully cultivated, can be expected to generate a congenial atmosphere rather than set a stage for industrial strife.

To summarise, the industrial strife of the present-day industrial world is mainly an outcome of a materialistic outlook of life, discontentment and unlimited ambition. This was aggravated by past industrial excesses practised by the employers on their employees. An Islamic economy tackles this problem on two counts: it regulates the rights and duties of employers and employees and secondly, through a long-term educational process, cultivates a value-system which is expected to generate a more congenial atmosphere than the one experienced now-a-days. In the opinion of the present writer, the employer-employee relationship as visualised by Islam paves road for wage stability. This is not to assert that the wage-demands will be an alien concept in an Islamic economy. In case where such a situation arises, the state will have to interfere to regulate the wage-price relationship. To this we shall turn later.

2D. *Market Rigidities*

The modern analysis of inflation is often visualised in a capitalistic framework of

31. See Ibn-Hazm *al-Muhalla,* Vol. 6, p. 156.
32. See footnote 27 *supra.*
33. See Sahih Muslim: *Kitabu uz Zuhd,* Hadith 11, 13; Sahih Bukhari: *Kitabur Riqaq,* Cahpter 3; Sunan al-Tirmidhi: *al-Zuhd,* Chapter 25; and Musnad Ahmad b. Hanble: Vol. II p. 24, 41, 132.
34. See Sunan Ibn Majah: *Kitabal-Hudud,* Chapter 14; Sunan al-Tirmidhi: *Kitabu Zuhd,* Chapter 33, 34; and Musnad Ahmad b. Hanble: Vol. I, p. 30, 52.
35. See Sahih Muslim: *Sifatul Munafiqin,* Hadith 66, 68, 69, *Kitabu al Zuhd,* Hadith 80; Sunan al-Darimi: *Kitabur Riqaq,* Chapter 36; Musnad Ahmad b. Hanble: Vol. II, p. 283, 523; Vol. III, p. 349, 387, 394, 454; Vol. V, p. 142; and Sahih Bukhari: *Kitabul Marda,* Chapter 1.
36. See Sunan al-Nissai: *Kitabul Jehad,* Chapter 8; Sunan al-Tirmidhi: *Kitabul Birr was- Silah,* chapter 41; Musnad Ahmad b. Hanble: Vol. II, p. 256, 340, 342, 441; and Musnad Abu Dawud Tayalisi: Hadith 2208, 2461.
37. *Al-Qur'an* (4:128), (59:9), (64:16).
38. *Ibid.,* (9:34).
39. See Sahih Bukhari: *Kitabul Iman,* Chapter 4, 5, 7.
40. *Al-Qur'an* (2:188), (4:10).
41. *Ibid.,* (59:9).

perfect competition. But in real life a number of market rigidities may interfere with the natural course of price determination. These rigidities influence the price level in certain sectors of the economy while prices in other sectors are also pushed up through a spill-over effect.

Islam sanctions a market economy that is regulated to rule out possibilities of *Zulm*, or *Akl-bil-batil* for some, or any artificial tampering with the natural course of supply and demand. But where this natural course takes a turn harmful to society in general, active state interference is also prescribed.[42] Some of the market rigidities which have been explicitly forbidden are discussed below. On the analogy of these, other malpractices of the present-day economy will have to be identified and controlled in an Islamic economy.

i) Speculation in the commodity markets: A very familiar feature of the commodity market is speculation. Goods are sold and bought on telephone a number of times and profit-margins are added at each stage without making actual delivery of goods. The speculators settle their differentials mutually and the last buyer the consumer pays for these differentials to all these speculators. Similarly, future markets exist for many agricultural products. Bargains are settled even before the crops are grown and the yield is apparent. Besides bringing ruin to many families, it has the effect of raising the ultimate price without adding any form, time or place utility to the product.

Islam has placed a total ban on all these practices. The Prophet (peace be upon him) has categoricallly instructed us not to conclude a bargain until the possession is also passed on.[43] Similarly, a buyer cannot sell the product until he has taken the full measure,[44] or carried the product to his warehouse.[45] Spot buying and selling without adding any utility to the product are not allowed. Similarly, all futures markets are banned. No crop can be sold until the fruit or grain are apparent.[46] Even in that case any sudden loss to the crop is to be compensated by the seller.[47]

ii) Middle-man: In the agricultural products market, one of the major malpractices is the existence of middle-men, who obtain the products from farmers cheaply and sell to the people in cities at higher rates. During the life-time of the Propphet (peace be upon him) these practices were quite rampant. He forbade the people in the cities

42. Ibn Taimiyah, *Al-Hisba fil Islam,* Egypt; Matba' Muyyad, 1318 A.H (p. 27-29) as quoted by the Jama'ati Islami Report *Islami Hikmat-e-Maeeshat,* Lahore) 1969, p. 152.
43. See Sahih Muslim: *Kitabul Buyu,* Hadith 33; 35; Sahih Bukhari: *Kitabul buyu,* Chapter 51 (c), 49, 54; Sunan Abu Dawud al Sajistani: *Kitabul buyu,* Chapter 65; Sunan al-Tirmidhi: *Kitabul buyu,* Chapter 56; Sunan al-Nisai: *Kitabul buyu,* Chapter 54, 55; Sunan Ibn Majah: *Kitabut tijarat,* Chapter 37; Sunan al-Darimi: *Kitabul buyu,* Chapter 25; Muwatta Imam Malik: *Kitabul buyu,* Hadith 40-46, 49; Musnad Zaid b. Ali: Hadith 556, 557; Musnad Ahmad b. Hanble: Vol. I, p. 56, 215, 221, 252, 270, 356, 368, 369; Vol. II, p. 46, 59, 63, 73, 79, 108, 111, 329, 337, 349; Vol. III, p. 327, 392, 403; and Musnad Abu Dawud Tayalisi: Hadith 1318, 1887, 2602.
44. See Sahih Muslim: *Kitabul buyu,* Hadith 58, 60, 61, 65, 66, 67, 68, 69, 70, 71; Sahih Bukhari: *Kitabul buyu,* Chapter 83, 85-87, 93, *Kitabus-Salam,* Chapter 3, *Kitabush-Shurb,* Chapter 17; Sunan Abu Dawud al Sajistani: *Kitabul buyu,* Chapter 22, 25, Sunan al-Tirmidhi: *Kitabul buyu,* chapter 15; Sunan al-Nisai: *Kitabul buyu,* Chapter 27, 28, 34, 39, *Kitabul Aiman wannudhar,* Chapter 45; and Sunan Ibn Majah: *Kitabul-tijarat,* Chapter 32.
45. See footnote 44, *supra.*
46. See footnote 45, *supra.*
47. Sahih Muslim: *Kitabul Musaqat wal-muzara'a,* Hadith 14.

to bargain on behalf of the villagers,[48] and to contact the villagers on their way to cities and buy their products at rates cheaper than the market rate.[49] A ban on these two practices calls for the provision of easy access to the open market for every one and a large scale transmission of market information to growers of crops so that they are not cheated from their potential gains. A modern Islamic economy will provide these market services to the agriculturists and the middle-men be simply banned. The market services which may be provided are the provision of godown space, transportation facilities, dissemination of market information, etc. This will reduce the extent of artificial tampering with the price by middle-men.

iii) Collusion: One of the present-day evils of the market economy is the collusion of big producers to fix prices at monopoly levels.[50] This puts the common user at a loss and the spill-over effect of this collusion raises prices elsewhere as well. In primitive agricultural markets also, the prices were bid up artificially by the collusion of a few sellers. This practice was prevalent in the days of the Prophet (peace be upon him) as well. It has been prohibited by him.[51]

An Islamic economy in modern times will regulate all these monopolistic tendencies by (a) passing anti-trust laws; (b) educating people about their rights; and (c) by inculcating a high moral sense among producers (sellers) so that they become the well-wishers of others.

iv) Ihtikar: Sometimes artificial shortages are created in the market by holding large stocks of goods in godowns and warehouses and withholding them from sale. The motive is to keep supply shorter than the demand and to profiteer by this situation. This is often done by big businessmen, who can afford to block large sums of capital.

It is known as *Ihtikar* in the *Shari'ah* and is *Haram*. The Prophet (peace be upon him) categorically forbade Ihtikar.[52] in an Islamic economy, legislation will be passed against *Ihtikar*. This will remove artificial shortages by big businessmen and will let the natural price level prevail in the market.

In the absence of speculation, middle-men and collusion to bid-up prices and Ihtikar, it can be reasonably hoped that an Islamic economy will not experience an artificial rise in the price level.

2E. *Resource Allocation*

Nevertheless, inflation can occur even in the absence of any increase in the aggregate demand or the wage level. Such an inflationary pressure is often the outcome of insufficient installed capacity. Often the supply of the price-inelastic

48. See Sahi Muslim: *Kitabul buyu,* Hadith 13, 14, 15; Sahih Bukhari: *Kitabul buyu,* Chapter 60, 64, 68, 70 *Kitabul Shurut,* Chapter 8, 11, *Kitabul hiyal,* Chapter 9; Sunan Abdu Dawud al Sajistani: *Kitabul buyu,* Chapter 44; Sunan al-Tirmidhi: *Kitabul buyu,* Chapter 65; Sunan al-Nisai: *Kitabul buyu,* Chapter 15, 16, 18, 20; and Sunan Ibn Majah: *Kitabut tijarat,* Chapter 14.

49. See footnote 48, *supra.*

50. The mechanism has been discussed in detail in J.K. Galbraith, *The Affluent Society,* London: Pelican Books, 1958.

51. See footnote 48, *supra.*

52. See Sahih Muslim: *Kitabul Musaqat wal-muzara'a,* Hadith 156, 158, 159; Sunan Abu Dawud al Sajistani: *Kitabul buyu,* Chapter 44; Sunan al-Tirmidhi: *Kitabul buyu,* Chapter 65; Sunan Ibn Majah: *Kitabul tijarat,* Chapter 14; Sunan al-Nisai: *Kitabul buyu,* Chapter 15, 16, 18, 20.

commodities (necessities) falls short of the demand due to allocation of resources in the price-elastic (luxuries) sector. This warrants a reallocation of resources away from the production of luxuries toward the production of necessities.

In an Islamic economy, the production of luxuries is a strand of *Israf* on a national scale. As a matter of fact, the production of luxury items will not be allowed so long as an adequate and cheap supply of necessities is ensured. All the resources which are utilized in the production of luxury items for the upper classes may be diverted to generate a regular supply of necessities at low prices. For example, the state, through its allocative power, can divert resources to the textile industry to produce cheap cloth for use by the common man. The production of silk and other fabric of fine quality can be restricted until an abundant supply of cloth is made available for the common man.

Islam has ordained an optimum use of resources. In no case does it want to see resources kept idle or wasted.[53] For example, the *Shari'ah* has recognized the ownership right of a person on *Mawat* (dead land), if he develops it and brings it to use.[54] Similarly, if a piece of land is kept uncultivatd for three years, it is liable to be confiscated by the state.[55] There are reported cases of re-appropriation of *Jagir* (land grant) by the pious *Khalifas* once the donee could not develop the land.[56]

Similar is the case of idle manpower resources. The Prophet (peace be upon him) has placed a high value on hard work. He has condemned beggary and idleness.[57] On the basis of these teachings, an Islamic economy will pass laws which make voluntary unemployment unlawful. Everybody capable of work must engage himself in some useful occupation or he will be coerced to do so. This will also take care of the situation where people might like to live on *Zakāh* benefits and sit idle. The law might not allow *Zakāh* benefits to able-bodied idlers.

Thus it can be hoped that an Islamic economy has the potential to safeguard against a general shortfall in the aggregate supply. This can be achieved by reallocating resources from luxuries to necessities and by utilizing idle resources.

2F. *Possible Sources of Inflation*

The built-in stabilisers, enumerated above, set the stage for a stable price level.

53. See Sahih Muslim: *Kitabul Haid,* Hadith 118; Sahih Bukhari: *Kitabudhdhaba'ih was-said wat-tasmiya,* Chapter 30; Sunan Abu Dawud al Sajistani:*Kitabul libas,* Chapter 38; Sunan al-Tirmidhi: *Kitabul libas,* Chapter 7; Sunan al-Nisai: *Kitabul fara'u wal-atirat,* Chapter 1-6; sunan Ibn Majah: *Kitabul libas,* Chapter 25; Sunan al-Darimi: *Kitabul adahi,* Chapter 20; Muwatta Imam Malik: *Kitabus said,* Hadith 16-18, 19; *Kitabul lubs-us-thiyabi,* Hadith 16; Musnad Ahmad B. Hanble: Vol. I, p. 219, 227, 237, 261, 270, 277, 279, 280, 314, 327, 329, 343, 348, 365, 366, 372, Vol. III, p. 476, Vol. V, p. 6, 7, Vol. VI, p. 73, 104, 148, 153, 154, 329, 333, 336, 429; and Musnad Abu Dawud Tayalisi: Hadith 1243, 1568, 2761.
54. See Salih Bukhari: *Kitabul Harthu wal muzara's,* Chapter 15,*Kitabul mu'alimu wal-ghasb,* Chapter 13; Sunan Abu Dawud al Sajistani: *Kitabul Kharaji wal-imarati-wal-fai,* Chapter 35; Sunan al-Tirmidhi: *Kitabul ahkam,* Chapter 38; Sunan Ibn Majah: *Kitabur-ruhun,* Chapter 17; Sunan al-Darimi: *Kitabul buyu,* Chapter 64; Muwatta Imam Malik: *Kitabul aqdiya,* Hadith 26, 27; Musnad Ahmad b. Hanble: Vol. III, p. 304, 313, 326, 338, 356, 363, 381; Vol. VI, p. 120; and Musnad Abu Dawud Tayalisi: Hadith 906, 1440.
55. See Yahya b. Adam; Kitabul Kharaj, Cairo: Maktaba Salfia, p. 91.
56. Abu Yusuf, *Kitabul Kharaj* (Urdu Trans. M.M. Siddiqui), Karachi: Maktaba Chiragh-e-Rah, 1966, p 248.
57. See Sahih Muslim:*Kitabuz Zakat,* Hadith 158; Sunan Abu Dawud al Sajistani: *Kitabuz Zakat,* Chapter 24, 28; Sahih Bukhari: *Kitabuz Zakat* Chapter 52; Sunan al-Nisai: *Kitabuz Zakat,* Chapter 83; Sunan Ibn Majah: *Kitabuz Zakah,* Chapter 26; Sunan al-Darimi: *Kitabuz Zakat,* Chapter 17; and Musnad Ahmad B. Hanble: Vol. I, p. 147, 167, 193, 466, Vol. II, p. 15, 88, 93.

But there are certain institutions in an Islamic economy, which have an inflationary character and unless a carefully adjusted mix is prepared, it is possible that these latter institutions will destabilise the price level. What will be the exact outcome of this situation cannot be predicted in the absence of real life data. But it is clear that the existence of these 'destabilishing' factors will necessitate anti-inflation measures, suggested later in this paper.

i) Zakāh benefits: Out of the eight heads of *Zakāh* expenditure,[58] at least three (i.e. the *Fuqara,* the *Masakin* and the *Gharimin*) pertain to the poorer sections of society. Even rest of the five could be 'poor'. Anyhow, *Zakāh* is a transfer of wealth from the 'rich' to the 'poor'.[59] It is common knowledge that the poor have a higher propensity to consume than the rich. Therefore, the institution of *Zakāh* is a potential source of increasing aggregate demand in the economy which could be inflationary.

ii) Just wages: The concept of just wages, enunciated above, contains seeds of inflation. The just wage, besides being related to productivity, has been mainly construed to provide basic necessities of life to everyone. Moreover, the profit-participation, bonus, subsidies on the produce of the employee and social security from *Zakāh* are all inflationary in character as they will directly boost demand consumer goods industries. The egalitarian proposals to 'appease' labour may not be economically feasible. The net effect of these measures on harmonious industrial relations will have to be carefully worked out.

iii) Liquidity preference: The people's demand to hold money has a relationship with their demand for goods and consequently with the price level. A higher liquidity preference means a higher demand for money while a lower liquidity preference releases funds for transactions in the market. Thus a fall in the liquidity preference, through pressure on demand for goods, leads to a higher price level. In a capitalistic economy there are three motives of liquidity preference: (a) transactions motive; (b) precautionary motive; and (c) speculative motive. It has been argued by Keynes that the first two motives are stable by nature and it is the speculative motive which fluctuates and widely so with the rate of interest. A small change in the rate of interest causes disproportionate changes in liquidity preference.

In an Islamic economy, due to ban on speculation and interest, the speculative motive to hold money will not exist. The precautionary motive can also be supposed to be weak, in the presence of a comprehensive *Zakāh*-based social security scheme. Similarly, the transaction motive seems to be weak on the following grounds: (i) condemnation of *Iktenaz;*[60] (ii) exhortation for *Infaq;*[61] (iii) condemnation of *Bukhl;*[62] and (iv) emphasis on the transitory nature of worldly life and its insignificance.[63]

It obviously means a low liquidity preference, which as we have seen, is

58. *Al-Quran (9:60).*
59. See Sahih Bukhari: *Kitabul Zakat,* Chapter 63; Sunan Abu Dawud al Sajistani: *Kitabuz Zakat,* Chapter 39; Sunan al-Tirmidhi: *Kitabuz Zakat,* Chapter 21.
60. See footnote 38, *supra.*
61. *Al-Quran* (2:254, 267), (4:397), (13:22), (57:7), (64:16).
62. *Ibid.,* (4:37).
63. *Ibid.,* (18:46).

inflationary in character. But, it cannot be asserted that this pattern of liquidity preference will generate inflation. In the initial period of transition to an Islamic economy it may be so, but subsequently, because of its stability, it may be anti-inflationary. Therefore its exact impact cannot be predicted safely.

3.

CONTROLLING INFLATION

3A. *Monetary Policy:*

Like any modern State, the Islamic State shall have monetary tools to control credit in the economy. The forthcoming discussion has been perceived in the framework of *Ribā*-free banking, thus eliminating interest as an essential tool of monetary management.

i) Qard Hasan ratio: As has been pointed out earlier, there will be two types of account holders in the islamic bank: (a) current account holders; (b) *Mudārabah* account holders. The deposits on *Mudārabah* account shall be invested according to the terms and conditions agreed to by the depositors. The current deposits shall be divided into three parts: (i) cash reserve; (ii) *Qard Hasan* reserve; (iii) *Mudārabah* funds. The ratio of reserves shall be regulated by the central bank. For example the central bank can prescribe that of the total demand deposits there will be 10 per cent cash reserve, 40 per cent *Qard Hasan* reserve and 50 per cent for investment of *Mudārabah.* It is expected that because of zero cost of capital the pressure on *Qard Hasan* reserve will normally be quite strong. The central bank can use this ratio for *Qard Hasan* as a tool to control supply of credit. Thus, for example, during times of inflation the 40 per cent ratio can be reduced to say, 30 per cent. This will reduce capacity of the commercial banks to extend credit on the basis of *Qard Hasan.*

But the effeciency of this tool can be seriously impaired if the commercial banks use reduction in *Qard Hasan* ratio to make more funds available for *Mudārabah.* This, of course, would depend on the conditions of the real sector and the demand for funds there. Anyhow, an expansion in the investment opportunities will surely provide the commercial banks to divert funds from *Qard Hasan* reserve to *Mudārabah* instrument. This will render this tool partly ineffective.

The *Qard Hasan* ratio can be sharpened as a weapon with two additional provisions:

a) The reduction in the *Qard Hasan* ratio may accompany a higher legal reserve ratio with the central bank, thus, siphoning off the excess liquidity of the commercial banks caused by reduction in the *Qard Hasan* ratio.
b) The re-finance facilities from the central bank may be made a function of the *Qard Hasan* extended by the commercial banks to the private sector. And once a smaller ratio for *Qard Hasan* has been prescribed, the extend of re-finance credit by the central bank to the commercial banks shall also go down. This will ensure a contractionary effect.

ii) Profit-share ratio: The profit-share ratio means the ratio of profit between the banker and the investor on *Mudārabah* funds.[64] For example, the bank may extend funds to an investor on the condition that 40 per cent of the total profit on bank's capital shall accrue to the bank. This 40 per cent is the profit-share. The central bank can use the profit-share as a tool of monetary control. During times of inflation it can increase the profit-share (say, from 40 per cent to 50 per cent) in favour of the bank, so that it becomes less lucrative for investors to obtain funds from the banks, as the cost of capital will have increased.

A potential source of leakage may be the effort of the private sector to add increased cost to the price of the product. But this would depend on the competitiveness of the market, because a monopolistic market can defeat all efforts to control inflation. So, the problem is related to the overall functioning of the economy. Monetary policy alone can hardly help in such a situation.

iii) Legal reserve ratio: The conventional tool of maintaining a certain percentage of total deposits with the central bank shall also be available for the Islamic central bank. During inflation, commercial banks can be made to keep a higher ratio (say, increasing it from 10 per cent to 15 per cent) of their deposits with the central bank. This will reduce the power of the commercial banks to extend credit to investors.

iv) Some variants of reserve ratio: Recent banking history has placed at the disposal of the central bank certain variants of the legal reserve ratio. These variants have been tried in different economics with mixed consequences. It is proposed that the Islamic central bank can also consider these tools and devise its own mix according to the economic conditions of the country.[65]

v) Supplementary reserve requirement: This method was devised by the Reserve Bank of South Africa in 1956. "Under the scheme of supplementary reserve requirements which the commercial banks have to maintain with the central bank a statutory percentage of their demand and time liabilities, the central bank may require the commercial banks, if deemed in the national interest, and usually after due notice, to maintain supplementary reserve amounting to a stated percentage of any increase in such liabilities after a specified date.[66] "It has also a direct and immediate impact upon the lending capacity of the commercial banks and can be used promptly to neutralise the effect of sudden and large movements of foreign capital or of unavoidable creation of central bank credit through open market purchase."[67]

vi) Special deposit system: The system of special deposits was tried for the first time in England in early days of the First World War. It was revived in 1958 as an alternative to the relaxation of credit squeeze granted in July 1958. The Bank of England was empowered to restrict the liquidity of the banking system by calling for

64. The term has been coined by Monzer Kahf in his paper "Contribution to the Theory of Consumer Behaviour in the Isamlic Society," In studies in Islamic Economics. A selection of papers presented to the First International Conference on Islamic Economics, held at Makkah, 1976, Edited by Khurshid Ahmed.
65. The discussions on the variants to legal reserve ratio has been based on Basu, S.K., *A Review of Current Banking and Practice,* London: MacMillan, 1974.
67. *Ibid.*, p. 131.
67. *Ibid.,* p. 132.

special deposits. These deposits would not be considered as part of the liquid assets of the banks.[68] "The immediate effect of the requirement is to reduce the liquid assets of the banks by an equal amount. With the banks continuing their usual minimum ratio between liquid assets and deposits, the potentiality of credit expansion would have removed or diminished."[69]

vii) Special accounts system: The system was tried in Australia by amendments in the Australian Bank Act. Under this system, "the amount of commercial bank funds which a central bank was entitled to immobilise at any time was related to *increase* in the commercial bank deposits rather than a percentage of *total* deposits ... The procedure was designed to impound in frozen balances and with it a sufficient part of the resources available to the banking system and thereby restrict capacity of the banks to create credit."[70]

viii) Cash reserve ratio: Cash reserve ratio is a conventional tool of credit control. The commercial banks are required to set aside a certain minimum percentage of their total deposits in the form of hard cash to honour cash demands of the deposits. This tool can also be used by the Islamic central bank. During inflation, the cash reserve ratio can be increased, leaving the commercial banks with a lesser lendng capacity.

ix)Refinance ratio: The liquidity of the commercial banks can be affected by manipulating 'refinance' ratio by the central bank. In an Islamic economy, the central bank will extend refinance to the commercial banks to the extent of percentage of the *Qard Hasan* granted by the commercial banks to the public. For example, it may lay down that each commercial bank can borrow *(Qard Hasan)* from the central bank to the extent of, say, 30 per cent of the total *Qard Hasan* grantd by them to the public. During inflation, the central bank may revise downwards this ratio (say, from 30 per cent to 20 per cent), thus affecting the capacity of the commercial banks to extend *Qard Hasan.* This weapon, however, does not affect the liquidity of the bank on *Mudārabah* funds.

x) Open market operations: Open market operations are a very widely used tool in the monetary management. It has been suggested by M.N. Siddiqui that the Islamic central bank, too, will have similar powers to manipulate the credit supply in the economy. He has visualised that the central bank shall buy or sell different commercial papers in the open market at market prices, which shall be determined by supply and demand in the market.[71]

It is difficult to entirely agree with Siddiqui. The modern system of buying and selling stock of shares, as discussed earlier, is, by and large, in the hands of the speculators. The system provides an unrestricted area of operations for the speculators. Therefore, the grafting of the present-day stock exchange operations onto an Islamic economy, will bring in all its evils as well. Moreover, the system of Riba-free banking does not provide a resting ground for a modern stock exchange.

68. *Ibid.*, pp. 133-134.
69. *Ibid.*, p. 134.
70. *Ibid.*, p. 136.
71. Siddiqui, M.N. *op.cit.* pp. 124.125, 151-152.

In the light of our discussion of the stock exchange in this paper, it can be suggested that the central bank can enter into "open" market operations only to a limited extent. The central bank, like any other customer, shall have to stand in line to wait for genuine buyers and for the 'intrinsic value' of the share to appear. This, obviously, blunts this weapon of monetary control to a considerable extent.

xi) Selective credit control: Besides the general credit control measures discussed above, certain selective credit control devices have been developed in areas where conventional weapons have not proved effective. Consumer credit is one such measure where a credit squeeze directed by the central bank hardly carries any effect. In the light of the American experience, a number of countries have regulated consumer credit (instalment sales) by manipulating the size of the down payment and the number of instalments.

As discussed earlier, the quantum of instalment sales will not be very large in an Islamic economy because of zero interest on this credit and the regulaton of consumer behaviour in the light of the *Shari'ah.* Anyhow, to the extent that it is deemed necessary to curtail instalment sales, the Islamic central bank can also apply the formula of raising the size of down payments and reducing the number of maturities in order to restrain inflation.

xii) Variants of selective credit control: Recently, in certain countries of Asia and Latin America variants of selective credit controls have been tried with considerable success. The Islamic central bank can also consider to adapt these variants according to local conditions. Some of the variants are as follows:

1. Import pre-deposit requirement: Under this system, "The applicants for foreign exchange or for import business are obliged to deposit with the central bank a certain percentage of the funds required to pay for imported goods "...The importer's own funds are then tied up for longer periods than would be the case if they were not required to make these deposits..."[72] But if these deposits are allowed to remain with the commercial banks this device cannot be used as a tool of monetary policy. Similarly, if the banks are not prevented from making loans to meet these requirements, it will not be an effective tool.

2. Ceiling on advances: The central bank can lay down ceilings on advances for individual borrowers from the commercial banks. For example, it can be prescribed that credit to an individual applicant, beyond a certain limit, will require sanction of the central bank. This can be used also by the Islamic central bank.

3. Non-bank credit: One of the areas highly insensitive to monetary policy is non-bank credit, which is not normally regulated by the central banks. Most of the leakage happens in this sector. In an Islamic economy, the non-bank agencies will also have to be regulated through legislation. For example, the house-building filnance and loans to employees by the government and private enterprises may have to be squeezed during inflation by state directives; otherwise the policies of the central bank may not be very successful.

72. Basu, S.K. *op.cit.,* p. 158.

4. Moral suasion and direct action: It is a conventional method to pressurise member banks to implement the central bank policies in true spirit. In all countries this has worked well because it is in the interest of commercial banks to have friendly ties with the central bank. In an Islamic economy, too, moral suasion can be used to implement central bank policies. In extreme cases of non-cooperation, the central bank can cancel the licence of the member bank.

3B. *Fiscal Policy*

i) Surplus Zakāh budget: Every year the Islamic state shall prepare a *Zakāh* budget separately from the budget of other receipts and expenditure because the expenditre heads of *Zakāh* have been defined in the *Shari'ah* and are not subject to any modification.

As observed earlier, the *Zakāh*-benefits are inflationary in character and during times of rising prices, a careless distribution of these benefits will not only push prices further, but will also damage the interest of the poorer section of society, which is in receipt of these benefits. In order to save these benefits from corrosion, one proposal can be to prepare a surplus *Zakāh* budget. This is possible because nowhere in the *Shari'ah* has it been observed that all the *Zakāh* receipts can be spent immediately. Time lags can be introduced between collection and distribution of *Zakāh.* This can be done with little human inconvenience. Expenditure on defence *(fi Sabil li-lallah)*, communication *(Ibn as-sabil)* and *Muallafatul Qaloob,* may be reduced and the share of *Fuqara, Masakin* and *Gharimin* may be kept intact. The surplus *Zakāh* budget will have the effect of reducing aggregate demand in the economy and consequently may dampen the price level.

ii) Surplus budgeting-other sector: Besides *Zakāh,* the budget of the other sector, i.e., receipts and expenditre from other taxes can also be prepared in surplus. This is a conventional fiscal tool and an Islamic economy can also use it with benefit.

iii) Zakāh certificate: It has been proposed by some that instead of cash transfer *Zakāh* funds may be invested in industries to provide employment for poor people.[73] The profits from these industries may be distributed among the *Fuqara, Masakin,* and *Gharimin* in the form of annual dividends.

In the initial phase of implementation, such a policy will be inflationary owing to time lags between investment and production, with aggregate demand outstripping aggregate supply. But subsequently, the dividends of these industries may be used as a fiscal device. It can be so arranged that in periods of rising price level the dividend is not distributed in cash. Instead *Zakāh* certificates may be issued at par value, encashable at the option of the holder after a period of three to six months. In this way, demand can be dampened for a short period.

iv) Zakāh-benefits mix: The *Qur'an* has ordained eight heads for *Zakāh* distribution but the precise ratio of these heads has not been laid down. It is at the discretion of the state to decide the share of each head of account. This provides a fairly wide operational freedom to the state. In an Islamic economy, comparative effects on aggregate demand of expenditure on these heads shall be studied and in

73. See Hasanuzzaman, "Zakāt and Fiscal Policy". Unpublished. Mecca Conference Paper (1976), p. 29.

the light of the findings a suitable *Zakāh*-benefits mix shall be prepared. On the face of it, it can be said that expenditure on *Fuqara* and *Masakin* is more inflationary than, for example, expenditure on *Muallafatul Quloob,* or *Gharimin.* The *Muallafatul Quloob* may have a smaller propensity to consume than the *Fuqara* and *Masakin.* Similarly, *Zakāh* to *Gharimin* will be passed on to the creditors who can normally be expected to have a better economic position and thus a lower propensity to consume than the *Fuqara* and *Masakin.* But all this needs to be worked out in the light of empirical evidence. Once these indicators are available, a suitable mix can be devised for *Zakāh* expenditure to control inflation.

v) Debt management: The Islamic State can use debt management as a fiscal tool in the following two manners :

1. It can issue fresh loan certificates *(Quard Hasan), Mudārabah* share, or *Shirkah* shares to pay off earlier liabilities. And in this sweep, the fresh collection can be arranged to be larger than the liabilities being paid off, leaving a surplus with the State. This surplus will reduce the purchasing power in the hands of the people. But, if this surplus is on account of *Shirkah* or *Mudārabah* share, the State will have to invest these shares. In that case, the exact impact of debt management will hinge upon the nature of investment, its gestation period and its capital-output ratio. It might be that the surplus on *Shirkah* or *Mudārabah,* when invested, generates greater inflationary pressure.

2. The State can appeal for *Qard-Hasan* to meet its defence requirements because *Jehad Fi Sabil-illah* is the responsibility of every Muslim. Public opinion can be mobilized to buy interest-free three months to five year long *Jehad* certificates. As an added attraction, tax concessions may be granted to obtain longer-term *Jehad* loans. Again, the net effect of this squeeze can be ascertained only after deducting the relaxation granted through tax concessions.

vi) Excise duty on loan applications: The state can levy excise duty on all loan applications and then use it as a fiscal tool. During times of inflation, the excise duty on each loan application with the banks can be increased to discourage request for credit. But this cannot be a very effective tool, as the amount of excise duty cannot, for political reasons, be made a high fraction of the sum requested.

3C. *Incomes Policy*

According to the conventional analysis of inflation, inflation need not occur so long as there are unemployed resources in the economy. Every increase in the aggregate demand, it was believed, would bring in unemployed resources into productive use and match supply with demand, so that prices are not bid up. It was only after full employment has been reached that prices will go up with an increase in demand. The Keynesian analysis was based on this theory. But recently, a strange phenomenon has been observed: inflation with unemployment. An increase in demand did not bring in a decrease in unemployment; instead it pushed up prices, to add to the agony of the general public. In such a situation, conventional tools of credit control do not remain effective. For example, if monetary policy is used to tighten credit, or if fiscal policy is used to raise taxes, (so that inflation is contained) it will reduce the production further, it will only aggravate the inflation.

As a matter of fact, such a situation arises when potential supply is larger than aggregate demand. Hence any further dampening of demand is improper. Monetary and fiscal policies are effective in the reverse situation where aggregate demand is larger than potential supply. Now if the former situation prevails, then there is no alternative other than an "incomes policy". Incomes policy means state interference to regulate incomes and prices so that no increase in income is allowed without a proportionate increase in productivity. Thus for example, if in any year productivity goes up by 5 per cent, wages and other incomes should not increase by more than 5 per cent.

This is to be achieved by voluntary agreements with employers and trade unions. But in case this is not being followed in letter and spirit, direct state intervention can be prescribed. In the United States, this was achieved through a system of guidelines. The industries were instructed to stick to the level indicated by official guidelines. Anyhow, an incomes policy is the only solution to the problem of inflation, where dampening of demand is not possible due to the existence of excess installed capacity. An Islamic economy will also have to adopt this policy in similar circumstances.

3D. *Policies in Abnormal Circumstances*

It is possible that pockets of inflation may develop due to the delinquent behaviour of credit sector. General policy measures to affect the price level may not be suitable in those circumstances. In that case, an Islamic State can take direct action to remove the hardship of the general public. This has been allowed by the *Shari'ah* under the omnibus provision of *Izalatul Darar,* a principle which is invoked to suspend general provisions of the *Shari'ah* for a short time where, due to aberrational behaviour of certain agents, a situation injurious to the common people develops. There is a concensus among the doctors of law that suitable changes in the normal law can be introduced to redeem people from hardship. Thus for example, if a multi-millionare proposes to buy large tracts of land in a town, he may be forbidden to do so under the principle of *Izalatul Darar,* so that he may not cause *Daiq* (hardship) to the common people. In this case, the normal law granting freedom to everyone to buy or sell anything one wants will have to suspended.

The following are some of the examples of direct action:–

i) Price Control: Can an Islamic State fix prices? In normal circmstances, the answer is, No. Once during the life-time of the Prohpet (peace be upon him), the general price level rose up. When the people requested the Prophet (peace be upon him) to fix the ceiling of the price level, he refused to do so, saying: "God determines the price level. He contracts and expands (the *Rizq*) and He grants *Rizq* (to everyone). I want to meet *Allah* (in a state) that none has to claim a right from me."[74]

On the basis of this tradition, it has been argued by some that the state cannot interfere with the price level. But another interpretation of the tradition is that the Prophet (peace be upon him) did not want to interfere with the natural market forces in the determination of the price level. But in case these natural market forces are not allowed to take their turn, or are artificially interrupted by malpractices, the state has

74. See footnote 3, *supra*.

the jurisdiction to interfere to save the people from injury. This point of view has been adopted by *Ibn Taimiyya*[75] and *Ibn Nujaim.*[76]

Price control, however, cannot be adopted as a regular feature of the economy, as it may lead to the development of black market of consumers' goods. But as a transitory measure, the state can fix prices, especially of necessities in order to save people from hardship.

ii) Buffer stocks: For maintaining a stable price level the state can keep large buffer stocks of necessities with an announced policy to sell at a given price. This will be used against those who may be tempted to profiteer or indulge in *Ihtikar* to create an artificial shortage. This will also act as a moral restraint. In practice, the state may not have to bring its stocks into the market, as the effect of the state's holding of stocks itself may be a deterrent.

iii) Confiscation of stock-holdings: In rare circumstances, when the good of the general public so recommends, the state can confiscate private stockholdings of necessities.

This impounding of private stocks will be a clause of law against *Ihtikar,* and it will be exercised after a reasonable notice, in times of extreme hardship. For example, during famine or flood, the profiteers might like to make fat profits by *Ihtikar;* the state can, after giving them notice, confiscate such stocks (with or without compensation) to save the people from mass hunger.

iv) Rationing: During the life-time of the Prophet (peace be upon him) a case was brought to him for decision where two cultivators disputed over access to irrigation water. The Prophet (peace be upon him) rationed the use of water by deciding that the first one could irrigate his land until the water is ankled-deep, and that he should let the excess water flow to the next cultivator. On this analogy, the state can introduce rationing of food and other necessities during periods of extreme crisis, such as famine or war.

v) Liberal imports: Another stop-gap measure is to liberalise imports of the commodities that are in short supply. Of course, the imports will have to be tied in with the balance of payments situation. But as a temporary measure, this can be adopted as a policy. In the absence of these imports, the price level might shoot up, bringing misery to the common people.

4.

CONCLUDING REMARKS

In normal circumstances, an Islamic economy is not prone to a high rate of inflation due to certain built-in stabilisers. But this does not rule out the possibility of inflation due to factors like wars, famines, floods, earthquakes, excess of aggregate

75. Ibn Taimiyah, see footnote 43, *supra.*
76. Ibn Nujaim, *Al-Ashbah wan-Nazair,* p. 121-129, as in footnote 74, *supra.*

demand over potential supply due to technological innovation, unfair wage hikes and market malpractices (such as collusion to raise prices, *Ihtikar,* profiteering, etc.). In these circumstanbce, the Islamic State has a set of policy tools which can be used to stabilize the price level.

The success of the policy measures to control inflation hinges upon their intelligent execution. To have policy tools is one thing, and to use them properly is quite another. For those policies to be effective, prompt action and a high degree of resilience and responsiveness are required: we therefore need to instill an Islamic conscience in the people by educating them in the *Shari'ah,* set up appropriate monetary and fiscal institutions and establish information collecting and dissemination systems and develop an honest and sincere bureaucracy. The implementation of the *Shari'ah* in the entire society will bring forth many problems, and the real challenge for the Muslim economist lies in facing these problems.

All that has been said above is no more than tentative and it needs to be tested against empirical evidence. In the absence of real-life data, it can be neither accepted nor rejected, except that someone else can have different conjectures. It is important to give a trial to the economic system of the *Shari'ah* and then to find solutions to the problems. A large number of problems which we perceive as major ones may turn out to be minor ones in the *Shari'ah*-based system.

COMMENTS

1. Dr. Osman Rani Hassan *Discussant)*

My assignment is to discuss Mr. Muhammad Akram Khan's paper on "Inflation and an Islamic Economy: A Closed Economy Model". This is not an easy task for me as the paper has been carefully written, well "guarded" within the framework of a closed Islamic economy, and guided by the *Sharī'ah.*

As Mr. M.A. Khan indicates, the intention of his paper is to discuss two basic issues: (i) the possibilities of experiencing inflation in an Islamic economy, and (ii) the possibile remedies to fight inflation, should it occur in an Islamic economy. Regarding the former the emphasis is on the credit structure as inherent in an Islamic economy. It is argued that in a *Ribā-free* banking system which restricts credit expansion for speculative purposes and in a speculation-free stock exchange, credit expansion can possibly be and should be regulated in accordance with the *Sharī'ah.* Similarly, the writer points out some possible factors that may contribute to inflation like excess demand, shortage of supply, market rigidities and unbalanced resource allocation between luxuries and necessities (especially those which can artificially be created) are well taken care of by the 'built-in-stabilizers'.

Under the assumption of an ideal "Islamic Society" in the analysis of consumer behaviour, there is very little, if any, to quarrel with in Mr. M.A. Khan's analysis. Similarly, one can argue that there should not be any serious inflation in the centrally planned economic system. In such a model, planners determine what to produce, how to produce and for whom, and simply price the product accordingly. What I feel needs to be discussed further is this issue of 'Islamic man' versus 'economic man'. In traditional economics, one can easily conceptualize the consumer behaviour as one aimed at maximising utility subject to certain constraints, moving toward equilibrium. But the model of consumer behaviour in an Islamic economy as outlined by the writer cannot easily be explained in terms of a set of postulates, for the consumer objective and the manner of movement toward equilibrium are not spelled out. Without the model being clearly spelled out, I think it is difficult to comprehend the overall analysis. This does not mean that Mr. Khan has entirely neglected these questions. The behavious of consumers and also of firms is pointed out here and there, *albeit* in an unorganized manner. However, I believe, this type of analysis is important to pave the way towards a more concrete model of an Islamic economy.

From the behaviour of 'Islamic man' as described in the paper, Mr. Khan tends to convice us that inflation can automatically be controlled or minimized. It also, however, raises a number of related questions: Will the same consumer behaviour help overcome deflation, should it occur, say for lack of demand? Will it not discourage growth? How will the system affect employment?

It is also alleged that benefits from *Zakāh* and just wages are inflationary. This may be true, but the effect can be minimized to a certain extent. Apart from practising surplus *Zakāh* budget as proposd by the writer, we might also consider the transfer of Zakah in kind (like fertilizer and machines) or the provision of free medical and educational facilities to the poor. In this way both incomes and output can be increased accordingly as not to affect prices immesurably, especially in the longer run.

While the model predicts that an Islamic economic system is not conducive to inflation, the writer however feels that this is insufficient. Inflation may occur for various other reasons outside the influence of the built-in-stabilisers in the economy. In such a case various policy measures may be used, particularly the monetary, fiscal and incomes policies. All these measures are recommended (though with some modifications) to regulate the supply of money in the economy. Since the type of inflation in the model discussed is not specifically referred to, it is difficult to pinpoint which policy should be given priority or what should be the policy-mix and one cannot therefore disagree on the points put forth by Mr. Khan. It is sometimes difficult to judge (without empirical verifications) the effectiveness of each of the policies. For example, the reduction in the supply of money through monetary manipulation to curb inflation may be nullified by an increase in the velocity of circulation of money., As noted by Mr. Khan, in an Islamic economy, where speculation and interest are banned, the liquidity preference tends to be low. Similarly, measures to increase the cost of investment (e.g., increasing the 'profit-share' in favour of the bank) may well be passed on to the consumers in the form of higher prices of output.

The fiscal measures mentioned, e.g., the surplus budget (including surplus *Zakāh* budget), and debt management can be used to check inflation. In addition, we may also like to suggest that direct taxes be increased to replace indirect taxes. In this respect the payment of *Zakāh* is a form of direct tax, although it may not be so flexible as the rate is more or less fixed.

As the problem of inflation is also a problem of supply and demand, it is necessary to tackle the problem by either curtailing demand or increasing supply or both. In the light of present inflationary experience, both should take place. On the one hand we should increase investment expenditure and, on the other, decrease consumption expenditure. In this there are already provisions in the *Sharī'ah* , where expenditures on luxuries and unnecessary things are highly discouraged. How would investment expenditure be affected? Will zero rate of interest be of any help?

Finally, one would like to know whether such a system could work. It is again very diffficult to give the answer a priori. For one thing, the model given to us is of a closed economy. In reality, there is interdependence among the nations of the world. Once the economy is opened to outside forces, there would be more complications and the model needs to be revised accordingly. For another, we are still at a highly theoretical level. Unless we can produce empirical evidence, nothing can be that certain. To ensure the success of an Islamic economy we need to (a) eradicate institutional weaknesses, for example, the unethical behaviour of consumers and producers; (b) have a continuous dialogue with planners, administrators and political leaders about goals and strategies; (c) overcome excessive caution and resistence to innovation and change; and (d) have a leadership and civil service fully committed to the cause of Islam. Above all, it requires a great deal of political courage (especially in the early stage) to steer the economy towards the long-term interests of all citizens. Otherwise, we may be leading towards continuous frustration and growing conflict.

2. Prof. K.T. Hossein

The great value of the paper is that it has put forward a soheme for managing an economy on Islamic lines to avoid inflation as far as possible. According to the arguments in this paper, ethics have to come forward to rescue economics. And the state controls envisaged can be adopted even in non-Islamic States. The author has the advantage of having referred to original sources. This is commendable. But the great disadvantage of the paper is that the scheme contained in it is of a capsule type to be taken as a whole and within a capitalistic framework. While Islam does recognise private ownership of property and productive resources, the possibility of a phenomenal increase in possession in these days of technological advancement is a thing to discount. The eventual impact of the proposed scheme will possibly be realised through experimentation. More sophisticated analysis with simulation techniques with computers may be helpful in this matter.

Land ownership referred to by the author is really production-oriented with emphasis on utilization which differs from unrestricted right of ownership adumbrated in the civil laws of most countries (right to destruction of one's own property is included in it). The real nature of property ownership in Islam is trusteeship as envisioned in the compulsary nature of *Zakāh* payment. This point seems to deserve a detailed analysis.

Are the "possible sources of inflation" outlined by the author also probable in the context of an Islamic economy? The economy can well be geared to adequate production (and imports where possible) when it is Islamized. *Zakāh* and just wages will also help save the economy from demand deficiency.

The author gives the impression that there are no limitations on profits in an Islamic economy. *Al-Hadith* may possibly be cited to show that there is no room for excessive profit-margins in Islam, for the businessman are to view profit as their remuneration for the distributive function of goods with which they are entrusted. The high profit margin which are now common creates crises in common people's lives.

If some very rich people quit production because of disadvantages such as limits imposed on profits, prohibition of interest, etc., an Islamic economy may run into trouble. It is to be considered whether the same principles are to be made applicable to everyone in an Islamic country. This point deserves consideration.

Will economic growth be slowed down in the process of curbing inflation? This point deserves consideration, especially since the context of the paper seems to be basically a variant of the capitalistic system.

Some additional minor observations are in order. The author's ideas about the so-called Jehad Certificates and Loans need to be thoroughly examined from the Shari'ah point of view. There is also a need to examine the feasibility and the permissibility of price controls in an inflationary situation in an Islamic economy.

GENERAL DISCUSSION

1. Dr. Ahmad Mohammad Ali is in basic agreement with the author on the point that the *Shari'ah* has not given a detailed design of an Islamic economy. He says that the *Shari'ah* has laid down the basic principles, elaborations of which have to be made in the light of the teachings of the *Qur'an* and the *Sunnah*. However, Dr. Ali is of the view that the author has contradicted himself by his assertions on every page of his paper, giving the impression that the *Shari'ah* has provided a detailed list of do's and dont's. He feels that most of these assertions need to be re-examined, and expresses doubt whether the author could find proofs in the *Qur'an* and the *Sunnah* to support them.

   Dr. Ali registers his objections particularly to the assertions by the author that the *Shari'ah* has laid down an elaborate code for consumer behaviour and that the rights and duties of employees and employers have been defined and elaborated in the *Shari'ah*. He also objects to another statement by the author to the effect that "many" articles have been declared Haram, and raises the question as to what percentage of the articles available now has been declared Haram. He is also particularly struck by the statement that borrowing for purposes of luxuries and unnecessary comforts is forbidden, and asks whether borrowing of money to buy a refrigerator is permitted or prohibited by the *Shari'ah*. Dr. Ali's submission is that such details are not spelled out by the *Shari'ah*, which nevertheless is perfect in the sense that its basic principles are applicable in all countries and at all times.

   Dr. Ali criticizes the author for "mixing up" economic issues with the moral behaviour of a Muslim. He says that a distinction must be made between "moral" and "contractual" behaviour. For example, speaking on the contractual relationship between employers and employees, he says that Muslim Courts will go along with the contractual relationship, and not with moral ethics which Islam suggests.

   Dr. Ali's final comment is that Mr. Akram Khan's paper, which he thinks is excellent for academic purposes, diverts attention from present-day problems faced by Muslim societies and institutions, by visualising an ideal Islamic society which does not exist. He is of the opinion that priority should be given to research on present-day issues - e.g., short-term investment avenues for the Islamic Development Bank (IDB).

2. Dr. Mohammad Abdul Mannan expresses his support for the approach adopted by Mr. Akram Khan in conceptualising some of the problems in the context of an ideal Islamic economic theory. He thinks that the application of such ideals to the real situation would enable us to see the real difficulties. However, Dr. Mannan qualifies his support by pointing out some drawbacks. In this connection, he says that the author has avoided issues of current interest, such as imported inflation and stagflation. Finally, Dr. Mannan questions the validity of the Hadith, referred to by Mr. Akram Khan, on the subject of price control.

3. Dr. Ziauddin Ahmad first emphasizes that there is no basis for expecting or believing that everything in an Islamic economy should be entirely different from other economic systems in the world. As a starting point, he suggests that Muslim economists spell out the distinguished features of an Islamic economy, which may serve to change or revise some of the Western economic ideas or concepts.

   Dr. Ziauddin's main focus is on the consumption in an Islamic economy and its implications for the analysis of inflation. He subscribes to the veiw that an Islamic economy is highly egalitarian with an accent on redistributive justice, but rejects the hypothesis that the transfer of income from the rich to the poor will cause the marginal propensity to consume (MPC) in an Islamic economy to be exceedingly high. He says that one must also take into account the structural and institutional changes which accompany such income transfers in analysing the impact of income redistribution on consumption propensities. Dr. Ziauddin says that there is empirical evidence to show that redistribution of agricultural land can lead to increased saving by creating incentives to save among farmers. The point that Dr. Ziauddin is driving home is that the impact of income redistribution on consumption will depend on the structural changes which Islamisation of the economy will bring about, and that one should not dogmatically assume a high MPC in an Islamic economy.

   Dr. Ziauddin goes on to argue that a rise in MPC, if any, need not necessarily enhance the inflationary process, for much would depend on the aggregate supply function as well. He points out that a rise in consumption will lead to inflation in situations of full employment of the Classical variety and to real output expansion in situations of excess capacity of the Keynesian type. He is of the view that all these in the final analysis depend on the development strategies and policies and not on religion.

4. Dr. Najatullah Siddiqi makes a number of points in response to the comments made by some of the previous speakers, before he gets to Mr. Akram Khan's paper. Responding to Dr. Ali, he picks up the issue of separation of the economic from the moral behaviour of man. Dr. Siddiqi points out that one cannot divorce the ethical from the legal aspect of the Islamic *Shari'ah*, for no watertight division between the two is possible. He is of the view that what may seem to be purely ethical or moral is also legally enforceable in certain circumstances, examples of which can be found in the area of *Fard Kifayah* He thinks that the Islamic State can intervene to enforce them if they are not performed voluntarily.

   Referring to another point raised by Dr. Ali that priority should be given to practical problems presently faced by Islamic institutions like the IDB rather than to model-building and theoretical exercises, Dr. Siddiqi thinks that it would be dangerous to deal with practicalities in the absence of a sound theoretical foundation. He stresses the importance of establishing certain "norms" at the academic level before practical problems are discussed.

   With reference to a comment by Dr. Mannan on the *Hadith* which deals with price control, Dr. Siddiqi says that he has no doubt about its validity or authenticity. He points out that this particular Hadith, which says "God is the one who fixes the price", has been thoroughly pondered upon by Imam-ibn-e-

Tamiya who concedes that the Hadith is correct. Dr. Siddiqi says that he has devoted about 40 pages of his book, *Islam ka Nazria-e-Malkiat,* Volume II (in Urdu), to a discussion of this subject. He goes on to explain that this Hadith must be understood in the context in which it was expounded: the Prophet (peace be upon him) was reported to have said this when people asked him to fix commodity prices at a time of acute shortage of food grains due to draught and some other natural causes. Dr. Siddiqi says that it represented a God-created situation where prices could not be fixed, for adequate supplies could not be ensured. He further points out that Imam-ibn-e-Tamiya had said that, in times of man-made shortage, the Head of State is perfectly entitled to fix prices and to institute follow-up measures. Dr. Siddiqi also refers to an historical experience during the period of an Abbaside Caliph when prices of food grains were fixed, supplemented by the importation of food grains from prosperous areas.

Coming to Mr. Akram Khan's paper, Dr. Siddiqi appreciates that a number of new ideas have been thrown in by the author - e.g., the idea of "*Zakāh* benefit mix". He makes a specifc reference to the role of profit-sharing in the context of banking as well as monetary policies. He is of the view that the author has rightly pointed out the possibility of manipulating the percentage share of profits flowing back to the financier in such a way as to influence the supply of low-level funds and the demand for loans. Dr. Siddiqi believes that the "profit-share" ratio can be adjusted upward or downward so as to bring about an equilibrium between supply and demand for credit. His submission is that profit-sharing ratios and refinance ratios represent potent regulatory devices for combating the problem of inflation.

Finally, Dr. Siddiqi objects to the use of the term "inflation" by the author to describe the price increases experienced during the time of the Prophet (peace be upon him) and the time of Hazrat Umar. Dr. Siddiqi points out that these refer to famine situations marked by acute shortages in commodity supplies, and warns that the liberal use of the term "inflation" in such cases will confuse the issue.

5. Dr. Mohammed Sultan Ahmed Abou Ali is in agreement with the general conclusion of the paper, according to which built-in stabilisers in the Islamic system tend tomake an Islamic economy less prone to inflation. He is also in sympathy with some of the measures suggested by the author for dealing with inflation, if it does arise in an Islamic economy.

   However, Dr. Abou Ali disagrees with the author on a number of specific points. He does not think that speculation is illegitimate in an Islamic economy, but nevertheless concedes that speculation connected with future dealings may not be in accordance with Islamic tenets as it deals with something that does not belong to anyone yet. In his view, the paper has a tendency to make the government interfere in so many areas-which he strongly objects to, for it would only add to the inefficiency of the bureaucracy. But he does not agree with the author's suggestion that price control should be resorted to only under extraordinary conditions and not as a regular feature of the economy. He believes that price control will be helpful in the allocation of resources and the administration of the economy.

Finally, Dr. Abou Ali reacts to a comment made earlier about the implications of egalitarian distribution of income for inflation. He points out that egalitarian income distribution may not lead to inflation, for people who are used to a more unequal income distribution may save a substantial proportion of the additional income resulting from a more equitable redistribution.

6. Mr. J.I. Laliwala says that *Zakāh* is not inflatinary - it is rather anti-inflationary. His reasoning is that the transfer of income from the rich to the poor will make the latter more productive and efficient, resulting in increased real output. He also points out that a once-and-for-all price rise does not constitute inflation which refers to persistent price increases.

   In an attempt to vindicate the position he has taken in his own paper, Mr. Laliwala argues that it is the government and no other section of society which is really responsible for inflation. He thinks that it is only the government which owns the power of credit creation, while all others can acquire money only by contributing to output.

7. In the opinion of Dr. Mohammed Umer Chapra, the main weakness of the paper lies in the fact that the sources of inflation are discussed towards the end of it. He believes that the author would have arrived at entirely different conclusions, had he discussed them at the beginning and analysed them in the light of Islamic teachings.

   Dr. Chapra maintains that inflation is bound to exist in Muslim societies so long as the reserve system operates and commercial banks are allowed to create credit, as proposd by the author. He does not share the optimism expressed by the author that these problems will be taken care of by such arrangements as *Mudārabah* banks. Dr. Chapra notes that Mr. Akram Khan's paper is based on Dr. Nejatullah Siddiqi's model where all the seeds of inflation are present.

8. Professor Khurshid Ahmed begins his comments by emphasizing the role of ethics in economics. He draws attention to the fact that the role of ethical values in the overall schema of Islamic economics is different from that which economists are familiar with in the contemporary world.

   Prof. Khurshid Admad is of the view that Mr. Akram Khan has made a valuable contribution in presenting a new socio-economic framework. Prof. Khurshid Ahmed finds the policy instruments, which are presently available, neither right nor sufficient from the point of view of an Islamic economy. The point stressed by him is that Muslim economists in their search for better alternatives, must not commit the mistake of excluding those policy variables that are available in the Islamic framework.

   Prof. Khurshid Ahmed attributes the weakness of Mr. Akram Khan's paper to its closed economy assumption. For the closed economy model excludes the external sources of inflation from the analysis.

   Referring to an earlier comment on the generality of the Islamic *Shari'ah*, Prof. Khurshid Ahmed says that this issue should be approached with extreme care. He concedes that the Shari'ah does not spell out details in respect of each and every item but he also points out that the general rules of the *Shari'ah* are capable of being applied to specific circumstances as well. He therefore thinks that it is important to study the implications of general rules for specific items and to see if there are any exceptions. In short, his submission is that it will be incorrect to conclude that the Shari'ah deals only with generalities.

9. Professor Mohammad Mohsin observes that Mr. Akram Khan has overlooked the relationship between growth and inflation in his paper. He says that in a growing economy income rises ahead of output, and that nothing can be suggestd as a cause of, or remedy for inflation, unless the pattern of investment is known. He compares the investment pattern of socialist societies with that of capitalist societies, showing that in socialist societies investment is geared towards infrastructures with demand being controlled and consumer goods being rationed, whereas in capitalist societies investment flows into the production of consumer goods, where the price problem arising from economic growth is not considered serious. Prof. Mohsin's suggestion is that the investment pattern in an Islamic economy must be studied before remedies for inflation can be suggested.

10. Dr. Mabid Al-Jarhi considers inflation as a dynamic phenomenon which needs to be analysed in a dynamic framework. He notes that Mr. Akram Khan's model is essentially static and believes that the author would have come out with different results had he dynamised his model. He thinks that it is important to consider changes in the marginal propensity to consume over time, in addition to dangers brought about by income transfer via *Zakāh*.

    Dr. Al-Jarhi is of view that the fractional reserve ratio system is inherently inflationary, falling in line with Dr. Chapra's view on this matter. Furthermore, he points out that the creation of money based on fractional reserve system has certain redistributive effects which are additional to the redistributive effects of inflation resulting from money expansion-which means that some people gain at the expense of others.

11. Dr. Monzer Kahf emphasizes the relevance of moral values to consumer behaviour. He says that moral values play a dominant role in determining consumer behaviour in all societies, be it Islamic or non-Islamic.

    Dr. Kahf thinks that the author of the paper has confused the issue by using "demand" and "consumption" almost synonymously or interchangeably. Thus he points out that a reduction in consumption does not necessarily amount to a reduction in demand, unless of course resources released from consumption remain idle. Dr. Kahf also points out the possibility of a fall in consumption being neutralized by a rise in investment so that aggregate demand remains unchanged.

12. Dr. A.M. Khusro considers none of the built-in stabilisers mentioned by Mr. Akram Khan as real stabilisers in an Islamic economy.

    First, Dr. Khusro rejects the proposition that interest-free banking tends to reduce the risk of inflation. He accepts that interest-free banking possesses many nice qualities, which however does not mean that it contains solutions for all problems. He thinks that interest-free banking offers no solution for inflation. His reasoning is that in an Islamic economy, where interest is replaced by profit-sharing, the higher the profit share ratio, the lower the demand for liquidity and the greater the velocity of circulation. He also thinks that the taxing of idle money through *Zakāh* and other means will increase the velocity of circulation, with consequent inflationary tendencies.

Second, Dr. Khusro doest not share the view that the nature of employer-employee relationship in an Islamic economy precludes the posibility of wage-price spiral. He thinks that negotiations between employers and employees may well entail wage adjustments based on, say, cost-of-living index with inflationary repercussions. He also thinks that this is true for all societies, be they Islamic or non-Islamic. He vehemently denies that there will be no demand for higher wages in an Islamic economy.

Third, he does not buy the proposition that there will be no market rigidity in an Islamic economy. For he thinks that monopoly and oligopoly elements will not disappear totally even in an Islamic economy.

Nevertheless, Dr. Khusro concedes that the moral side of Islam constitutes a major built-in stabiliser in the sense that consumers, acting in the spirit of "Qanaat", restrain consumption and producers behave in accordance with their sense of responsibility to the Islamic society, thus bringing about a tendency towards equilibrium between supply and demand.

INFLATION IN MUSLIM COUNTRIES: IMPLICATIONS FOR AN ISLAMIC ECONOMY

Jaferhusen I. Laliwala

1.

INTRODUCTION

Sometimes it is argued that inflation is both desirable and inevitable in a developing economy. Milton Friedman has exposed the fallacy of this argument as follows:

> "The argument generally runs like this. A country that is trying to force the pace of development places heavy pressure upon the available resources. The pressure upon the resources means an increase in demand which can be met only by a rise in prices. This argument, however, confuses physical magnitudes with money magnitudes.
>
> The pressure on resources during the course of development affects relative prices. It tends to make the prices of those things for which demand is particularly great in the course of development high compared with the prices of other things. It need not affect the absolute price level. Everything depends on how the real resources, which are employed in the course of development, are acquired. If the printing press or any of its more sophisticated modern variants is used to try to acquire resources, then of course there will tend to be inflation and price-rise".[1]

Friedman sees no virtue in impoverishing some people and enriching others in order to get some arbitrarily determined increase in the amount of investment or saving through inflation.[2] It is obvious that inflation is not dsirable because it is a tax on poor people who can least afford it. Terborgh describes inflation as a "brutal process", as it falls with special severity on those least able to bear the burden of it. He also considers inflation as economically disruptive, as it generates continually shifting strains and stresses in the market, and adds:

"Some costs are sticky and respond slowly to inflation, others move with

1. Milton Friedman, *Inflation - Causes and Consequences*, 1963.
2. *Ibid.*

alacrity. The adjustment of prices to changing costs is jerky, irregular, and it may be added, prevailingly tardy. Profit margins on individual products and services tend to be chronically more or less out of line with normal standards, the whole margin-structure remaining continually of balance".[3]

It is thus clear that economic development is not a disease, warranting inflationary treatment. If economic development is a health-giving exercise, there can be no place for inflation in it, as inflation constitutes a symptom of mismanagement of the economy. Inflation penalises the downtrodden and benefits the rich people and the Government. In this regard Palyi has the following to say:

> "Inflation is 'robbery' on a national scale-a surreptitious levy on liquid income and wealth, raised in a haphazard fashion with no regard for ability to pay, no respect for the rule of law, for equity and justice. It penalizes the saver especially and the honest producer while the lucky operator and the political manipulator may reap unearned rewards".[4]

2.

INFLATION - A THEORETICAL PROFILE

2A. *Aetiology of Inflation*

Inflation means an erosion in the real value of money. Why does the value of money fall? The real value of money, like the value of any commodity, is determined by its demand and supply. If the supply of money increases more than the demand for money, the value of money (like the value of any commodity whose supply is in excess of demand) will fall, signalling a rise in the general price level.

Money supply may be defined as consisting of (a) reserve money, i.e., as currency with the public and with the banks, or (b) the currency with the public and the demand deposits of the banks, or (c) the currency with the public and demand and time deposits of the banks. Generally, the second definition of money is widely used in the economic literature. The first definition, narrow though it is, is also very useful, as it directly goes to the root of the problems, i.e., the sources of the high-powered money. The third definition of money supply includes time deposits which are potential money in the sense that they can be turned into demand deposits, i.e., actual money.

Total demand for money in the economy depends on national output. Given the wage-payment habits, the development of the banking system and the non-bank financial intermediaries and the development of the communication system, a certain amount of money would suffice to satisfy the given demand for money based on recognized objectives and other given subjective factors.[5] Given the factors that determine the supply of money, demand would depend on the volume of national output. Increase in output tends to neutralize the effect of increase in money supply on the price level. A failure on the part of output to keep pace with the increase in money supply would lead to an increase in the general price level.

3. George Terborgh, *Essays on Inflation,* 1971, pp. 125-6.
4. Melchior Palyi, *An Inflation Primer,* 1962.
5. See: Laidler D.E.W., *The Demand for Money - Theories and Evidence,* 1969 Chapters 4,5 and 6.

2B. *Inflation - a Monetary Phenomenon*

It thus becomes quite evident that in a money economy, inflation is a monetary phenomenon caused by excessive growth of money supply. This is in conformity with the Quantity Theory of Money which explains inflation better than any other theory.

It is therefore argued in the paper that the trade unions, traders, smugglers, corporations, scarcity of agricultural goods, price of oil, etc. are not responsible for inflation. *Neither cost-push nor demand pull descriptions of the process of inflation explain the aeteology of inflation.* Prices of goods are affected by the demand for goods, and goods cannot be demanded without money, and money is acquired by the people by contributing to output. Thus there is the flow of supply of goods parallel to the flow of demand for goods, so that the general price level cannot rise, though prices of some particular goods may rise while the prices of some other goods may fall. It then follows that people cannot produce inflation, because they cannot have money except by producing goods.

It is only the government and the Central Bank that have free access to money by simply printing it without having to contribute to total output. Seen in this light, inflation is the result of the government's attempt to invest more than the available savings warrant. Money supply in excess of the demand for money-which is the consequence of investment exceeding saving-results in rising prices, because it is through a rise in prices that the demand for nominal money is brought into equilibrium with the expanded money supply. Thus inflation is a monetary phenomenon. Excess of investment over saving, and hence inflation, occurs whenever the government attempts to increase the rate of investment in excess of the natural rate of investment or to reduce the rate of unemployment below the natural rate of unemployement or to peg the exchange rate at a level lower than the equilibrium exchange rate through fiscal and monetary means.

3.

AN EMPIRICAL ENQUIRY

An attempt is made in this section to enquire into the inflation phenomena experienced in 10 muslim countries. Data on high-powered money, money supply, quasi-money, credit creation, deficit finance, foreign exchange reserves, borrowings by the banks from the Central Bank, price index, national income, imports, etc. pertaining to the economies of Saudi Arabia, (1966 to 1973), Egypt (1961 to 1974), Syria (1961 to 1974), Libya (1964 to 1973), Iraq (1961 to 1971), Iran (1961 to 1973), Tunisia (1961 to 1974), Turkey (1961 to 1974), Pakistan (1961 to 1974) and Malaysia (1961 to 1974) have been obtained from International Financial Statistics (May, 1976), published by the International Monetary Fund. These data were fed to the computer and various linear regression models were tried, and the results, as it will be seen shortly, support our hypotheses and successfully adumbrate the validity of the theory.

The regression model used here is a simple one:

$Y = f(x) = B + Ax + e$, where e is independently and normally distributed with mean 0 and variance O^2, i.e., $e \sim N(O, O^2)$. The above function is estimated with OLS technique. However, the test for serial correlation cannot be attempted, the time period being less than 15 years.

In Table 1, we have run three regressions per country using three different measurements of money supply, i.e., M_1 = high-powered money; M_2 = currency in circulation plus demand deposits in banks; and M_3 = currency in circulation plus demand and time deposits in banks. Regressing wholesale price index on money supply per 100 units of output, we find significant correlation between the price index and the growth in money supply, whatever the definition of money supply. The results thus support the hypothesis that inflation is caused by excessive expansion of money supply.

In Table 2, an attempt is made to relate changes in money supply (M_2 and M_3) to changes in high-powered money (M_1). The results show that the increase in money supply is attributable to the growth of the high-powered money (which is under the control of the government and the Central Bank).

In Table 3, six regressions for each of the ten countries are worked out, using different concepts of money supply and plugging in different explanatory variables. The results clearly show that variations in money supply per 100 units of output can be significantly correlated with either deficit financing or accumulation of foreign exchange reserves or both.

TABLE 1
RELATIONSHIP BETWEEN PRICES AND MONEY SUPPLY per 100 units of output

Country	Regression No.	$\hat{B}$	$\hat{A}$	R^2
Saudi Arabia	1	35.1487	5.7533** (1.2638)	0.7755
	2	32.9411	4.5840* (1.6374)	0.5664
	3	21.3559	4.1421** (0.9661)	0.7539
Egypt	1	47.6071	1.9212** (0.2506)	0.8305
	2	46.7668	1.6217** (0.2800)	0.7365
	3	46.9375	1.1588** (0.1994)	0.7377

cont. ....

(Table 1 cont.)

Syria	1	31.3410	2.4296** (0.2751)	0.8667
	2	32.7072	2.0318** (0.1725)	0.9204
	3	32.6007	1.8872** (0.1509)	0.9288
Iran	1	39.0249	5.3515** (0.8223)	0.7938
	2	20.1522	5.4638** (1.5183)	0.5407
	3	51.8916	1.8786** (0.3260)	0.7512
Pakistan	1	43.1937	3.7475** (0.6428)	0.7390
	2	49.8462	2.1988** (0.3644)	0.7521
	3	51.8295	1.5124** (0.2538)	0.7474
Libya	1	59.3054	2.4032** (0.2698)	0.9084
	2	59.7929	2.0162** (0.1948)	0.9305
	3	64.1460	1.2681** (0.1740)	0.8692
Tunisia	1	3.0233	8.2016** (0.8187)	0.8932
	2	8.7426	3.9589** (0.3360)	0.9204
	3	14.7508	2.4600** (0.1222)	0.9713

(Table 1 cont.)

Iraq	1	40.1023	3.6558** (0.5990)	0.8054
	2	23.5315	4.5103** (1.0284)	0.6812
	3	26.6438	3.2419** (0.5500)	0.7942
Turkey	1	23.7553	6.0509** (0.2198)	0.9844
	2	10.8882	4.1714** (0.1761)	0.9791
	3	20.2400	3.0277** (0.1547)	0.9696
Malaysia	1	57.1376	3.3942** (0.5869)	0.7360
	2	47.3423	2.7983** (0.4480)	0.7684
	3	63.7020	1.0544** (0.1031)	0.8971

Note: Number in the parenthesis indicates the standard error of the estimate.

* indicates significance at 5 per cent level.

** indicates significance at 1 per cent level.

Regression 1 is based on the equation $X_2 = B + AX_1 + e$, where X_2 = wholesale price index, X_1 = money supply (M_1) per 100 units of output and e = error term.

Regression 2 is based on the equation $X_2 = B + AX_3 + e$, where X_3 = money supply (M_2) per 100 units of output.

Regression 3 is based on the equation $X_2 = B + AX_4 + e$, where X_4 = money supply (M_3) per 100 units of output.

TABLE 2
MONEY SUPPLY (M_2 and M_3) RESPONSES TO CHANGES IN HIGH POWERED SUPPLY (M_1)

Country	Estimate	$100\overline{\propto}$	$100(1-\overline{\propto})$
Saudi Arabia	1	116.5592	−16.5592
	2	102.9717	− 2.9717
Egypt	1	108.054	− 8.0545
	2	90.3591	9.6409
Syria	1	110.6763	−10.6763
	2	135.2334	−35.2334
Iran	1	119.6871	−19.6871
	2	93.0993	6.9007
Pakistan	1	75.7494	24.2506
	2	62.2030	37.7970
Libya	1	97.8121	2.1879
	2	95.0274	4.9726
Tunisia	1	132.7765	−32.7765
	2	65.5628	34.4372
Iraq	1	141.0428	−41.0428
	2	131.4559	−31.4559
Turkey	1	105.2030	− 5.2030
	2	97.8333	2.1667
Malaysia	1	109.7955	− 9.7955
	2	50.1920	49.8080

The basis for Estimate 1 is as follows:

$100\overline{\propto}$ indicates, percentage change in (M_2 attributable to changes in H (in percentage) e.i. M_1 and $100(1-\overline{\propto})$ indicates percentage change in M_2 attributable to changes in high-powered money-Multiplier.

In Estimate 2, the method of computation remains the same, but M_2 has been replaced with M_3.

TABLE 3
RELATIONSHIP BETWEEN MONEY SUPPLY AND BUDGET DEFICITS AND FOREIGH EXCHANGE RESERVES

Country	Registration No.	$\hat{B}$	$\hat{A}$	R^2
Saudi Arabia	1	10.3584	−0.0004** (0.0001)	0.6912
	2	13.8774	−0.0003** (0.0001)	0.5800
	3	17.6752	−0.0005** (0.0001)	0.7412
	4	9.9267	+0.0003** (0.0007)	0.6896
	5	18.4939	0.0003* (0.0001)	0.5534
	6	17.0648	0.0004** (0.0001)	0.7385
Egypt	1	10.2169	0.0144** (0.0019)	0.8344
	2	14.2169	0.0.154** (0.0025)	0.7628
	3	19.7297	0.0215** (0.0035)	0.7617
	4	17.9614	−0.0467* (0.0175)	0.3715
	5	23.0352	−0.0451 (0.0209)	0.2785
	6	31.9688	−0.0641* (0.0292)	0.2870

cont. .....

(Table 3 cont.)

Syria	1	14.7517	0.0104** (0.0016)	0.7864
	2	16.9090	0.0124** (0.0021)	0.7460
	3	18.0980	0.0135** (0.0022)	0.7534
	4	25.8797	0.0126** (0.0032)	0.5618
	5	29.9572	0.0170** (0.0034)	0.6716
	6	32.2947	0.0184** (0.0037)	0.6714
Iran	1	8.8530	0.0289** (0.0043)	0.8070
	2	12.8087	0.0186** (0.0055)	0.5142
	3	18.4142	0.0816** (0.0108)	0.8397
	4	8.8605	0.0640** (0.0164)	0.5792
	5	12.8606	0.0398* (0.0166)	0.3431
	6	18.8291	0.1685** (0.0485)	0.5232
Pakistan	1	−0.4680	0.0017** (0.0001)	0.9221
	2	−4.1161	0.0030** (0.0002)	0.9259
	3	−7.7568	0.0045** (0.0003)	0.9536
	4	7.1153	0.0042** (0.0013)	0.4633
	5	8.6202	0.0074** (0.0021)	0.4870
	6	12.3474	0.0101** (0.0033)	0.4392

cont. .....

(Table 3 cont.)

Libya	1	9.7686	0.0234** (0.0047)	0.7564
	2	11.5863	−0.0268** (0.0065)	0.6829
	3	16.0176	−0.0366** (0.0119)	0.5407
	4	7.7460	0.0151** (0.0016)	0.9157
	5	9.0704	0.0178** (0.0024)	0.8743
	6	12.1131	0.0255** (0.0050)	0.7598
Tunisia	1	10.0777	0.0152 (0.0355)	0.0151
	2	21.3816	0.0688 (0.0726)	0.0696
	3	22.3865	0.1480 (0.1169)	0.1179
	4	9.9892	0.0352** (0.0061)	0.7357
	5	23.7405	0.0705** (0.0143)	0.6684
	6	28.7777	0.1095** (0.0263)	0.5902
Iraq	1	10.4171	0.0421** (0.0106)	0.6389
	2	12.8166	0.0243* (0.0103)	0.3815
	3	16.3538	0.0410* (0.0141)	0.4842
	4	7.9997	0.0432** (0.0080)	0.7624
	5	10.8378	0.0295** (0.0073)	0.6431
	6	13.2266	0.0482** (0.0090)	0.7594

cont. ....

(Table 3 contd.)

Turkey	1	−10.0205	2.1732** (0.4006)	0.7102
	2	−11.8204	3.1874** (0.5594)	0.7302
	3	−19.6922	4.4215** (0.7420)	0.7474
	4	17.6399	0.6522** (0.0689)	0.8819
	5	14.4269	0.9139** (0.1204)	0.8275
	6	16.7384	1.2653** (0.1572)	0.8437
Malaysia	1	11.6413	0.0084** (0.0014)	0.7375
	2	17.5536	0.0107** (0.0017)	0.7753
	3	30.3257	0.0335** (0.0028)	0.9218
	4	5.5121	0.0037** (0.0007)	0.7255
	5	9.8743	0.0047** (0.0008)	0.7479
	6	5.2276	0.0153** (0.0010)	0.9537

Note: Number in parentheses indicates the standard error of the estimate
* indicates significance at 5 per cent level.
** indicates significance at 1 per cent level.

The computations are based on the following regression equations:

Regression 1 $X_1 = B + AX_2 + e$
Regression 2 $X_3 = B\ AX_2 + e$
Regression 3 $X_4 + AX_2 + e$
Regression 4 $X_1 = B + AX_5 + e$
Regression 5 $X_3 = B + AX_5 + e$
Regression 6 $X_4 = B + AX_5 + e$

where $X_1 = M_1$ per 100 units of output; X_2 = Net claims of the banking system on the Government (i.e., deficit financing); $X_3 = M_2$ per 100 units of output; $X_4 = M_3$ per 100 units of output; X_5 = Foreign exchange reserves of the banking system; and e = the error term.

For Iran, Iraq, Malaysia, Syria, and Turkey, both budget deficits and changes in foreign exchange reserves are positively associated with variations in money supply. For Pakistan, too, we have obtained similar results, but the positive correlation between increase in money supply and accumulation of foreign exchange reserves is apparently due to the inflow of foreign aid which has more than offset the balance of payments deficits. We thus conclude that the expansion of money supply in Pakistan is explained mainly by budget deficits.

However a budget deficit is found to be negatively related to variations in money supply for both Saudi Arabia and Libya. This means that an increase in government deposits (due to budget surpluses) with the central banks tends to reduce money supply. Increases in money supply in Saudi Arabia and Libya and Tunisia have been significantly explained by accumulations in foreign exchange reserves. The reverse is observed in the case of Egypt where we have found a negative relationship between accumulation of foreign exchange reserves and growth of money supply. But then variations in money supply are significantly explained by budget deficits.

In Table 4, we have regressed income velocity of money (which is the inverse of the demand for money) on time. We have found that the velocity of money is not significantly related with time for Saudi Arabia, Syria, and Iraq regardless of the definition of money supply (i.e., M_1, M_2 and M_3). This means that the velocity of money has been fairly stable. In contrast, we have also discovered that the velocity of money is significantly related with time for Libya, Pakistan and Turkey (using all the three concepts of money supply), for Iran (using M_2 and M_3 concepts), for Malaysia and Tunisia (using M_2 concept) and Egypt (using M_3 concept). But, in all such cases, the R values are negative without a single exception, indicating a fall in the velocity over time.

TABLE 4
THE VELOCITY OF MONEY TRENDS

Country	Regression No.	R^2	F Ratio	R
Saudi Arabia	1	0.4398	4.7107	0.6632
	2	0.2827	2.3649	0.5317
	3	0.2135	1.6287	0.4621

cont. ......

(Table 4 cont.)

Egypt	1	0.0438	0.5491	−0.2092
	2	0.0572	0.7283	−0.2392
	3	0.3487	6.4255*	−0.5905
Syria	1	0.0702	0.9053	0.2649
	2	0.0663	0.8519	0.2575
	3	0.0761	0.9878	0.2758
Iran	1	0.2234	3.1691	−0.4726
	2	0.7538	33.6841**	−0.8682
	3	0.5850	15.5085**	−0.7649
Pakistan	1	0.7034	28.4653**	−0.8387
	2	0.8455	65.6534**	−0.9195
	3	0.6122	18.9441**	−0.7824
Libya	1	0.9314	108.6310**	−0.9651
	2	0.8742	55.5829**	−0.9350
	3	0.8763	56.6803**	−0.9361
Tunisia	1	0.0457	0.5751	0.2139
	2	0.6875	26.4006**	−0.8292
	3	0.0045	0.0542	0.0671
Iraq	1	0.0632	0.6076	0.2515
	2	0.0045	0.0403	−0.0668
	3	0.3405	4.6477	−0.5836
Turkey	1	0.6862	26.2422**	−0.8284
	2	0.8204	54.8037**	−0.9057
	3	0.8469	66.3574**	−0.9202

cont. ....

(Table 4 cont.)

Malaysia	1	0.0146	0.1781	−0.1209
	2	0.7481	35.6323**	−0.8649
	3	0.0189	0.2315	−0.1376

Note:

* indicate significance at 5 per cent level

** indicates significance at 1 per cent level

The computations are based on the following regression equations:

Regression 1 $X_1 = B + AX_4 + e$

Regression 2 $X_2 = B + AX_4 + e$

Regression 3 $X_3 = B + AX_4 + e$

where X_1 = income velocity of money (M_1), X_4 = changing time period of one year; X_2 = income velocity of money (M_2); X_3 = income velocity of money (M_3); and e = the error term.

The results, thus, show that the velocity of money is either *not* significantly related with time (i.e., the velocity has been stable) or, where it is so related, the relationship is *negative* (i.e., the velocity has been falling). If the observed rise in the price index is to be explained by a rise in the velocity of money rather than by an increase in the supply of money, the velocity (where it is found to be significantly related with time) should have been observed to have increased, but actually in all such cases it is observed to be negatively related with time. The fall in the velocity of money over time, to the extent of the fall, nullifies the effect of the growth in money supply on the price level. Our findings, shown in Table 4, therefore, lend additional support to our monetary hypothesis. The present observation that the growth of money supply significantly explains the general price rise (as shown in Table 1), in spite of a fall in the velocity of money over time (as shown in Table 4) clearly projects inflation as a monetary phenomenon.

The Fundamental Causes of Inflation

Domestic cause of inflation is found to be the budget deficit and the external cause of inflation is discovered to be the accumulation of foreign exchange reserves which is the consequence of under-valued exchange rates. For example, if the oil exporting countries floated their currencies, their currencies will be revalued, their imports will become very cheap in terms of local currency, domestic monely supply will be curbed due to greater utilization of foreign exchange reserves and inflation will be checked. At present, in these countries, under-valued exchange rates have led to a massive accumulaltion of foreign reserves, resulting in a huge expansion of money supply, with inflationary consequences.

In Pakistan and Egypt, budget deficits are the cause of inflation, and in oil exporting countries, "rigid exchange rates" are responsibe for inflation. In both the cases, money supply per unit of output increases and causes general price-level to soar. If inflation is to be averted, public expenditure should be reduced to the minimum so that the budget deficits can be avoided, and the currency should be floated so that the external value of the currency can be determined by the forces of supply and demand.

Thus inflation prevalent in these 10 Muslim countries calls for the adoption of the basic remedies of zero budget deficits and fully flexible exchange rates, which will check the expansion of money supply. But in a situation where inflation is expected to continue, money supply controls will create unemployment in the beginning. For if money supply is not allowed to keep pace with upward wage adjustments, the growth of aggregate demand will tend to be sluggish, resulting in some temporary unemployment. In such a situation in addition to the measures prescribed above, the methods of indexation will have to be adopted to dislodge inflation which has settled itself, giving rise to "explosive expectations".

4.

INFLATION AND AN ISLAMIC ECONOMY

An Islamic economy is one that is geared towards the prosperity of the masses, which is to be achieved via larger production without loss of freedom. Its moral socialism, on the one hand, accepts private enterprise with free competition and, on the other, supports trade unions, consumer societies, autonomous universities and other institutions and organizations that spring from the free activities of the people. An Islamic State is a means to the creation of an Islamic Society. The Islamic State, the Islamic Society and the Islamic Economy are not meant only for Muslims, but are expected to work on the principles of Islam which are universal in nature and which try to create a prosperous, happy and peaceful society for all people. Islam provides the inner spiritual strength and vitality needed for the realization of the noble goals of Islam, and it is the duty of Muslims as an organization, to translate these goals into realities. Muslims cooperate with other organisations and communities as the part of a larger movement for the realization of the moral goals of freedom, prosperity, equality, peace and brotherhood for all sections and members of mankind.

Inflation in such a well-balanced society may prove to be like a monkey-wrench and hence it is grossly inconsistent with the fundamental spirit of Islam. It may therefore be argued that zero-inflation is required for an Islamic economy to usher forth.

In a truly Islamic economy, a long-term inflationary trend is neither possible nor desirable. Computations of price index are not perfect anywhere, and an apparent inflation of 1 to 2 per cent is not always indicative of true inflation, as a small margin of error is always to be presumed and improvements in the quality of goods are to be taken stock of.

A long-run inflationary trend is never desirable. For under such a situation money cannot effectively perform its roles as a medium of exchange, unit of account and store of value. Unless the quantity of money per unit of output persistently increases, inflation is not possible, and it is not understandable why an Islamic government, which would have control over the money supply, should allow the quantity of money per unit of output to increase in the long-run.

Deficit finance collects resources mainly by creating inflation which is a tax on the poor people. It is also inconsistent with the spirit of Islam, as it is tantamount to the clipping of coin, which is dishonesty par excellence. Thus an increase in the supply of high-powered money will reduce the value of money in general, the burden being borne by the poor and middle-class people. It is too dangerous and risky to allow public expenditure to mount in an unwieldily fashion. For there is a temptation for the government to opt for increased money supply rather than for increased tax revenue or reduced public expenditure. Thus statism (which, in a way is the worhip of the state) and inflation go together. It then follows that deficit finance beyond safe limits is unacceptable in an Islamic economy. We have to choose between the worship of God and the worship of the State. Moral values of freedom, equality and brotherhood that spring from the worship of God require minimisation of state activities so that the activities of the people may thrive. Of course, state activity which is complementary to private initiative is welcome, but its boundaries are very limited.

COMMENTS

The Review Committee

We appreciate the substantial effort that has been put into this paper, but we also feel that the paper needs to be thoroughly revised. It is our considered opinion that the overall tenor of the arguments in the paper is more emotional and less scholarly than it ought to be. In particular, the statement that inflation is purely a monetary phenomenon should be reconsidered or clarified, as many economists would find it difficult to accept it as it stands. Perhaps, it should be stated explicitly that the paper is based on the Quantity Theory of Money, all its shortcomings notwithstanding.

We find the statistical part of the paper even less satisfactory. Neither the time periods covered by various regressions nor the exact sources of data for each country have been made clear. It should be borne in mind that high correlation among variables by itself never proves causation. The apparent causation may well be spurious. Hence there is a need to qualify some of the conclusions which have been drawn mainly on the basis of the strength of the correlation coefficients.

It is a pity that the paper gives no consideration at all to various econometric problems of estimation that may have serious consequences on the empirical results. For instance, no mention is made of multi-collinearity among explanatory variables which would seriously undermine the statistical significance of the regression coefficients. Besides, the high correlations obtained may merely due to strong trends in all the explanatory variables. Also no mention is made of the presence or absence of serial correlation among the residuals of the regression, which, if present, could cause a serious underestimation of the "F" Ratio. These considerations underscore the desirability of being very cautious in drawing conclusions from the regressions presented in the paper.

It is not at all clear how the author's conclusions about the stability of money velocity can be established on the basis of Tables 2 and 4. It cannot be ascertained from these tables whether the velocity is stable over a cycle or variable within a cycle but stable secularly in each country. It seems to us that the data on which Table 1 is based may be used to test the stability of money velocity over time in each country, but that the simple linear model used by the author does not permit such a test. Therefore, the statements about the stability of velocity must be reconsidered.

In view of the above comments, the conclussions by the author towards the end of his paper must be either greatly modified or substantially toned down.

Finally, a remark regarding the question of inflation in the context of an Islamic economy is in order. The paper seems to do little justice to the topic it is supposed to handle and there is a need to inject an Islamic content into it to make it a worthwhile contribution to the seminar on Monetary and Fiscal Economics on Islam.

* Comments by the discussants and the general discussion on Dr. Laliwala's paper are not presented here, as the tape recordings were completely unintelligible.

MONETARY POLICY IN AN INTEREST-FREE ISLAMIC ECONOMY - NATURE AND SCOPE

Mohamed Ariff

1.

INTRODUCTION

It is readily obvious that in the modern *"capitalistic"* economy system, the interest elements plays a very important role, and it is almost inconceivable that the system could function without the interest component. Interest has been viewed not only as an integral part of the price mechanism whereby savings and investments are regulated in a *"laissez faire"* system but also as an important policy instrument with which government interventions can be made to influence and control the economy. The mechanics of monetary control through variations in the rates of interest are not our immediate concern. It is nevertheless pertinent to point out that monetary policy is often equated with interest rate management of the central banks and is conceived as a macroeconomic weapon which will become blunt if the interest element is eliminated.

The main aim of the present paper is to scrutinize the above hypothesis that interest is an all-important macroeconomic variable in the formulation of an effective monetary policy in a "modern" economic set-up and to visualize the role of monetary policy in an interest-free Islamic economy.

2.

THE ROLE OF INTEREST IN MONETARY ECONOMICS

An operational definition of monetary policy is useful for the analysis of the role of interest rates. Monetary policy may be defined as any deliberate action undertaken by the monetary authority to alter the quantity, availability and cost (i.e., interest rate) of money. It then becomes clear that interest rate is only a part of the story, although interest rate changes apparently influence the demand for and the supply of money. But, it is also conceivable that changes in the quantity and availability of money can be brought about even without having to alter the interest rates. Be that as it may, monetary policy based on interest rate manipulations suffer from serious shortcomings which have severe implications for the efficacy of monetary policy. To analyse these issues systematically, we need to examine first the quantity theory of money.

2.A *Quantity Theory of Money*

Let us first invoke Fisher's famous equation of exchange, MV = PT where M is the total money stock, V its velocity of circulation, T the total volume of transactions and P the general price level. This equation simply asserts that the total money expenditure equals the monetary value of all goods and services traded. This identity can, however, be transformed into a theory that a change in the quantity of money would affect the general price level by holding the velocity of money and the volume of transactions constant. To accommodate a situation of less than full employment, the equation may be rewritten as MV = PQ, where Q represents output, so that changes in the money stock would affect the level of output.

The traditional version of the quantity theory of money was too mechanistic to be of any value to policy makers. It must, however, be noted that interest rate had no role to play in the traditional quantity theory, which had maintained that the only substitute for excess money balance was goods and services, virtually ignoring the financial assets.

By recognizing financial assets as a close substitute for money, Keynes initially conceded that changes in interest rate could influence the general price level, although quantity of money would still remain the key variable[1]. Keynes subsequently reversed the relative importance of the stock of money and the rate of interest, the latter exerting a more direct impact upon the general price level through its influence on savings and investments, the former being relegated to an indirect role of influencing the interest rate[2]. Moreover, the possibility that interest rate may change on its own accord even without a corresponding change in the money stock meant that fluctuations in the price level were independent of changes in the money stock.

The final Keynesian assault on the quantity theory came with the special case of the "liquidity trap" which highlighted the circumstances in which an increase in the money stock would have no influence whatsoever on the interest rate, leaving the economy virtually unaffected.[3] This possibility exists if the interest rate reaches such a low level that no further fall in the rate of interest, and hence no further rise is bond process, are anticipated, so that the increased money stock is merely absorbed into idle speculative balances. The velocity of an idle deposit being zero, an increase in money stock is completely neutralized by a decrease in its velocity so that total monetary expenditures remain unchanged with no impact at all upon the economy.

Although Keynes seemed to have treated the "liquidity trap" case as no more than an interesting theoretical possibility, the Keynesian analysis has cast serious doubts on the potency of monetary policy. With the demand for money being unstable and investment being generally insensitive to changes in interest rate, changes in money stock will have no predictable effects upon the national economy.

1. J.M. Keynes, *Tract on Monetary Reform,* Macmillan, (London) 1923.
2. J.M. Keynes,*The Treatise on Money,* Macmillan, (London) 1930.
3. J.M. Keyness, *The General Theory of Emplyment, Interest and Money,* Macmillan, (London) 1936.

The modern quantity theory, associated with the Chicago school, postulates a stable demand function (i.e., a constant velocity of money in circulation) for real money holdings, the independent variable being subject to only slow changes, whereas the stock of money can be varied almost at will. The implication is that changes in the value of money are rather supply-determined and that the demand for money is independent of its supply. In the modern theory, money is regarded as a close substitute for all assets, real and financial, so that a change in the money stock would cause a general increase in the demand for goods in the commodity markets in addition to its immediate impact on the interest rate in the financial markets.

In the modern version of the quantity theory, demand for money is generally insensitive to changes in interest rate, which means that a given change in money stock is not offset by a countervailing change in the demand for money caused by a change in interest rate. [4] In other words, the demand for money is not sensitive enough to permit a change in money stock to exert a predictable impact upon expenditures. It is, thus, the volume of money rather than the interest rate which plays the crucial role in the modern reformulation of the quantity theory. And high interest rates would then indicate not necessarily a tight money situation but simply an inflationary situation where the lenders of capital demand higher rates of interest to safeguard their real incomes.

2B. *Policy implications of the Quantity Theory*

Implicit in the quantity theory of money, especially in the revised modern version, is the powerful influence that monetary variables can exert not only on the nominal magnitudes but also on real output and employment. But there are reservations about the use of "active" monetary policy as a countercyclical device, owing to the uncertainty of the time lag between policy action and income response and the consequent dangers of destabilizing impacts. Nevertheless, the postulate that a change in the monetary variable can have predictable effects upon the economy clearly suggests that monetary policy is a viable macroeconomic device.

The Keynesian objections to the use of monetary policy stems mainly from the premise that the volatility of velocity and the insensivity of investment to changes in interest rates render the monetary instrument some what impotent. Although the quantity theory assigns a more important role to the volume of money rather than to the rate of interest as a monetary variable in influencing the economy, it apparently concedes that interest rate is a significant instrument variable that could influence the economy by affecting the cost and the availabity of the loanable funds.

2C. *Cost of Credit*

Interest constitutes a cost to the borrower and a return to the lender. It then follows that the banking sector could affect the level of investments and the flow of new savings by controlling the rate of interest via adjustments in the stock of money. Interest is then conceived as an important monetary variable. The effectiveness of monetary policy would, however, depend upon the sensitivity of investment and saving to changes in the rate of interest.

If cost-of-credit considerations are totally irrelevant for investment decisions,

4. M. Friedman, "The Quantity Theory of Money; A restatement" in Friedman (Ed.), *Studies in Quantity Theory of Money,* University of Chicago Press, (Chicago) 1956.

interest rate variations will have no impact at all upon the economy. If cost-of-credit considerations are irrelevant within a certain range of interest rates, the usefulness of monetary policy is partially impaired. If credit-cost considerations matter in the upward direction only, monetary policy becomes asymmetrical in its impact. Indeed, these possibilities cannot be ruled out.

The Keynesian analysis unambiguously suggests that it is business expectations and not cost-of-credit considerations which strongly influence investment decisions. Relatively high interest rates may not deter the business community from undertaking new investment activities if business expectations are buoyant. High capital costs will then be passed on to the consumers in the form of higher product prices. Relatively low interest rates, on the other hand, may not stimulate new investment if the business outlook is extremely gloomy. It would then follow that a monetary policy based on interest rate manipulations cannot serve as an effective countercyclical device, especially in situations of extreme pessimism and optimism.

There is fairly reliable empirical evidence[5] to support the view that investment demand is generally insensitive to changes in the rate of interest. It even appears that cost of capital hardly enters into investment decisions.

That potential investors do overlook marginal changes in the rate of interest is not necessarily inconsistent with the view that they would respond to significant changes in the rate of interest. Besides, capital-cost considerations may well become important beyond certain level of interest rate, so that even marginal changes in cost of credit are taken seriously into account by potential investors. In other words, interest rate has to be sufficiently high for monetary policy to be effective. But there are severe constraints upon the permissible level of interest rates, as will be shown shortly.

There are also limits below which interest rate may not sink, as typified by the Keynesian "liquidity trap". These limits are reached when bond prices have risen to such a level that further increases in bond prices are not anticipated. Under these circumstances, excess money balances, resulting from an expansionary monetary policy, would merely be held in idle deposits, especially since the opportunity cost of the doing so in term of forgone interest rate is small in view of the low rate of interest and since the risk of capital losses associated with bond purchases are rather high.

2D. *The "Locking-in" Effect*

The preceding discussion suggests that changes in the rate of interest may not significantly affect the demand for investible funds. Whilst modern monetary analysis seems to play down capital cost consideratins in investment demand, it also stresses the possibility that rising interest rates could dampen investment activities by stifling the supply of investible funds due to the "locking-in" effect. For increases in interest rates would depress bond prices thereby preventing the financial institutions from selling bonds to make liquid funds available for potential investors. In other words, high interest rates, even if they do not discourage investment demand, would effectively "lock-in" funds thereby curbing investment activities.

Thus the "locking-in" effect of a rise in the interest rate would render monetary policy effective, notwithstanding the Keynesian stance regarding the buyoancy of

5. T. Wilson and P.W.S. Andrews (eds.), *Oxford Studies in the Price Mechanism,* Oxford University Press, (London) 1951,and J.F. Ebersole, "The Influence of Interest Rates Upon Entrepreneurial Decisions in Business- A case Study," *Harvard Business Review,* Autumn, 1938.

expectations as the major determinant of investment activities and the empirical observation regarding the interest-inelasticity of investment demand. If this is the case, monetary policy becomes decidely asymmetrical. Whilst a monetary policy that raises the rate of interest during a boom will prevent new investments by effectively "locking-in" funds, a monetary policy that reduces the rate of interest during a depression will not stimulate investment activities in the wake of pessimistic business expectations by merely "unlocking" loanable funds.

The strength of the "locking-in" effect, and hence the efficacy of the monetary policy, will depend upon the the age-profile of government securities. The potential capital losses associated with high interest rates are greater in the case of longer-dated securities. But the potency of monetary policy in terms of the "locking-in" effect have been questioned even for longer-dated securities.

It was seen that financial institutions will be unwilling to sell securities so as to make funds available for investment if the interest rate rises, thus depressing security prices. The main deterrent here is the potential capital losses that financial institutions will suffer as a result of a fall in bond prices. However, if the potential investor, encouraged by buoyant business expectations, is willing to offer higher interest rates, thereby creating an interest differential which adequately compensates for the capital losses, a tight money policy that raises interest rates will fail to "lock-in" funds. In other words, the "locking-in" effect will not be a sufficiently strong deterrent to investment, if availability, and not cost of credit, is the essence of the investment decision.[6] This will be the case especially if the financier is interested only in net income yield and not the overall net worth of his financial assets.

Moreover, the "locking-in" effect will not work if an increase in the interest rate which depresses the bond prices leads to expectations that the interest rate will continue to rise, depressing bond prices further. Such "elastic" expectations provide an incentive for a financial institution to sell its securities so as to avoid bigger capital losses in the future, thereby releasing funds for investment.

Furthermore, a tight money situation created by increased interest rates may generate an inflow of funds into those financial institutions which raise their short-term deposit rates. Those financial institutions will then be able to lend more without having to release their security holdings. Thus funds will be made available so long as the potential investors are willing to pay higher interest rates.

The forgoing considerations apparently weaken the theoretical appeal of the monetary policy that relies on increases in interest rates to "lock-in" investible funds. Even if the "locking-in" effect successfully arrests the availability of funds for investment, it may be offset by an increase in the efficiency with which the available money stock is being utilized, i.e., an increase in the velocity of money.

An increase in the rate of interest raises the opportunity cost of holding idle money balances so that firms and individuals will have an incentive to economise upon their transaction cash holdings while the speculative demand for money will also fall, now that bond-prices have fallen. This general decline in the demand for money enables a given stock of money to finance a larger volume of expenditures.

The commercial banking sector may respond to high interest rates offered by the would-be investors by selling their short-dated securities so as to make investible

6. G.K. Shaws,*An introduction to the Theory of Macroeconomic Policy,* (London) 1971, p. 72

funds available. Deposits destroyed by the sale of government securities are matched by new deposits created by granting of new loans. But the new deposits so created are decidedly active whereas the old deposits destroyed by the purchase of securities are largely idle.[7] The restrictive monetary policy may thus lead to the conversion of idle into active deposits thereby generating an increase in the velocity of circulation.

Non-bank financial institutions may develop innovations to overcome monetary restraints imposed by the monetary authority. For example, non-bank financial intitutions, which are not subject to the same degree of credit control as the commercial banks, may effect a transfer of deposits from the commercial banks by creating an interest rate differential, now that the would-be investors offer high rates of interest to escape the credit squeeze. Since non-bank financial institutions normally maintain reserve ratios lower than the conventional commercial bank ratios, the net effect of the deposit transfers is to enable a given monetary base to finance a larger volume of expenditures.

In the final analysis, the effectiveness of the tight money policy depends upon the level of interest rate. The interest rate will have to be sufficiently high for the restrictive monetary policy to effectively curtail the availability of investible funds just as it has to be high enough for the potential investors not to ignore considerations of cost of credit in their investment decisions.

2E. *Constraints on Interest Rates*

The preceding analysis has demonstrated that the interest rate must reach a rather high level in order that increases in the rate of interest affect investments either by curbing the investment demand or by curtailing the availability of investible funds. But as has been pointed out already, there are severe constraints upon the permissible level of interest rates.

First of all, implicit in the high level of interest rates is the heavy burden of National Debt. A higher rate of interest raises the costs of debt servicing, which implies a heavier tax burden and a more inequitable income distribution in favour of the creditors who are presumably the better-off members of society.

Second, a high level of interest rate tends to foster the development of the monopoly sector of the economy, which is in a better position to pass on the increased costs of credit to consumers in the form of increased product prices and which has easier access to alternative means of finance than the competitive sector.[8] The danger here is that a restrictive monetary policy may have destabilizing consequences. High interest rate may add to inflationary pressures by raising the cost of productions which the monopoly sector will sucessfully transmit to the consumers in the form of higher product prices. Thus a demand-pull inflation may merely be transformed into a cost-push one. Besides, in a hyper-inflationary situation, rising interest rates may well be viewed simply as any other price increases and may be accommodated accordingly without any contractionary effect.

Finally, high rates of interest tend to favour short-term projects and discourage long-term ones, since the longer pay-off period renders the latter unattrative.[9] In

7. *Ibid.*, p. 74.
8. J.K. Galbraith, "Market Structure and Stabilization Policy", *Review of Economics and Statistics,* May 1957.
9. V. Argy, "The Impact of Monetary Policy on Expenditures with Particular Reference to the United Kingdom", *IMF Staff Papers,* November, 1969.

other words, high rates of interest are not conducive for enhanced economic growth. This seems to pose a conflict between the stabilization and growth objectives.

2F. *Policy Implications*

A number of important policy inferences may be made from the above analysis with respect to the use of the interest rate variable in monetary management. First, interest rate is not a double-edged weapon in the sense that it does not cut both ways equally. It seems to be more potent as an anti-inflationary device than as an anti-deflationary instrument. Second, its potency even as an anti-inflationary device is not unquestionable, since there are fairlly strong theoretical and empirical bases which suggest that increases in the rates of interest may neither dampen the investment demand nor curtail the availability of funds significantly. Of course, it is conceivable that interest rates may reach such a high level that the increase cost of funds can no longer be ignored by would-be investors, and the size of potential capital losses can no longer be overlooked by the financial institutions whose main business is to make more funds available for investment. But, then, there are theoretical limits beyond which it is not desirable to let interest rates rise.

All these considerations cast serious doubts on the wisdom of using the interest rate as a monetary policy instrument. This, however, does not necessarily imply that monetary policy has little or no scope in any economic system. After all, the interest rate is only one element in the monetary set-up. Indeed, modern monetarists argue that it is the stock of money, and not the rate of interest, which is crucially important from the macroeconomic policy viewpoint. The implication is that monetary policy can be activated without having to draw interest rate into the picture. This is a policy conclusion is of considerable relevance to an Islamic economy in which interest has no legitimate role to play.

It must, however, be stressed that merely on the basis of the above, analysis, the influence of interest rate on investment decisions in a capitalistic economy cannot be dismissed out of hand. Of course, the argument that interest rate is not all that effective as marcroeconomic policy tool does not necessarily deny the role of interest rate as an allocative agent in the microeconomic sence. Thus, for example, a situation of buoyant expectations, when a rise in the interest cost does not deter the potential investor, does not mean that the investor fails to equate interest rate with the marginal efficiency of investment. It may simply mean that bouyant expectations would cause the marginal efficiency schedule to shift outward so that investment will rise despite an increase in the interest rate.

The main purpose of the preceding analysis is to show that the interest element is not an indispensable macroeconomic policy instrument. To be sure, it is not at all necessary to demonstrate the shortcomings and inadequacies of the interest rate weapon in the capitalist system in order to vindicate Islam's stance on interest. Nonetheless, it serves to throw light on the instrument which needs to be discarded or replaced in an Islamic economy and helps to overcome the "psychological barrier" that interest rate is too important a cog to be removed.

3.

MONETARY ECONOMICS IN AN ISLAMIC SOCIETY

Islam prohibits the payment and receipt of interest. The Holy *Qur'an* and the Hadith have been unambiguous on the question of interest, although there have been discredited attempts to suggest that Islam is against excessive interest rates only and that reasonably low rate of interest is not inconsistent with the Islamic ideology. The truth remains that Islam disapproves of the payment and receipt of interest regardless of what forms and magnitudes it may assume and the end uses to which the borrowed funds are applied.

Our objective in this section is not to substantiate the Islamic stance on the issue of interest with elaborate references to the *Qur'anic* and other sources, but to visualise a system which would enable monetary policy to play a useful role in an interest-free environment.

3A. *Economic Rationale for Zero Interest Rate*

It is well known that the interest element is given a respectable place in the capitalist system, although the theoretical explanations of the interest phenomenon are far from satisfactory. If interest is conceived of as a reward for saving, as the classical theory indeed asserts, why do people save at all if they do not intend to lend their savings at interest? Why must interest be charged on money not saved but inherited? These are not rhetorical questions. The classical theory treats saving as a function of interest and claims that a particular interest rate is required to bring about equality between saving and investment. Since the bulk of saving in a modern society is accounted for by corporate saving and the bulk of borrowing is financed not by individual savings but by credit created by commercial banks, interest cannot be simply a reward for saving, nor can saving be determined by the rate of interest per se. It is interesting to note that Keynes regards saving as a function not of interest rate but of income. In an Islamic society, people save mainly because Islam urges its followers to practice thriftiness in spending and moderation in consumption. For frugal spending is equivalent to honest earning, according to *al-Hadith*.

Interest is sometimes perceived as a price paid for sacrifice involved in abstaining from present consumption, since people tend to value the present more than the future. However, it is also plausible that "sacrifice" incurred by abstinence varies inversely with income levels. Why, then, do the rich charge exhorbitant interest rates on their savings when their "sacrifice" in abstaining from present spending is rather negligible compared with the "sacrifice" by the poor who live hand-to-mouth? This obviously involves interpersonal comparisons which modern economists seek to avoid. The capitalist economic system cashes in on product differentiation, persuasive advertisements, built-in obsolescence, market innovations, etc., all of which are largely aimed at the consumers who indulge in conspicuous consumption. In such a world of consumption "temptations", abstaining from present consumption or postponing it to a future date becomes a really difficult task. Seen in this light, interest as a reward for income that is not consumed would seem justifiable. But Islam strongly advises its followers against conspicuous consumption and economic excess, and firmly advocates simplicity in consumption habits. In a society where a low posture in consumption is simply a way of life, the abstinence explanation of interest loses its theoretical appeal.

Interest is sometimes attributed to the productivity of capital. This neo-classical explanation of interest obviously begs the question of why interest must be charged on consumption goods. Even in the case of capital borrowings, the productivity of capital may turn out to be negative due to, say, unexpected excessive fall in product prices. Why, then, must interest be charged on such capital? The productivity theory cannot explain it. The Islamic stance is fairly straight-forward: capital by itself is not productive, and it is the application of human efforts to a stock of capital which generates output and income. The reward for capital, then, cannot be legitimately fixed in advance, unlike interest rates, but can only be determined in retrospect, depending on profits or losses.

The so-called modern explanations of interest emphasize the opportunity for making a gain with the use of borrowed funds as the basis for interest payments. The pertinent question then is: what about the possibility of incurring losses when borrowed funds are used? The Keynesian view that interest is the premium on current cash over deferred cash is based on the concept of liquidity preference, which appears to be a psychological phenomenon in which speculation plays a central role. But speculation itself is disfavoured in Islam, as it is often associated with hoarding and profiteering activities which are anti-social. Islam thus demolished the very psychological foundation of the institution of interest and asserts that the normal rate of interest is really the zero rate.

Islam enjoins its followers to strive for their living and not to live on the toils of others. The very spirit of Islam is against living by owning without working. Seen in this light, interest resembles unearned income.

In an Islamic society the individuals may save and invest but the distinction between saving and investment is somewhat blurred. Since saving and investment decisions are not completely independent but are, to a large extent, interdependent in an Islamic economy, the Keynesian divergence between saving and investment, and hence the major cause of cyclical fluctuations, does not arise significantly. Of course, saving will not equal investment if a part of the saving is hoarded. And "hoarding" represents savings that are not transformed into investment. Hoarding is simply an act of holding money in idle reserves, and "lending" money out of this idle reserve therefore merits no monetary remuneration in the form of interest.

Islam does not tolerate economic waste and hoarding is therefore vehemently discouraged, while the Islamic fiscal device of *Zakāh* in a sense penalises those who hoard. All these imply that the gap between saving and investment is minimized. To avoid waste of resources, saving must be put to productive uses either by investing one's own funds and facing the risks of profits and losses associated with it, or by allowing others to use the funds through "lending". "Lending" thus relieves the hoarder of the burden of sitting on idle money balances. There is thus no room for interest in an Islamic economic system.

We need to distinguish between profit and interest. Interest differs from profit especially in that its rate is "fixed" in advance at the time of transaction regardless of whatever happens to the venture, whereas the profit rate is knwon only in retrospect and may turn out to be positive, zero or negative. Profits are thus clearly associated with risks that investment entails. So long as the owners of investible funds are willing to share these risks, the returns they get are legitimate profits. Mere "lending" of one's funds without assuming investment risks does not entitle an individual to any return. By not differentiating between capital ownerships and entrepreneurship, Islam does not give rise to the emergence of financiers who live on interest earnings as distinct from entrepreneurs who thrive on assuming business risks.

3B. *Hoarding, Lending and Investment*

Individuals or households with excess of income over consumption face the choice of hoarding it in the form of idle reserves or lending it to others who will be able to use it or invest it. All these alternatives have different economic implications from the earnings point of view.

Although "hoarding" implies holding money balances in idle deposits, it does not necessarily constitute an absolute waste of financial resources, since one may like to hold some liquid cash at any given time for, say, precautionary motives. The nominal returns on idle balances are obviously zero while the real returns might be negative in a world of rising prices which reduce the value of money. Thus there are *real* costs involved in holding idle reserves.

Excess money balances (i.e., excess of what is normally held in idle reserves) may be either invested if one is willing and able to bear risks or lent if one is not prepared to face risks. If the latter were the case, the choice is really between hoarding and lending. That Islam forbids interest earnings does not necessarily imply that the individual will be indifferent between hoarding and lending. For one thing, as was argued earlier, it is unethical in Islam to promote economic waste implicit in hoarding. Besides, and equally important, idle balances have real costs, mentioned earlier, which the individual can avoid by lending his funds *if* the funds so lent out are protected against the risk of erosion in the value of money.

It appears that a nominal rate of return equivalent to the actual rate of increases in general prices[10] is not necessarily inconsistent with the Islamic ruling on interest, on two counts: (a) a nomial return equivalent to the increase in general price indices merely means *zero* return in *real* terms and (b) this nominal return is determined only in retrospect and not "fixed" in advance, quite unlike interest rates. The practical difficulties of determining this nominal return based on price indexation may weaken the theoretical appeal of this prescription, but such difficulties can be largely overcome if "lendings" are institutionalised. "Lendings" may take the forms of interest-free "current" deposits which may be used to make interest-free advances for non-investment purposes, imposing, of course, service charges on borrowers.

It must, however, be conceded that such compensation to lenders based on indexation, even in the nominal sense, may not be compatible with Islamic jurisprudence. This appears to be basically a question of interpretation and opinions may differ. But, it seems that such compensation is already implicit in lending-borrowing transactions where debts are delineated in kind. Thus, for example, a ton of wheat borrowed and returned implies such compensation when the price of wheat rises during the lag. The borrower has the choice of either borrowing money to buy a ton of wheat or borrowing a ton of wheat itself. If the price of wheat rises during the lag, he would either return more money than what was borrowed or acquire a ton of wheat at a higher cost - equal compensation is involved in either case. It is difficult to see how one can be considered legitimate while the other cannot. If it can be resolved that individual commodity indexation is permissible, it can be extended also to a

10. The national return on "lending" will be zero if the general price index is absolutely stable.

bundle of commodities.

A seemingly serious objection to such compensation for financiers is that it would conflict with the concept of social justice in Islam, unless of course such compensation is also extended to others, e.g., wage earners and rent recipients. But, such a policy will be simply inflationary and self-defeating. We should, however, guard ourselves against logical pitfalls here. We should bear in mind that the issue at hand is compensation for the financier and not his income, for his income from "lending" is zero in an interest-free Islamic system whereas wage earners and land owners receive positive remuneration. Therefore, the question of compensation for financiers in an Islamic economy need not be confused with that for other factors such as labour and land in an inflationary situation.

To say the least, the indexation proposal to offset the effect of inflation on "financiers" deserves careful scrutiny before it can be adopted within an Islamic framework or dismissed out of hand.

Investments may be "direct" or "indirect". "Direct" investments represent total commitment of funds in one's own economic ventures (i.e., sole proprietorship or partnership) where the returns, i.e., profits, may be positive, zero or negative in real or nominal terms. "Indirect" investments imply funds being channelled through an institutional intermediary on a profit-sharing basis, and the returns - which are not predetermined - may again be positive, zero or negative. Saving and investment of this variety may be effected through an Islamic banking system which permits "time deposits" to be translated into equity shares along, say, cooperative lines so that the "depositors" become co-owners of the financial institution which in turn will commit these financial resources again on a profit-sharing basis, declaring dividends at the end of the year if profits are made.

3C. *Demand for Money and Government Securities*

In an Islamic economy the substitute for money is essentially goods and services as in the case of the Classical economic system. To put it differently, transactions demand for money consitutes the dominant motive for holding money. However, the precautionary motive in itself is not un-Islamic. Whether or not there is room for speculative motive as well, depends upon the line we draw between speculation and gambling. Should we define the former as one where existing risks are calculated and countered and the latter as one where new risks are created, speculative demand for money may well be legitimate within an Islamic framework. A word of caution, however, is in order. Speculation is frowned upon in Islam as it often entails stock-piling and profiteering activities which have adverse economic implications for the community at large.

According to the Tradition, for instance, the sin committed by hoarding grains with the hope that prices will rise cannot be obliterated fully even if the entire stock is given away as charity. However, Imam Al-Ghazali makes a distinction between stock-piling in times of shortage and that in times of surplus, and suggests that the former is objectionable and the latter is not. In other words, Islam does not decry speculation in general; it is against destabilizing speculation only. Even if we lend some legitimacy to the speculative motive within the Islamic framework, the role of interest-bearing bonds and the inverse relationship between bond prices and interest rates and its monetary implications in terms of speculative balances are all completely irrelevant in the Islamic context.

Government bonds need to be redesigned both as a source of deficit financing and as a means of monetary control. The profit-sharing principle cannot be evoked, since a substantial proportion of these funds are used to meet recurrent and development expenditures which do not yield monetary returns and since private individuals cannot acquire equities in public enterprises which are government-owned. Nevertheless, "lendings", characterized by their zero real return, may partake of the character of interest-free bonds. Individuals, however, may be reluctant to commit their funds for any specific period of time in government bonds and may prefer to deposit such excess money balances in the form of interest-free "current" accounts which can be withdrawn at a very short notice. This means that government bonds can be sold mainly to financial institutions. Insofar as individuals are concerned, it will amount to "indirect" lending through an institutional intermediary. As only a small portion of the "current" deposits are normally withdrawn, the financial institution can safely earmark a fairly large proportion of these "costless" funds for the purchase of government securities.

Interest-free bonds, however, cannot play the same role as conventional bonds,since interest rates and hence of costs of credit cannot be influenced through open-market operations. Although the cost element ceases to be a monetary policy variable under the Islamic scheme, even the interest-free Islamic Bonds can be regulated in such a way as to influence the monetary situation by indirectly controlling the availability of funds. This may be achieved through legislative powers vested with the Central Bank to vary the statutory requirements with respect to the ratio government securities that bank and non-bank financial institutions are obliged to carry in their "advances" portfolios. As a tight money policy measure, the Central Bank may raise this ratio so that investible funds of financial institutions can be effectively frozen. As an easy-money policy measure , this ratio may be lowered in order to make more funds available for private investments. This obviously implies that credit creation by the commercial banks will be allowed to continue even in an Islamic framework.

The legitimacy of the commercial banks' power to create deposits in an Islamic economy still remains a matter of unsettled controversy. Perhaps attention in the future needs to be focussed not just on how legitimate such credit creation is but on adjustments in the pattern of ownership, control and distribution of profit in the banking sector so as to lend legitimacy to credit creation if it is to be recognized as an integral function of the commercial banks.

3D. *The Scope of Monetary Policy*

Monetary policy in modern times seems to have regained the respectability it had lost under the Keynesian assault. Friedman and his disciples, in asserting the potency of monetary policy, have emphasized that the crucial variable is the stock of money, and not the rate of interest. This message of the new monetarism has far-reaching implications for the role of monetary policy in an Islamic economy where interest rate is totally illegitimate.

The volume of money can be varied, for example, through the sale/purchase of government securities to/from financial institutions and through adjustments in the statutory ratio of such securities in the "advances" portfolios, as mentioned earlier. In inflationary times, a rise in this ratio will siphon off a large proportion of the excess money which has been depositd with financial institutions. In addition, the Central

Bank may give directions to financial institutions regarding the volume and compsotion of their financial commitments. All such restrictive measures may effectively curtail the availability of funds for investment. But in times of depression, funds unlocked through the government purchase of its bonds may not necessarily stimulate investment activities, if pessimistic business expectations prevail.

Although the monetary policy as outlined above is seemingly asymmetrical in its impact, the unique character of the Islamic monetary system, discussed earlier, tends to make the monetary policy a double edged weapon. For, the financial institutions in an Islamic economy, being essentially profit-sharing and equity-seeking institutions, play an active role in contrast with the passive role of conventional financial institutions outside the Islamic set-up. The Islamic financial institutions can therefore lead the business community and influence the business outlook by injecting confidence and stimulating investments in time of economic recession.

It is, therefore, clear that there is ample scope for monetary policy to play an effective role within an Islamic framework, in spite of the total absence of the interest element. To be sure, an Islamic economy is at no terrible disadvantage vis-a-vis a non-Islamic economy with respect to the efficacy of monetary policy, especially in view of the dubious macroeconomic stabilization role of interest rates. One may even argue that monetary policy may perform better in an Islamic system, because of the unique nature of the system itself, as shown, for example, by the symmetrical impacts referred to earlier.

This is not to deny that monetary policy has limited applicability regardless of whether it is in an Islamic economy or not. For instance, the question of the lag between policy action and the desired effect has led many monetarists not to recommend discretionary monetary policy has led many monetarists not to recommend discretionary monetary policy for stabilization purposes.

In an Islamic set-up, the principal substitute for money is goods and services and the transactions motive accordingly dominates as in the Classical system. But, unlike the Classical system, in an Islamic system the velocity of money circulation cannot be constant, simply because of the islamic stance on consumption, which reduces to some extent the vulnerability of the goods and services market to the monetary stimuli. Monetary expansion does not necessarily lead to substantial consumption expansion, since Islam frowns upon extravagances and excesses in consumption, so that velocity of money falls. Nor does monetary restriction result in any remarkable reduction of consumption expenditure, because consumption tends to be always on a somewhat low gear with little scope for significant contraction, so that the velocity of money rises. Velocity changes would therefore offset, at least partially, changes in money supply. The implication is that monetary policy will be ineffective, as suggested by the Keynesian analysis.

In any case, an Islamic economy is relatively more stable than its capitalist counterpart. Since saving and investment decisions in an Islamic economic system are interdependent, and not independent, the divergence between saving and investment is not pronounced. This implies greater economic stability, now that differences between injections and leakages in the circular flow of income are minimised. Since consumption is always placed on a relatively low-key basis in an Islamic society, the marginal propensity to consume is somewhat low, and a low consumption propensity implies a rather weak multiplier mechanism which does not permit economic disturbances to be magnified. This considerably reduces the amplitude of economic fluctuations.

Moreover, in the Islamic system the danger of general prices being pulled up by demand is not as great as in the case of a capitalist economy, in view of the relative stability of its consumption expenditures which are comparatively insensitive to changes in the stock of money. In the same vein, the danger of general prices being forced up by monopoly elements is less serious in an Islamic system. For, attempts to push up the prices of commodities in a unilateral fashion to make excessive profits is completely alien to Islamic ideology.

4.

SUMMARY AND CONCLUSION

It might appear at first sight that there is scarcely any scope for monetary policy in an interest-free economy. For, interest rate is believed to be such an important variable influencing the demand for and the supply of money that its absence would render the monetary policy completely impotent and invalid as a macroeconomic weapon. That this is an erroneous view is implicit in our analysis in Section 2 which suggests that the faith in the interest rate as a monetary policy instrument variable is really misplaced.

New monetarists of the Chicago school of thought stress that it is the stock of money, and not the rate of interest, which is most important. This revelation has important implications for an Islamic economy which denies any role to interest rate.

In an Islamic society, excess money balances may go largely into "lendings" or investments in direct or indirect forms. The third possibility of "hoarding" represents an insignificant outlet not only because idle resources imply economic wastes that Islam abhors but also because there are negative real returns on idle money balances owing to the erosion in the value of money over time. "Lendings" to financial institutions in the form of "current" deposits or "indirect lendings" to the government in the form of bond purchases carry no *real* return, while direct and indirect investments carry positive returns in the form of profits or negative returns in the form of losses. The monetary authorities may vary the quantity of money in such a way as to influence lendings and investments.

As the consumption pattern is unlikely to be affected significantly by changes in the volume of money in an Islamic society which discourages extravagances and excesses in consumption habits, surplus money will be channelled into productive purposes, if such opportunities exist, or may simply lie idle either in the form of household hoarding or unused lendings in financial institutions. The implication is that the velocity of money circulation might fall. Conversely, a tight money situation may not witness marked reductions in the demand for goods and services, since the consumption pattern in an Islamic system is always on a low profile, implying that existing stock of money will be used more efficiently to finance a bigger volume of transactions so that the velocity of circulation would rise. Velocity changes may thus neutralize the monetary measures.

Although the spirit of the new monetarism of the Chicago school, which plays down the role of interest rate and emphasizes the impact of the money stock changes, would seem to appeal to Islamic scholars who seek alternative monetary system, the present analysis seems to support the Keynesian conclusion that velocity changes may negate the changes in the volume of money, questioning the potency of monetary policy in an Islamic economy. Nevertheless, we must hasten to add that monetary policy has serious limitations not only within an Islamic framework but also without it.

It, however, appears that the probability of cyclical fluctuations is comparatively small in an Islamic economy, since the Keynesian ex-ante divergence between saving and investment, caused by the divergence between "market" and "natural" rates of interest, does not arise. The risk of inflation, in particular, appears to be minimal in an Islamic economy. The demand-pull variant of inflation has relatively little relevance in the present context, because more money does not necessarily result in significant increases in consumption expenditures in an Islamic system which discourages conspicuous consumption and excesses in expenditure. Thus the question of "too much money chasing too few goods" would not arise significantly. Likewise, several variants of cost-push inflation also appear to be largely irrelevant, since Islam would not permit monopoly power to be abused to raise prices unilaterally.

The following conclusions are therefore difficult to resist. First, an Islamic economy is not significantly worse-off than its non-Islamic counterpart with respect to the potency of monetary policy, not only because monetary influence can be exerted through variations in the money stock per se even in the absence of the interest rate variable, but also because the role of interest as a macroeconomic variable is being played down even in modern monetary analysis. Second, an Islamic economy is perhaps even better-off in the sense that the need for such a policy is felt somewhat less, as the economy tends to be relatively stable.

The two basic assumptions underlying the above analysis are (a) the existence of a low consumption profile and (b) the absence of a serious divergence between saving and investment in an Islamic set-up. These assumptions might appear to be too simplistic and unrealistic at first sight. It may also be argued that the marginal propensity to consume would increase with a more equitable distribution of income. While there may be nothing un-Islamic about such an outcome, one cannot deny that the consumption function and hence the consumption pattern in an Islamic economy would significantly differ from that in a capitalist one. In particular, Duesenberry's demonstration effect would have limited applicability in a truly Islamic economic order.

While most Muslim economists seem to concede that the consumption function in an Islamic economy will be unique, they may not be prepared to accept that it will also be inherently stable. It cannot be denied, however, that the value attached to simple way of life in the Islamic socio-economic order is an important determinant of the consumption pattern in an Islamic economy. Especially in the presence of good business opportunities, free from abnormal risks, the Islamic virtue of thriftiness can be easily practised.

The divergence between saving and investment in modern times are largely the result of the fact that savers and investors are different entities. But the distinction between the two can be blurred through institutional arrangements in an Islamic economy. If depositors would also account for the ownership and control of the financial institutions, the gap between saving and investment can be considerably reduced. This does not, however, mean that disequilibrium between saving and investment can be entirely ruled out even in an Islamic economy. This merely suggests that such a disquilibrium in an Islamic economy is unlikely to be as serious as it would be in a capitalist economy.

Finally, a word of caution is in order. While the banking system in an Islamic economy can operate efficiently on the profit-sharing principle and the profit rate can effectively substitute the allocative function of the interest rate, the profit rate cannot obviously be used as a macroeconomic weapon, quite unlike the interest rate. In other words, the profit rate cannot be varied at will by the monetory authority to stablize the economy. This calls for alternative mechanisms. Variations in the volume of money as suggested earlier is one possibility. It however appears that the Central Bank in an Islamic economy will have to rely heavily on selective controls and moral suasion.

Admittedly, the present paper has projected an "ideal" image of the Islamic economy. To accommodate deviations from the "ideal" without at the same time violating the fundamental Islamic principles is beyond the scope of the present paper. Nevertheless, there is no doubt that Islamic ideals are practical and not heroic. It is pertinent to note that many of the economic illness witnessed around the world today are peculiar to the present economic environment. This means that some of the policy prescriptions with which we are now familiar may well become redundant in the Islamic set-up. Thus the form and the role of monetary policy envisaged for an Islamic economy are bound to be quite different from those that are relevant for the capitalist regime.

COMMENTS

1. Dr. Ziauddin Ahmad *(Discussant)*

The paper written by Dr. Mohamed Ariff on the role of Monetary policy in an Islamic economy raises a number of pertinent issues on which further thought needs to be given by Muslim scholars in an attempt to advance our knowledge about the working of an Islamic economy in modern conditions under the norms provided by Islam. The literature on the subject is so scanty that any exploration in this field of study is worthy of our appreciation. Dr. Ariff's paper makes a valuable contribution in this respect and deserves careful consideration.

Dr. Ariff's paper is broadly divided into two parts. In the first part of his paper, he seeks to demonstrate that even in the modern "capitalistic" economic system interest does not perform so vital a function that its elimination will blunt the working of monetary policy. The second part of the paper gives an overview of what the author regards the distinguishing characteristics of an Islamic economy which provide *"ample scope for monetary policy to play an effective role within an Islamic framework, in spite of the total absence of the interest elements"*. It is my own conviction that interest is not an indispensable part of the modern economic system and that it is perfectly feasible to run the economy of a country in the absence of the interest element without any untoward effects on growth or allocative efficiency.

While I am in full agreement with Dr. Ariff in this respect, I am unable to subscribe to a member of ideas in his paper and differ with him on many substantive issues related both to his interpretation of modern monetary theory as well as the working of an Islamic economy. My main purpose in highlighting these points of disagreement is to provoke further discussion on the subject in a constructive spirit and thus to assist in the evolution and development of scientific thought in this admittedly difficult field of enquiry.

Dr. Ariff's main contention in the first part of his paper is that *"monetary policy based on interest rate manipulations suffers from serious shortcomings which have severe implications for the efficacy of monetary policy"*. After a general discussion of some of the Keynesian ideas about money and interest and the main postulates of the new quantity theory of money, Dr. Ariff makes an incontrovertible statement that the effectiveness of interest rate policy *"would however depend upon the sensitivity of investment and saving to changes in the rate of interest"*. He then proceeds to suggest that *"If cost-of-credit considerations are totally irrelevant for investment decisions, interest rate variations will have no impact at all upon the economy. If cost-of-credit considerations are irrelevant within a certain range of interest rates, the usefulness of monetary policy is partially impaired. If credit-cost considerations matter in the upward directions only, monetary policy becomes asymmetrical in its impact. Indeed, these possibilities cannot be ruled out."* Subsequently he states that *"The Kyenesian analysis unambiguosly suggests that it is the business expectations and not cost-of-credit considerations which strongly influence investment dicisions."* He also cites certain studies which support the view that *"investment demand is generally insensitive to changes in the rate of interest. It even appears that the cost of capital hardly enters into investment decisions."* These are highly unqualified statements.

The received body of doctrines in the history of economic thought tells us that the interest rate plays an imnportant part in the Keynesian system even though Keynes differed from classical economists in regard to the actual mechanics of the determination of interest rates. Keynes clearly postulated a negatively sloped relation between investment and the rate of interest when, in the context of his discussion of the factors affecting the marginal efficiency of capital, he said that "the rate of investment will be pushed to the point on the investment demand schedule where the marginal efficiency of capital in general is equal to the market rate of interest."[1]

As far as the current literature on the subject is concerned, opinions differ widely on the sensitivity of investment expenditures to changes in interest rates and other manifestations of credit restraints. However, it is generally recognised that the sensitivity of demand for real assets to a change in interest rates depends on the relative importance of interest charges and amortisation payments in the total cost of the investment project. Interest is a large element of the cost in investment in housing and for that reason housing shows marked sensitivity to changes in interest rates. Construction expenditures account for as much as one half of gross private domestic investment in some industrially advanced countries so that interest is an important element in determining the overall level of economic activity in such countries. As against construction, there is less agreement about the sensitivity of busdiness spending to changes in interest rates. Investment in inventories tends to be relatively interest-inelastic because businessmen expect investment expenditures in this category to pay for themselves very soon, though even in this case, as the interest rate goes up a point will be reached at which financial costs will begin to make themselves felt in investment decisions.

In as far as investment in industrial plants is concerned, Dr. Ariff is right that there are many empirical studies that purport to demonstrate that entrepreneurs do not regard the interest rate as an important factor in their investment decisions. However, it has been pointed out by many economists that there is an obvious drawback in drawing conclusions on the basis of replies of a certain group of businessmen. To the businessman, interest is only one of the many factors affecting the investment decision and typically the businessman does not think of these factors in the same frame of reference as the economist. Moreover, most of the empirical studies of this type relate to highly industrialised countries in which an increasingly large proportion of business investment is financed with internal funds. The sensitivity of investment to changes in interest rates will naturally be higher in less developed countries where business firms have to depend on borrowed funds in greater measure. Even in the case of developed countries, it has been pointed out, on the basis of empirical evidence, that "though corporations are able to rely largely on internal funds during recession and early recovery periods, the proportion of external financing generally rises during late recovery and boom periods, thereby increasing the influence of monetary policy at these times."[2]

It would appear from the above that the influence of interest rate on investment decisions in a capitalistic economy cannot be dismissed out of hand. It is interesting that Dr. Ariff himself revises his stand on the question a little later in his paper when he says that "capital cost considerations may well become important beyond certain

1. J. M. Keynes: *The General Theory of Employment, Interest and Money,* (Harcourt, Brace and Company) pp. 136-137.

2. The Report of the Commission on Money and Credit, Committee for Economic Development, U.S.A., (Prentice Hall, 1961) p. 52.

level of interest rate so that even marginal changes in the cost of credit are taken seriously into account by potential investors. In other words, interest has to be sufficiently high for monetary policy to be effective".[3]

Dr. Ariff then goes on to suggest that even though a "sufficiently high" interest rate will influence investment decisions and make monetary policy effective, there are "severe constraints upon the permissible level of interest rates" The three constraints that he mentions specifically are: (a) a high rate of interest raises the cost of debt servicing for the government which implies a heavier tax burden and a more inequitable income distribution; (b) it tends to foster the development of monopolies as they are in a better position to pass on the increased cost of credit to consumers and (c) high rates of interest favour short-term projects and discourage long-term ones. He then concludes the first part of his paper on an affirmation that "All these considerations cast serious doubts on the wisdom of using the interest rate as a monetary policy iinstrument".

I think the constraints to which Dr. Ariff attaches so much importance are really not much of an impediment in the pursuit of a realistic interest rate policy in capitalist countries. In the first place, "high" is a relative term to which Dr. Ariff himself attaches no precise connotation. The level to which interest rate has to be raised to obtain the desired restrictive impact depends on the objective conditions prevailing in particular countries which can differ widely from case to case. Countries which have low rates of inflation and a well-developed capital market can obtain the desired result with modest increase in interest rates, whereas in countries suffering from severe inflation the interest rate may have to be pitched quite high. As for the specific constraints mentioned by Dr. Ariff, they are realy not of decisive importance. The income redistribution effects of debt servicing of national debt can be easily neutralised by appropriate fiscal measures. The growth of monopolies can be curbed by appropriate legislative action. The disincentive effects of high interest rates on long term projects can be softened by a number of fiscal devices.

It seems to me that for vindicating Islam's position on interest it is really not necessary to demonstrate that the interest rate weapon is not of much use even in capitalistic economies. Attention needs to be concentrated on a comparative evaluation of the mechanisms that are employed to achieve the objectives of monetary policies in an Islamic economy as distinguished from those employed in capitalistic or centrally planned ecconomies. Growth, allocative efficiency and distributive justice are the criteria on which such a comparative evaluation needs to be based. There is vast scope for both theoretical and empirical research in this field.

The second part of Dr. Ariff's paper contains a number of observations about the nature and characteristics of an Islamic economy which have a bearing on the scope and efficiency of monetary policy. His main thesis is that the probability of cyclical fluctuations is comparatively small in an Islamic economy which, for this reason, tends to be more stable than a capitalistic economy. He therefore feels that in such an economy the need for an active monetary policy would be felt somewhat less compared to other market economies. As for the effectiveness of monetary policy in the framework of an Islamic economic system, the author is of the view that the absence of the interest element does not constitute much of a handicap "in view of

3. The author does not give equal attention to the effects of lowering of interest rate on investment decisions except to note that "Relatively low interest rates may not stimulate new investment if business outlook is extremely gloomy".

the dubious macro-economic stabilisation role of interest rates", and that the necessary control can be exercised through variations in the money stock per se. While I find myself in substantive agreement with Dr. Ariff in respect of the main theme of this portion of his paper, there are a number of points on which I feel further consideration is needed.

Dr. Ariff advances two main reasons for proving his point that an Islamic economy would be more stable and less susceptible to cyclical fluctuations. The first reason he gives is that "Since savings and investment decisions are not completely independent in an Islamic economy, the Keynesian divergence between saving and investment, and hence the major cause of cyclical fluctuations, does not arise significantly". The second reason is stated by Dr. Ariff in the following words: "Since consumption is always placed on a relatively low-key basis in an Islamic society, the marginal propensity to consume is somewhat low. The relatively low consumption propensity implies a rather weak multiplier mechanism which does not permit economic disturbances to be magnified. This considerably reduces the amplitude of economic fluctuations."

I feel that both these propositions can be taken as interesting hypotheses on which further work would need to be done before one could say anything really definite about them. Dr. Ariff provides no detailed justification for his belief that saving and investment decisions are to a large extent interdependent in an Islamic economy. It seems to me that he has taken this position because the institution of *Zakāh* in Islam impels savers not to keep their capital idle. Thus he says "Islam does not tolerate economic waste and hoarding is therefore vehemently discouraged, while the Islamic fiscal device of *Zakāh* in a sense penalises those who hoard. All these imply that the gap between saving and investment is minimised." The main point for consideration here is whether it can be assumed that all the saving which is put at the disposal of financial institutions in an Islamic economy would get actually invested. My feeling is that since under modern conditions savers and investors are bound to be different entities, such an equilibrium cannot be taken for granted.

The proposition that an Islamic economy will have a low propensity to consume and hence a low value of the multiplier also deserves further consideration. It is true that Islam frowns upon extravagance and excesses in consumption. However, despite the practice of austerity on the part of the affluent sections of the population, the marginal propensity to consume of an Islamic economy can be quite high if it is at a low stage of development and the pattern of future development is such that most of the benefits of growth accrue to the low income groups who on account of large unsatisfied demand have usually a high marginal propensity to consume.

Certain other propositions advanced by Dr. Ariff stand in need of even closer scrutiny and appear to be of doubtful validity. While discussing the demand for money he says that "In an Islamic economy the substitute for money is essentially goods and services as in the case of the Classical economic system." There is no reason why this should be considered axiomatic. There is nothing to preclude the existence of a well-developed capital market in an Islamic economy so that recipients of money balances have a choice either to spend them on goods and services or to purchase non-interest bearing financial scrips. Similarly, it is difficult to agree with Dr. Ariff when he says that "in the Islamic system the danger of general prices being pulled up by demand is not as great as in the case of a capitalistic economy, in view of the relative stability of its consumption expenditures which are comparatively insensitive to changes in the stock of money." The behaviour of consumption expenditures in an Islamic economy consequent to changes in the stock of money cannot be generalised in this fashion, and in the case of low-income countries one may well find a very close correspondence between the changes in the two magnitudes.

Dr. Ariff regards saving to be invariant with respect to changes in interest rates and is of the view that "in an Islamic society, people save mainly because Islam urges its followers to practise thriftiness in spending and moderation in consumption." Empirical evidence in regard to interest elasticity of saving is indeed inconclusive. However, a number of studies point to the conclusion that increase in interest rates by financial institutions does lead to greater flow of savings to such institutions. In view of the fact that in an Islamic economy also there would be need for greater mobilisation of savings by the financial institutions, it is worth considering as to what type of a return can be provided to those who deposit their savings in financial institutions.

Two suggestions occur in this respect in Dr. Ariff's paper. One is the conversion of time deposits with banks into equity shares. There is no doubt about its permissibility in Islam. The other suggestion is that banks may pay to the depositors a nominal rate of return equivalent to the actual rate of increase in general prices. According to Dr. Ariff this would not be logically inconsistent with the Islamic ruling on interest because it would imply zero return in real terms. I have discussed this idea with some religious scholars in my country who are of the view that this is not permissible in Islam. It would be well to give further consideration to this matter in the seminar.

It may be said in conclusion that Dr. Ariff's paper provides a good basis for discussion on the subject of the role of monetary policy in an Islamic economy. He has touched on many issues which have a crucial bearing on this subject. However, there are many more areas that remain to be explored. A major field in which intensive work is needed, and which has remained more or less untouched in Dr. Ariff's paper, relates to the substitution of interest by some alternative mechanism or mechanisms for the allocation of scarce resources. It is often suggested that in an Islamic economy a system of profit-sharing can take the place of interest. The mechanics of such change-over and its implications need to be studied in depth. In fact it is necessary to work out a complete model of an interest-free economy with all the objective conditions essential for its successful functioning clearly spelt out. This alone can serve as a guide for practical action.

2. Dr. Mohammad Umer Chapra *(Discussant)*

Let me at the very outset pay my compliments to Dr. Ariff for a very thought-provoking and well-written paper on the role of monetary policy in an Islamic economy. This paper has no doubt the potential of becoming a worth-while contribution to the field of Islamic economics.

He has very skillfully demonstrated the ineffectiveness of interest rate as an instrument of monetary policy. The rate of interest is not a double-edged weapon; it is more potent as an anti-inflationary instrument. You cannot induce people to borrow by lowering the rate of interest if the prospects for business are not bright. In addition, the Keynesian "liquidity trap" reduces the available supply of loanable funds at low rates of interest. In periods of booming businss conditions high rates of interest do not serve as a deterrent unless they are raised to very high levels which would be inimical to economic growth, encourage short-term projects, increase the already heavy interest burden of the public debt and foster the development of monopolies. In addition, there is the problem of the "locking-in" effect. Thus he points out that it would be more desirable to concentrate on regulating the stock of money when thinking of monetary policy. Therefore, the non-availability of the rate of interest as an instrument of monetary policy cannot create any handicap in an Islamic economy.

He, however, fails to give any consideration to the mechanics of regulating the quantity of money in an Islamic economy. Will the same instruments be used as in capitalism or will there be different instruments. In the capitalist system there are two direct agents for increasing or decreasing the quantity of money - (1) the government, through its deficit financing or borrowings from the central bank (which is the same as printing of notes) and (2) the commercial banks, through their power to "create" deposits. The central bank only tries to change the cost or availability of "high-powered" money to influence the ability of commercial banks to "create" deposits. While discussing the subject of monetary policy in an Islamic economy it is important to discuss the question of the commercial banks' power to "create" deposits. Dr. Ariff has implicitly assumed, like most other Muslim economists, that "creation" of deposits by commercial banks will be as legitimate in an Islamic economy as it is in its capitalist counterpart.

This raises a very important question to which I hope the scholars attending this seminar will give their due attention: should Muslim economists carry on their analysis within the framework of the capitalist system or should they tear apart the different ingredients of the capitalist system to see whether they really fit into, or conflict with, the value system of Islam?

Another problem I face in Dr. Ariff's paper is that he has made a number of unrealistic assumptions about the operation of a Muslim society; some of these assumptions are really unnecessary for the final conclusions he has drawn. For example, to explain why people would save in an Islamic society without the interest reward he explains that the "low posture in consumption"' being a way of life, "the abstinence explanation of interest loses its theoretical appeal." This explanation is not realistic. Throughout Muslim history we have seen that people who have had high incomes have not led a simple life. Morever, absence of interest does not necessarily mean the absence of return on savings. Islam is not an advocate of Marx's concept of "surplus value". Islam recognises return on capital through sharing in the risks of business. Dr. Ariff does mention profit in a later part of his paper but does not build that into his model to show why people will save in the absence of interest.

While the value of a simple way of life may be a part explanation for savings in a Muslim society, a major part of the explanation would lie in the availability of investment opportunities and sufficient return on investment to offset the risk and the eroding effect of inflation. In a Muslim society like Saudi Arabia with high incomes and low business opportunities, combined with unattractive international stock markets and undesirable exchange risks. consumption is bound to be an attractive alternative compared with savings eroded by inflation. Hence savings would not be high in a Muslim society just because of the value attached to a simple way of life. They would be high if investment opportunities were available and if the rate of return is adequate.

Another simplification and unncessary assumption is that hoarding of idle balances will be minimized because hoarding is discouraged in Islam and idle wealth is penalized by *Zakāh*. Even Muslims in an Islamic society will prefer to hold idle balances and not invest them if they face prospects for incurring losses.

In addition to a number of simplistic assumptions, there are some errors of judgement. He has advocated indexation of financial assets to offset the effect of inflation. If indexation is recognised for financial assets then in the Islamic framework of justice it should also apply to every income or asset the value of which erodes away due to inflation. If we do not recognize indexation for all these why should we recognise it for only finance? Will this not conflict with the concept of "justice" in Islam?

Dr. Ariff has assumed that velocity (V) cannot be constant in an Islamic society because of the Islamic stance on consumption (C); consumption expenditure will be comparatively insensitive to change in the stock of money (M). Hence, if M rises then V goes down because C remains constant, and vice versa. The changes in V will thus neutralize the changes in monetary stock. This leads him to the conclusion that monetary policy will be ineffective in an Islamic economy. Therefore, the gist of his reasoning would be that of the two constituents of monetary policy, interest and money stock, interest is ineffective even in capitalism and has no place in Islam, and changes in money stock will be ineffective because they will be neutralized by changes in V. This undoubtedly conflicts with his earlier conclusion where he states that monetary policy could be activated without having to draw the interest rate into the picture by influencing the stock of money.

Such a conclusion would of course create a pessimistic note; however to offset this he argues that "In any case an Islamic economy is relatively more stable than its capitalistic counterpart" because divergence between S and I will not be pronounced in an Islamic economy. He argues that the probability of cyclical fluctuations is comparatively small in the islamic economy. He tries to do a valuable job here but remains unconvincing because of a number of unrealistic assumptions about consumption, saving, and investment.

Therefore, while I have no qualms about admitting both the conclusions he has given in the second last part of his paper, I feel that the conclusions are not really borne out by his analysis in spite of being skillful and valuable. The same conclusions could have been reached without the unrealistic assumptions he has introduced.

I feel that some additional work would further raise the quality of this excellent paper and make it an extremely valuable contribution to Islamic economics.

GENERAL DISCUSSION

1. Dr. Mohammed Omar Zubeir disagrees with the author on the point that there is no room in Islam for speculation of any type. He stresses that speculation which reduces fluctuations in prices would be compatible with the Islamic spirit of justice.

He also does not agree with the author's suggestion that the debtor compensates the creditor for erosion in the value of money due to inflation. He is of the opinion that this is not permissible in Islam.

Dr. Zubeir also finds it difficult to accept the author's postulate that the marginal propensity to consume in an Islamic economy will be less than that in a Western society. On the contrary, Dr. Zubeir argues that the prohibition of interest and the discouragement of hoarding would tend to raise consumption in a Muslim society to a level higher than that in non-Muslim societies.

2. Dr. Mohammed Umer Chapra, too, rejects the author's assumption that the consumption level in an Islamic society will be relatively low. He even suggests that the opposite is probably closer to reality. He postulates that the lack of well-developed money markets and of business opportunities in an Islamic society will encourage the Muslims to spend more to offset the risk of erosion in the value of money due to inflation. He cites the example of the oil-rich Muslim countries where Muslims are as much subject to luxuries in consumption as those in non-Muslim countries.

DISTRIBUTIVE JUSTICE AND FISCAL AND MONETARY ECONOMICS IN ISLAM

Mahfooz Ahmed

1.

INTRODUCTION

The existence of acute income inequalities, unemployment and poverty in a large number of developing countries has been the major cause of concern at both national and international levels. The continual North-South dialogue on New World Economic Order is indeed a manifestation of the seriousness of these problems. The growing concern is also clearly reflected in the search for new strategies, models and policy frameworks to tackle these problems at the national level.

In this context, it is notable that income inequalities happen to be very acute in a majority of Muslim countries[1]. Data on the distribution of wealth is not available but it is generally agreed that wealth tends to be more unevenly distributed than income everywhere.

The existence of acute income and wealth disparities particularly in Muslim countries is somewhat inconsistent with Islam's emphasis on social and economic justice. In a sense, Islam treats all as being equal before God without distinction of rank, class or race. The entire institutional and policy framework in Islam is geared to the achievement of the fundamental objective of distributive justice. Moreover, a certain degree of flexibility is permitted in regard to the scope, coverage and other operational details of the policies.

The aim of this paper is to highlight the problems of income and wealth distribution and their policy implications in the Muslim countries. The paper is divided into four sections including the introduction. In Section 2, the present state of income distribution in Muslim countries is analysed and the dimensions of the problems are highlighted. Section 3 presents the concept and the importance of distributive justice in Islam, and reviews the Islamic fiscal and monetary structures. In the last section, an attempt is made to derive certain implications with reference to the analyses in the preceding sections.

1. A Muslim country for this study is defined as one where Muslims form a large majority of the population.

2.

ECONOMIC DISPARITIES IN MUSLIM COUNTRIES

2A. *Income Disparities in Muslim Countries*

Table 1 and 2 provide comparative data on the size distribution of income for 12 Muslim countries and 5 developed countries[2]. Two global measures of income inequality are presented in Table 1. These are (a) the Gini coefficient or Lorenz ratio, and (b) the Kuznets index of inequality[3]. These measures have been widely used to indicate the overall level of income inequality. These two ratios lie between zero and unity; the higher the ratio the greater the income inequality and *vice versa*. Table 2 presents the size distribution of income by decile groups and hence provides a more disaggregated picture than that given by the summary measures in Table 1.

TABLE 1

INCOME INEQUALITIES IN CERTAIN MUSLIM COUNTRIES

Country	Year	Lorenz ratio	Kuznets Index	GDP per capita US
MUSLIM COUNTRIES				
Bangladesh	1966/7	0.342	0.260	266(70)
Egypt	1964/5	0.434	0.332	260.(73)
Indonesia	1971	0.463	0.337	126(73)
Iran	1968	0.502	0.373	1635(75)
Iraq	1956	0.629	0.502	381(70)
Lebanon	1955-60	0.537	0.418	603(70)
Libya	1962	0.267	0.203	5236(74)
Malaysia	1970	0.518	0.395	602(73)
Pakistan	1970/1	0.330	0.248	129(73)
Sudan	1963	0.446	0.344	117(70)
Tunisia	1970	0.502	0.397	624(74)

cont. ....

2. The data in these tables should be taken cautiously. Firstly, these do not always relate to the same period. In some cases, they are very old and do not reflect the current situation, which may have changed significantly, as perhaps in Libya and Iraq. Moreover, the data on income distribution suffer from well known problems associated with survey data in the developing countries, e.g., the underestimation at the lower and the upper end of the income scale, and differences in scope, coverage, methods of collection, reference period, etc.
3. The Lorenz ratios are derived from the Lorenz Function, vide Kakwani N.C., and Poddar N., "Efficient Estimation of Lorenz Curve .... from grouped Data." *Econometrica, 1976* For the derivation of the Kuznets index see: Kuznets S; "Quantitative Aspects of the Economic Growth of Nations, II, ..." Economic Development and Cultural Change, Supp. July, 1957.

(Table 1 contd.)

Turkey	1968	0.568	0.437	910(75)
B. **DEVELOPED COUNTRIES**				
Germany (W)	1970	0.394	0.299	6871(75)
Japan	1971	0.287	0.213	4133(74)
Sweden	1970	0.387	0.290	8459(75)
U.K.	1968	0.338	0.258	4089(75)
U.S.A.	1972	0.417	0.316	7087(75)

Sources: 1) Shail Jain, *Size Distribution of Income,* The World Bank, 1975.
2) For GDP per capita, U.N. *Statistical Year Book,* New York, 1976, The figures in braces are the years to which the figures relate.

It is evident that the existing income disparities are very acute in most Muslim countries. The inequalities are greater than those found not only in the developed countries but also in many developing countries. Countries with relatively low income inequality are also among the least developed nations.

The simple average of the Lorenz ratios of the five developed countries works out to 0.365. With reference to this average, the Lorenz ratios are higher in nine out of twelve Muslim countries[4]. The three countries where the Lorenz ratios are lower than the average for the developed countries are Libya, Bangladesh and Pakistan, the last two being the poorest among the Muslim countries. In Iran, Lebanon, Malaysia, Tunisia and Turkey, the Lorenz ratios are over 0.50, indicating high levels of income inequality. Such acute cases of inequalities would not be many in the whole world. The same picture emerges when comparisons are based on the Kuznets index of inequality.

A more dismal pattern is shown by the data in Table 2. Taking the 12 Muslim countries together; the share of the poorest 10 per cent of the people in the total income available is 2.2 per cent as compared to 37.0 per cent of the richest 10 per cent and 26.3 per cent of the richest 5 per cent. The picture gets worse if only those nine countries are considered, where the Lorenz ratios are higher than the average for the developed countries. The average share of the bottom 10 per cent population in these nine countries turns out to be 1.21 per cent as compared to 41 per cent of the richest 10 per cent and 28.7 per cent of the richest 5 per cent of the population.

The averages for the nine countries may be compared with those for the five developed countries. The average for the poorest 10 per cent in the developed countries is 2.04 per cent which is 70 per cent higher than the average for the nine Muslim countries. At the other end of the income scale, the shares of the richest 10 per cent and richest 5 per cent in the developed countries are 28.3 and 15.9 per cent

4. The writer is fully conscious of the problems associated with international comparisons. The writer's intention here is just to indicate a broad profile of the inequality phenomenon.

respectively, which are 30 and 45 per cent lower than the simple averages for the nine Muslim countries.

In the cases of Bangladesh and Pakistan, where paradoxically the Lorenz ratios are very low (even lower than that of the developed countries), the extent of abject poverty and destitution is among the worst in the world. For example, according to a recent ILO study[5], 96 per cent of the total population of Bangladesh was branded as 'poor' on the basis of the current Western European Standard of the 'poverty line', which was taken as US$ 2.4 per person per day or US$ 880 per person per year.

Evidently, the Western European standards cannot be applied to countries of Asia and Africa or for that matter to any Muslim country. Moreover, estimating Western European standards on current exchange rates conceals differences in purchasing power of the US dollar. According to a study, in most Asian countries one US$ could buy only 20c worth of goods and services. After adjusting the 'poverty line' for differences in purchasing power, it appears that 96 per cent of the Bangladesh population fall below a poverty line of US$ 0.50 per person per day or US$ 182 per year. Even this poverty line is very high for a country like Bangladesh where the average per capita income of the country was only US$ 66 in 1970, or about one-third of the Western European poverty line. On a more realistic poverty line of US$ 50 per year, which is equivalent to that of a 'destitute' according to Western European standards, nearly 60-70 per cent of the total population or about 45-50 million, were estimated to be poor.

In Pakistan, although the situation is somewhat better, about 50 per cent (over 35 million people) live below a poverty line of US$ 50 per year. According to a recent study[6], the percentage of population living below the more comprehensively estimated poverty lnes, was 53.7 in rural areas and 44.1 in the urban areas in 1969/70. The study shows that the poverty line for a five-member family in rural and ruban areas of Pakistan were PRs. 174 and PRs. 206, in 1969/70, or US$ 42 and US$ 49 respectively, at current exchange rates. The most disturbing result of the study is that the proportion of population below the poverty line has increased from 36.9 per cent in 1963/4 to 53.7 per cent in 1969/70 in rural areas, and from 40.4 per cent in 1963/4 to 44.1 per in 1969/70 in urban areas.

For Libya, recent data are not available on the size distribution of income. On the basis of 1963 data the country had the lowest income inequality among all the Muslim countries. It stands in striking contrast even with the averages of the five develped countries. Interestingly, the income per capita and the growth performance of the country are also very impressive. The low level of income inequality in Libya may indeed reflect the existing situation also because of the massive social security programme mounted by that country recently. It will be surprising if the level of inequality is lower than the figure given in the table. Iraq's figures also may not correctly reflect the present situation. In fact, the figures in the table are too old to be of any use.

No similar information on income distribution is available for the rest of the Muslim countries, which calls for further research. However, one does not need

5. Peter Richards, "Poverty, Unemployment and Underemployment", Tripartite World Conference On Employment, Income Distribution ...., I.L.O., June, 1976.

6. Mujahid G.B.S., and Jackson, D.A.S, "The Measurement of poverty in the Third World Countries: The Case of Pakistan"., Paper presented at the World Statistical Conference, New Delhi, December, 1977.

further persuasion to accept the grim fact of the existence of acute income disparities in many Muslim countries and abject poverty and destitution in some. Moreover, considering the not-too-happy levels of economic growth of the populous countries, including Indonesia, Egypt and Sudan, the dimensions of the problem are indeed frightening.

TABLE 2

SIZE DISTRIBUTION OF INCOME IN CERTAIN MUSLIM AND DEVELOPED COUNTRIES

Decile groups / Country	bottom 10%	2nd decile	3rd decile	4th decile	5th decile	6th decile	7th decile	8th decile	9th decile	top 10%	top 5%
A. MUSLIM COUNTRIES :											
Bangladesh	3.4	4.5	5.4	6.3	7.3	8.5	10.1	12.2	15.6	26.7	16.7
Egypt	1.5	3.1	4.2	5.3	6.5	8.1	10.1	12.8	17.3	31.1	19 2
Indonesia	2.7	4.1	4.9	5.6	6.3	7.1	8.0	9.3	11.3	40.7	33.7
Iran	1.2	2.8	3.8	4.9	5.9	7.2	8.8	11.0	14.7	39.7	29.7
Iraq	0.9	1.2	1.8	3.6	3.7	5.1	7.2	10.6	17.1	49.8	35.1
Lebanon	2.4	2.7	3.2	4.0	4.8	6.0	7.6	9.9	14.3	45.1	34.6
Libya	4.8	5.5	6.4	7.1	8.0	9.1	10.4	12.0	14.7	22.2	13.3
Malaysia	1.1	2.4	3.4	4.3	5.6	6.9	8.8	11.5	16.1	39.5	28.3
Pakistan	3.6	4.8	5.6	6.6	7.5	8.5	10.0	11.9	14.7	26.8	17.3
Sudan	1.9	3.1	3.9	5.0	6.2	7.7	9.6	12.5	17.1	33.0	20.9
Tunisia	1.8	2.4	3.1	4.1	5.2	6.8	8.9	12.2	18.12	37.3	23.5
Turkey	1.0	1.9	2.8	3.7	4.8	6.2	8.1	10.9	15.9	44.7	32.8
B. DEVELOPED COUNTRIES :											
Germany (W)	2.2	3.7	4.7	5.8	7.0	8.3	10.3	12.5	16.5	29.1	18.2
Japan	3.4	5.4	6.3	7.2	8.3	9.2	10.5	12.1	14.5	23.1	14.2
Sweden	1.5	3.7	4.9	6.1	7.4	8.8	10.6	12.9	16.6	27.5	16.8
U.K.	2.3	4.3	5.4	6.5	7.8	9.2	11.0	13.2	16.4	23.9	13.7
U.S.A.	0.8	3.1	4.4	5.8	7.1	8.8	10.8	13.5	17.6	28.1	16.6

Source: Shail Jain. *Size Distribution of Income,* The World Bank, 1975.

2B. *Regional Disparities in Muslim Countries:*

The analysis could be extended to an investigation of regional disparities in the Muslim countries. Table 3 sets out certain indicators of development for 25 Muslim countries and 5 developed countries. These 25 Muslim countries jointly account for 600 million population, but differ from each other on many scores: size, level of development, economic performance, availability of social services, and strength of balance of payments.

Population-wise, there are the vast countries of Indonesia, Bangladesh, Pakistan, and Nigeria with more than 60 million people each. Turkey, Egypt and Iran each have between 30-40 million population, while Afghanistan, Iraq, Malaysia and the Sudan, have 10 20 million each. In all the others, the population in less than 10 million each. Bu there is no relationship between the size of population and the level of economic growth. Indeed, if at all, the relation is inverse. For example, the highest per capita GDP US$ 11,726 is in Kuwait which has 1.03 million population; and the lowest US$ 66 is in Bangladesh where the population is 76.8 million. Infact, the GDP per capita of Kuwait is the highest in the world as that of Bangladesh is among the lowest. Libya's per capita GDP US$ 5236 in 1974 compares favourably with those of the five developed countries included in the table.

The income disparities among the Islamic countries are brought out more clearly by Table 4. It is notable that, of the 600 million population in these countries, only 46 million or about 7.6 per cent have per capita GDP of more than US$ 1,000. Almost two-thirds of the population has a per capita GDP of less than US$ 250. In fact, except Nigeria, the GDP per capita is less than US$ 130 in the remaining seven countries which account for 55 per cent of total population of all the coutries taken together.

The growth performance of the high income countries is also remarkably high and for obvious reasons. For example, the rates of growth of GDP recorded in Saudi Arabia, Iran and Libya in the recent period were higher than 15 per cent per annum. The contribution of oil revenues towards growth performance is quite evident in these countries; this is also true, to a certain extent, for Iraq and Indonesia. The growth performance of Turkey and Syria has also been quite good. On the other hand, the performance of the poor countries has been bad. In most cases they were barely able to match the growth of GDP with that of population, and in Bangladesh the per capita GDP declined during 1970-73. These trends have different implications at the national level, but at the regional level they imply a further deterioration in the disparities within the community of Muslim nations.

TABLE 3

SELECTED ECONOMIC INDICATORS

Country	popn mn. no. 1975	GDP per capita US $	growth rate % GDP	per caput	health popn. per bed	physician	education pub. exp. % of GDP	tot. exp	foreign exch reserve mn. SDR 1976
Muslim Countries :									
Afganistan	18.8	88(70)	2.5[a]	0.4	7051	26091	1.3	12.7	145
Algeria	16.8	710(74)	..	..	356	8192	6.5	11.6	1711
Bangladesh	76.8	66(70)	2.2[b]	0.2	464	5100	1.2	11.7	249
Bahrain	0.26	1111(70)	..	..	248	1348	3.4	9.5	381
Egypt	38.1	260(73)	4.7[c]	2.4	6946	9345	5.8	17.6	292
Indonesia	139.6	126(73)	8.2[d]	5.4	1415	18863	2.4	12.7	1290
Iran	33.4	1635(75)	20.2[e]	16.9	650	2752	3.8	12.2	7603
Iraq	11.5	381(70)	8.3[b]	4.8	482	2369	4.3	11.5	3960
Jordan	2.78	407(74)	..	..	937	2438	3.6	8.3	243
Kuwait	1.03	11726(74)	..	..	241	800	2.6	14.7	1660
Lebanon	2.96	603(70)	..	..	260	1330	2.7	18.6	1423
Libya	2.44	5236(74)	17.5[f]	12.8	240	1139	..	12.2	2759
Malaysia	12.3	602(73)	..	..	273	7269	..	..	2127
Morocco	17.3	426(75)	4.7[b]	1.5	732	13802	5.3	20.5	423
Nigeria	64.8	223(73)	..	..	1378	25463	4.1	24.2	4478

cont. ....

(Table 3 contd.)

Oman	0.79	380(70)	..	..	2802	..	2.1	..	266
Pakistan	72.4	129(73)	3.3[b]	0.5	1871	..	2.3	5.2	458
Qatar	0.10	2531(70)	..	..	130	938	3.8	..	89
Saudi Arabia	9.24	3220(74)	16.3[b]	13.0	897	4995	..	..	23261
Sudan	16.1	117(70)	3.9[e]	0.8	1097	12372	8.0	14.8	20
Syria	7.60	743(75)	11.9[d]	8.4	1054	2905	..	18.2	628
Tunisia	5.74	626(74)	9.7[b]	7.2	423	5219	..	26.4	319
Turkey	40.2	910(75)	7.1[d]	4.6	463	1834	..	12.7	967
Yemen(R)	6.87	129(73)	..	..	1443	26449	..	..	620
Yemen	1.75	97(70)	..	..	665	32380	..	..	71
U.A.E.	..	..	..	..	..	..	..	..	1641
Developed Countries:									
Germany (W)	61.8	6871(75)	2.2[b]	1.8	87	516	4.1	14.0	29954
Japan	112.8	4133(74)	6.8[c]	5.4	171	351	4.3	19.5	14292
Sweden	8.22	8459(75)	2.6[b]	2.3	66	645	7.5	13.5	2144
U.K.	55.9	4089(75)	2.3[d]	2.1	117	761	..	..	3641
U.S.A.	215.1	7087(75)	2.5[d]	1.6	149	622	6.6	18.9	15768

Sources: *U.N. Statistical Year Book,* 1976.
I.M.F., *International Financial Statistics,* 1977 Supplement, May, 1977.

Notes: a- 1965-69; b- 1970-74; c- 1970-73; d- 1970-75; e- 1965-70; f- 1960-65

TABLE 4

INCOME DISPARTIES IN MUSLIM COUNTRIES

Per capita GDP US $	No. of country	Population million	Population per cent	Name of Country
Less than 100	3	97.4	16.4	BD, AF, YEM,
100 - 250	5	299.8	50.0	SUD, IND, PAK, YEMR, NJG.
250 - 500	5	70.5	11.7	EGT, IRQ, JOR, MCO, OMN.
500 - 1000	6	85.6	14.3	ALG, LEB, SYR, MAL, TUN, TKY.
1000 - 2000	2	39.73	5.4	BAH, IRN.
2000 - 5000	2	9.3	1.6	QTR, SAB.
5000 - more	2	3.47	0.6	LBA, KWT.

Source : Table 3.

BD - Bangladesh
AF - Afganistan
YEM - Yemen
SUD - Sudan
IND - Indonesia
PAK - Pakistan
NIG - Nigeria
EGT - Egypt
IRQ - Iraq
MEMR - Yemen Republic
JDR - Jordan
MCO - Morocco
OMN - Oman
ALG - Algeria
LEB - Lebanon
SYR - Syria
MAL - Malaysia
TUN - Tunisia
TKY - Turkey
BAH - Bahrain
IRN - Iran
QTR - Qatar
SAB - Saudi Arabia
LBA - Libya
KWT - Kuwait

The disparities in incomes, however, are not repeated in regard to the availability of health and education services, which implies that there is no one-to-one correspondence between disparities in incomes and the availability of social services. For example, health facilities in Bangladesh, the poorest among the Muslim countries, are better than those in ten other countries having per capita GDP ranging from US$ 66 to US$ 610. Indeed, it compares favourably with Saudi Arabia, whose per capita GDP is almost 50 times higher. On the other hand, Kuwait with the highest per capita GDP does not compare well with the averages for the five developed countries. More or less the same holds for education as well. These findings may be corroborated with additional data relating to other relevant aspects.

The foreign exchange reserves data, besides indicating the relative strengths of the balance of payments position of each country, confirm the above findings. While the oil exporting Muslim countries are saddled with huge foreign exchange reserves, populous countries suffer from serious balance of payment difficulties. Worst affected among these is Sudan which seems to be hovering on bankruptcy. Sudan's foreign exchange reserves are even lower than that of Bangladesh.

Thus, when the Muslim countries are taken as a group, one can see pockets of affluence and abject poverty, high levels of education and widespread illitracy and striking differences in the availability of other social services. There are extreme shortages of labour in some and acute unemployment and under-employment in others. Some countries have relatively better organisational and institutional frameworks, although in terms of per capita GDP they are ranked very low. Thus apart from highlighting disparities, this analysis also indicates tremendous potential for utilising the disparate advantages of various countries for a mutually conducive transformation.

3.

ISLAMIC SOLUTION TO THE PROBLEM OF ECONOMIC DISPARITIES

3A. *Distributive Justice in Islam:*

The glaring income inequalities at the national and regional level in the Muslim countries appear un-Islamic, because Islam places a profound emphasis on equity and social justice[7]. Distributive justice is not merely a narrow theoretical concept in Islam; it implies equality in all spheres of life[8]. The institutional framework is also geared to achieve this end. Moreover, there is enough flexibility within the fundamental policy framework to tackle the problem of inequality and injustice.

The analysis in this section is an attempt to expose the anomaly of existing income inequalities and 'isalmic emphasis on equality and justice and to identify the elements of policy framework which may have relevance in removing such an anomaly in the

7. Bertrand Lewis, *The World of Islam,* 1976 Edition.
"There was to be no church and no priests, no king and no aristocrates, no castes and no estates and no privilages other than the natural and rightful superiority of those who accept the new dispensation over those who wilfully reject it".
8. Hassan Ahmed, "Social Justice in Islam", *Islamic Studies,* Islamabad, Sept., 1971.
"Equitable distribution of wealth is one of the fundamental socioeconomic values of Islam which is, in fact, the Islamic equalitarianism, the foundation stone of Islamic society".

present-day context. This analysis is based mainly on the teachings of the *Qur'an* and the policy framework that emerged during the *Khulfa* period[9]. No notice is taken of the existing fiscal and monetary framework in the Muslim countries for the simple reason that such systems have emerged from various pulls and pressures of time and needs, and may not correspond to what has been ordained.

The pillars of Islamic equity and social justice are :

(a) supremacy of social gains over private benefits;
(b) public provision of basic minimum sustanance;
(c) denigeration of concentration of wealth and exploitation; and
(d) stress on work effort and prohibition of interest.

Islam encourages private enterprise for exploiting the limitless bounties of God to the maximum. Individual property rights are also recognised. The *Qur'an* also accepts differences in capacities, skills and ranks among people and hence a certain inherent degree of inequality. However, all these sanctions are qualified and restricted such that the vital importance of equity and social justice is not diluted. For example, individual enterprise is qualified by the legitimacy of purpose. It has to be an honest endeavour (IV: 29). To earn the minimum needs by least endeavour for oneself and family is a duty and given a status of worship. To permit earning one's living during Haj is an example of the exalted status (II: 193). Savings to meet future consumption and a desire to leave an inheritance are regarded legitimate objectives of productive activity. Beyond these ends, Islam advocates moderation (XXV: 67), restrains conspicuous consumption and prescribes certain types of consumption. Luxury living (VI: 141, VII: 31) miserliness particularly in Infaq (IV: 37), too much yearning for material well-being (C: 8) are condemned (IV: 36), thus placing definite limits on the individual's freedom of expenditure and enterprise.

Similarly, God is the absolute owner of all resources and man is His trustee. Therefore, man has to act within the limitations of trusteeship while utilising the resources himself. (IV: 7; XXIV: 33; IV: 5). For example, the owner has no right to destroy useful property[10]. Its wasteful use and that which is detrimental to public interest is prohibited. Other members of the family and the extended family have a claim over an individual's property[11]. Moreover, an individual's right to private property is acceptable so long as it is productively used, otherwise such property has to be transferred to those who can utilise it better[12].

Finally, although unequal earning capacities due to inherent differences are recognised, the inequalities in income and wealth arising from these are abridged by many injunctions. The surplus left after meeting all legitimate needs should be distributed among those who are not so well-off. According to a Tradition, the Prophet (Peace be upon him) recognized so many kinds of commodities that his companions presumed that "man has no right on his surplus wealth"[13]. The *Qur'an*

9. Khulfa period here refers to the period of the first four Khalifas.
10. Siddiqui M.N., *"A Survey of Contemporary Literature on Islamic Economics"* Mimeographed, p. 156, 1976.
11. It is the duty of a Muslim to support the following, namely, parents, relattives, neighbours, orphans, the poor and the traveller (II: 215). This however has to be in the name of God within limits with humility and without ostentation. (II: 215, 219).
12. Ahmed Ziauddin, "Socio-Economic Values of Islam"., *Islamic Studies.,* December, 1971; see also, Hassan Ahmed, *op. cit.,* and Malik Hafeoz, "Spirit of Capitalism and Pakistani Islam", *Islam and the Modern Age,* New Delhi, May 1971.
13. Hasan Ahmed, *op.cit.,* see Ziauddin Ahmed, *op. cit.*

also denounces lthe motive of personal enjoyment of property for merely individualistic ends (IV: 29).

Thus while no restraints are put on private enterprise and private ownership, and inequality in earnings due to inherent capacity differences are recognised, the religious obligations, legal requirements and other qualifications on an individual as a member of the society he lives in, eliminate the avenues of continuing economic disparities.

Moreover, the primacy of social gains over private benefits, is very clearly reflected in the Islamic approach to distributive justice. An individual cannot act independently of the society in which he is placed[14]. The *Qur'an* envisages maximum circulation of wealth among all members of the society (LIX: 7). Muslims are ordained to share the burdens of the poor and the needy. The importance of society in determining the activities of an individual is evident and there is no legal sanction for an individual enterprise that goes against others' interests. Public ownership of natural resources is an important element of the primacy of social ends. The Prophet (peace be upon him) had brought under state control some grasslands for the use of the state. The Tradition of the Prophet (peace be upon him) was also followed by the first *Khalifa*, who extended the scope of such control for public use. Indeed, public ownership is "a central concept in Islam" although its scope is "not rigidly defined, but left to be determined in the light of certain principles, depending on the needs and circumstances"[15]

It is the responsibility of society and the state to ensure provisions to meet the basic minimum needs of each member of the Islamic society. According to Al-Ghazali, *Shari'ah* provides five fundamental rights to every Muslim, one of which is the 'protection of life', which implies a provision of basic minimum sustenance to each individual. The basic needs include food, shelter, provision against disease, education, and other things regarded necessary according to the customs of the society[16]. The state during the reigns of the first *Khalifa* provided the minimum needs of the Muslim out of the state funds.

In the *Qur'an Shari'ah* and Traditions, there are many injunctions for checking the concentration of wealth in a few hands. The checks on individual enterprise and property have already been noted. More specifically, condemnation of hoarding (IX: 34-35) the encouragement of charity, and *Zakāh* are measures which keep the concentration of wealth under control. *Zakāh* is progressive in incidence and flexible in so far as the inclusion of various forms of wealth is concerned. The specific uses of *Zakāh* and other state revenues are even more redistributive in impact[17]. According to a Tradition, Umar is reported to have said, "Had I known before what I came to know later, I would have taken away surplus wealth from the rich and distributed it among the poor immigrants". It is a great virtue to give away surplus wealth to the poor, the orphans and the destitute etc. (II:215). Feeding of the poor is emphasised (CVII: 1-7), at the same time maltreatment of the poor and excessive love of wealth is decried (LXXXIX: 15-21). The laws of inheritance which include the members of the extended family, also ensure inter-generation equity. (II: 180-182, 240; IV: 7-8, 33).

14. *Ibid.*
15. Siddiqui, *op.cit.* p. 14 & p. 35.
16. Vide Tabawi, referred in Sidiqui, *op.cit,* pp. 16-21.
17. Fariq K.A., *Khilafat-i-Rashida ka Iqtisadi Jaaiza,* (Urdu), Delhi, 1977

The *Qur'an* places greatest emphasis on the use of one's own labour for earning a living (LXVIII: 15) and hence on earned income[18]. It is ordained that all wealth has to be acquired through honest labour (II: 269). The vital importance of work effort is also reflected from the life of the Prophet (peace be upon him). Thus apart from upholding the dignity of labour, the emphasis on work in Islam highlights the nonexploitative nature of its productive enterprise system. At the same time, the denigration of the 'unearned' income by prohibiting interest and usury removes not only the important exploitative element from the techniques of acquiring wealth, but also the important factor that distorts the distribution of income and wealth.

Indeed, the Islamic market structure without interest and with distributive justice as the fundamental goal is quite distinct from that under the capitalistic mode of production. In the Islamic market framework, profit maximisation is not an important motive of private enterprise. Competetion is favoured over monopoly, but it has to be honest and without exploitation. It is not sacrosanct or unalterable. In this form, the market system serves the goal of social and economic justice with efficiency in allocation[19].

In contrast, the market framework under the capitalist mode of production implies, other things remaining the same, that market prices left to themselves lead to Pareto optimality which is defined as the 'blissful' configuration of economic forces such that even an infinitesimal change would make someone in the system worse off. In other words, a private enterprise system achieves simultaneously an optimal allocation of resources, most effecient utilisation of available factors and other inputs and maximisation of satisfaction by the consumers, other things being equal. Although the market system leads to efficiency in the Paretian sense, it is known to fail in tackling the problem of income distribution and social justice. For example, it is quite conceivable in such an economy that Pareto efficiency may accompancy a worse form of income distribution. Even when the system starts from a 'proper' state of distribution initially, there is no guarantee that the equilibrium solution will be proper'.

The Islamic institutional and policy framework for achieving the basic goal consists of : (a) moral education and (b) legislation, taxation and state intervention.

Although, (a) emphasises morally-oriented voluntary actions, the injunctions of the religion are such that the failure to abide by them makes an individual irreligious. Thus the relgious compulsions under (a) are in fact more binding than is apparent at first sight. The legal compulsions under (b) are self-evident, but the role of the state in securing distributive justice is very wide. The salient features of the operational institutional framework of Islam is brought out very clearly by the following statement: "For establishing economic justice, Islam does not rely on law alone. Great importance is attached for this purpose to reform the inner man through faith, prayers, education and moral training, to changing the preference and ways of thinking, and inculcating in him a strong moral sense that keeps him just. If and when these means fail Muslim society should be strong enough to exert pressure to make individual adhere to the limits. When even this does not deliver the goods, Islam is in favor of the use of coercive powers of law to establish justice by force"[20] There are

18. "None of you has ever eaten any food better than that of one's own labour". Bukhari, Quoted by Ziauddin Ahmed, op.cit. See also, Fazlurrehman, "Economic Principles of Islam", *Islamic Studies,* March, 1969.
19. Siddiqui, op.cit. pp 33-34.
20. Siddiqui, *op.cit.*

many other authorities on Islam who agree on the dominant role of the state in enforcing distributive justice. Some modern thinkers include the following among the coercive powers of the state: "restriction on individual freedom of action, regulation of business activities, fixation of prices, wages, rents and rates of profits, taxation, taxing away the entire surplus wealth, use of coercion in purchase or hire, nationalisation, ceiling on property, economic planning and financial penalties"[21].

The most remarkable aspect of the Islamic operational framework is the inherent flexibility in matters of details. As ends rather than means are of central importance in an Islamic approach to policy, necessary and desirable extensions are permissable, within the fundamental context, depending upon the given situation. The following review of the fiscal and monetary structures also tends to confirm the above statements.

3B. *Islamic Fiscal and Monetary Structures*[22]:

Fiscal structure: Fiscal structure that emerged during the reigns of the Prophet (peace be upon him) and the First *Khalifa* may be presented in a tabular form as follows:

TABLE 5
STRUCTURE OF EXPENDITURE AND REVENUE

Category of expenditure	Sources of revenue
a) Religion	1. Incom from Property : i) Agricultural lands
b) *Jihad* and defence	ii) mines iii) other property
c) Transfers and subsidies	2. War repatriations (1/5 of total)
d) Payments to Neo-Muslims	3. Treaty money
e) Others	4. *Jiziah*
	5. *Zakāh*
	6. Agricultural produce tax
	7. Foreign trade tax

In the fiscal system of the Classical period the main sources of revenue were 1(i), 2, 3, 4, and 5. The receipts under 1(i) included income from urban property of the evacuees and from agricultural land in and around Madina. One-fifth of the total war booty was reserved for repatriation to the state's treasury. *Jiziah* was a head tax on non-Muslims, imposed at a flat rate. *Zakāh* was a charge on the wealth of Muslims.

21. *ibid.*
22. This review is entirely based on the study of Prof. Fariq K.A., *Khilafat-Rashida ... op.cit.,* 1977.

Besides, certain oasis were reserved as grasslands for animals used for Jihad. Substantial amount was spent on the poor, the destitute, orphans, etc. However, a major proportion of the total expenditure was spent by the Prophet (peace be upon him) on *Jihad* and defence and the propagation and strengthening of religion. Some amounts were also paid to the neo-Muslims to win their hearts to Islam.

During first *Khalifa*, Abu Bakr's regime, two additional sources of revenue viz., income from mining and considerations for war treaties, contributed significantly to the total revenues. Abu Bakr spent most of the State's income on defence and Jihad. He used to distribute budgetary surpluses, if any, among the residents of Madina equally.

During the second *Khalifa,* Umar's regime, the conquests increased and with them the boundaries of the Islamic State. Many significant changes occurred in the fiscal structure during this period. More grasslands were brought under control of the State for augmenting the supplies of horses and camels for the ever growing war machine. The tax on agricultural produce became an important source of Government revenue. The expenditure on war and defence increased substantially, because this was the period when the Islamic State was firmly established. According to some reporters, as many as 60,000 troops were sent by Umar in one year to the war theatres of Syria and Iraq. At the same time the state's revenues also boomed so that large budgetary surpluses were generated.

The scope of *Jiziah* was extended to non-Muslims other than Jews and Christians in accordance with the direction of the Prophet (peace be upon him.) During the time of the Prophet (peace be upon him) only adults were liable to pay *Jiziah*. However, Umar raised the rates and made them more progressive. He introduced three rates of *Jiziah:* viz. 1.2 dinars for workers, peasants and small artisans, 2.4 dinars for the middle-income group and 4.8 dinars for the rich. The cultivators were charged both agricultural-produce tax and *Jiziah,* while those in towns paid only *Jaziah*. The former were also responsible for feeding the Islamic army in transit for a certain period.

The Iranian system of agricultural tax, according to which various crops were taxed at different rates, was adopted by Umar with the modification that it was applicable to all cultivable land irrespective of whether the land was cultivated or not. A compulsory procurement in kind was also madefor the Islamic army in addition to the produce tax. After a few years, the structure of this tax was changed. The notable change was to raise the tax rates of certain crops in lieu of abolishing the procurement in kind. More crops were brought under the tax. The compulsory procurement in kind for the army at times included foodgrains, edible oil, honey, ginger and clothes.

Another innovation of Umar was the establishment of the Department of subsidies. The budgetary surplus, if any, was distributed equally among all, including slaves, by the Prophet (peace be upon him) and Abu Bakr. During Umar's regime State revenues increased substantially; he therefore created this department to organise the distribution of subsidies and transfers out of the budgetary surplus, on a regular basis. Subsidies were given (a) in kind in the form of a fixed ration per person, and (b) fixed annual subsidies in cash, to those who had participated or were willing to participate in Jihad.

While subsidies in kind were granted equally to all including the slaves of the recipients, the cash payments were made according to 9 grades formed on the basis of the recipients closeness to or companionship with the Prophet (peace be upon him) and of past or intended sacrifices for Islam. Although there arose many problems due to the establishment of this department, Umar's action gave an operational meaning to the State's obligation to provide a minimum sustenance to the people. On the adverse side, it created artificial distinctions among people, led to substantial wastage of rations which often were more than the requirements of the family, dampened work effort, because subsidies in kind were not tied to work or any return obligation to the State, and raised the use of slave labour by rich recipients of such subsidies.

Umar also levied a tax on foreign traders and also the Muslim and non-Muslim traders of the State. However, different rates were charged, e.g., 10 per cent from foreigners, 5 per cent from non-Muslims and 2.5 per cent from Muslim traders of the State. An incentive rate of 5 per cent was prescribed for the imports of wheat and olive, which amounted to one half of the rate on other agricultural commodities.

Under the regimes of Uthman and Ali, the fiscal structure was widened and strengthened further. Uthman continued with the fiscal structure that had emerged during Umar's regime, including the department of Subsidies. An important change introduced by him was the inclusion of horses in the wealth for *Zakāh*. More significant was the substantial increase in transfers and subsidies during his period. Ali dispensed with the grades for distributing new cash subsidies and distributed most of the budget surplus if any.

Zakāh is a charge imposed by the *Qur'an* on the wealth of Muslims, but its coverage was left undefined. The Prophet (peace be upon him) levied *Zakāh* on the following kinds of wealth: (a) precious metals, (b) domesticated animals, (camel, cow, goat and sheep), and (c) agricultural produce (wheat, maize, barley, dates trees, dried grapes etc.). The rate was 2.5 per cent on precious metals, but silver and gold worth 10 dinars were exempted. The rate on gold and silver acquired from mining or treasure was 5 per cent. Only animals used for trade were taxable, and 4 camels, 30 cows and 40 goats were exempt. The rates for this category were: one goat for 5 camels, one calf for 30 cows and one goat for 40 goats. A certain amount of agricultural wealth was also exempt from *Zakāh* Agricultural crops from irrigated fields were taxed at the rate of 10 per cent. Umar added olives in this category, and Uthman added horses. Inherently, therefore, the incidence was progressive.

According to the Qur'an, *Zakāh* was to be used for the following purposes: (a) distribution to the destitute, (b) distribution to the poor and orphans, (c) expenditure on the collection of *Zakāh*, (d) payment to the Muslim converts, (e) assistance to slaves for repayment of their contractual obligations, (f) assistance to poor for repayment of their loans, (g) support to those intending to participate in Jihad, and (h) maintainance of travellers. However, *Zakāh* was mostly used by the Prophet (peace be upon him) and the khalifas on Jihad and war preparation. Evidently, the redistributive impact of the expenditure of *Zakāh* is far more significant than its incidence as a tax.

(ii) Monetary structure: Unlike the fiscal structure, information on the monetary structure is extremely scanty. It appears that no organised monetary institutional famework was in existence in those times. The credit transactions were, therefore, basically unorganised. The *Qur'an* abolished interest (II: 266) and hence the credit structure got radically reoriented. Another injunction of the *Qur'an* (II: 281-283)

advocates proper writing down of loan transactions in the presence of acceptable witnesses. According to an interpretation of this injunction, four types of transaction are mentioned, viz., (a) cash payment for immediate delivery of purchased goods; (b) forward transactions involving a promise to purchase on credit at a future date; (c) credit transactions involving immediate possession with payment being made at a future date; and (d) advance payment for goods and services at agreed prices now, with delivery being taken at a future date. The type (a) by its very nature was normal. Type (b) was banned which in effect was equivalent to eliminating the possibility of speculation. Types (c) and (d) were allowed and the written agreements were to be used for these.

After the prohibition of interest no one was permitted to demand interest. The monetary transactions, therefore, took the form of *Mudarabah,* under which surplus funds were provided on a profit-sharing basis. Outlets for beneficial deals were many, due to booming trade, most of the well-to-do people being traders themselves.

There is evidence to suggest that inflation became rampant from the latter part of Umar's regime. The prices of animals went up several times and continued to rise during Uthman's period. Indeed, inflation became general, encompassing such commodities as Arabic horses, date palms, land, buildings and agricultural estates.

In the modern context, inflation adversely affects the fixed income groups and redistributes income in favour of the profit earners. Inflation during the *Khulfa Rashdeen* period might have affected the recipients of the fixed cash subsidies from the state. However, it is difficult to assess the relative impact because many of the recipients also belonged to the trading classes. Moreover, the growth in real output and capital formation, due to participation in *Jihad* and trade, was equally rapid. The absence of interest from the credit transactions eliminated the unearned component of income. Banning of forward trading also removed the possibility of the bad effects of speculation. Finally, the adverse redistributive impact of the lagged response of interest rates to inflation, thereby affecting the real cost of credit and its allocation among borrowers and for different uses was not relevant in those days of an unorganised money market.

4.

POLICY IMPLICATIONS

The review of the Islamic concept of distributive justice and the fiscal and monetary structures during the classical era enables us to derive certain policy implications for tackling the problems of the prevailing disparities in income and wealth distribution among the Muslim countries today.

It is evident from the above analyses that striking disparities in income and wealth at the national and the regional level are inconsistent with the Islamic concept of distributive justice. Therefore, the major thrust of the strategy would be a massive redistribution of income and wealth at the instance of the State. However, for obvious reasons, the problems facing various countries will have to be dealt with at two levels, viz., (a) national level, and (b) regional level. At the national level the package of policies will again differ from country to country. On the basis of the analysis in Section 2, three categories could be distinguished: (1) rich oil producing countries, (ii) satisfactorily growing non-oil producing countries, and (iii) the poor countries.

For the rich oil producing countries where resources are not a constraint, the main thrust of the redistributive effort will be in the form of a massive social security programme, rapid creation of a basic machinery for providing minimum sustenance to all people, free distribution of social services, i.e., health, education and housing, firm control on luxuries and conspicuous consumption, conservation of oil resources and stepping up of capital formation for ensuring a selfsustained growth in future. The transfer and subsidies programmes must, however, be tied with work effort, so that work habits are not adversely affected. All types of wastage must also be avoided.

For the second group of countries, redistributive policies would have to be integrated into their development plans and economic growth with social justice must become the central focus of such plans. In view of the binding nature of resources constraints, a careful balance has to be struck between the resources required for capital formation, on the one hand, and those for social security programmes on the other. However, the importance of social security should increase as a part of the long-term plan for providing a minimum sustenance for all.

The poor countries face explosive problems of poverty, unemployment and disparities in income and wealth distribution. There are no easy solutions. Much research is being done on these problems and the countries concerned have also shown adequate awareness of their problems. However, the major thrust of the redistributive strategy in these countries would be a radical transformation of the existing institutional structure, coupled with a reorientation of the production structure consistent with the existing demand pattern. Resources constraint makes it difficult for these countries to adopt a substantial social security programme. Domestic saving effort of these countries will have to be supported by massive aid from outside.

At the regional level, substantial aid from the rich to the rest of the countries is called for. The rich countries may give outright grants to support the minimum needs programmes of the not-so-rich nations and also give necessary assistance in the form of interest-free loans to strengthen their development efforts. To the poor countries massive support needs to be given. It has to be in the form of outright grants or interest-free loans repayable over a very long period.

At the regional level also, a comprehensive research effort should be mounted, financed by the rich countries, to get a more accurate and up to-date data on the existing disparities in all Muslim countries, and to study the feasibility of regional economic cooperation which may be mutually beneficial to all.

It is heartening to note that in some Muslim countries, fiscal and other redistributive efforts have followed the classical traditions. The massive social security programmes and provision of free education and housing in Libya and Iraq have the characteristics of the policies during the *Khulfa Rashdeen* period. Subsidizing food and other essential goods in most of the oil producing rich countries is an important step in ameliorating the conditions of the weaker sections in their society and is consistent with the Islamic approach. However, other extensions and improvements in the existing policy framework which are consistent with fundamental Islamic values are possible. There is also a need for diverting resources to the poor and not-too-rich Muslim countries on a much bigger scale than at present.

COMMENTS

1. Prof. Khurshid Ahmad *(Discussant)*

My first comment is concerned with the data on which Dr. Mahfooz Ahmad bases his empirical analysis. It is necessary to present the latest data available in the Muslim countries, particularly in view of the revolutionary changes that have taken place in many of these countries. Thus, for example, it would be unfair and unscholarly to draw conclusions about Iraq in 1978 on the basis of the figures for 1956.

The techniques employed to measure the degree of inequality and the extent of poverty may give rise to a fanatical view of the situation. This is not at all sufficient; we ought to find out the causes and sources of poverty and inequality - be it regional, national or international. We need to study in particular the historical and structural factors affecting the relationship between developed and developing countries and the policies which have been adopted to narrow the gap over the last two decades. We have to adopt techniques which would throw light on the sources and causes of poverty and inequality so that we can be in a better position to think of appropriate policy measures to combat the situation.

Coming to the exposition of the Islamic concept of social justice, skillfully handled by Dr. Mahfooz Ahmad, I wish to stress the need for us to be constantly aware of the fact that the Islamic efforts are distinctly different from the efforts towards achieving distributive justice in capitalistic and socialistic economies. I think this is the crux of the matter, for we cannot arrive at Islamic solutions to problems of poverty and inequality simply by tinkering with policy instruments which have been employed in a number of mixed economies. Justice is an inalienable aspect of the Islamic faith. The *Qur'anic* approach to the problem is illustrated by the following verse (*Sura* CVII):

> "Seest thou one who denies the Judgement (to come)?
> Then such as the (man) who repulses the orphan (with harshness),
> And encourages not the feeding of the indigent, So woe to the worshippers who are neglected of their prayers.
> Those who (want but) to be seen (of men),
> But refuse (to supply) (even) neighbourly needs."

It is thus very clear that the failure to fulfill the demand of justice in day-to-day economic and social life is regarded as the denial of faith itself or the denial of the law of distribution on which the earth and the heaven are operating. So ours is a unique approach where social justice is not simply a result of expediency and where welfare is not a concession given to pacify people or reduce social tension. Islam's stance is unambiguous: justice cannot be established unless man's relationship with God is built on the right foundation. Thus justice and faith are the two sides of the same reality. I therefore wish to reiterate, once again, that Islam's unique approach to the question of social justice and equity differs from the way in which the problem is tackled in other socio-economic systems. It would then follow that justice can be achieved in an Islamic society not merely through institutional changes; to achieve justice, man himself needs to be changed. This, in other words, is an integrated approach that Islam brings to bear.

The four-point schema for equity justice that Dr. Mahfooz Ahmad has developed, is a very valuable effort. But there are a few other aspects should not be ignored - i.e., individual freedom, initiative, incentive, equality of opportunity, etc. I am not sure if it would be correct to suggest that Islam regards social interest as supreme above individual interests. It is the harmony of social and individual interests that Islam seeks to establish. Of course, there would be some hard cases where conflicts may not be eliminated in the process. But, then, the Islamic *Shari'ah* helps us identify those situations where social interest would not prevail upon the individual and other situations where individual interest would have to be set aside in the larger interest of society. Thus the Islamic *Shari'ah* gives us a schema for solving conflicts between social and individual interests, if and when they occur. And absolute judgement in this regard would be difficult.

There are a number of important issues in the realm of social welfare and justice, which deserve the careful attention of Muslim economists. First, let met take up the issue relating to social security schemes. If the experience of mixed-economies in this regard is anything to go by, social security schemes in these economies have tended to adversely affect the incentive to work, earn and invest, which gives rise to situations where the state nurses an army of people who are unwilling to work.

Now the question arises: would a similar situation arise in an Islamic framework where we are banking upon a massive social security system? If not, why not? Is the situation going to be different because of the moral values, the concept of man and the overall socio-moral framework within which Islamic man is to operate? Or would there be a certain built-in safeguard in the system? After all, we find that Islam has, on the one hand, provided an elaborate system of social security and, on the other, given dignity to man for striving for the *'Halal'* Certainly, there is a need to examine how this problem will be tackled in an Islamic distributive system.

The second problem which needs our attention is the dichotomy between growth and distribution. We have been fed with growth models. Where the basic idea is that if we want growth we have to defer the question of equitable distribution otherwise it would be impossible to mobilise the surplus for capital accumulation which growth requires. Where we emphasize that distributive justice is one of the primary objectives of Islamic economic policy, we must face this question at the analytical level. We can dispose it off simply by saying that we do not want to worship the god of growth. But the pertinent question is: is it not possible to have both growth and distribution justice, without having to sacrifice one for the sake of the other, in an Islamic economy?

Another area which needs to be examined concerns the relationship between growth and development based on the assumptions and biases of Western growth theories. Is there enough empirical evidence to support the notion that there is a relationship between the two? We can draw on empirical work and even on common sense or simple logic. If the people are living at or below the subsistence level and if their purchasing power is increased through some distributive mechanism, what would be the effect on the rate of growth of savings and the supply of effort in the country? Would this type of transfer increase the quality and efficiency of labour? What would be the implications of distributional transfers for the health of the people and what would be the impact of improvement in the health standards on the overall growth of the economy? All these need to be examined thoroughly.

Of course, much would depend on the pattern of growth envisaged and the manner in which resources are to be mobilised. The institutional set-ups required will then depend on who is to be motivated, which in turn would depend on the degree of concentration of economic power in the country. Some empirical studies have been made to assess the impact of food supplies to poverty-stricken areas and on the development efforts of the recipients. In-depth analysis of these areas will show us whether our distributive efforts would be anti-growth or pro-growth oriented.

It is important to note that distributive justice in Islam is not confined to transfer payments only. To be sure, Islam emphasizes equity and justice in all aspectsof human relations. Thus, for example, the notion of "fair wages" and the concept of "just prices" also form part and parcel of social justice envisaged by Islam. Dr. Mahfooz Ahmad has not probed into these aspects of social justice.

It is on policy matters that Dr. Mahfooz Ahmad will have to work hardest in order to make his paper more useful. Here, again, I find that the author is consciously or unconsciously thinking within the framework of Western growth theories. He identifies two gaps, namely saving-investment and balance of payments, as the major constraints on economic development. He then proceeds to emphasize the importance of making capital resources available through aid to overcome these constraints. I do not deny that capital shortage is and can be a great constraint, but it will be unrealistic to assume that this is the only constraint. This means that the removal of this constraint through internal capital formation or external aid will not ensure rapid economic development. It is really necessary that we regard the Western type of development as the ideal or that we should design our own model on the lines of the Western value system and moral norms? I am not giving the answer; I am just raising these questions. For my worry is that, before we can find the solution, we have to be fairly confident that we are at least raising the right question.

Dr. Mahfooz Ahmad reviews three types of countries- i.e., the oil rich, the poor and the middle group - and then discusses various policy alternatives. I agree with the author that empirical research in this area is urgently needed, but I have strong reservations about his policy suggestions. I do not think that a massive social security scheme is the best answer to the problem of poverty and inequality even in the oil-rich countries which can best afford it. Their economic structure and social pattern are such that their problem of inequalities cannot be solved by mere transfer payments.

While I agree with Dr. Mahfooz Ahmad that rich Muslim countries should help the poor Muslim countries, I think that grants and aids are not necessarily the best vehicles for such help in all cases. Rather, we should develop interdependence between Muslim countries in such a way that both the donors and the recipients gain. It is not at all difficult to visualise such interdependence among Muslim nations. There is enough diversity in resource endownments within the Muslim world to permit viable exchange of goods based on comparative costs. The resource-rich Muslim countries are new dependent on the non-Muslim world for their imports of consumer goods. Economic interdependence envisaged here will ensure that Muslim countries will depend on each other to meet each other's needs. Interdependence based on complementarity will lead to a more efficient allocation of resources in the Muslim world. This approach is more pragmatic and desirable than the one based on aid and grants which have certain undesirable psychological overtones.

2. Dr. Erfan Shafey *(Discussant)*

To Dr. Ahmed goes out thanks for choosing this important topic. Justice is one of the most important concepts in the intellectual history of mankind. Justice may be somewhat elusive and difficult to specify for all situations yet it is indispensable for the conduct of human affairs. Justice is indeed the essence of a successful integrated social system.

The paper is ambitious in its scope. It deals with distributive justice of income, and to a lesser extent wealth, *within* as well as *among* Muslim countries. Its theme accords well with the spirit and canons of Islam. It also fits well within the current international concern for a fairer new world economic order.

Dr. Ahmed's logic is straight-forward and unassailable. His first proposition is that substantial economic disparities exist within and among Muslim countries. His second proposition is that economic justice is a basic tenet of Islam. From these he correctly deduces that redistributive measures are in order within and among Muslim countries. His propositions are well-argued, perhaps slightly more than sufficiently documented, and his conclusions are generally sound as far as they go. I have no major disagreement with his paper, but if I were to rewrite it I would have placed my emphasis somewhat differently.

In the final analysis, questions about redistributive justice boil down to two issues: *to what extent* should equity be sought, and by what *measures* can it be pursued. Let us see what Dr. Ahmed did in terms of these twin issues.

First, let me deal with the definition and criteria of equity. Dr. Ahmed discards the criterion of Pareto optimality, the only criterion of traditional economics, in view of its well-known limitations. For elucidating the concept of Islamic justice, he relies on four pillars or guidelines which, I feel, are too broad to give enough guidance in concrate situations. Further research is needed in this areas, so as to reach a consensus or at least broad agreements on what it means and how much weight should be given to redistributive justice in the total matrix of Islamic societal objectives. For needless to say, egalitarian policies do have favourable and/or adverse effects on the propensities to save, invest, work, and procreate, which influence economic development and socio-political stability. Some trade-offs at the margin among redistributive justice and other objectives are inevitable, depending on the circumstances of time and place. Thus it is not enough to postulate an abstract principle like equity in absolute terms and in isolation from other objectives. In fact it may be somewhat misleading to do so. A point of incidental importance is that Dr. Ahmed uses the word *equality* almost interchangeably with *equity*. This is merely a terminological slip for Dr. Ahmed well distinguishes the two, and he never for a moment derives from the 45° Lorenz diagonal any prescription, however useful he finds it for prognostic purposes.

Second, let me move on to the measures to be pursued to achieve equity or rather to reduce inequity. *Reducing* the gaps between the rich and the poor within and among Muslim countries is surely a more practical goal than *eliminating* those gaps.

The first impression one gets from Dr. Ahmad's policy discussion is that his recommendations, though sound, are rather skimpy and not sufficiently worked out. Furthermore they do not, to my mind at least, possess a distinctive Islamic character; they could have been those put forward by any learned economist for any group of countries of any creed. Dr. Ahmed doe *not* press hard enough for the classical ideals and economic institutions of redistributive justice which he has so painstakingly outlined.

It is interesting to ask why there is nothing much distinctively Islamic about Dr.

Ahmed's recommendations, and how they could be made to have a more Islamic component.

Part of the difficulty which Dr. Ahmed encountered is the still underdeveloped 'state of the art' of Islamic economics in general, and fiscal and monetary policies in particular. Dr. Ahmed himself has done an excellent job in outlining the fiscal and monetary structures in the *Khulfa Rashdeen* era of Islam. But Islamic economics has to be something more than economic history and economic philosophy, however interesting these may be. And if Islamic economics is to evolve into an action-oriented policy-science with a message to contemporary society, then some synthesis between the old and new is of the utmost urgency. Could it be in some areas of economic policy Muslims are prematurely closing the avenue of *Qiyas* and *Ijtihad* as supplements to the *Qur'an* and the *Sunnah*? I approach this part of the discussion with all the due humility of the freshman.

Thus in one are of particular importance for the present topic, *Zakāh*, a few questions inevitably arise. Can the concept of *Zakāh* be adapted to meet new contemporary forms of income and wealth, e.g., real estate, mineral deposits, oil, uranium, foreign exchange reserves? In the age of large public sectors and prominent economic roles of government could *Zakāh* be given by one rich Muslim country to another poor Muslim country? Could *Zakāh* be made progressive, and its rates uniformly simplified?

Were Dr. Ahmed's conclusions forced on him at least in part, by the great divisions and rifts in the contemporary Islamic world which, among other things, preclude the existence of one central treasury which would cater for the *collective needs* of Muslims? This is certainly true, and for that reason we perhaps cannot blame Dr. Ahmed for considering redistributive measures within a stratified framework of three groups of Muslim nations; oil-rich, oil-poor and miscellaneous others. But in the absence of one Muslim political community, cannot we think of activating the existing, and/or setting up new, *non-government* Muslim foundations which would provide collective goods and services on a larger and much more significant manner than has been the case up till now? Does the Muslim world now lack rich individuals and/or families a la Ford and Carnegie, and many others in the Christian and Jewish worlds, whose non-profit foundations cater for a variety of public needs from child-care to scientific research? An incidental merit of non-profit non-government foundations is also their ability to extend their services to Muslim minorities in non-Muslim countries.

Islamic practices over the centuries can provide many inspiring example of redistributive measures. Indeed, a Muslim scholar might not be particularly struck by the originality of any concept or practice of redistribution which is found in the non-muslim world; some kind of precedent of each did exist in a Muslim society at one time or another. What we can and ought to learn from the non-Muslim world, however, is something about the continuous adaptation and techniques of making redistributive institutions respond to new challenges. Consider, for example, the Muslim institution of *Wakf*. Instead of abolishing or liquidating its existence, as some Muslim countries seem to be doing to ease administrative problems, why not modernize it and extend its activities to combat some of the cause of poverty (e.g., illiteracy, sickness, lack of skills, etc.)? We should simply not expect simply to alleviate poverty by administering negligible hand-outs to numerous individuals, some of whom may not be in need of it at all.

The last point calls for some elaboration. Current soio-economic reform in the mainstream of economics has gradually undergone some change. As Muslims, we might learn something from this evolution to make our efforts more effective. Initially it was all simple private charity under the capitalist system; in the mid-thirties it was supplemented by social security programmes for certain groups (the aged, blind, widows and orphans). A great momentum occurred from a combination of measures *attacking some of the roots of poverty,* e.g., policies aimed at eliminating unemployment and increasing investment in human capital (by emphasising the returns on education, training, child-care, housing and other public services, elimination of discrimination in employment), and in regional development programmes. Last but not least, more recently income supplements as a means of guaranteed annual income, negative income taxes, and child allowance. Of course, atecedents to some of these concepts of redistribution can be found in the Muslim world. What we need now is to gain effectiveness for our redistributive policies, and not lament the fact that latter-day reform movement stole the wind from our sails.

What this boils down to is this: instead of relying on economic growth to automatically reduce poverty -- the so called 'trickling down theory' -- the emphasis should be on strategies which deal directly with the poorest elements in national and international society and make them an integral part of the development process which tends to by-pass them.

In helping the poor and the under-privileged we should rememeber that what is appropriate for one group or region may not be appropriate for another. Suffice it to mention some of the target groups: the disabled, the aged, minorities, females, members of broken families, urban migrants, etc. Different poverty groups need different measures to help them. Interestingly enough, the bill for doing this at the global world level is estimated to be quite modest in comparison to total world production. It is the institutional and political contraints - not physical or technological - that are the main obstacles.

On another important front, that of international economic aid among Muslim countries, Dr. Ahmed indicates its importance but does get give any facts nor does he attempt to evaluate the current efforts. The following broad picture, however, can be drawn about official development aid in the world, and the relative role of Muslim OPEC countries:

(1) Official international aid as a whole has shown a steady rise since the 1960's, but much of this growth is really nominal, after taking account of inflation. Thus in real terms the rise has been less than 1 per cent per year.

(2) During the 1970 - 1975, West European countries accounted for 39 per cent of official development aid in the world, compared to 29 per cent from the United States, and 8.7 per cent from OPEC countries. The share of all OPEC countries put together almost equalled what one country did in terms of aid: West Germany (which ranked second after France in Europe).

(3) During 1970 -1975 the contributions by the Muslim countries of OPEC as percentages of total world aid were as follows: Saudi Arabia 3.1 per cent, Kuwait 1.8 per cent, Iran, Emirates, Iraq and Libya in the range of 0.7 - 0.9 per cent; Algeria and Qatar in the range of 0.1 - 0.3 per cent.

(4) In terms of the percentage of aid to GNP, the most prominant in the whole world were Muslim countries whose contributions are shown in the following table (1970-1975) derived from World Bank publications.

Country	Aid as per cent of GNP
Qatar	5.4
Emirates	4.3
Saudi Arabia	2.6
Kuwait	2.5
Iraq	2.2
Libya	1.4
Iran	0.8
Algeria	0.3

Most of their aid went to other Muslim countries. As a reference point, Sweden which was the most generous donor among advanced countries gave only 0.8 per cent of its GNP as aid.

In evaluating individual or collective country performance in the field of economic aid, it is pertinent to take into consideration the following grim facts. All official aid in 1975, for instance, totalled US 17 billions, which was worth about only 18 days defence spending by the developed world (West and East) and OPEC countries in that year. Another shocking statistic is that annual aid from all advanced countries amounts to only two months' expenditure on alcohol and tobacco consumption in the OECD group of countries. Moreover, while developing countries insist that the industrial nations should reach the UN's official development aid of 0.7 of GNP by the year 1980, many of the advanced countries (Germany and Japan in particular) do not accept a target date while the United State does not accept the target itself.

It would be interesting if reasonable targets and target dates were set by able Muslim countries for the help of needy Muslim countries. As an example, Muslim oil-countries could allocate for aid a fixed ratio of oil revenues or - better still, from the recipient point of view - an increasing ratio that would rise with oil revenues, for redistributive justice is always easier if an when it is 'tied' to a growing level of income. There may be some oil Muslim countries which now have no large balance of payments surpluses (Iran and Libya). However, as these countries raise their per-capita incomes, they may be able to participate more effectively in the aid endeavour by adding to their current efforts a small annual percentage of the increment in their national incomes.

I would like to conclude my comments with a focus on one major characteristic of integrative systems, which should be distinguished from other systems of human interaction such exchange and threat systems. In an integerative system you do something for someone - if and when you do it - because of what you are and what he is (say, a felow neighbour, a countryman, or a brother in Islam). You do it primarily out of love, respect or sympathy; *not* because of the expectation of some benefit in return, and not out of fear of some threat. Islamic countries may not be now great traders economically amongst themselves, most of their trade is with non-Muslim countries. Worse still, some of them might be at logger-heads politically and militarily with one another. Yet it is a remarkable feat that the power of the integrative system of Islam brings Muslims together each yearin the holy city of Mecca in the holy days of *Al-haj*. May God bless this integrative system of Islam, and may Muslims uphold their integrative system, and rely on it for overcoming some of their economic and political problems.

Our topic is distributive justice, and to do distributive justice of time to the participants of the seminar, I should perhaps have stopped earlier.

GENERAL DISCUSSION

1. Prof. Mohammmed Mohsin points out the basic inconsistency between the title of Dr. Mahfooz Ahmad's paper and the country-studies contained in it. For, none of the countries covered by the study is governed by an Islamic constitution or guided by an Islamic economic policy.

Prof. Mohsin's main criticism is levelled against the wisdom of comparing Muslim countries, most of which are less developed, with the developed countries of the West. A more meaningful comparison, in the opinion of Prof. Mohsin, would have been that between Muslim countries and other less developed countries in the non-Muslim world - in which case the author would have discovered that the pattern of income distribution and income disparities between the Muslim and non-Muslim countries are not very different after all. He says that differences in the pattern of income distribution and income disparities between Muslim and non-Muslm countries may well be due to factors which have nothing to do with the fact some countries are Muslim and others are not.

Prof. Mohsin also points out that there is a great deal of diversity among the Muslim countries themselves, so much so that empirical analysis would be meaningless if one puts, as the author has done, all Muslim countries - which have diverse economic, social and political systems - under the one banner of Islam.

2. Dr. Mabid Al-Jarhi's comments center around the relevance and usefulness of the Pareto optimality, although Dr. Mahfooz Ahmad has dismissed it early in his paper. Dr. Al-Jarhi observe that the problems of making interpersonal utility comparisons and constructing social welfare functions are bound to render any atempt to achieve distributive justice at the analytical level extremely difficult. Nevertheless, Dr. Al-Jarhi feels that it may be possible for a Muslim economist to enumerate the basic requirements that a Muslim government should fulfill in order to reduce the income and wealth disparities in a Muslim society without infringing any fundamental Islamic principles. Thus Muslim economist would be able to see theoretically how the role of the Muslim government in toto could be substituted for social welfare functions which would help us eventually reach the Pareto optimal solution.

Dr. Al-Jarhi argues that the above approach is not an impossible one. He explains that it is the diversity of utility functions among various income groups and the interdependence of their utility functions which have made the construction of social welfare functions impossible. Indeed, the Islamic moral rules do create such interdependence. And, the interdependence of utility functions makes aggregations impossible, because we do not know how such interdependence occurs. But Dr. Al-Jarhi contends that this poses no major problem for us, since Islamic teachings tell us how to make the utility of one Muslim dependent on that of his Muslim brothers.

Dr. Al-Jarhi adds that it is important to know what kind of redistribution is allowed in Islam and what kind is not. This would help the policy maters to farmulate policy-mixes. As regards the use of monetary policy, Dr. Al-Jarhi is of the view that some desirable redistributive effects can be created and some undesirable redistributive effects can be eliminated by an Islamic monetary authority. Thus the elimination of interest would help redistribute income and wealth more equitably. By the same token, the power of the banks to create money would enable the owners of the banks to make abnormal profits: the lower the reserve ratio, the greater the scope of the banks to create money.

Finally, Dr. Al-Jarhi notes the conflict of interest between politics and economics may not permit redistribution purely on the basis of the efficiency criterion based on the Pareto optimality. He then suggests that one way out would be to look at the effect of redistribution of wealth on the distribution of political power and see how this would in turn influence economic decisions in an Islamic society.

3. Dr. Muhammed Anas Zarqa's comments may be divided into two parts. The first part is concerning the statistical section of Dr. Mahfooz Ahmad's paper. Dr. Zarqa points out that one cannot expect numbers to tell the story and that one has to tell it for them. Although the source of data used by the author is fairly well known, his conclusions based on these data can be questioned. Dr. Zarqa observes that it is money income and not income in kind which is reported, for the latter cannot be easily measured. He further notes that in Muslim countries, most of which are underdeveloped, a substantial part of the total income is paid in kind. He was of the opinion that money income in these countries may well be distributed more unequally than 'real' income. Thus Dr. Zarqa warns that extreme care should be exercised in interpreting any set of income data. In this connection, he stresses that special attention must be given to family structures, social modes of making transfer payments and the question of income in kind.

Dr. Zarqa makes it clear that the point of the above comments is not that income distribution in Muslim countries is acceptable or tolerable. The point that Dr. Zarqa was driving home is that the basis for such conclusions should not be the international income comparison of the kind Dr. Mahfooz Ahmad has resorted to in his paper.

Dr. Zarqa also takes the author of the paper to task for jumping to conclusions which are obviously unwarranted by the set of statistics presented in his tables. Dr. Zarqa makes a particular reference to the statement by the author to the effect that income inequality in Muslim countries is not only worse than that in developed countries but also worse than that in other developing countries as well. This conclusion is unwarranted because the table from which it is derived compares Muslim countries with the developed countries only. Dr. Zarqa also adds that it would have been more useful had the author compared underdeveloped Muslim countries with underdeveloped non-Muslim countries.

The second part of Dr. Zarqa's comments deals with the historical content of Dr. Mahfooz Ahmad's paper. He makes it clear in no uncertain terms that several points raised by the author are either inaccurate statements or pure conjectures. Among the conjectures is the statement by the author that the family allowances, which *Hazrat* Umar initiated, acted as an incentive to increase the family size to a desired level. Dr. Zarqa points out that there is no way of knowing this, for no one measured the average family size during the time of *Hazrat* Umar before or after the allowances were implemented.

Dr. Zarqa also objects to the claim that artificial distinctions were created among the people during the time of *Hazrat* Umar, for purpose of distributing rations, which acted as a disincentive to productive work. Dr. Zarqa says that such claims are indeed hard to substantiate even in a modern economy, let alone in the time of *Hazrat* Umar.

He also indicates the inaccuracy of the statement which asserts that *Hazrat* Ali raised the rate of *Zakāh* on animals and reduced its rate on agricultural products. He says that although the four guided *Khalifas* differed in certain details with regards to the *Zakāh* rates and *Zakāh* coverage - due to differences in their interpretations of the orders and the actions of the Prophet (peace be upon him) - the core of the *Zakāh* system is directly attributed to the *Qur'an* (especially as regards receipients) and to the binding *Sunnah* (especially as regards payers and rates).

In winding up his comments, Dr. Zarqa agrees with the author that at present income and wealth distribution in Muslim countries is unacceptable as borne out not only by international comparisons but also by Islamic ideology. However, he was of the view that the historical portion of the paper, which is much less convincing, is best left out for a separate and well-documented paper.

4. Dr. Mohammad Omar Zubeir starts off his comments by saying how important it is to be clear about the Islamic framework. He points out that individual freedom to earn and to accumulate wealth by '*Halal*' means is allowed in Islam, which however requires resources to be utilised productively without being hoarded. To reduce income disparity, Islam has prescribed compulsory *Zakāh* payments and voluntary acts of charity. He thinks that government interference is justified only when the concentration of wealth becomes socially harmful.

Dr. Zubeir expresses concern over the preoccupation of Muslim economists with "efficiency" even when they discuss equity issues. It is wrong to look at the distributive system solely from the efficiency angle; the right approach, according to Dr. Zubeir, would be to ensure that the distributive system complies with the *Qur'anic* principles and then see whether it is efficient or not. Besides, efficiency should not be measured purely in terms of increases in productivity and capital accumulation. He says that it is important to consider the system as a whole, In this regard, Dr. Zubeir is of the view that income disparities are not necessarily bad in themselves, for they do provide incentives for greater efforts.

It is stressed by Dr. Zubeir that the redistributive system envisaged should not encourage the practice of begging by the poor. He recalls the famous story of a man who came to the Prophet (peace be upon him) who then arranged capital for him to raise his standard of living. Dr. Zubeir infers from this that the snatching from the rich and giving to the poor is not the Islamic panacea for alleviating poverty.

Finally, Dr. Zubeir puts it emphatically that inter-regional and international income disparities can be reduced by activating the market mechanism and invoking the spirit of Islam without having to resort to compulsory capital transfers from the rich to the poor and from prosperous areas to depressed regions.

5. Dr. Mohammed Sultan Abou Ali is in general agreement with Dr. Zubeir on the freedom of individuals in an Islamic society, but he also underscores that extreme disparity or inequality has both economic and political consequences. Concentration of wealth leads to concentration of political power which can be abused by the wealthy to protect their vested interests. Dr. Abou Ali is of the opinion that even if the wealthy people accumulate wealth by *Halal* means, but do not spend a reasonable proportion of their wealth for the welfare of society, it is the duty of society to exert pressure on them.

Dr. Abou Ali notices that the author of the paper has not touched on the question of "primary distribution of income". Which results from a certain pattern of resource allocation. He feels that it is important to talk about distribution before one can discuss the question of redistribution. By this he means that there is a need to look at the pattern of distribution of resources which automatically generates a particular pattern of income distribution. This, however, raises questions regarding the appropriateness of the project evaluation techniques used in capitalistic and socialistic societies for Muslim society. Dr. Abou Ali calls on Muslim economists to look into this.

Finally, Dr. Abou Ali comments on "basic needs" mentioned in the paper. Saying that he has understood neither the "basic needs" issue nor the intentions behind it, he observes that every society has its own notion of what these basic needs really are. In this context, Dr. Abou Ali raises two questions: What pattern of resource allocation is consistent with the "basic needs" approach? What is the time horizon envisaged for satisfying these basic needs? Dr. Abou Ali cautions that the "basic needs" is an ambitious issue which has many ramifications: one should not raise the issue unless one is prepared to probe into it deeply.

6. Dr. Jafar Idrees' comments are directed against some of the "misleading statements" made by Dr. Mahfooz Ahmad in the historical section of his paper. Dr. Idrees points out that the author has made his historical references by taking them out of context.

First, he refers to the statement which claims the First *Khalifa* had stopped a payment to the new Muslims, a payment authorised by the Prophet (peace be upon him) to keep them neutral. Dr. Idrees is absolutely sure that *Hazrat* Abu Bakr had no right to stop something which was started by the Prophet (peace be upon him), and that he in fact never did. The truth is that, Dr. Idrees explains, *Hazrat* Abu Bakr was convinced by an argument put forward by *Hazrat* Umar that these people were no longer eligible for the payment of *doles* as they had ceased to be "new" Muslims. Seen in this light, it is clear that the First *Khalifa* did not actually stop something started by the Prophet (peace be upon him).

Dr. Idrees also pin-points another misleading statement to the effect that during the time of *Hazrat* Umar it became impossible to continue the practice of distributing the immovable properties of the conquered. He shows that this statement gave the impression that *Hazrat* Umar was dictated by the forces of circumstances, while the truth was that there were sound reasons for stopping it, as is maintained by many companions of the Prophet (peace be upon him).

Dr. Idrees is also struck by another statement by the author who has claimed that *Hazrat* Umar had extended the scope of *Jizya*, meant for Jews and Christians, to cover other non-Muslims as well. He then clarifies that when *Hazrat* Umar asked what he should do about the people who were neither Christians nor Jews, he was told that the Prophet (peace be upon him) had said that they should be treated like Jews and Christians. Thus expanding the scope of *Jizya* was not *Hazrat* Umar's invention.

Finally, Dr. Idrees objects to the statement that inflation became rampant in the later period of Umar's *Khilafat*, for the author has not given evidence to support this. He advises that one should refrain from making such sweeping statements if these cannot be substantiated by authentic historical evidence.

7. Dr. Ehsan Rashid's comments revolves around the question of Pareto optimality. He stresses that Muslim economists, true to their descipline, should not abandon optimality even within the Islamic normative framework. For optimisation is the essence of economics. If the basis for rejecting the Pareto optimality is that it is the first-best solution that is not attainable, there are second-best and third-best alternatives to consider. He thus insists that Muslim economists must still adhere to optimality principles. In the process of optimising, they must work with constraints which should be taken as given and solutions must be sought subject to these constraints. In short, Dr. Rashid's submission is that Muslim economists should not reject things that they can usefully employ in working out an optimal regime within the Islamic framework.

8. Dr. Naqvi emphasises that distributive justice is a relative and not an absolute concept, for obviously it cannot make everyone happy. He further points out that distributive justice is so much a property of a static system as of a dynamic one. He thinks, therefore, that it is important to be clear about the context in which distributive justice is to be discussed.

He then takes up the issue of the relationship between distributive justice and growth. This according to Dr. Naqvi calls on the one hand for a review of the objectives of distributive justice in relation to growth and on the other hand a consideration of the possibility of growth being constrained by distributive justice.

Dr. Naqvi proceeds to say that distributive justice should be considered both marginally and intra-marginally. The concern at the margin would be equalisation of income. His implication is that income could be equalised at the margin and yet there would still be substantial intra-marginal inequalities. The main thrust of Dr. Naqvi's argument is that we should go beyond income distribution and take a hard look at the pattern of ownership of private property in the context of Islam. He is of the opinion that we cannot rely on the laws of inheritence to take care of it, and he goes as far as to suggest that death duty be imposed, although it is considered to be against Islam.

9. Dr. Mohamed Ariff questions the logic of extending Pareto optimality to the Islamic system. He points out that Pareto optimality, in spite of being value-free

on matters of distribution, implicitly assumes that benevolence and malevolence are absent anywhere in the system. The absence of benevolence and malevolence implies selfishness and indifference. Dr. Ariff explains that this would mean that the individual is concerned only about himself and that he is totally indifferent towards others - so that individual preference functions are independent and not interdependent, which is unlikely to be true for any society and certainly not true for Islam. He then goes on to argue that the concept of universal brotherhood in Islam obviously implies benevolence among all Muslims, for a true Muslim must wish for his brother what he wishes for himself.

In the opinion of Dr. Ariff, the notion of Islamic brotherhood opens up new avenues in welfare economic analysis. He concedes that much would depend on the degree of benevolence which refers to how an individual equates his own welfare with that of another. Dr. Ariff says that he is aware that all these involve interpersonal comparisons which economists are supposed to avoid. But he stresses that social justice calls for interpersonal comparisons and that Muslim economists can play a meaningful role by positively responding to this call.

FISCAL ANALYSIS OF ZAKAH WITH SPECIAL REFERENCE TO SAUDI ARABIA'S EXPERIENCE IN ZAKĀH

Abdin Ahmed Salama

1.

INTRODUCTION

The aim of this paper is to provide a fiscal analysis of *Zakāh* in theory and in practice and to examine the rationale of applying properly designed taxes in an Islamic State. The theoretical analysis in Section 2 will highlight the major characteristics of *Zakāh* such as the nature of *Zakāh,* the rationale behind its imposition, the coverage of *Zakāh* or the *Zakāh* base and the rates of *Zakāh.* In this area the writer's contribution will be to rephrase in fiscal language what is being written by some Islamic jurists and to throw light on some concepts in *Zakāh* which are found to have been embodied in modern tax systems.

The third section of the paper will provide a theoretical analysis of the experience of the Kingdom of Saudi Arabia since it started implementing *Zakāh,* explaining the salient features of *Zakāh* as applied in the Kingdom, the major developments of *Zakāh* legislation in the Kingdom and the pattern of *Zakāh* revenue during the last sixteen years. A positive analysis of *Zakāh* during the period 1382-1395/96 will be provided in Section 4, using the official rate of budgeted *Zakāh* and GDP figures. *Zakāh* collected will be analysed in relation to the *Zakāh* base using a limited base, i.e., wholesale and trade contribution to the GDP and then a broader base, i.e., the overall private sector's contribution to the GDP.

Potential *Zakāh* revenue will be computed applying a rate of 2.5 per cent, using narrower and broader bases of *Zakāh* as shown in the theoretical analysis. A potential *Zakāh* revenues using a broader base will be compared to the GDP. A low *Zakāh* ratio would not lend support to the argument that *Zakāh* is the only levy that a Muslim country should impose, for it will mean that *Zakāh* alone will not be a source of sufficient revenues for a modern state. The *Zakāh* yield on a broader base will be compared to the present expenditures on social security in Saudi Arabia and to an extended social security system that will cover wider services using Islam's broader concept of poverty. The potential *Zakāh* on a broader base will be compared to the Saudi government's expenditure on essential services, and this will be used to test the above hypothesis that *Zakāh,* even when broadly applied, may not be enough to meet these expenditures. The economic advantages of applying properly designed taxes will be investigated. It must be emphasized at the outset that *Zakāh* represents earmarked revenue and as such it is not meant to cover current deficits.

The results found in this paper are presented to the Muslim jurists for decisions on the following quesions:

1. Should *Zakāh* base be broadened in order to cover all modern economic activities that yield revenue?
2. Should taxes other than *Zakāh* be imposed in an Islamic State and, if so, what should be the attributes of these taxes?
3. Should Saudi Arabia, as a leading Islamic State in the application of *Zakāh,* use a broad-based instead of the limited-based *Zakāh* and is it advisable for Saudi Arabia to apply other taxes, to achieve goals other than revenue?

2.

THEORETICAL ANALYSIS OF *ZAKĀH*

2A. *Characteristics of Zakāh*

Zakāh as a levy has the following characteristics which distinguish it from secular levies:

First, *Zakāh* is a religious levy aimed at purifying the individual, and the payment of *Zakāh* brings a Muslim nearer to *Allah. Zakāh* thus becomes an expression of gratitude to *Allah* for having bestowed the bounties on the individual.

Second, this levy is not left to individuals to pay whenever they like. The state is entrusted with collecting *Zakāh.* It is reported that all Khulfa Rashdeen did was to collect *Zakāh* and the first war after the Prophet's death was waged because of *Zakāh.* At the time of *Khalifa* Osman ibn Afan,[1] due to abundant resources in the treasury, it was decided that *Zakāh* would be collected by the state only on pecuniary wealth, i.e., assets like commercial assets, livestock, etc. For other holdings, *Khalifa* Osman ordered the owners to pay *Zakāh* on behalf of the *Khalifa* to those whom they saw fit.

Thus *Zakāh* was not left to private individuals to pay as charity. There is no doubt that *Zakāh* is meant to be collected in an organized way, since the *Qur'an* earmarks the *Zakāh* revenue for specific purposes which include the cost of collection and administration of the levy.

Third, the *Zakāh* rate is defined and established on a flat rate basis and no authority on earth has any right to alter the *Zakāh* rates. This in turn limits the use of *Zakāh* as a fiscal weapon to achieve economic stabilization. A major objective of *Zakāh* is to achieve alleviation of poverty. *Zakāh* cannot therefore be used as a source of revenue for financing state expenditure.

1. Abdelaziz El-Neim, *Taxation system in Islam and its Applicability in Saudi Arabia,* 1975 2nd edition Dar Elirshad 1st Edition 1969 (Arabic).

Fourth, *Zakāh* is a broad based levy and covers wide activities. It is levied on animal wealth, agricultural production, commercial activities, minerals extracted from the earth; and the recent view is that all incomes that generate from assets or employment should also be subject to *Zakāh*.

Fifth, *Zakāh* rates are differentiated according to the type of base and allowance is made for difficulties encountered in production. For example, a 5 per cent rate is applied on agricultural produce of irrigated land and 10 per cent on produce of rain-fed land, whereas a 20 per cent rate is applied on minerals and treasures extracted from the earth. In the case of honey, the *Zakāh* rate for honey collected from hilly areas is 5 per cent while that collected from plains is 10 per cent. Where *Zakāh* is applied on a broad base, e.g., *Zakāh* on trade, all the assets are counted, and the *Zakāh* rate is only 2.5 per cent.

Sixth, *Zakāh* revenue is earmarked to be spent on certain items detailed in the *Qur'an:* the poor, the deprived, those who are unable to pay their debts; destitute travellers and in the path of *Allah*. *Zakāh* in this sense is to be separately budgeted.

It is interesting to note that the earmarking of *Zakāh* has been instrumental in introducing the concept of earmarking revenue for certain types of expenditures in modern times. Recently many economists have called for the application of earmarking of public finance in developing countries. Economists led by Please[2] notice the disappointing behaviour of public savings in the case of the less developed countries in spite of impressive tax efforts. A solution to this problem is found by earmarking the taxes for special development projects. Lewis[3] for example, recommends that the proceeds of a new tax are tied to a new service, by earmarking, for instance, a tax on wages for social security. The main advantage of earmarking revenue is that it reduces the discretionary powers of officials. The World Bank encourages earmarking and it often insists on 'local' contribution to the project it finances and in some cases it even requires precise earmarking of taxes for counterpart funds. Colombia, Costa Rica and Ecuador provide examples of countries where earmarked funds have been set up in conjunction with highway investment programmes.[4]

Seventh, *Zakāh* is applied to all Muslims having a specified minimum income or possessing a specified minimum wealth. Those having income or wealth below that minimum do not pay *Zakāh* and are referred to as either poor or deprived. *Zakāh* thus introduces the concept of a minimum exemption limit, of persons below the level which should be helped and above the level which should be taxed. It is, again, interesting to note that such programmes are being introduced in modern times under the name of negative income taxes.

Eighth, on no source should *Zakāh* be paid twice so that there is no question of double taxation in *Zakāh* administration. It may be noted that taxing a source twice is also rejected by modern tax systems.

2B. *Zakāh Base and Zakāh Coverage*

The following are subjected to *Zakāh* payments: (a) animal wealth; (b) commercial assets; (c) gold and silver; (d) agricultural production; (e) honey and

2. S. Please, "Taxation Reality or Mirage?" *Finance and Development*, Volume I March 1967 pp. 24-33.
3. A.W. Lewis, *Development Planning*, George Allen Unwin London 1966, p. 128.
4. P. Ekund, "Taxation and Earmarking in Developing Countries," International Development Association Economic Department Working Paper No. 43 Revised July, 1970.

animal products; (f) mineral wealth and treasurs extracted from the earth or sea; (g) estates, factories and all other earning assets; and (h) income from employment.

As far as the *Zakāh* coverage is concerned, every Muslim should pay *Zakāh,* although there are some difference of opinion among Muslim jurists as to whether or not the young and insane are exempted from *Zakāh* obligations. For example, El-Qardawi maintains that even the young and insane should pay *Zakāh* when their wealth or income exceed what they need to lead a decent life.[5]

2C. *Conditions of Zakatable Assets*

Not all assets are subject to *Zakāh.* According to Muslim scholars all items which the individual uses for transport, housing, intrument necessary for carrying work and furnitures are exempted from *Zakāh* as no income is generatd by such assets. For any asset to be subject to *Zakāh* certain conditions must be satisfied. Only those assets which are growing or which have growth potential, i.e., investible assets, are subject to *Zakāh.* And only those such assets which exceed a certain minimum can be taxed as *Zakāh.*

This minimum stipulated by the Prophet (peace be upon him) as five camels, forty sheep, two hundred dirhams of monetary, gold and silver holdings, and five 'Awsag' for crops and seeds. These were considered as a minimum sufficient to support a household comprising of a couple, a son and a servant for the whole year, as stated by Sheikh El-Dahlwi.[6]

All *Zakāh*-payers are given a minimum allowance necessary for their subsistance. What this minimum should be has remained a controversial issue but Muslim scholars have analysed this concept in great detail. Some *Hanafi* scholars in the past have interpreted the necessary minimum as that which is sufficient to prevent death, which includes expenditures on food, housing, clothing, weapons for defence, repayment of debts, instruments necessary to carry out work, house furniture transport facilities and costly books for scholars, etc.[7] Given this concept, all those whose incomes are too low to satisfy these needs will be exempted from *Zakāh.* Instead, they will be among those who should be paid from *Zakāh* revenue. An Islamic social security system, therefore, is of a wider coverage.

The question of minimum needs, or what is now popularly termed as "basic needs", has been dealt with extensively in the recent economic literature on poverty. Poverty in many developed countries is measured only by the money income criterion,[8] so that poor households are identified as those which fall below the so called poverty line which refers to some annual money income. However, it is now increasingly recognized that ideally one should take into account "needs", assets, money income and income in kind[9] in identifying the poor. In this context, it is pertinent to point out that what is considered "ideal" at present is also what the Muslim scholars determined a long time ago.

2D. *Assessment of Zakāh*

Incomes from different sources are added together and a unified assessment is

5. Yousaf El-Qardawi, *El Zakāh Jurisdiction,* Vol. 1. (Arabic) p. 113.
6. *Ibid.,* p. 150.
7. Yousif Qasim, "Notes on Zakāh and Zakāh applied in Saudi Arabia", Lecture Notes (Arabic).
8. Allan B. Batcheldor, *The Economics of Poverty,* 2nd Edition, Wiley and Sons Inc. 1971. p. 13.
9. *Ibid.,* p. 16.

done. If a trader, for example, has profits from trade and has animal wealth then both are added. After the earned income is assessed *Zakāh* is to be paid immediately when earnings are received. This is what is known as the Pay As You Earn (P.A.Y.E.) system, designed with the compliance of modern income taxes.

In the case of *Zakāh* on animal wealth, Muslim jurists in the past exempted fed animals which were rare at that time. Presently most of the animal wealth are fed and many Muslim jurists agree that such holdings should be subject to *Zakāh* after expenditure incurred in feeding has been deducted. The *Zakāh* rate on animal wealth was double that on monetary holdings.[10] This may serve to increase the flow of such wealth through the market especially where some tribes hold cattle as a sign of prestige.

Monetary hoards, on the other hand, are subject to the 2.5 per cent *Zakāh* rate annually when the minimum subject to *Zakāh* is reached. An advantage of applying this rate on monetary deposits will be to encourage investment of such hoards.

There is no longer any valid basis for the controversy over whether or not *Zakāh* should be paid in paper money. This is because commodity money cannot satisfy modern needs, and paper money is now widely used as a means of payment, as a store of wealth and as unit of account. However, it remains to be resolved whether or not minimum income which is subject to *Zakāh* should be allowed to escalate with the rates of inflation.

As regards *Zakāh* on jewellery, some Islamic jusrists maintain that jewellery is subject to *Zakāh* when jewellery is hoarded or used as a store of value[11] and not as ornament. Others are of the opinion that these are subject to *Zakāh* regardless of the uses to which they are put. The view of *Hanbalis* is that any jewellery made to evade *Zakāh* should be subject to *Zakāh,* since the Prophet (peace be upon him) was reported to have forbidden all practices that lead to *Zakāh* evasion.

Before *Zakāh* on trade is considered, the concept of trade should be made clear. The act of buying a car for one's own personal use and selling it later does not constitute a trading transaction. On the other hand, a transaction in which cars are bought with the intention of selling them is considered a trading activity and all such tradable assets are subject to *Zakāh.*

Maymoon Ibn Mahran, one of the early Muslim scholars, is quoted to have said that, for *Zakāh* purposes, a trader should calculate all his monetary holdings as well as circulating assets (which will be evaluated in monetary terms), adding to these all loans given to credit-worthy individuals and subtracting from these all debts he owes to others. The balance will be subject to *Zakāh.*[12] Assets which are not circulating, scuh as buildings and furniture, are exempted.

2E. *Presumptive Assessment of Zakāh*

Presumptive assessment of *Zakāh* is allowed.[13] It is known, that the Prophet (peace be upon him) allowed the assessment of dates by what is recently known as presumptive assessment, and not by actual weight of production. This assessment, as stipulated by the Prophet (peace be upon him), should be undertaken by an honest and experienced assessor. After the presumptive assessment, which should not be

10. Yousaf El-Gardawi, *op. cit.,* p. 237.
11. *Ibid.,* p. 292.
12. *Ibid.,* p. 332.
13. *Ibid.,* p. 381.

harsh, a minimum of one-third or one-fourth of the crop should be set aside for the *Zakāh* payer so that the balance of two-thirds or three-fourths will be subject to *Zakāh*.

It is of interest to note that presumptive assessment of income taxes is practiced in modern times and various guidelines have been suggested not only to ensure honesty and accuracy in assessment but also to provide proxy measures that would reflect the true income of tax-payers. Such assessments may be based on a number of factors including the size and location of the business, the number of workers employed, the number of vehicles owned and the private living style of tax-payers.[14]

2F. *Broad Vs Narrow Base*

Muslim jurists are divided on the issue as to whether *Zakāh* should be imposed on a narrow base or a broad base. Those who call for a narrow based *Zakāh* rely on what is being narrated from the Prophet (peace be upon him) that he imposed *Zakāh* on a few types of agricultural products. Imam Malik and El-Shafie had argued that *Zakāh* should be paid on all edible crops that can be stored.

Imam Ahmed sees that *Zakāh* is due on all crops that could be dried or can be stored and weighed, which means that no *Zakāh* is due on fruits like apricots, peaches, apples and vegetables that do not satisfy those criteria. Abu Hanifa extended the application of *Zakāh* to all products. El-Garadawi supports this view and regards it as being nearest to the spirit of the *Shari'ah*. This is in conformity with the stance of Khalifa Omer Ibn Abdelaziz, Mugahid, Hamad and Dawud El Nakhie, according to whom all products are subject to *Zakāh*.

Some jurists are of the opinion that *Zakāh* on vegetables and fruits, which could not be stored, should be paid out of the value of the crop and not in kind.

2G. *Taxes other than Zakāh*

Some modern scholars have called for a levy similar to *Zakāh* on non-Muslims residing in a Muslim State.[15] *Zakāh* on Muslims only is taken to be as a religious duty, but according to this view-point a Muslim government may impose a levy similar to *Zakāh* on non-Muslim citizens.[16] It is narrated that Seidna Omer Ibn El-Khatab imposed a double levy on the Christians of beni Tageleb and gave the levy the name of Sadega instead of *Jiziah* to please them. It is also narrated that Saidna Omer Ibn El-Khatab imposed *Ushur* on trade coming from non-Muslim countries.[17]

Many verses in the *Qur'an* call for spending money in the path of *Allah;* and it is argued that the state can impose levies that would satisfy these needs where people hesitate to pay out of their own initiative.[18]

Imam El-Shatabi is quoted to have approved imposing other levies if such levies were in the interest of the Muslim nation. Thus for example, when a war is waged against the Muslim nation and financial resources of the state were not sufficient to meet total needs, the rich will be asked to fill the gap. It was argued that if they do not pay a part of their wealth to win the war, they will lose all their wealth in the event of defeat.

14. A. Morag, "Some Economic Aspects of Two Administrative Methods of Estimating Taxable Income," *National Tax Journal*, Volume X, June 1957.
15. Abdelaziz El-Neim, *op. cit.*, p. 13.
16. Yousaf El-Gardawi, *op. cit.*, p. 98.
17. Abdelaziz El-Neim, *op. cit.*, p.147.
18. *Ibid.*

It is quoted from Ibn Omer that there are extra duties on wealth-holders beside paying *Zakāh*. Furthermor, Ali Ibn Abi Talib is reported to have said that *Allah* had imposed on the rich what would be enough to eradicate poverty, and it is therefore the duty of the rich to contribute towards the eradication of poverty. In the same vein, Omer Ibn El-Khatab is quoted as having said that if he were to live as he had lived, he would distribute excess holdings of the rich to poor immigrants.

It is clear that *Zakāh* is earmarked for certain types of expendinture which do not include expenditure on bridges, roads, school and other necessary amenities. It would then follow that the Muslim State has to impose extra levies to finance such expenditures. That such extra levies were actually imposed in Muslim States in the part is attested by available evidence. Thus Ibn Khaldoun is reported to have attributed the high cost of living in Muslim cities to the high government charges which were passed on to the consumers in the form of high prices.

The above analysis is indicative of the scope for imposing taxes other than *Zakāh* in an Islamic State. In addition, there are other advantages which taxation offers to a developing country and which are well-documented in the appropriate literature.[19] Taxes can be designed in such a way as to (a) curtail consumption and free resources for governmental services or capital formation, (b) reallocate resources from investments regarded as having little beneficial effect upon economic development to those of greater benefit for growth, (c) provide incentives to alter economic behaviour so as to facilitate economic growth, e.g., incentives to save, to enter the market sector, to work longer periods and to encourage capital formation, (d) provide a flow of funds to the government to facilitate the transfer of resources, and (e) reduce income inequalities. It may then be argued that an Islamic State should impose taxes other than *Zakāh* to achieve these objectives, provided that the ends and the means do not violate the Islamic *Shari'ah*.

2H. *Shari'ah Conditions for Extra Levies*

Some Muslim jurists had looked at the question of imposing extra levies purely from the angle of the financial needs of the state.[20] This financial need criterion for justifying additional levies ignores the various benefits that can be derived from a well-designed revenue structure which would combat inflation, prevent recession, achieve economic growth and improve the distribution of income and wealth. However, there is evidence to show that Islamic governments in the past used taxes as a fiscal device to achieve certain objectives. Thus, for example, it is reported that Omer Ibn El-Khatab reduced the rate on cooking oil and wheat coming to El-Medina from 10 per cent to 5 per cent to encourage imports of these scarce items. This was a fiscal measure which the great *Khalifa* used to ensure adequate supplies of these essential goods for the population of El-Medina.

Government expenditure should be rationalized before any excess levy is imposed, and in this context the dialogue between Sultan (Katz) of Egypt and Izeldin Ibn Abdel Salam is always quoted. The latter had advised the Sultan not to impose any levies until all his luxurious holdings were disposed of and the disbursement to his soldiers were limited to their actual needs. The Muslim jurists had therefore emphasized the sanctity of public money and set a criterion that should carefully be

19. R. M. Bird and O. Oldman, *Reading on Taxation in Underdeveloped Countries*, The John Hopkins Press, Baltimore 1967, p. 46.

20. Abdelaziz El-Ne[illegible], *op. cit.*, p. 181.

followed in modern Muslim States.

Levies imposed should be distributed equitably and they should satisfy the economic criterion. Here Muslim scholars may make use of what tax experts consider as necessary to design an optimal tax structure that would meet economic, equity, revenue and administrative criteria. Due suggests many requirements for an optimal tax structure, that would ensure (a) a high rate of capital formation by penalising the consumption of luxuries and non-essential items, (b) a high rate of economic growth by avoiding excessively high marginal rates of income taxation which would be disincentive to work and earn, and (c) minimum use of resources for compliance by the tax-payers and by the tax collecting authorities.[21]

It is important to note that some of the above criteria were already outlined a long time ago by Muslim jurists. The equity criteria both in its vertical and horizontal forms is emphasized by Islam. The concept of vertical equity requires unequals to be treated unequally, and this indeed was well taken by Muslim jurists in the case of *El-Kharaj* (or land tax). The *Kharaj* rates were differentiated according to factors relating to (a) fertility of land, (b) types of crops, whether expensive or cheap types, (c) differences in irrigation, and (d) proximity to the market.[22]

Another example of vertical equity in Islamic policy is given by the quotation which states that the Prophet (peace be upon him) distributed *Al-Fiya,* giving the married double the share of the bachelor. Horizontal equity, by which is meant equal treatment of equals, is a well-established principle in Islam.

Equity consideration apart, attention was also given to other aspects of tax administration. Thus Muslim rulers used to collect *El-Kharaj* at source which made compliance much easier.

The economic criterion is also well emphasized in *El-Kharaj* literature which recognizes the importance of allowing the base to grow so that the goose that lays the golden egg is not killed.

21. *Islam and Income Distribution*

It is quoted that Omar Ibn El-Khatab decided not to distribute newly-opened lands to the followers of the Prophet when they urged him to do so. In doing so, he adhered to the ruling of *Allah* that coming generations must make use of their land. Instead, he imposed a *Kharaj* or land tax, based on the fertility of land, which was paid by the users of land.[23] He is also reported to have said that if he had lived any longer, a shephered in Sanaa (Yemen) would take his share from the earnings of these lands with pride and diginity.[24]

The above discussion emphasises the fact that Islam aims at achieving an equitable distribution of resources among present individuals and future generations. Islam also stresses the need to give the poor their rights in such a way that their pride and dignity are preserved and upheld. It is also clear that the state is entrusted to alleviate poverty. Thus, the modern practice of sacrificing equitable distribution of income for the sake of economic growth in many Muslim countries is not consistent with Islamic principles.

21. J.R. Due, *Taxation for Economic Development in Tropical Africa,* cambridge (Mass.) M.I.T. Press, 1963, pp. 34.40.
22. Abdelaziz El-Neim, *op. cit.,* p. 222.
23. Yousuf El-Gardawi, *op. cit.,* p. 407.
24. *Ibid.,* p. 408.

3.

PROBLEMS IN MODERN PRACTICE OF ZAKAH: THE SAUDI EXPERIENCE

It is appropriate that the preceding discussion of theoretical issues relating to *Zakāh* is supplemented by an analysis of the actual experience of *Zakāh* in the Kingdom of Saudi Arabia. This section will, therefore, concentrate on providing a regorous analysis of this leading experience. The analysis will include the salient features of *Zakāh* as applied in the Kingdom, major developments of *Zakāh* legislation and finally an empirical analysis of its financial performance.

3A. *Salient Features of Zakāh Applied in Saudi Arabia*

Zakāh has been imposed on all the Saudis; and later, the Bahrainis, the Kuwaitis and the Qataris also become subjected to the *Zakāh* levy. All Saudis are subject to *Zakāh,* regardless of whether they are adults or children, sane or insane.

Zakāh is imposed on all capital assets and the yield generated from those assets, profits and earnings that accrue to individuals and companies, yield generating from imports, and all profits and earnings accruing to the Saudis from commercial, industrial or handicraft activities. Also subject to *Zakāh* are the financial holdings of any sort including financial and commercial deals, dividends and all other income that come under the ambit of *Zakāh* as defined by the Islamic *Shari'ah.*

The above broad base was subsequently reduced to a limited base, following a ruling issued by the Great *Mufti* on 29.1.1956. He decreed that all assets not meant for sale will not be subject to *Zakāh.* Assets such as estates, machines, houses, hotels and cars will only be subject to *Zakāh* if meant for sale and in this case only profits will be subject to *Zakāh.* This ruling was based on a *Hadith* where it is quoted that *Zakāh* should only be paid for assets meant for sale. Later a ruling was issued subjecting the hotels' yields to *Zakāh,* exempting the buildings, furnitures and other assets from *Zakāh* payment.

Zakāh on animal wealth and agricultural products is imposed according to regulations which pertain to the ascertaining and collection of *Zakāh* on animals as laid down by the Islamic *Shari'ah.* Assessment is done by the Committees set up by the Ministry of Finance, and *Zakāh* thus collected is locally distributed.

Zakāh assessment takes the form of annual valuation of assets subject to *Zakāh* such as commercial assets, and financial and monetary holdings. It is stipulated that all individuals and companies involved in commercial or industrial activities must hold proper accounts. Such accounts should reflect the initial capital and the inflows and outflows during the *Zakāh* year. These accounts stand as a basis for ascertaining *Zakāh* and must be approved by the Commercial Court; in areas where such courts do not exist *Kut'tab Eldel* (Notaries Public) are responsible. Public corporations are exempted from *Zakāh,* on the basis of the *Shari'ah* ruling that public money is not subject to *Zakāh.*

Zakāh of those who do not hold proper accounts will be assessed by estimating the value of all their holdings such as machines, instruments, and other physical and financial holdings subject to *Zakāh.* Presumptive assessment is undertaken only in the case of pecuniary holdings.

All those who are subject to *Zakāh,* whether they are individuals or companies, should submit to *Zakāh* officials declarations reflecting the true value of their holdings, such as monetary, financial and real assets and profits accruing from those holdings which are subject to *Zakāh*. *Zakāh* officials following a rigorous scrutiny of those declarations will levy *Zakāh* and the *Zakāh*-payer will be notified.

If the *Zakāh*-payer finds that the assessment exceeds the true value of his commercial activities, he can appeal within fifteen days following receipt of the official assessment. This appeal will be presented to a committee, but he has to pay his *Zakāh* due first; and if it is found that *Zakāh* assessed exceeds what he should pay, the excess paid will be refunded.

3B. *Major Developments in Zakāh Legislation*

Zakāh was imposed by a royal decree on 21.11.1950 at a rate of 2.5 per cent. On 7.4.1951 the *Zakāh* rate was reduced to 1.25 per cent to allow *Zakāh*-payers to pay the remaining part, at their own discretion, to needy persons. Subsequently, *Zakāh* was once again collected in full, but following compalints from the people of Naged and Hejaz, the *Zakāh* rate was again reduced to 1.25 per cent on 1.4.1959. The rest was left to individuals to pay to needy persons. In 1963 it was definitively decided that *Zakāh* should be collected in full and total *Zakāh* payments should be paid to the Social Security Department.

King Abdulaziz on 5th June, 1371 (1951) issued a royal decree outlining the rationale behind the government's decision to collect *Zakāh*. In brief, the aim was to (a) help individuals to perform one of the major pillars of Islam; (b) distribute *Zakāh* by the state to those who really deserve it. Only one departure in this respect was conspicuous where the King delegated El-Kasim *Zakāh*-payers to collect and distribute *Zakāh* individually and not through the state.

Until 17.11.1956 only Saudis were subject to *Zakāh*, i.e., Saudi individuals and Saudi companies as well as Saudi partners in non-Saudi companies. As from the date, *Zakāh* was extended to Bahrainis, Qataris and Kuwaitis as well.

A number of measures were taken to strengthen the collection of *Zakāh*. It was decided that the Ministry of Finance should not pay Saudi contractors any instalments due before a *Zakāh* certificate is presented.[25] These documents, issued by the Department of *Zakāh* and Income, would certify that the *Zakāh* of the previous year has been paid. The validity of these certificates was later extended from twelve months to eighteen months, to allow the Department enough time to scrutinize the accountsof *Zakāh*-payers.

3C. *Zakāh Base of Importers*

On 1.3.1393 (1973) the Minister of Finance issued a circular showing how the *Zakāh* of Saudi contractors importing materials to ARAMCO should be assessed. ARAMCO officials estimated that profits derived from each contract would range

25. Contractors supplying essential materials were exempted from presenting certificates of *Zakāh* payment to the Ministry of Finance when they are competing for new contracts. This category of contractors include those who supply agricultural plants, fuel for agricultural schemes found in remote areas, soil, agricultural sand, and fertilizers, grass used for grazing animals, and water, and those who hire water-wells but own the pumping machine.
They are exempted from presenting such certificates on the condition that the value of their contracts does not exceed SR.0.2 million and that they have no other commercial activities.
This exemption was made to enable small contractors to enter into the market but this of course does not mean that they are exempted from *Zakāh*.

between 0.25 per cent to 3 per cent of the value of each contract. The Minister of Finance accordingly decided that *Zakāh* should be assessed on the basis of a 3 per cent profit rate. Following this assessment, a 20 per cent profit became deductable as allowance to meet necessary expenditures of *Zakāh* payers. This 20 per cent allowance is permitted only when proper accounts are presented to the *Zakāh* Department, since proper record keeping in such commercial activities should present no difficulty.

On 20.4.1394 (1974) the Minister of Finance issued a circular showing how profits of Saudi importers in general for the year 1394 would be calculated for the purpose of assessment of *Zakāh*. In the case of the importers of animals *Zakāh* would be calculated on the basis of a 5 per cent rate of profits, while a 10 per cent rate of profits would be applicable to the importers of foodstuffs.

On 11.5.1395 (1975), following the report on oil price increases, it was decided that the *Zakāh* base should be counted on the basis of the importer's capital in 1390 as a base for the year 1394, and where increases in import values are noticed, these increases would be multiplied by a presumptive rate of profit, i.e., 5 per cent for importers of animals, 10 per cent for the importers of vegetables and fruits and 15 per cent for the importers of other foodstuffs. In the case of other contractors, *Zakāh* would be assessed on the basis of their initial capital, any increase being multiplied by a presumptive rate of 15 per cent of their total contract values during *Zakāh* year. Out of their profits assessed, 30 per cent would be deducted to meet expenditures incurred in running the businesses. Such deductions are given only if proper accounts are presented to the *Zakāh* Department.

To ensure effective application of *Zakāh* on Saudi importers, the Department of *Zakāh* and Income started extracting original documents of importation from the Customs Department. These documents will be sent to various branches of the *Zakāh* Department in Saudi Arabia.

Let us now look at some examples of how importers' *Zakāh* is assessed. First, let us consider the case of importers whose initial capital is valued as at 1390 and whose imports increased between 1390 and 1394.

The importer's initial capital in 1390 is arrived at by dividing the value of total imports of 1390 by eight, which reflects the assumed rate of capital turnover in this field. The result is compared with his capital in 1394, and the increase in imports is multiplied by a rate applicable to the category of imports, which is then added to his evaluated capital. Hypothetical examples will help us understand the mechanics of such *Zakāh* assessment.

Take the case of an automobile importer, whose imports had increased from SR 8 million in 1390 to SR 12 million in 1394 with an absolute increase of SR 4 million. This importer's initial capital in 1390 will then be equal to one-eighth of the 1390 value of imports, which would give us a capital of SR 1 million. The SR 4 million increase in the imports during the period under consideration will be multiplied by 15 per cent which is the rate of profits applicable to car importers. The total *Zakāh* base will thus be computed as SR 1.6 million. Given the *Zakāh* rate of 2.5 per cent, *Zakāh* due on this base will be SR 40,000.

If the *Zakāh*-payer is an importer of animal or vegetables or fruits, the profits will be equal to 5 per cent of SR 4 million (SR 0.2 million), so that the total *Zakāh* base will be SR 1.2 million in 1394.

In the case of foodstuff importers, the profits will be equal to 10 per cent of the increase in imports, which will give us SR 0.4 million; and the total *Zakāh* base will be SR 1.4 million in 1394.

Let us now consider the case of importers whose capital was evaluated in 1390 and whose imports declined between 1390 and 1394. In thise case, the *zakatable* capital will be equal to one-eighth of the value of imports in 1394, and not one-eighth of the value of imports in 1390 as in the previous case. If, for example, the imports had fallen from SR 8 million in 1390 to SR 6 million in 1394; the *zakatable* capital will be calculated as SR 0.75 million. To assess the total Zakah base for 1394, profits for the year will have to be added, the profit rate applied being dependent on the nature of the imports. For example, if the imports are foodstuffs other than vegetables and fruits 10 per cent will be added to the *zakatable* capital to arrive at the total *Zakāh* base of SR 0.825 million.

The *zakatable* capital of new importers who were not registered in 1390 will be determined on the basis of the value of their imports in 1394, dividing it by eight. The *Zakāh* base will be assessed by adding to this figure profits for the year, the rate of profit applied being dependent on the type of imports.

It is important to stress that the above examples concern only those who do not keep proper accounts. For those who hold proper accounts *Zakāh* will be assessed on the basis of a rigorous scrutiny of their accounts.

In cases where an importer is paid a subsidy by the government, the subsidy is not added to the total value of imports. As subsidies are paid to keep prices fixed, such subsidies are not liable to *Zakāh.* However, since 1.8.1393 subsidies given by the state to importers have been subject to *Zakāh,* and the *Zakāh* base will be equal to the total import value plus the subsidy multiplied by the profit rate of 15 per cent.

When the value of imports is more than or equal to the value of imports in 1390 the value of *Zakāh* base should not be less than the base in 1390, although there are exceptions for imports of animals, vegetables and other foodstuffs importers. Consider for example, the case of a yarn importer whose import values were SR 8 million in 1390 and SR 8.5 million in 1394. His *Zakāh* base, applying the above formula, would be SR 1.15 million in 1390 and SR 1.075 million in 1394. In this example, the 1394 *Zakāh* base is less than the 1390 base. This is because the import increase of SR 0.5 million when multiplied by 15 per cent gives us a profit of SR 0.075 million. In this case, *Zakāh* payable in 1394 will amount to 2.5 per cent of the 1390 *Zakāh* base of SR 1.15 million.

In the case of those who have other commercial activities besides importation, such as contractors, 15 per cent of their profits in these activities should be added to their imports-based *Zakāh* base.

3D. *Zakāh Base of Other Groups*

On 8.8.1392 the Department of *Zakāh* and Income issued a circular, explaining how *Zakāh*-payers will be assessed. It divided *Zakāh*-payers into those who keep audited accounts and those who do not. The aim of this circular was to unify assessment of *Zakāh* in different parts of the Kingdom in order to achieve horizontal equity.

The *Zakāh* base of those who present audited accounts is assessed in the following manner:

(i) Paid-up capital at the beginning of the year forms a part of the *Zakāh* base, and any increase in capital during the year will only be taken into account when

assessing the next year's *Zakāh* base.

(ii) Net profits for the year before distribution, according to profit and loss accounts, will be added to the *Zakāh* base regardless of when these profits were ascertained. Profits earmarked for distribution is also included in assessing the *Zakāh* base unless such profits are credited in a bank in the names of the shareholders.

(iii) The *Zakāh* base also includes profits carried forward from the previous years, since such profits are considered as additions to the initial capital. No allowance will be given to *Zakāh* collected previously and every year is taken separatly for the purpose of assessing *Zakāh.*

(iv) All types of reserves, as they are considered part of the capital of the firm, are added to the *Zakāh* base. But reserves kept to meet pensions and after-service payments for employees are exempted. And reserves kept to meet depreciation of assets were subject to *Zakāh* until 23.1.1393. when the regulation was repealed.

(v) Payable account balance is also included in the *Zakāh* base, as it is considered part of the capital on the ground that it can be invested.

(vi) The following items constitute deductible allowances for the purpose of assessing the *Zakāh* base; (a) the net value of fixed assets, provided that the *Zakāh*-payer has paid the full amount for these assets and that value of these assets is less than the sum of the paid-up capital, carried-forward profits, reserve appropriations and the payable account; (b) actual losses incurred during the base year or carried forward; (c) investments in other firms, whether they take place inside the Kingdom or outside;[26] and (d) 80 per cent of fixed assets of companies providing electricity and pilgrimage transport.[27]

The *Zakāh* base of those who do not present audited accounts is assessed as described below:

(i) The total capital at the beginning of the year would have to be estimated. The initial capital can be obtained from the trade registry, articles of association, contracts undertaken by the company during the year or any other relevant documents. In cases where the working capital is found to be different, the *Zakāh* Department is authorised to decide the amount of this capital by looking into the value of total transactions. This total will be divided by the rate of capital turnover common to the specific industry, trade or business.

(ii) Net profits at the end of the year are deducted on the basis of the overall transactions undertaken by the *Zakāh*-payer. Under no circumstances should such profits be less than 15 per cent of his overall purchases.

(iii) Commercial debts owing to *Zakāh*-payers are added to the *Zakāh* base, unless the *Zakāh*-payer can prove to the department that these are bad debts which cannot be recovered. Debts which the *Zakāh*-payer considers as bad debts will be added to the *Zakāh* base when they are received. This means that *Zakāh* on such loans are paid for the previous years and not for the assessment year. The *Zakāh*-payer is requird to state clearly when the debt was incurred, why it is

26. In the case of invesments abroad it must be ascertained that profits earned abroad are added to *Zakāh* base, before investment deductions are made. In case where *Zakāh*-payers did not present actual profits, 15 per cent of total investments abroad will be added to the *Zakāh* base.

27. These deductions should be limited to assets in the form of cables, spare parts and other essential materials.

not collected, and whether it is a commercial debt or not, supported by relevant documents.

Those who do not hold audited accounts, are required to fill in declaration forms issued by the *Zakāh* Department. These declarations include the name and address of the *Zakāh*-payer, the number and salaries and marital status of the employees, the size of working capital, the total value of imports, contracts, and total sales. The declaration is forwarded by two verses from the *Qur'an* which emphasize the fact that payment of *Zakāh* is part of the *Taqwa* or fear of God, which means that a person will be committing a grave sin if he makes a false declaration.

The *Zakāh* Department discovered that some *Zakāh*-payers resort to certain methods to have their *Zakāh* base reduced. Thus it has been detected that some of them reduce their working capital by buying a new estate or land. The Department has therefore issued a directivce that such expenditures will not be deducted from the working capital.

The Department of *Zakāh* has also noticed an increase in number of Saudi doctors and engineers who are engaged in private practice. Since these activities tend to generate incomes far in excess of their professionals' needs, the department issued a circular to such groups urging them to pay their *Zakāh*.

3E. *Problems of Interpretation: Juristice Rulings*

Some difficulties are encountered in *Zakāh* assessment especially with regard to some activities. Loans raised by *Zakāh*-payers in order to meet capital expansion, represents a problem in this context. But it has been resolved that such loans are to be added to the *Zakāh* base, as the purpose of raising such loans is to increase profits. All loans raised by the company to meet capital expansion will be added to the *Zakāh* base if such loans are not repaid in full when *Zakāh* is assessed. In cases where only part of the loans are repaid, the unpaid loans will be subject to *Zakāh*.

As regards debts due to the company owed by others, that is if a company is the creditor, the ruling is that such debts will be subject to *Zakāh*, where debtors are able to pay but the company is reluctant to collect those debts. These debts will be exempted only if the company has failed to collect them in spite of measures taken to recover them. These measures should be in the form of a decision taken by the Board of Directors regarding what it considers bad debts, the total value of these debts and on whom they fall. In the case where any of these bad debts are subsequently collected, *Zakāh* should be paid for the appropriate years.

Similarly, materials which have been purchased but which have not reached the stores of the company when *Zakāh* is assessed also present some problems. The juristic ruling in thise case is that these goods will not be considered the property of the company until they are paid for in full and the goods are received.

There are similar difficulties with regard to goods sold but not delivered. The ruling on this is that sums received for undelivered goods will be subject to *Zakāh* in the following year, if the delay in the delivery is caused by the buyer. In th case of sums received in advance for undelivered goods they will not be added to the *Zakāh* base of the same year, as they will appear in the next year's base when the goods are delivered.

4.

ZAKAH FISCAL PERFORMANCE IN SAUDI ARABIA

In this section an evaluation of the performance of *Zakāh* is undertaken from the revenue mobilization point of view during the period 1381/2 - 1396/7. As it is not possible to obtain data on the actual *Zakāh* collected, the analysis is based on budgeted figures only.

4A. *Revenue Yield of Zakāh 1381/2 - 1396/7. (1961/62 - 1976/77)*

Table 1 below clearly indicates that *Zakāh* yield during the period of the study was quite low. The absolute *Zakāh* yield exhibited a continuous increase but taken as a percentage of the GDP a downwards trend is observed.

TABLE 1
ZAKAH REVENUE AND ZAKAH PERCENT TO GDP
1381/82 - 1396/97

Item Year	*Zakāh* Revenue Millions SR	% of GDP
1381/82	3.5	N. A.
1382/83	2.5	0.03
1383/84	Not collected	Nil
1384/85	Not collected	Nil
1385/86	Not collected	Nil
1386/87	5.0	0.04
1387/88	6.0	0.04
1388/89	6.0	0.04
1389/90	6.5	0.04
1390/91	6.5	0.03
1391/92	8.0	0.03
1392/93	11.0	0.03
1393/94	12.8	0.01
1394/95	16.0	0.01
1395/96	27.0	0.01
1396/97	34.5	N. A.

N.A.: Figures of GDP were not obtained by the writer.
Source: 1381/82 - 1390/91 R. Knauer House, "The Saudi Arabian Economy" Praeger 1975; 1391/92 - 1396/97 Ministry of Finance Budget Books.

4B. *Zakāh Elasticity With Respect to the GDP*

To measure the effectiveness of a fiscal levy, many statistical techniques are usually employed. In this paper, given limitations of time and the nature of data collected, the measurement of *Zakāh* elasticity during the period of the study will be done using simple computations.

The income-elasticity of any tax may be viewed as the ratio of the rate of growth of that tax with respect to the rate of growth of income or $(\Delta T/T)/(\Delta Y/Y)$. The growth rate of *Zakāh* and the GDP over the period were computed using the compound growth rate formulae of the form

$$\log(1+r) = \frac{\log Y_n - \log Y_1}{n-1}$$

Where Y_n is the value of the variable in year n and Y_1 is the value of the variable in year one, n is the number of years; r is the rate of growth.

The drawback here is that growth rates obtained using this formulae do not take into account the fluctuations occurring during years between n and 1. In order to improve our results, two growth rates for each variable are computed for the whole period, i.e., 1382/83-1395/96 and another for the period 1392/93 - 1395/96 to take recent changes into consideration. Income-elasticities for the two periods are computed using the elasticity formulae given above.

The results of the computation show that the *Zakāh* revenue in Saudi Arabia has been extremely inelastic with respect to changes in income, since the elasticities fall substantially below unity. The *Zakāh* elasticity with respect to changes in the GDP for the period 1382/83 - 1395/96 is found to be 0.81. For the period 1392/93 - 1395/96 the income-elasticity of *Zakāh* declined to 0.62, indicating that *Zakāh* revenue was not responsive to huge income increases arising from the oil boom.

However, *Zakāh* revenue in the case of a narrow base, i.e., wholesale and retail trade, restaurants and hotels for the period 1382/83 - 1396/97, was income-elastic in the sense that the elasticity exceeded unity (1.1). But the elasticity coefficient for this narrow base during the period 1392/93 - 1395/96 turned out to be 0.79. In other words, *Zakāh* percentages increase over this period were significantly less than the percentage increases in the *Zakāh* narrow base, indicating that *Zakāh* effort decreased subsequent to the oil boom.

4C. *Zakāh Effort Analysis*

We shall apply a minimum *Zakāh* rate of 2.5 per cent on various bases of private sector contributions to the GDP at factor costs in current prices. The result will be a potential *Zakāh* revenue if *Zakāh* is applied in full to the base or, to put it differently, if all incomes generated during the period were subject to a 2.5 per cent *Zakāh* tax. Such an analysis can only stand as a reference point, as no allowance is made for the ways in which such bases are distributed between individuals receiving these incomes from a variety of sources. Given these limitations such computations give a rough measurement of *Zakāh* potential.

Table 3 shows that *Zakāh* collected from the wholesale and retail trade and hotels throughout the period of this study ranged between a minimum of 20 per cent and a maximum of approximately 30 per cent of what it ideally should be, which means that the enormous *Zakāh potential in the country has not been fully exploited. Perhaps an improvement of the Zakāh* collection machinery as well as an extention of *Zakāh* coverage along the line explained in this theoretical analysis may raise this ratio considerably.

TABLE 2

GROSS DOMESTIC PRODUCT BY KIND OF ECONOMIC ACTIVITY AT FACTOR COST IN CURRENT PRICE (MILLION SAUDI RIYALS)

Year	1382/83	1383/84	1384/85	1385/86	1386/87	1387/88	1388/89	1389/90	1390/91	1391/92	1392/93	1393/94	1394/95	1395/96	1396/97
Item : *Private Sector contribution.*															
1 - Wholesale & retail trade, restaurants & hotels	516.0	599.7	718.0	823.2	721.8	806.5	937.8	1007.5	1067.5	1177.5	1553.5	2354.6	3044.9	4642.1	
2 - Transport, storage & communication:	537.3	636.6	739.6	855.5	937.9	1009.7	1173.2	1242.5	1479.3	1567.4	2121.3	2717.6	3945.7	5776.1	
3 - Ownership of dwellings :	382.0	405.9	430.0	462.0	494.0	545.0	601.0	661.0	727.0	800.0	1000.0	1333.0	2000.0	3000.0	
4 - Total private sector contribution :	7676.2	8100.7	8591.4	10432.4	11565.1	12979.9	14089.1	15474.2	20776.0	25712.4	37554.5	95339.9	128843.8	146428.6	
5 - Gross Domestic Product :	8603.7	9205.2	10257.5	11775.6	13142.5	1456.0	15975.3	17398.6	22921.2	28257.3	40551.1	99315.0	134210.3	155053.0	

Source : 1382/83 to 1386/87 to 1966/67 SAMA
Annual Report : 1392/93 A.H. Jeddah 1974/ pp. 112-13.

TABLE 3
EXPECTED ZAKAH YIELD FROM WHOLESALE AND RETAIL TRADE AND HOTELS

Item Year	Potential Yield Million SR*	% of actual *Zakāh* yield to potential Yield %
1382/83	12.5	20
1383/84	15.0	Nil
1384/85	18.0	Nil
1385/86	20.6	Nil
1386/87	18.0	27.8
1387/88	20.2	29.8
1388/89	23.5	25.6
1389/90	25.2	25.8
1390/91	26.7	24.4
1391/92	29.4	27.2
1392/93	38.8	28.3
1393/94	58.9	21.7
1394/95	76.1	21.0
1395/96	116.0	23.3

* These figures represent absolute contributions applying a 2.5 per cent *Zakāh* rate.

Source: Tables (1) and (2)

Table 4 gives the expected *Zakāh* revenue on the assumption that all income generated by the ownership of dwellings are subject to a 2.5 per cent levy. However, it must be emphasized that the housing sector is not subject to *Zakāh* and incomes generated from renting houses are not subject to *Zakāh*. The "expected yield", in this sense, may suffer from overstatement or exaggeration. Comparing the *Zakāh* actually collected with the "expected yield", it is found that the ratio ranges between a minimum of about 25 per cent and a maximum of 44 per cent, which indicates the fact that *Zakāh* actually collected falls well below what could be generated if this narrow base was subject to a rate of 2.5 per cent.

TABLE 4

EXPECTED ZAKAH YIELD FROM THE OWNERSHIP OF DWELLINGS

Item Year	Potential Zakāh Yield Millions SR*	% of *Zakāh* actually collected to potential
1382/83	9.6	26.2
1383/84	10.2	24.6
1384/85	10.8	Nil
1385/86	11.6	Nil
1386/87	12.4	Nil
1387/88	13.6	36.7
1388/89	15.0	39.9
1389/90	16.5	39.3
1390/91	18.2	35.7
1391/92	20.0	40.0
1392/93	25.0	44.0
1393/94	33.3	38.4
1394/95	50.0	32.0
1395/96	75.0	36.0

* These figures represent 2.5 per cent of the contributions to the GDP from the source of dwellings ownership.

In Table 5, a broad base is used to estimate the total potential yield from the private sector by applying a 2.5 per cent levy on the private sector's contribution to the GDP. It must, however, be carefully pointed out that these estimates tend to exaggerate the real potential yield since not all private sector incomes are subject to *Zakāh* in Islam and since no allowance has been made for legitimate deductions such as depreciation and no consideration has been given to the actual distribution of income, in these computations. This analysis should not preclude the fact that not all private sector contributions to GDP are subject to *Zakāh.*

TABLE 5
POTENTIAL AGGREGATE ZAKAH YIELD FROM THE PRIVATE SECTOR

Item Year	Potential yield Million SR*	A.Z./P.Y. %
1382/83	191.9	1.3
1383/84	202.5	Nil
1384/85	214.8	Nil
1385/86	260.8	Nil
1386/87	289.1	1.7
1387/88	324.5	1.8
1388/89	352.2	1.7
1389/90	386.9	1.7
1390/91	519.4	1.3
1391/92	642.8	1.2
1392/93	938.9	1.2
1393/94	2383.5	0.5
1394/95	3221.1	0.5
1395/96	3660.7	0.7

* These figures represent 2.5 per cent of the private sector's contribution to the GDP.

For example, a sizeable proportion of this income may belong to groups which may not be subject to *Zakāh.* On the other hand, by ignoring the public sector's contribution to the GDP, these estimates exclude all payments which households receive from the public sector and which should be subject to *Zakāh.* This introduces a downward bias in the computation. The estimates given in Table 5 should therefore be treated with caution.

4D. *Zakāh Yield and Expenditure on Social Security*

A social security system with a limited coverage is applied in Saudi Arabia. The coverage is limited to labourers who receive wages. It covers injuries and diseases arising from work. The system has also provisions for disability, old age, and death. In the future, the system may be extended to cover risks of temporary disability arising from disease or maternity. Family allowances, unemployment allowances and other allowances may also be introduced.

The aim of this analysis is not to appraise the social security system applied in Saudi Arabia but to see if *Zakāh* collected in Saudi Arabia covers whatever payments are given by the state to alleviate poverty. For this purpose, *Zakāh* revenue during the perod 1388/89 - 1393/94 is compared to the total grants given to deserving cases by the Social Security Department. In this regard, Table 6 reflects a poor *Zakāh* revenue in comparison with government expenditure designed to alleviate poverty.

Zakāh covered only 9 to 17 per cent of this expenditure during the period of the study. If the coverage of the social security system is extended to cover risks mentioned above and if *Zakāh* effort as well as *Zakāh* base were to remain unchanged, then the role of *Zakāh* in the eradication of poverty will be extremely limited.

TABLE 6

***Zakāh* Budgeted in Relation to Financial Grtants Given to Deserving Cases, 1388/91 - 1393/94**

Item / Year	Financial Grants Million SR (1)	*Zakāh* Revenue Million SR (2)	% of (2) to (1) %
1388/89	36.4	6.0	16.7
1389/90	39.2	6.5	16.7
1390/91	47.6	6.5	13.6
1391/92	58.4	8.0	13.7
1392/93	68.4	11.0	16.1
1393/94	140.1	12.8	9.0

Source: "The Statistical Indicator", by Central Dept. of Statistics, Ministry of Finance, Saudi Arabia, 1st Issue 1396 AH, 1976, p. 105.

4E. *Zakāh Revenue and the Saudi Government Appropriation for Social Services*

Table 7 shows that both *Zakāh* budgeted revenue and *Zakāh* potential yield, when applied to a broader base, would fall below the government appropriations for social services in general. Of course, *Zakāh* is not meant to cover the social services as explained in the theoretical discussion earlier; such expenditures necessary for any state would have to be covered from other sources. No modern State can afford to run into huge deficits which are inflationary. This analysis emphasises the need for the imposition of levies other than *Zakāh,* since the latter by itself cannot be used to cover such expenditures.

TABLE 7
ZAKAH BUDGETED AND POTENTIAL AND EXPENDITURES OF SAUDI GOVERNMENT ON SOCIAL SERVICES

Item Year	Expenditure on Social Services Million SR (1)	Potential *Zakāh* Yield Million SR (2)	Budgeted *Zakāh* Yield Million SR (3)	% of (2) to (3) % (4)	% of (3) to (4) % (5)
1388/89	1306.1	352.2	6.0	26.9	0.4
1389/90	1328.1	386.9	6.5	29.1	0.5
1390/91	2319.0	519.4	6.5	22.4	0.3
1391/92	3200.7	642.8	8.0	20.0	0.2
1392/93	5158.4	938.9	11.0	18.2	0.2
1393/94	6949.5	2383.5	12.8	34.3	0.2
1394/95	23017.8	3221.5	16.0	16.0	0.1

4F. *Zakāh Revenue and Saudi Government Expenditures on Essential Services*

Table 8 provides an empirical support for the hypothesis that *Zakāh* collected covers only an insignificant proportion of government expenditures on essential services.

Even a broad-based *Zakāh* with a full coverage of all private sector incomes will not be sufficient to satisfy such needs, as is clearly shown in the last column of Table 8. Other levies will, therefore, be necessary to meet government expenditures on essential services if deficit financing is to be avoided.

TABLE 8
SAUDI GOVERNMENT EXPENDITURES ON ESSENTIAL SERVICES IN MILLION SR
(1391/92 - 1396/97)

Item : Year	Local Govt.	Housing & Public Services	Defence & Aiforce	Interior	Labour & Social Security	Hralth	Education	Transport	Agricul- ture & Irrigation	Subsides	Total	% of actual Zakah	% of potential of Zakah
1391/92	644.2	15.4	2346.5	735.4	309.8	279.3	1156.9	1482.6	568.6	680	8207.8	0.09	7.8
1392/93	886.9	54.5	3547.4	980.3	347.0	420.9	1600.0	1435.1	768.1	680	10660.0	0.10	8.8
1393/94	1933.4	83.5	5408.4	1294.2	525.8	582.8	2243.2	2282.5	1031.9	710	16095.7	0.08	14.8
1394/95	4293.9	136.0	8813.3	2307.6	1406.6	1163.0	3781.2	4558.2	1303.2	4758	32521.0	0.05	9.9
1395/96	14396.3	222.1	23723.7	4882.6	3891.9	3197.4	12973.9	11564.6	2178.4	4658.1	81689.0	0.08	4.5
1396/97	16077.6	9130.6	31906.4	5853.6	2693.1	2972.7	14029.8	16567.8	2336.0	2967.3	208719.2	0.1	not available

Source : SAMA Annual Report 1396 (1976), p. 127.

5.

CONCLUSIONS

First, the preceding analysis highlights the necessity of using extra sources of finance if continuous reliance on deficit financing is to be avoided. Besides, other levies will achieve goals other than revenue, and the importance of properly designed taxes in achieving economic stability economic growth and equitable distribution of income is well documented.

Secondly, in the case of *Zakāh* applied in Saudi Arabia, it is advised that coverage should be extended to all Muslims living in the Kingdom as stipulated by Islam.

Finally, the *Zakāh* base in the case of Saudi Arabia may be expanded to include all incomes earned, as this will achieve horizontal equity. This together with improved administration, will ensure substantial revenues that can be used for the alleviation of poverty.

COMMENTS

1. Dr. Muhammad Anas Zarqa *(Discussant)*

I think the paper provides a good start for the analysis of *Zakāh*. It is indeed refreshing to see Dr. Salama's theoretical analysis contrasting with the empirical insight he has provided.

Compared to Islamically justifiable taxes, *Zakāh* is unique in being based on the direct order of *Qur'an* and *Sunnah*. Other taxes would have to be justified by inference. There are in Islamic taxation some old questions regarding the permissibility or desirability of non-*Zakāh* taxes. A major question in this regard is whether the Muslim state has the right to levy taxes beyond *Zakāh*.

I think most Muslim economists - Dr. Salama and myself included - would answer this question with a loud and clear: yes. But giving what one believes is the right answer is scientifically not enough. It has to be based on valid premises and correct reasoning (M. Friedman's "as if" approach notwithstanding). it is here that I feel Dr. Salama could have made a much better case in justifying taxes beyond *Zakāh* and in refuting the opposite view.

Dr. Salama opts for an empirical case, wherein actual *Zakāh* proceeds in a certain country and period are demonstrably insufficient to finance government operations. This empirical demonstration, "shows up those who say that *Zakāh* is enough and nothing more than *Zakāh* sould be levied ...". I find such argument weak and inconclusive at best. At worst, it is apt to confuse the unwary.

The argument is inconclusive, because even it it is true for a given country and period, it may not be true otherwise. Also, the empirical soundness of the estimates is subject to important reservations - more on this later.

Secondly, the argument may confuse, because it implicitly grants the possibility that *Zakāh* proceeds may sometimes be sufficiently high as to make other taxes redundant. Truth however is that this is theoretically *impossible* because *Zakāh* in Islam is *earmarked* rigidly for redistribution to the poor (and to the other related categories of recepients explicitly stated in *Qur'an*). All non-redistribution activities of an Islamic state (i.e., production of public goods and services) must be financed from non-*Zakāh* sources. Unless the state is fortunate to have other revenues (oil, profitable public enterprises, etc.) - and the fortunate are few indeed - levying of taxes is an Islamic imperative to the same extent as state duties are imperative. And state duties are far from few. For in addition to the many socially obligatory duties *furūḍ kifāyah* that are assignable to the state, you have the politically binding duties that the community of Muslims demand of the state by the political process of *shura* (mutual consultation). You also have the various "public goods" in the strict economic sense which, by their very nature, are to be produced by the state or not at all. With all these state duties that may *not* be financed from *Zakāh*, it is absurd to doubt the Islamic necessity of taxes beyond *Zakāh*.

There can be sensible difference of opinion on *other* matters such as:

(a) The extent and distribution of tax burden for financing government operations that do *not* involve direct transfer payments.

(b) The permissibility and extent of taxes beyond *Zakāh to finance further transfer payments* to the poor.

Here and only here does the old question. "Is there an obligation on wealth beyond *Zakāh*?" arise. (For details on this question in *Fiqh* see Y. Qaradawi: *Fiqh Al-Zakāt,* vol. II, pp. 963-92). Even for those who answer that question in the negative, i.e., consider *Zakāh* as the only *obligatory* transfer payment, it is preposterous for them to doubt the necessity of taxes to finance *non-transfer* governmental duties.

Let me now refer to the last part of Dr. Salama's paper where he has attempted to relate *Zakāh* proceeds in Saudi Arabia to the country's GDP and other magnitudes. The *Zakāh* ratios are bound to be affectd by the sources of *Zakāh,* its coverage, methods of collection and distribution, etc. What is shown to be collected on the record may well be less than what is actually transferred from the rich to the poor; and what *is* collected is not the same thing as what *should be* collected. Thus *Zakāh* as a percentage of national income may vary from country to country. I can give a concrete example. I tried to calculate the *potential Zakāh* proceeds in Syria for 1971. According to my estimate it amounted then to 3 percent of the Net National Product of Syria, or to 25 percent of the government budget excluding defence, or to 40 percent of industrial investment in the country. Thus 3 percent of the NNP is not an insignificant sum.

Finally, I wish to scrutinise the validity of an assumption in Dr. Salama's paper according to which state-owned resources and industries are exempted from *Zakāh*. I think it is wrong to assume so. Let me illustrate. If I happen to own a phosphate mine, I will have to pay *Zakāh* on net income from the mine. If the mine is then nationalised, its ownership and income become public, hence exempted from *Zakāh*. I find this exemption unacceptable unless a clear basis for it can be found in *Shari'ah*. For, income from the mine is now general public revenue, and unlike *Zakāh*, it is *not* earmarked only for the poor. The fact that public ownership is increasing for a variety of reasons, and benefits trickling to the poor from public revenue often disappointing, it is quite likely that the poor stand to loose if we exempt from *Zakāh* public productive assets and incomes.

2. Dr. Mohammad Al-Raddady *(Discussant)*

Dr. Salama's paper is undoubtedly a remarkable contribution to Islamic economic literature. The author attemps to probe into the most pressing fiscal problems of our time. In the words of the author, the aim of his paper "is to provide a fiscal analysis of *Zakāh* in theory and practice and to investigate the rationale of applying properly designed taxes in an Islamic State." This, indeed, is an enormously ambitious task.

The most striking feature of the paper is the focus on so-called *Zakāh* revenue. The first half of the paper is devoted to the principles of *Zakāh,* relating to such matters as *zakatable* assets coverage, methods of assessment, and various conditions governing what is subject to *Zakāh.* Throughout the paper, Dr. Salama presents an impressive analysis, covering a wide range of fundamental issues, and he also suggested practical solutions.

No participants in this Seminar can be expected to agree on all points. It is, therefore, quite natural that I should disagree on certain issues with Dr. Salama. For instance, suspicions are aroused by terminological confusion. The use of the prefix *theoretical* as a heading in the first part of the paper seems to be a misnomer. A distinction is usually made between normative and positive economics. By the same token, there is need for a clear distinction between statement of well-established *Zakāh* principles or rules and statements of opinion.

Theoretical analysis in general and theory in particular imply a set of relations which are sufficiently specified and conceivably *falsifiable.* Non-conformity of Islamic principles to theory does not by any means diminish the practical importance of Islamic Economics. I wish that the author had used other alternatives or had avoided subjugating *Zakāh* principles to theoretical assumptions.

Consequently, the argument underlying the concept of *Zakāh* Revenue is hardly convincing. True, the term 'revenue' can be used to mean collected *Zakāh* in aggregate, but it also implies financial arrangements that contradict the *Zakāh* spirit. One feels uneasy about such confusion for two reasons :

a) the running theme of the argument tends to emphasize a system of taxation in such a way that the paper appears to be marginal to the *Zakāh* structure ; and
b) those who expect a demarcation line between the system of taxation and the *Zakāh* principles might be disappointed.

The fundamental principles of *Zakāh* are not confined to purification alone. These principles also underscore real development.

It is true that the author has tried to show the importance of fiscal policy in financing modern state pojects. But this is only one side of the problem. One way to finance the various competing projects is to resort to the *Zakāh* fund. Perhaps for this purpose, the author has advanced his argument advocating a broader base of *Zakāh,* which is a wise suggestion. Yet he has used the term *'extra levies'*, which is also open to serious confusion and inaccuracy.

What is the alternative? Well, I wish I had the answer. One alternative is to use the term *proceeds* instead of revenue. Extra levies need to be modified to fit precisely into the *Zakāh* context.

In the second part of paper Dr. Salama has examined the main features of *Zakāh* in the Saudi Arabian Kingdom. He has traced the development of the institution of *Zakāh* both in terms of legislation and administration.

I found myself in general sympathy with some of the arguments particularly in the area of *Zakāh* evasion and effective assessment. Dr. Salama, to support his argument, has made an empirical examination of *Zakāh* as applied in Saudi Arabia, applying some important tools of economic analysis. The statistical techniques used and the clarity of thought expressed are the main features of this part of the paper.

Zakāh elasticity computations have revealed both low *Zakāh* effort and the insignificant contribution to the GDP. More important, the author has gone further to predict future developments. Correlation coefficients (R^2) have shown high variations with three selected variables. There are however some limitations inherent in statistical investigations. We should be very careful in accepting statistical evidence with variable limited to three factors. The analysis of high capacity and high effort is difficult enough when it is dealth with under the normal simplifying assumptions. Thus, for example, *Zakāh* may affect the real behaviour of economic units, yet it is quite difficult to predict the actual impact of *Zakāh* on the operating economic units with any degree of accuracy. The author has implicitly endorsed the importance of expectation and has referred to the government measures to encourage agricultural production, but he has not stressed the point.

Had this paper compared and contrasted Saudi Arabia's *Zakāh* experience with the experiences of other Arab or Muslim countries, the conclusion regarding what has been called *Zakāh* revenue would have been different. For one thing, most of the Arab countries, which have developed a highly complex system of taxation, have not achieved significant changes in their economic structures.

On the whole this paper is a very good step toward further rigorous research that might explore how *Zakāh* applications may create economic certainty in our uncertain world.

GENERAL DISCUSSION

1. Dr. Monzer Kahf points out that Dr. Salama has completely ignored the wealth of the private sector in his *Zakāh* calculations, although he asserted earlier in his paper that *Zakāh* should be levied on such wealth as well. Dr. Kahf believes that, had the author taken into account the wealth of the private sector, he would have come out with a *Zakāh* ratio that is four or five times higher than the figure given in his paper. This would imply a more important role for *Zakāh* as a tool of economic policy than what the author has assigned to it. Dr. Kahf is of the view that it is not inconsistent with Islamic jurisprudence to collect and distribute *Zakāh* either in kind or in money terms. He thus believes that the medium of transfer could well be consumption goods or consumer durables – which would make *Zakāh* a powerful policy instrument.

Dr. Kahf thinks that too much emphasis is being placed on *Zakāh* as a transfer payment from the rich to the poor. He does concede that it may generally be the case, but he also submits that it is not quite so on matters of detail. He refers to the *Qur'anic* Verse 60 of *Surah Tauba* and argues that among *Fuqra, Masakin, Amileen, Mullafatil Qulub, Fir-riqab, Gharimin, Fi-sabilillah* and *Ibn-as-Sabil,* only four can classified as poor.

Dr. Kahf is of the opinion that Dr. Salama has been consistent and right in suggesting that there is no *Zakāh* on oil and other mineral resources as long as these are exploited by the state. Dr. Kahf bases his opinion on his knowledge of Fiqh when he says that mineral resources should be exploited by the state and not by individuals who are allowed to tap these resources only to meet their needs. He even goes as far as to suggest that the revenues from the state-owned mines are very similar to *Zakāh,* regardless of whether these are used to benefit the poor or society as a whole.

Dr. Kahf's final comment is that there is a need to devise some sort of *Zakāh* equivalent to apply to non-Muslims. He wishes that Dr. Salama had given thought to this is his paper.

2. Dr. Mabid Al-Jarhi first makes technical point. He says that the inclusion of both assets and earnings in the *Zakāh* base would influence the *Zakāh* elasticity estimates presented by the author. He points out that since wholesale trade is part of the private sector activity, X_1 and X_2 in the regression are related and inter-related so that there is a danger of multi-collinearity. His suggestion here is that X_1 should have been excluded from X_2 before one can be regressed on the other.

Shifting the attention away from *Zakāh* to other Islamic taxes, Dr. Al-Jarhi stresses that *Zakāh* does not constitute the entire fiscal system of an Islamic State. He says that there can be and should be other taxes and that it is important to discuss the Islamic criteria for such taxes.

Finally, he raises an issue which seems to fall within the realm of political economy – i.e., the idea of taxing by representation. He asks: to what extent should the sovereign consult the people before taxing them?

3. Professor K.T. Hosain thinks that it is incorrect to say that the rate of *Zakāh* cannot vary. For he believes that the *Zakāh* rate did vary during the time of the Prophet (peace be upon him). Prof. Hosain also raises a question regarding the rate structure of *Zakāh* mentioned in Dr. Salama's paper, He enquires whether it is based on Fiqh or Hadith.

4. Dr. Nejatullah Siddiqi refers to a point which is related to *Zakāh* on agricultural products, a point attributed to Dr. Qardawi who has emphasized that the expenses of the cultivator should be taken out before *Zakāh* can become effective. Dr. Siddiqi points out that this opinion is in conflict with the view held by Abu-Yusuf and Ahnaf and that it has far-reaching implications. He expresses disappointment that the author has not given his own views on this important matter.

Dr. Siddiqi explains that the low *Zakāh* ratios expressed in percentage terms in Dr. Salama's paper are due to the fact that the public sector accounts for a larger proportion of the GDP. He thinks that the author ought to have clarified this point which would however warrant certain changes in the author's conclusions.

Dr. Siddiqi says that the empirical study of Saudi Arabia presented by Dr. Salama should be treated with some caution as it represents a special case in the sense that the bulk of the GDP originates from the public sector.

He then goes on to discuss a controversial point raised earlier by Dr. Zarqa, regarding the liability of the state to pay *Zakāh*. Dr. Siddiqi seems to think that it is odd for the state to tax itself. He also seems to support the views expressed earlier by Dr. Kahf according to whom income transfer from the rich to the poor is not the only rationale for *Zakāh* and the ultimate responsibility of ensuring that every individual is cared and provided for rests with the state. He therefore thinks that we can afford to exempt the government from *Zakāh*. Dr. Siddiqi is inclined to do that even if the state is producing for the market by taking on the role of a manufacturer, a miner or a trader. He points out that the difficulty here will be that the same good can be taken out of the market for purpose of, say, defence, leading to many complications. Dr. Siddiqi's submission is that so far there has been a consensus in the Ummah that the state should not be subject to *Zakāh,* even though the area of operation of a modern Islamic State will be much wider than it was the case in the past. He warns that there will be no consensus if were to modify this.

Dr. Siddiqi also responds to another point raised earlier by Dr. Zarqa about the rationale for extra *Zakāh* taxation. He says that Dr. Zarqa's argument is again based on the assumption that *Zakāh* is a transfer payment for the benefit of the poor. Dr. Siddiqi emphasizes that an individual's obligations to pay out is not over the moment he pays his *Zakāh* dues. He argues that state is entitled to impose extra – *Zakāh* taxation which may well be justifiably spent on, say, the construction of infrastructure, without it being earmarked for the transfer of income to the poor. He does not think that Dr. Zarqa should insist on his view. It would lead to a new controversy that is totally unnecessary.

Lastly, Dr. Siddiqi expresses surprise at the comment made earlier by Dr. K.T. Hosain about the variability of the *Zakāh* rate during the time of the Prophet (peace be upon him), Dr. Siddiqi emphatically points out that, to the best of his knowledge, the *Zakāh* rate has never changed since it was first established.

5. Dr. Mohammad Sultan Ahmed Abou Ali refers to the earmaking of *Zakāh* funds for certain types of expenditures which do not include expenditures on roads, schools, hospitals, etc. The gist of his argument in this connection is that since *Zakāh* will be the only source of revenue in the fiscal structure of a modern Islamic economy, it will not be feasible to make budget appropriations by groups of beneficiaries. He therefore suggests that a certain proportion of the total revenue is set aside to be spent on groups of people who are eligible to receive *Zakāh* so that they get a share of the total proceeds at least equal to *Zakāh*. He believes that this will overcome the problem of earmarking.

   Dr. Abou Ali's second point deals with multi-collinearity between X_1 and X_2 in the regression equation. Assumng that the numbers given in parentheses refer to the values of T tests, and given the degree of freedom as indicated by the number of observations, he finds that the coefficients are not really significant.

6. Dr. Mahfooz Ahmad does not think it is permissible to include income in the *Zakāh* base as the author has suggested. He says that neither the *Zakāh* base nor its rate can be varied. He thinks that this rigidity notwithstanding, some flexibility is provided by the variability of the exemption provisions. He is of the veiw that the amount exempted in the case of a person who owns five different items will be different from that in the case of another person who owns only two items. He thus submits that it is possible to rationalise the exemption limit without raising any controversy. He therefore concludes that *Zakāh* is basically a form of wealth tax.

Appendices

APPENDIX I

MONETARY AND FISCAL ECONOMICS OF ISLAM*

An Outline of Some Major Subjects for Research†

INTRODUCTION

For several centuries Muslim scholars remained pioneers in their fields of learning and continued to push the frontiers of knowledge thus contributing in a highly significant way not only to the advancement of the Muslim world but also the development of science and the expansion of the store of human learning. Unfortunately, however, there came a period during which the vigour and resilience of the response of Muslim scholars to the fresh challenges they faced remained in low key, and the quality and character of their intellectual contributions left much to be desired. In recent years, to the satisfaction of all Muslims, there has been an encouraging revival in the intellectual activity of Muslim scholars around the world and a serious effort is being made to respond successfully to the intellectual challenges that the Ummah is now facing.

Among the fields that have received the special attention of Muslim scholars is the area of monetary and fiscal economics of Islam on which a number of treatises and books have been written so far in several languages. Some valuable ground has already been covered in this field but a large number of questions are yet to be answered.

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* A booklet issued by King Abdulaziz University Printed by The Islamic Foundation in 1977.

† Original draft of this document was prepared by Dr. Muhammad Umar Chapra. It was revised and expanded at the Islamic Foundation by Khurshid Ahmad in the light of alternate suggested by Dr. Muhammad Nejatullah Siddiqi and Dr. Muhammad Uzair. The revised document was discussed by a special committee which met at King Abdul Aziz University. Jeddah (2nd-4th November, 1976) and was attended by Dr. Muhammad Omar Zubeir, Dr. Hasan Abu Rukba, Dr. Muhammad Saqr, Dr. Hasan Balkhi, Dr. Tawfiq Shawi, Dr. Abdul Hamid Abu Sulaiman, Dr. Umar Chapra, Dr. Muhammad Anas Zarqa and Professor Khurshid Ahmad. The final draft has been produced in the light of the discussions held by the committee and suggestions and comments made by Dr. Ma'bid Al-Jarhi of th Islamic Development Bank.

To draw the attention of Muslim scholars to some complex issues in the field of monetary and fiscal economics of Islam, King Abdul Aziz University is issuing this booklet which divides the subject into four major parts, further subdivided into a total of twenty subjects. The first part relates to the conceptual aspects of ribā, credit, saving and investment in Islam and comprises eight subjects. The second part relates to some of the major policy issues involved in organizing monetary, banking and fiscal affairs in a ribā-free economy and has also been subdivided into five subjects. The third part comprises five different subjects concerning the international aspects of Islamic banking and, finally, the fourth part relates to the formulation of a theoretical framework for the monetary and fiscal economics of Islam. It is hoped that the booklet by pointing out the major questions involved, will promote scholarly and constructive research in this field and ultimately help Muslim scholars come to grips with the major issues and meet successfully the challenges that face the Muslim Ummah.

King Abdul Aziz University takes this opportunity to invite all Muslim universities around the world to encourage promising students and scholars in their Department of Economics and Business to write Masters or Doctors or post-doctoral dissertations on these subjects not only to generate greater interest in the field but also to help increase our understanding of the complexities of the problems and enable us to find solutions that reflect the genius of Muslim scholarship and are in conformity with the dictates of our justice - and welfare - oriented ideology.

King Abdul Aziz University is ready to render whatever assistance it can provide in the pursuit of research on this subject to enable Muslim scholars to answer the questions raised in this booklet.

This booklet has been prepared in collaboration with the Islamic Foundation, Leicester. The University expresses its gratitude to the Islamic Foundation and all those scholars who have co-operated in the production of this study outlining themes for research in Fiscal and Monetary Economics of Islam.

Dr. Muhammad Omar Zubeir
President
King Abdul Aziz University

Part I
Conceptual Aspects

Subject 1

Ribā in the Qur'ān, Sunnah and Fiqh

(a) A review and analysis of the Qur'anic verses and ahadith related to ribā - to determine their real meaning and significance.

(b) Ribā as it appears in the Fiqh literature - an examination and analysis of the Fiqhi discussion, particularly of the controversy over Ribā al Fadl and Ribā al Nasiah, to indicate the points of agreement and divergence and the underlying juristic or socio-economic reasons.

(c) Scrutiny of the claim by certain quarters that "Ribā" is equivalent to "usury" and does not apply to "interest" on productive loans. In this connection specific attention needs to be given to the erosion in the real value of the principal amount as a result of the high rate of inflation in the modern world. Does ribā relate to the lending of real commodities, including commodity money (such as gold) or does it also extend to the modern fiat money whose real value is subject to change and having a secularly declining trend in its real value. In the case of ribā-free loans where profit-sharing is not feasible, would the introduction of some indexation be in conflict with the Shari'ah? In this respect various forms of indexation may be examined, e.g., the cost of living index or some other price index, the average price of the commodities specified by the Prophet in the ahādīth related to ribā, and the average rate of return on profit-sharing investments.

(d) In the light of the discussion in a, b, and c above, what conclusions may be drawn about ribā - clearly distinguishing areas where there is concensus and areas where there is, or could be, genuine room for difference of opinion in the light of the Sharī'ah.

(e) An examination of the question of earned and unearned income in the light of the rationale behind the prohibition of ribā - is all unearned income ribā? Is any form of unearned income permissible? In this respect the paper should also examine the concept of just price, and exploitative or monopoly profits, rents, wages and salaries, as well as speculative profits.

Subject 2
Ribā and Muslim History

The objective of this paper should be to indicate the monetary system during the classical period (Prophetic and Khilāfat al-Rāshidah) and the changes that were brought into that system by Islam. The paper should also survey the various forms that lending and borrowing have taken during different periods in Muslim history, particularly during the classical period. The paper should also indicate and evaluate the different techniques adopted during Muslim history to circumvent the Islamic teachings on ribā and discuss the main socioeconomic and political reasons underlying these.

Subject 3
Survey of Classical Islamic Literature on Money

A survey of the opinions of Muslim jurists and scholars on money, including the following aspects:

(a) Its nature, rules of behaviour to which the state should adhere with respect to issue and regulation of money

(b) The effect of the change in the real value of money on contractual relations (such as creditor-debtor relationship).

(c) Rules of behaviour governing transactions involving money among individuals and countries. How should the individual and the state manage their monetary assets?

(d) The paper should take note of any classical literature dealing with the relationship of money to economic activity.

Subject 4
Survey of Contemporary Islamic Literature on Money, Banking and Monetary Policy

Only the major works of the 20th Century should be examined to highlight the various issues and controversies and to indicate the areas of weakness and strength. This survey should also cover the major models proposed for interest free banking and indicate as well as evaluate the underlying juristic differences.

Subject 5
The Place of, and the Rationale Behind, the Prohibition of Ribā in Islam

The paper should clearly indicate the place and role of the prohibition of ribā in the overall value system and way of life of Islam to demonstrate that it is not "capitalism minus ribā" that Islam stands for, but that prohibition of ribā is one of the important corner-stones of a distinct economic system having its own values and goals that could not be fully realized until ribā is abolished. The rationale should be discussed in the light of the prominent socio-economic goals of Islam like social and economic justice, equitable distribution of income, accelerated and balanced economic growth, and general social welfare. Citations and statistics should be provided from other systems indicating how ribā can nullify the socio-economic goals cherished by Islam. Could the isolated abolition of ribā in most present-day Muslim economies, with their capitalist-feudalist economic systems, help achieve the socio-economic objectives of Islam, or would it necessitate an overall implementation of all Islamic values in the light of the Qur'anic verse: "O, you who believe! Enter Islam Completely". (2:208). If a graduated programme is considered desirable in the implementation of Islamic values, where would the abolition of ribā stand in such a programme?

The paper should clearly distinguish between economic, moral, social and other reasons for the abolition of ribā. On the economic side, the paper should consider separately if possible:

(a) The mechanism for the creation of liquidity.
(b) How different financing schemes influence the risk attached to investment funds and how this affects saving-investment behaviour.
(c) The allocative and welfare effects of monetary exchanges.

Subject 6
The Role of Credit in an Islamic Society

The paper should review and analyse the Islamic values related to credit and critically examine the scope and role of credit in all its major ramifications (consumption, production, etc.) in the life of individuals, firms and the state in an Islamic economy in the light of overall socio-economic goals - Does Islam tolerate, permit or encourage the "living on credit" prevalent in capitalist societies? In the light of the Islamic socio-economic norms would it be desirable that both the private and the public sectors in an Islamic economy place less reliance on credit than is the case in capitalist economies? Does living on credit necessarily promote a better standard of living and produce a more viable/balanced/just economy? Can high rates of growth and improved standards of living be promoted through better distribution of income, value-oriented regulation of consumption, "discouraging" hoarding and "encouraging" investment? This paper is closely related to subject seven. It should specify, if possible, the conditions under which an expansion of credit to consumers and producers may be desirable in an Islamic economy.

Subject 7
Saving and Investment in an Islamic Economy

What is the place of saving and investment in the overall framework of Islamic values - what are the various direct or indirect incentives and/or penalties that are built-in or could be employed in an Islamic economy to induce income-earners to save? What incentives and/or penalties are built-in or could be employed in an Islamic economy to induce savers to employ their savings profitably and to overcome the liquidity preference of savers who do not wish to be active investors themselves? What alternative instruments or channels for profitable employment of savings could be made available to savers so as to provide them a positive net increase in the real value of their savings with adequate safety and liquidity of their funds? What would be the role and scope of profit-sharing in the mobilization of savings? It is hoped that this paper will develop a framework for inter-temporal allocation of resources in an Islamic society.

Subject 8

Allocation of Resources in a Ribā-Free Economy

The paper should deal with at least the following questions

(a) Does the rate of interest really perform efficiently the function of allocation of resources in a capitalist economy?

(b) How well is the function of resource allocation taken care of in a socialist economy? Is the use of a shadow rate of interest really essential and does it introduce greater efficiency? Would it be necessary to have such a rate in an Islamic economy? If not, what would be its substitute?

(c) How would the allocation of resources take place in an Islamic economy? How would resource allocation decisions be taken where profit-sharing is not possible or feasible? What criteria would be used to choose projects for "optimum" allocation and to ensure an equilibrium between supply of, and demand for, financial resources? Would the abolition of ribā introduce more, or less, efficiency in the allocation of resources? If the answer happens to be less, would there be any offsetting advantages for the economy in the abolition of ribā. In the case of collective choice about allocation, who would have the decision-making powers? How would honesty, equity and efficiency be ensured?

Policy Issues

Subject 9
Money in an Islamic Economy

What should be the characteristics of money in an Islamic economy in the light of the Shari'ah? - Do the various present day forms of money fulfil these characteristics to be particularly examined in this respect is the place of the stability of the real value of money in the Shari'ah teaching? Is there any room or scope for a secularly rising price level? Would such a trend be in harmony with a ribā-free Islamic economy?

Keeping in view the central goals of an Islamic eonomy, is it necessary to have full-bodied or fully representative money in an Islamic economy? What is the scope for fiat money? How does fiat money with a secularly declining real value fit into a ribā-free Islamic eonomy? Would the central bank in an Islamic economy have the "privilage" to "print" money without the backing of real resources? If this privilege is to be recognized, can some guiding principles be provided in the light of the Shari'ah to prevent unscrupulous governments from exploiting this privilege and to save the Muslim society from the ravaging effects of inflation resulting from rapidly expending fiat money. What is the scope from the Islamic viewpoint of the computerized disembodied forms of international money currently being discussed as a possible development in the future? Are there any guidelines available lin the Shari'ah to direct the thinking of Muslims?

What is the scope for deposit money in an Islamic economy, particularly the creation of deposits by commercial banks or other banking institutions. In the Islamic model of banking, would banks be allowed to create deposits?

In the light of the Shari'ah is it possible to say specifically whether any individual or institution has the right to lend money which he or it does not have. Does the creation of deposits, fit into the ribā-free framework of the economic system of Islam?

Can any prediction be made about the behaviour of the velocity of circulation of money in an Islamic economy? Can something be said specifically about the velocity of currency, primary bank deposits and derivative deposits in an Islamic economy?

Is it possible for an Islamic State to make its money immune from the monetary, fiscal and foreign exchange policies of other countries? Would this necessitate, or make permissible, certain adjustments in policies?

Subject 10
The Role of Monetary Policy in an Islamic Economy

The paper should discuss the goals and functions of the central bank and monetary policy in an Islamic economy. How and in what manner could monetary policy be oriented to the socio-economic goals of Islam - like social and economic justice, equitable distribution of income, economic stability and growth and general social welfare? Can there be a compromise between the various goals and, if so, what goals would receive priority? To what extent and under what conditions would the central bank be able to realize its goals?

This paper should examine the various tools of monetary policy in a modern Islamic economy, emphasising their nature and scope. How does the abolition of ribā influence the role of monetary policy in a modern economy? Could the absence of the rate of interest as an instrument of monetary policy seriously handicap an Islamic economy? Is a substitute for bank rate or other instruments of monetary policy feasible or desirable? What alternative tools of monetary policy can be developed? Is it possible to use profit-sharing as an alternative instrument? If so, how?

The impact of the abolition of ribā on international monetary relations of Muslim countries should be discussed.

Another aspect that may also be examined is related to the special context of Muslim developing countries and the role of monetary policy in the overall Islamic strategy of development in these countries whether resources-rich or resources-poor. Is it possible to identify the fundamentals of a monetary policy which is Islamically-oriented and also consistent with the needs, stage of development and level of resources of these countries?

Subject 11
Commercial Banks and Other Financial Institutions in an Islamic Economy

The objective of this paper should be to indicate the differing and complementary roles of different institutions mobilizing savings and allocating these among equity investments and loans. The criteria to be used for this allocation should be carefully examined to provide guidance to prospective ribā-free banks or financial institutions. With respect to equity investments, along with the different criteria to be used in choosing between different alternatives, the paper should also discuss the question of whether the lending or investing bank should or should not take active part in the supervision or management of the project financed. With respect to loans, all different types of loans should be examined (e.g., production and consumption loans, instalment credit, public sector loans for different "productive" and "unproductive" purposes, short-medium, and long-term loans and loans with and without profit-sharing). On loans without profit-sharing how would the service charge be determined?

With respect to profit-sharing the paper should discuss the concept of profit-sharing in Islam and attempt to evaluate the controversy over whether the bank alone will bear losses or whether the borrower will also share them in a specified proportion.

This paper should also discuss the question of inter-bank lending and borrowing, particularly the domestic and international relations between Muslim and non-Muslim banks.

With respect to commercial banks lending resources derived from demand or short-term deposits, how could the liquidity and safety of their funds be ensured? In the case of financial institutions other than commercial banks, would all their funds be invested in a profit-sharing framework? How would the risk be diversified to ensure the safety of their funds?

Could there be a centralized insurance of deposits to ensure the safety of depositors' funds? Could there be a centralized insurance of profit-sharing investments of commercial banks to reduce their risk and ensure the viability of these institutions? Could some guidelines be provided for the insurance of these deposits and/or investments? Would such insurance be in the private or the public sector?

Would it be necessary to have a nationalized banking system in an Islamic economy or would banking be desirable and feasible in a private-sector framework?

How would the functioning of non-Muslim financial institutions be regulated in an Islamic economy with specific reference to their functions as channels for surplus funds towards or away from the Islamic economy?

Subject 12
Fiscal Policy of an Islamic State and its Relationship with Monetary Policy.

What would be the targets and instruments of fiscal policy in an Islamic State?

What would be the targets and instruments of taxation policy in an Islamic economy, particularly the role of *Zakāh* and other taxation with particular reference to their effect on savings, investment, growth and welfare. Would there be any Shari'ah constraints on the taxing powers of an Islamic State?

What would be the essential features and instruments of the expenditure policy of an Islamic State?

Could the taxation and expenditure policies be used for stabilizing the economy? How would this be done? What would be the role of public borrowing in an Islamic State? Would it be necessary for an Islamic State to have a balanced budget or would it resort to expansionary and contractionary fiscal policies as in capitalist economies? Is there any distinction in this respect between an Islamic State and any other state? What guiding principles could be provided in the light ofthe *Shari'ah*? What criteria would be used to allow budgetary deficits or surpluses? Could continuing budgetary deficits be permitted in an Islamic State? Would there be any *Shari'ah* constraints on the borrowing power of an Islamic State? Can the Islamic State print money to finance its expenses? Is it possible that in an Islamic State instead of the rate of interest, other methods, including the distribution of income, could be used as instruments for managing the economy?

The relationship between monetary and fiscal policies should also be examined to indicate their complementary and conflicting roles with a view to suggesting how the two can together be made to serve the ultimate goals of economic policy in Islam.

Subject 13
Inflation in an Islamic Economy

The paper should examine scientifically whether and to what extent an Islamic economy could be plagued by bouts of recession, depression and inflation. A thorough examination of inflation, its causes and cures should also be undertaken in the context of abolition of riba, effects of *Zakāh* on consumption and investment, and the developmental policy of an Islamic State. Is a long-run inflationary trend possible or desirable in an Islamic economy? This paper may also throw some light on the phenomenon of inflation in the contemporary Muslim world and explore the constituents and effects of an Islamic anti-inflationary policy.

Part III

International Aspects

Subject 14

Foreign Exchange Markets in an Islamic Economy

The paper should examine the nature and scope of domestic regional and international markets for foreign exchange from the point of view of Islamic teachings, with specific reference to the determination of rates of exchange, floating versus stable rate systems, foreign exchange speculation, spot and forward markets and internationa capital movements. What measures may be adopted to regulate (or prevent, if necessary) the outflow of capital from a riba-free economy, particularly through foreign banks. What measures may be adopted to attract the flow of capital towards a riba-free developing economy? the paper should also discuss the problem of riba from the point of view of international lending and the juristic controversy of dar al-harb and dar al-Islam.

An effort should be made to provide some guiding principles in the light of the Qur'an and the Sunnah to enable an Islamic State to determine its policies in the area of foreign exchange and international monetary relations.

Subject 15

Debt Servicing Burden of Developing Muslim Countries

The paper should examine the debt servicing burden of developing Muslim countries and indicate its implications for international stability and peace, economic development in the Muslim world and the political strength of Muslim countries in international power politics. The paper should also examine the causes of this indebtedness and indicate the measures that could be adopted by the countries concerned individually to improve their position and by the Muslim countries collectively to provide relief to the affected countries. The paper should also examine the question whether it is necessary to borrow to the extent some Muslim countries have done? Is it possible to use "own" resources more effectively for development with as little resort to international borrowing as possible? In the light of the Shari'ah could certain guidelines be provided to an islamic State about international borrowing? Is it permissible in the Shari'ah for one generation to borrow and knowingly pass its debt servicing burden to future generation.?

Subjct 16

The Islamic Development Bank

The paper should discuss the role and scope of the Bank in the light of the problems of the Muslim Ummah and the Bank's Charter. What problems the Bank is likely to face. The paper should try to provide some guidelines with the rationale behind them to enable the Bank to play an effective role in the Muslim world as a pioneer in the field of Islamic banking.

Until such time as there is an adequate development of short-term ribā-free investment instruments in the Muslim world, could the Bank be allowed to invest at least a part of its surplus funds in the traditional outlets for development banks? If the Bank invests in non-traditional outlets for short-term surplus funds of development banks, how would the safety and liquidity of the Bank's resources be ensured? Is it necessary for a pioneer Islamic bank to fulfil the dictates of the Shari'ah fully with immediate effect or can some margin be allowed for the development of an Islamically-oriented money market in the Muslim world? In this respect it should be borne in mind that the Bank has to have some source of income of its own if it is to avoid depending on subsidies from member countries for financing its normal day-to-day expenses.

Subject 17
Islam and the International Monetary Reform

The paper should examine the various issues and problems in the field of international monetary reform and attempt to provide guidelines for their solution in the light of Islamic teachings. Would the implementation of these guidelines lead to the evolution of a stable international monetary system? The paper should also critically evaluate, from the point of view of the Shari'ah, the major proposals made so far for international monetary reform? Could an alternative model be provided base on Islamic teachings? How would this model help implement the Islamic ideals of socio-economic justice and general human welfare in an international perspective?

Subject 18
Monetary Integration and the Islamic Dinar

The paper should critically evaluate the need and prospects for, as well as the feasibility of, monetary integration in Muslim countries.

The paper should also critically examine the concept of an Islamic unit of account and a common currency for Muslim countries. What problems are likely to be faced? Would it be possible to solve these problems? Are there any pre-requisites or conditions for the creation of such a unit of account or common currency? Do the Muslim countries fulfil these conditions? What measures may be taken to create the prerequisites?

The paper should also propose a plan for the use of petrodollars to reduce the dependence of the Muslim world on the West. What is the assurance that the petro-funds thus made available would on the one hand, help attain the cherished goals of the Muslim world, and on the other, provide a safe ad profitable outlet to the oil countries for their surplus funds?

Part IV
Theoretical Framework

Subject 19
Theoretical Framework for the Monetary and Fiscal Economics of Islam

The paper should lay down the fundamentals of a balanced monetary and fiscal theory well integrated into the overall framework of Islamic economics and in harmony with the goals and values of the Shari'ah. This cannot be done successfully unless the paper identifies the assumptions and hypotheses underlying human nature and behaviour in the capitalist and socialist economic thought and clearly distinguish and evaluate their counterpart in the Islamic ideology. In the light of the ethical base of Islam and the socio-economic objectives of the Islamic system, could the concepts and methods of capitalist and socialist welfare economics be valid in the Islamic frame of reference? If not, what would be the basic postulates of welfare economics in Islam and how would they affect monetary and fiscal economics in the islamic framework?

How would the differences indicated above modify the models or ideal types explaining human behaviour in Islamic economics? What kind of structural changes would this introduce in the monetary and fiscal economics of Islam? If the changes are fundamental can the monetary and fiscal economics of Islam be studied with capitalist or socialist tools, methods or ideal types? If behaviour models are to be changed would some or all of the definitional models also need to be changed accordingly?

In this paper, an attempt may also be made to construct models or ideal types to indicate the behaviour of certain important variables in the monetary and fiscal fields of an Islamic economy. Would these models or ideal types overcome the major limitations of their counterparts in the capitalist and socialist framework and would they explain human behaviour more realistically. In what ways would the policy implications of these be more conducive to human welfare in the Islamic framework?

Subject 20
Alternative Institutional Arrangements for an Islamic Economy

This paper will present some institutional arrangements for different sectors of an Islamic economy in the form of a sample analytical model. It will provide terms of reference for later theoretical and empirical discussions that will hopefully lead to an optimal institutional framework.

APPENDIX II

RECOMMENDATIONS OF THE SEMINAR

The Seminar gave particular attention to the distinguishing characteristics of an Islamic economy which might have implications for the working of monetary and fiscal policy within the framework of the Islamic economic system. It was agreed that in order to achieve the objectives of an Islamic economy, emphasis should be placed on eradication of poverty, reduction in inequalities of income and wealth and acceleration of growth. The participants were of the view that abolition of interest and introduction of *Zakāh* would contribute greatly to the achievement of these objectives. However, it was agreed that these two measures would need to be supplemented by other steps to bring about the desired change in Muslim countries. A general consensus emerged that the banking and financial systems existing at present in Muslim countries needed several changes to achieve the objectives of an Islamic economy. It was resolved that further thought needs to be given to this subject.

There was an extensive discussion on as to how the allocation of resources would take place in an Islamic aconomy when interest is abolished. It was the view of most participants that profit-sharing could replace interest as an allocative device and that this was not only feasible but would, in fact, improve the allocation of resources. It was felt that alternative mechanisms of resource alocation also need to be explored, keeping in view the socio-political structure of the different Muslim countries.

It was recommended that a follow up Seminar of economists of the Muslim world should be held as early as possible to consider the foregoing issues.

The Seminar recommended that the theme of the next Seminar on Islamic economics should be "Development and Distribution" and that it should be held not later than 1400 H (1980 A.D.).

The Seminar appreciated that interest-free financial institutions have started functioning in the Muslim world and recommended that their methods of working should be studied by experts sponsored by the Centre so that a better knowledge of the operational aspects of Islamic banking can be promoted.

The Seminar recommended that the papers presented should be published as early as possible, after changes have been made in the light of the discussion at the Seminar.

The participants in the Seminar greatly appreciated the hospitality extended to them during their stay in Mecca and the excellent arrangements made for the meeting.

APPENDIX III

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APPENDIX IV

GLOSSARY*

Adl	Justice
Akl bil batil	Appropriation by wrongful means
Amanah	Trust
Awsaq	Plural of Wasaq (an Islamic measure of capacity) It equals 211 litres, and holds 123 kilograms of barley.
Baitul mal	Public treasury in the Islamic state
Bai al sarf	Money changing
Bukhl	Miserliness
Fai	Enemy property acquired by an Islamic state without actual fighting; All revenue of an Islamic state other than Zakat and Ushr
Dirham	A silver coin weighing 3 grams
Fard Kifayah	Socially obligatory; a duty to be performed by one or many until a social need is satisfied.
Fi Sabil Allah	In the cause of Allah; one of the eight heads of expenditure of Zakāh covering all activities for the defence of Islam and its promotion.
Fuqaha	Muslim jurists
Fuqara	The poor
Ghani	The well-to-do
Gharar	Dubious circumstances
Gharimin	Debtors
Hadith	Traditions or saying of the Prophet
Halal	Legitimate
Haram	Forbidden
Hiba	Gift
Hidayah	A compendium of Islamic law in the Hanafi School, literally: guidance
Hirs	Greed
Hisbah	Public supervision, especially in the market, of weights and measures and the quality of goods and services etc.
Ibn al sabil	The wayfarer
Ijtihad	Use of reason in elaboration and interpretation of Shariah; original juristic opinion.
Ihtikar	Hoarding, especially of food grains
Iktinaz	Hoarding of cash

* Prepared by Dr. M. N. Siddiqui.

Iqtisad	Moderation
Iqta	Administrative granting of land
Israf	Extravagence
Ithar	Sacrifice
Izalatul Zarar	Elimination of injury
Jihad fi Sabil Allah	Striving in the cause of Allah; especially defending Darul Islam from aggression.
Jizya	Tax levied on non Muslims in an Islamic state in lieu of exemption from military service.
Khalifah	Vicegerent; duly elected head of an Islamic state
Kharaj	Lant Tax
Khums	One fifth, payable to state out of treasure trove and certain other categories of wealth.
Masakin	The needy
Mawat	Unowned uncultivated land
Muallafatul Quloob	Those whose hearts have to be reconciled to Islam
Mudarabah	Profit-Sharing - A form of partnership in which one party supplies the capital and other party manages the business.
Mudarib	The working partner in mudarabah
Muqarid	Same as Mudarib
Qanaat	Being contented with what one has
Qard Hasan	Applied to loan without interest, literally: good loan
Qirad	Same as mudarabah.
Qiyas	Analogy
Rahn	Mortgage
Ribā al Fadl	Element of interest in barter e.g., when similar foodgrains are exchanged in unequal quantities.
Ribā al Nasiah	Interest on account of deferred delivery or payment.
Rizq	Provision
Sabr	Patience
Sadaqah	Charity; Zakāh
Sahib al Mal	The owner of capital (in Mudarabah or Qirād)
Salat	Prayers, especially the obligatory prayers five time a day.
Shari'ah	Islamic Law
Shirkah	Partnership
Shuh	Selfishness
Sultan	Authority; the ruler
Sunnah	The way of the Prophet, peace be on him, comprising what he did or said or approved of.
Ta'awun	Cooperation
Imam	The ruler
Infaq	Spending, especially in the way of Allah

Taqwa	Piety, mindfulness of Allah
Tawakkul	Reliance on Allah
Tawfiq	Grace
Ulul Amr	Rulers; Leaders of the community
Ushr	(One kind of Zakāh) One tenth, payable to state out of the produce of rain-irrigated land.
Waqf	Endowment
Wasiah	Will; Testament
Zakāh	Poor due; tax paid be well-to-do Muslims in cash or kind.
Zulm	Oppression; transgression.
Tabdhir	Undesirable expenditure
Tana'um	Indulgence in luxuries

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* Prepared by Jaleel Asghar