FISCAL POLICY AND RESOURCE ALLOCATION IN ISLAM

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THE SEMINAR AND ITS MESSAGE

Foreword

Perhaps it would not be an exaggeration to suggest that the field of monetary and fiscal economics of Islam constitutes an area in which most original and pioneering work has been done by Muslim economists and bankers during the last decade. At the intellectual level a number of conferences, seminars and colloquia were organized, amongst which the two seminars on the “Monetary and Fiscal Economics of Islam” held at Makkah (Oct. 1978) and Islamabad (Jan. 1981) were outstanding. The Makkah Seminar addressed itself to some of the major theoretical problems, while the Islamabad Seminar, along with further strengthening the theoretical research, undertook a thorough examination of some of the experiments in Islamic banking in different parts of the world in general, and the Report of the Council of Islamic Ideology on the Elimination of Interest from the Economy in particular.

The Institute of Policy Studies, in cooperation with the International Centre for Research in Islamic Economics, King Abdulaziz University, Jeddah, has already published a research report on the major contributions of the Islamabad Seminar. The proceedings of the Seminar have now been produced in two volumes. The first volume, *Money and Banking in Islam,* appeared in April 1983, which contained four studies on different aspects of the monetary economics of Islam, both theoretical as well as practical. Now we are presenting the second volume dealing with some of the key questions of fiscal policy and resource allocation. Both these volumes are being offered in cooperation with the International Centre for Research in Islamic Economics, King Abdulaziz University, Jeddah and the Islamic Foundation, Leicester. These proceedings have been edited by Dr. Ziauddin Ahmed, Dr. Munawar Iqbal and Dr. M. Fahim Khan. Dr. Ziauddin Ahmed has kindly acted as the chief editor for the two volumes. The editors have contributed a highly perceptive introduction reviewing the major themes and contributions of the Seminar and identifying challenging areas for further reflection and research. In view of the usefulness of this introduction and its highly integrative character it has been included in both the volumes of these proceedings. Dr. Munawar Iqbal and Dr. M. Fahim Khan have worked hard to prepare these volumes for publication and I feel personally indebted to all three of them for their painstaking efforts. For a number of reasons work on the project started very late and the editors did not have more than a few months to complete this monumental task. It is nothing short of a miracle that the editing and publication of these volumes has virtually been done in less than six months. May Allah bless these efforts and give the best of the rewards to the editors and the team of young workers who have seen it through the press. Our special thanks are due to brothers Khalid Rahman, Rao Muhammad Akhtar, Muhammad Ramzan Akhtar and Tariqullah for their labour of love.

I would fail in my duty if I do not record our gratitude to Dr. Mohammad Omar Zubair, Dr. Omar Hafiz, Professor Syed Nawab Haider Naqvi, Dr. Anas Zarqa, and Dr. M. Nejatullah Siddiqi for their cooperation, support and guidance and to the Islamic Foundation, Leicester for its moral and material support to the Islamic Economics Project of the Institute of Policy Studies. It is hoped that these two volumes will be of immense assistance to all those scholars, researchers, students and economic practitioners who want to have a better understanding of the monetary and fiscal economics of Islam. These volumes should be treated as companion volumes to the two books already produced by the International Centre for Research in Islamic Economics viz. *Studies in Islamic Economics,* (Leicester: The Islamic Foundation, 1980), and *Monetary and Fiscal Economics of Islam*, (ed. by Mohamed Ariff, Jeddah: International Centre for Research in Islamic Economics, 1982).

KHURSHID AHMAD

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Introduction

These two volumes* comprise of ten papers presented at the International Seminar on Monetary and Fiscal Economics of Islam held in Islamabad, Pakistan in January 1981 along with the written comments of the main discussants on each of these papers and a gist of the general discussion following the presentation of the papers. The authors of the papers were provided an opportunity to revise their papers in the light of the comments made by the main discussants and others in the Seminar, and the present volumes contain the revised versions of these papers. The agenda of the Seminar also included a discussion on the Report on the Elimination of Interest from the Economy submitted by the Council of Islamic Ideology to the Government of Pakistan in June 1980. This Report is reproduced in this volume with the kind permission of the Council of Islamic Ideology.

The Seminar presented an excellent opportunity for an exchange of views on various aspects of monetary and fiscal economics of Islam. A unique feature of the Seminar was that, for the first time, it brought together a galaxy of prominent academic economists, policy makers and practising bankers of the Muslim World to dilate exclusively on this subject. The ground work for this Seminar was already laid by the contributions made by the Muslim economists at the Seminar on Monetary and Fiscal Economics of Islam held in Makkah in 1978. On that very occasion it was decided that a follow-up seminar should be held as early as possible to explore further the themes discussed there as also to appraise the progress of interest-free financial institutions that had started functioning in the Muslim World and to study the operational aspects of Islamic banking and finance. The Islamabad Seminar provided a valuable opportunity for the cross fertilisation of ideas among theoreticians, policy makers and practical bankers which resulted in greater understanding at the complex issues involved in remodelling the monetary al1d fiscal systems of Muslim countries in line with Islamic injunctions. The results achieved by these two Seminars have been truly remarkable and have contributed immensely towards enlarging the frontiers of knowledge in this specialised branch of Islamic economics.

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* The present volume *Fiscal Policy and Resource Allocation in Islam*, and its companion volume *Money and Banking in Islam*, published in April 1983 by the International Centre for Research in Islamic Economics, Jeddah and the Institute of Policy Studies, Islamabad.

This introduction offers some general reflections on the work of the Seminar. It is not intended to be a summary of the discussions as a complete record of the proceedings is available in this volume after each paper. We have merely attempted to highlight the main points of the discussion and while doing so we have tried to synthesise the ideas expressed, wherever possible, and to indicate the divergence in views, wherever it appeared to be pronounced. Every care has been taken to faithfully reflect the views expressed by various participants both in the record of the proceedings and in this introduction but if there have been some lapses on our part, we wish to assure that these are entirely unintentional.

The papers presented at the Seminar dealt with almost all the major issues in the field of monetary and fiscal economics of Islam. For purposes of this introduction, it has been found convenient to cover the whole gamut of the discussions under certain broad heads. The first section deals with the distinguishing characteristics of an Islamic economy which have a bearing on monetary and fiscal policies and to which frequent references were made in the Seminar. The second section deals with the objectives and instruments of monetary policy in an Islamic economy. The third section reviews developments in the theory and practice of interest-free banking. The fourth section deals with issues related to fiscal policy. The fifth section deals with matters related to project 'evaluation in an interest-free framework and the likely impact of the abolition of interest on growth, stability and allocation of resources. The final section identifies certain areas for further research and study.

I

DISTINGUISHING CHARACTERISTICS OF AN ISLAMIC ECONOMY

The deliberations of the Seminar resulted in a reaffirmation of the view, already well crystallised in the literature on Islamic economics, that absence of interest-based transactions and presence of a well functioning *Zakah* system are to be regarded as the two most distinguishing features of an Islamic economy. An Islamic economy has to conform to the dictates of Islamic *Shari'ah.* In view of the clear prohibition of interest in Islam, the financial system of an Islamic economy has to be organised on a basis which steers clear of interest. The Seminar provided an excellent opportunity for discussing ways and means of re-modelling the monetary and banking systems of Muslim countries in accordance with the tenets of Islam. The main points of the discussion are reviewed briefly in a separat~ section of this introduction. As for the *Zakah* system, participants in the Seminar regarded it as a basic ingredient of the Islamic economic order and one of the most important components of the Islamic system of social security.

It was also emphasised at the Seminar that social justice is the hallmark of the Islamic economic system, and abolition of interest and establishment of the *Zakah* system are to be seen as two major institutional devices to establish a just social order. Islam seeks to promote the virtues of *‘Adl* and *Ihsan* among its followers and any society which is permeated by these qualities would need a minimum of state intervention to establish a just social and economic order. It is the responsibility of the state, however, to ensure social justice and, in the context of prevalent conditions, it is empowered to take all necessary actions within the framework of Islamic *Shari’ah* to achieve this objective.

Papers presented at the Seminar pointed to what the authors of these papers regarded as certain specific distinguishing characteristics of an Islamic economy having a special bearing on monetary and fiscal policies. Faridi concentrates on the expenditure pattern of Muslims guided by Islamic precepts in developing his idea of a "third sector" which he regards as a distinguishing feature of an Islamic economy. The argument runs somewhat along the following lines. Islam lays great stress on spending in the way of Allah to attain the welfare of *AI Akhirah* (hereafter). There should be a great urge, therefore, on the part of Muslims to spend a good part of their income and wealth for bettering the lot of the poorer sections of the community through cash disbursements and improvement of community services. Payment of *Zakah* is of course obligatory on Muslims but they are exhorted to spend as much as possible, beyond this compulsory levy, on the general welfare of the community for their own spiritual uplift and to attain beneficient reward in the hereafter. Faridi states that empirical and historical evidence suggests substantial spending of this nature in Muslim countries. He attaches so much importance to such welfare oriented resource transfers in a Muslim community that he envisions an Islamic economy to be composed of three sectors, namely, public sector, private sector and a third “voluntary sector”. The private sector is characterised by the forces of demand and supply and is actuated by the profit motive. In the public sector, profit motive is substituted by considerations of social welfare. The “third” or “voluntary sector” encompasses all such individual and social activities as are not motivated by material considerations but are undertaken for securing reward in the hereafter.

The concept of the “third sector” introduced by Faridi has a bearing on resource allocation in an Islamic economy. It reduces the role of the market forces in the allocation of resources, and since the activities of this sector are intended to directly raise the general economic and social welfare of the community, it leads to a more socially optimum allocation of resources. The composition of the national output is more need-oriented and less luxury-dominated. The government budget is relieved of a lot of social welfare expenditures which means that resort to taxation can be kept low in an Islamic economy.

The participants in the Seminar recognised the theoretical validity of the “third sector” in Faridi’s scheme but questions were raised as to its quantitative significance in the context of the present state of Muslim societies. In fact, Faridi himself acknowledges in his paper that the volume of resources flowing through the “third sector” will be a function of the state of *taqwa* of an Islamic society. The general feeling is that fiscal policy will have to playa major role in present day Muslim societies in alleviating mass poverty and modifying the pattern of income distribution in line with the egalitarian objectives of an Islamic polity.

There was interesting debate on the question whether, as compared to other economies, an Islamic economy would be characterised by a higher average and marginal propensity to consume. Metwally is of the view that because of the "tax of *Zakah"*, both the average and marginal propensities to consume would be higher in an Islamic economy. The proceeds of *Zakah*, he states, go mainly and directly to the poor and the needy and hence act immediately to raise the propensity to consume. It was pointed out by some participants that Metwally's proposition could not be treated as axiomatic because the consumption pattern of a society is determined by a host of factors. There is no doubt that the institution of *Zakah* serves to transfer purchasing power to poorer sections of society and reduces inequalities of income and wealth but it does not necessarily follow from this that the overall propensity to consume would be higher in an Islamic economy. Abu Ali refers to the work of Duesenberry who shows, with the use of Veblen's demonstration effect, that consumption as a proportion of a given level of income could be higher in a society characterised by larger inequalities of income and wealth. He believes that in an Islamic economy consumption would be less compared to other economies with the same level of income. Other participants also referred to Islam's emphasis on simple living and avoidance of ostentatious consumption which should serve to keep the overall propensity to consume lower in an Islamic economy. It appears that this is a field which admits of considerable pragmatism for the actual situation can differ from country to country, depending on the stage of a country's development, its historical background and the attachment of its people to the moral values of Islam.

II

OBJECTIVES AND INSTRUMENTS OF MONETARY POLICY IN AN ISLAMIC ECONOMY

The papers presented at the Seminar identified three major objectives of monetary policy in an Islamic economy, namely, stability in the value of money, economic well-being with full employment and optimum rate of economic growth, and promotion of distributive justice. Al-Jarhi emphasises that it is almost mandatory on the central bank of an Islamic economy to preserve the value of money and suggest, in this context, that the central bank should allow expansion of money supply only to the extent it is justified by a possible contribution to growth in real balances. Chapra is also of the view that stability in the value of money should be accorded high priority in the Islamic frame of reference because of the unequivocal stress of Islam on honesty and fairness in all human dealings and because of the negative impact of inflation on socio-economic justice and general welfare.

While inflation is incompatible with the goals of an Islamic economy, prolonged recession and unemployment are also unacceptable. Monetary policy has therefore to aim at a high rate of economic growth with full employment. Chapra, however, clarifies that maximisation of economic growth *per se* is not the objective of monetary policy in an Islamic economy. He emphasises that the requirement to attain material prosperity within the framework of Islamic values necessitates that it should not be attained through the production of inessential and morally questionable goods and services, should not lead to an excessive and overly rapid use of God-given resources at the expense of future generations and should not harm present or future generations by degenerating the moral or physical environment.

Most participants were of the view that monetary policy should be used actively to promote the goal of distributive justice in an Islamic economy. Ariff, however, was of the view that too much concern with distributive justice in formulating and implementing monetary policy may adversely affect its overall efficiency and effectiveness in attaining other goals of monetary policy. Ariff too, like other participants, subscribed to the view that reduction in income inequalities should be an important policy objective of an Islamic state but felt that instead of over-burdening monetary policy by assigning to it too many objectives, the goal of distributive justice should be achieved by activating other policy tools. In making this suggestion Ariff referred to the well known Meade-Tinbergen principle that the number of policy instruments should be equal the number of policy objectives; otherwise, there may be conflict of policy goals. The general feeling in the Seminar, however, was that it is difficult to follow the Meade-Tinbergen principle too faithfully in actual practice, and that an attempt has to be made to so chisel the monetary policy that, along with other policy tools, it makes an important contribution to the attainment of the goal of distributive justice.

The Seminar gave careful attention to monetary policy instruments that could be used in an Islamic economy to achieve the stated policy objectives. The general feeling was that abolition of interest, and the non-availability of the Bank Rate weapon to the central bank, would not constitute any serious handicap to monetary management in an Islamic economy. It was pointed out that control over the volume of money supply is a crucial factor in monetary management. Adequate control could be exercised on money supply in an Islamic economy by regulating high powered money, defined as currency in circulation and reserve assets of banks. Besides, use could be made of variations in cash reserve ratio, liquidity ratio and credit ceilings to bring about desired changes in money supply. Apart from controlling money supply, monetary policy is also capable of being used to influence the allocation of resources. In the interest-based system, variations in interest rates and policy-induced differentials in interest rates perform an important allocative function. This role could be performed by changes in profit-sharing ratios in an Islamic system. The actual manner in which the various monetary policy instruments may be used in an Islamic economy is discussed in the next section.

It was emphasised that the allocation of bank resources in an Islamic economy should be value-oriented to help realise the goal of general social welfare. Both Al-Jarhi and Chapra express dissatisfaction with the manner in which bank resources are utilised in the capitalistic system. Al-Jarhi points out that in the interest-based banking systems operating in capitalistic countries, solvency of the borrowers is a paramount consideration while the productivity of the investment undertaken is considered secondary. Chapra expounds the view that the monetary and banking arrangements in capitalistic countries tend to generate income inequalities because "society's resources mobilised by banks are utilised by them for enriching a few families." He, therefore, pleads for reduction in the financial power of banks. This, he feels, could not be achieved by the apparently simple expedient of nationalising the banks because "the place of businessmen and industrialists could easily be taken over by bureaucrats". He feels that the solution lies in: (a) having a larger number of banks and ensuring that none of them expands beyond a certain limit determined by the central bank of the country; (b) requiring the banks to provide financing to a larger number of entrepreneurs and limiting the provision of finance to anyone business or family to a small proportion of banks resources; and (c) disallowing the inter-locking of directorates of banks and big business firms. Besides, special measures as deemed necessary may. be taken by the central bank to bring about a more equitable distribution of bank finance. These could include inducement mechanisms, such as central bank introducing loan guarantee schemes to reduce the risk of financing in certain sectors, and compulsive measures such as setting of mandatory targets to ensure sufficient supply of bank resources for specified sectors or purposes.

Al-Jarhi goes a step further. He favours imposition of a 100 per cent reserve requirement on commercial banks. He justifies this on three grounds. Firstly, fractional reserves cause the monetary system to suffer from an "inherent instability" because any switch from "high powered money" to "deposit money" and vice versa changes the supply of money. With 100 per cent reserves such a switch will change only the composition of money, leaving its total supply constant. Secondly, changes in the money supply arising from deposit creation or resulting from substituting deposits and cash make it more costly to maintain the existing stock of real balances or to add to it. Thirdly, money creation is a social prerogative and hence the benefits of the process of money creation should accrue to the whole society which can best be achieved through 100 per cent reserve system.

Al-Jarhi outlines a model with 100 per cent reserve system in which the liquidity and financial requirements of the private business sector will be met by the central bank opening deposit and investment accounts in commercial banks and other financial institutions which in turn will invest these deposits in the real sector and share the profit with the central bank. Variations in the central bank's deposit accounts with the commercial banks will have the effect of bringing about the desired changes in money supply.

While there was general agreement with regard to the objectives of monetary policy in an Islamic economy as outlined by Chapra and Al-Jarhi, doubts were expressed by some participants whether replacement of the present monetary institutional framework by an entirely different model was absolutely necessary. Ziauddin Ahmed was of the view that problems of instability and inequity could be solved within the framework of the fractional reserve system. If there are suitable checks and balances, the process of money creation need not be unstable. Further, even in the fractional reserve system measures can be adopted to ensure that the allocation of derivative deposits is such that the benefits are equitably distributed. It seems that this is an area in which there are genuine differences of opinion among Muslim economists and further exchange of views would be fruitful.

III

THEORY AND PRACTICE OF INTEREST-FREE BANKING

Prohibition of interest in Islam necessitates that in countries seeking to introduce Islamic economic system, banking and financial practices be organised on a basis other than interest. Research work on the subject has proceeded to suggest that the principle of profit-sharing offers the best alternative to interest in an Islamic system. The participants in the Seminar were familiar with the work of Muslim economists in this field. Apart from this background they had the opportunity of going through the Report of the Council of Islamic Ideology on the Elimination of Interest (hereinafter referred to as CII Report) which was submitted to the Government of Pakistan in June 1980. Among the papers presented at the Seminar, those by Al-Jarhi and Chapra contained material on the subject. Besides, the paper presented by Fahim Khan reviewed the working of Islamic banks which had already started functioning in some countries.

There was overwhelming support in the Seminar for the view expressed in the CII Report that the ideal alternatives to interest in an Islamic economic system are profit/loss-sharing and *qard-hasanah.* The view is rooted in the Islamic philosophy of justice between man and man. To charge interest from someone who is constrained to borrow to meet his essential consumption requirements is considered an exploitative practice in Islam. Charging of interest on loans taken for productive purposes is also prohibited because it is not an equitable form of transaction. When money is invested in a productive undertaking the quantum of profits that may accrue is not known before hand and there is also possibility of a loss. Charging of a fixed and pre-determined rate of interest on loans for productive purposes cannot therefore be morally justified. Justice demands that provider of money capital should share the risk with the entrepreneur if he wishes to earn profit. Thus, there is a basic difference between Islam and capitalism in regard to the treatment of money capital as a factor of production. Whereas in the capitalistic system, money capital is treated at par with labour and land, each being entitled to a return irrespective of profit or loss, this is not so in Islam which treats money capital at par with enterprise.

The CII Report contains a detailed blueprint for reorganisation of banking practices and procedures on the basis of the principles of profit/loss-sharing in consonance with the Islamic legal concepts of *sharakah* and *mudarabah.* Under this system, the amount of return on the funds invested is neither fixed nor pre-determined. The quantum of profits depends on the operational results of the economic undertaking. When capital is provided entirely by one party and enterprise and/or labour entirely by another party the profit is to be divided in proportions agreed at the time of the contract while loss is to be borne by the provider of capital, unless it is due to the negligence of the entrepreneur/worker. If there are more than one providers of capital, profit is to be distributed among them in agreed proportions, while loss is to be shared by them strictly in proportion to their capital contributions.

The CII Report does not suggest any change in the institutional structure of the monetary and banking system. The central bank, the commercial banks and the specialised financial institutions would continue to perform the same functions as previously but their operating procedures would be modified to replace interest-based transactions by a system of variable return. Commercial banks would provide funds to business enterprises and would be entitled to receive a part of the profits earned by the enterprise in accordance with the agreed proportions stipulated in the *mudarabah* contract. For the purpose of profit distribution, the respective capital contributions of parties, utilised for varying periods, would be brought to a common denominator by multiplying the amounts with the number of days during which each particular item such as equity capital of the firm, its current cash surpluses, suppliers' credit as well as the finance provided by the bank were actually deployed in the business. In other words, the calculation of the respective capital contributions of the parties would be made on a daily product basis. As for deposits, the commitment on the part of the bank to pay a fixed return on savings and time deposits would be re placed by an agreement with the depositors to pay to them a part of the profits earned by the bank. Distributable profits would be computed by setting off the administrative expenses, payments due to the central bank and other banks in respect of finance provided by them, provision for taxes and appropriation for reserves from the total earnings. The amount of profit so arrived at would be divided between the shareholders of the banks and the holders of savings and time de posits, the basis of the calculation for apportionment of profits being the daily products of the amount of capital and reserves and the total amount of savings and time deposits. Commercial banks would also accept demand deposits but they would not share in the profit of the bank.

The methodology suggested in the CII Report for the elimination of interest from the transactions of the non-bank financial intermediaries and specialised financial institutions is modelled more or less on the same lines as in the case of commercial banks. A somewhat different procedure has been suggested for providing housing finance which is based on the sharing of the actual or imputed rent.

No change is contemplated in the functions and responsibilities of the central bank. However, its operating procedures and the contents and substance of some of its monetary policy instruments would undergo significant changes consequent to elimination of interest. These are discussed in detail in CII Report. The Bank Rate weapon is proposed to be replaced by an alternative instrument of control to influence the total availability of bank finance as well as the allocation of bank finance among competing uses. This consists of empowering the central bank to vary the profit-sharing ratio on the basis of which it would provide financial assistance to banks. It can also be empowered to prescribe profit-sharing ratios for banks in respect of finance provided by them to business firms and, as observed in the CII Report as well as by Nejatullah Siddiqi, variations in such profit-sharing ratios can powerfully influence investment decisions in the desired direction. The central bank's power to require the commercial banks to maintain minimum cash reserves with it against their demand and time liabilities and to vary this ratio from time to time will remain unaffected by the elimination of interest. It will be possible to retain liquidity ratio requirement as an instrument of monetary policy with the only change that the interest-bearing securities held in the portfolio of the banks will have to be replaced by such financial instruments as are permissible under the *Shari'ah.* The central bank's role as "lender of the last resort" as well as the provision of refinance by it to commercial banks and other financial institutions would not be affected by the abolition of interest. However, under the new system such assistance would in general be provided under profit-sharing arrangements or other alternative methods permissible under the *Shari'ah.*

The CII Report recognizes that there are certain spheres where it will not be possible to use the system of profit/loss-sharing so that use will have to be made of alternative devices to replace interest. The most prominent case of this type relates to government borrowings from the banking system as well as the non-banking sector. The CII Report suggests that the banking system should provide loans to government on interest-free basis within the safe limits of monetary and credit expansion. Some participants in the Seminar pointed to the possibility of indexation of government loans and small savings schemes and felt that by preserving the real value of *qard-hasanah,* indexation fulfilled the Islamic imperative of socio-economic justice and should therefore be permissible. Others pointed out that under the *Shari'ah* currency transactions are not treated differently from commodity transactions in as far as lending and borrowing are concerned. The basic principle in this respect, they pointed out, is that the same quantity should be returned as was borrowed even though the price of the commodity may have changed in the meantime. The possibility of the use of indexation in the dealings of the banks with private clients, particularly in respect of mobilisation of deposits, was also discussed in the Seminar but, in view of the lack of unanimity of views on this issue, it was considered a suitable subject for further research and study.

Another area where interest cannot be replaced by profit-sharing relates to government borrowing from external sources. The Council of Islamic Ideology recognised the difficulties in the elimination of interest from transactions relating to international loans and aid and has therefore acquiesced in government borrowing from abroad on the basis of interest for the time being. The CII Report, however, expresses the hope that if Muslim countries work jointly, reduce reliance on outside assistance and promote movement of capital among themselves on the basis of profit/loss-sharing or some other non-interest basis, it is not unlikely that, with the passage of time, non-Muslim aid-giving countries and international financial institutions may also begin to deal with Muslim countries on a basis compatible with *Shari'ah*.

The CII Report gives due recognition to difficulties that may arise in changing the whole system to profit/loss-sharing in one step. It has therefore given qualified approval to certain other methods being used in conjunction with profit/loss-sharing like leasing, hire-purchase, *Bai Muajjal*, investment auctioning and financing on the basis of normal rate of return*. However, cautioning against the danger that such methods could open a back-door for interest, it emphasises that their use should be kept to the minimum extent that may be unavoidably necessary under given conditions and that their use as general techniques of financing must never be allowed. The participants in the Seminar were even more emphatic in sounding such a note of caution. They were strongly of the view that, keeping in view the rationale for the condemnation and prohibition of interest in Islam, no mechanism other than profit/loss-sharing really conformed to the spirit of Islam. It was recognised, however, that the concept of profit-sharing cannot be applied in the case of personal loans taken for meeting consumption requirements.

It was felt that in a truly Islamic society, the need for such loans should be minimal as Islam emphasises austerity and exhorts people to live within their means. Moreover, the *Zakah* system is expected to assist persons who find it difficult to meet their essential consumption requirements from their own earnings. Still some arrangements would need to be made to meet loan requirements of an emergent nature arising from temporary causes. Some participants in the Seminar were of the view that such requirements should be met by stipulating that each bank should devote a small percentage of its resources for interest-free lending. Others were of the view that banks should not be burdened with this responsibility and separate consumer loan institutions should be organised for the purpose with resources contributed by the Government or derived from *Zakah* proceeds.

The Seminar also devoted attention to the evolution of new financial instruments to suit an interest-free system. In this context, the recommendation made in the ell Report to replace debentures with a new type of corporate security

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* The concepts and operating procedures of these methods have been explained in Section I of the Report of the Council of Islamic Ideology.

to be called the Participation Term Certificate based on the principle of profit-sharing was noted with interest. Al-Jarhi in his paper has mooted the idea of banks offering various types of certificates to mobilise investible resources which he has named as Specific Investment Certificates, General Investment Certificates, Profit-sharing Certificates and Leasing Certificates. Al-Jarhi also suggests the issuance of Central Deposit Certificates by the central bank of the country to attract the savings of the people on a profit-sharing basis. The idea is that savings thus mobilised should be placed by the central bank in the investment accounts of different commercial banks and profits realised from such investment should be distributed among the holders of Central Deposit Certificates. This seems to be a promising idea because, as Al-Jarhi states, such Certificates would give a more stable yield on account of diversified investment and would therefore make a useful addition to the variety of financial instruments that would be available for investment in an interest-free economy.

The Islamabad Seminar did not confine itself only to theoretical aspects of interest-free banking. It had an occasion to review the actual field experience in the conduct of interest-free banking operations in the Muslim World. The paper presented by Fahim Khan gives a good deal of information about the actual operating procedures of a number of Islamic banks some of which were personally visited by him. The participants in the Seminar also had the opportunity to hear the executives of some of the Islamic banks who expounded the methods of their working.

It was apparent from the paper presented by Fahim Khan that interest-free banking, which still recently existed only in the realm of theory, has now a lot of practical experience to offer. At the time the paper was written, interest-free banks were already functioning in Sudan, United Arab Emirates, Kuwait, Bahrain, Jordan and Egypt. Two other interest-free institutions were located in European countries. Besides, the Islamic Development Bank, which is a multilateral financing institution of the Muslim World, had been in the field for some years. In Pakistan, interest had been eliminated from the operations of a number of specialised financial institutions and more than 6500 branches of Pakistani banks had just embarked on interest-free banking by opening separate counters where people could deposit their savings which banks undertook to invest in profitable but interest-free avenues.

The review of the working of the interest-free banks in Fahim Khan's paper shows that these banks have successfully devised banking practices which are in conformity with *Shari'ah.* They accept both current deposits and deposits committed for investment which are called Investment Accounts. The Investment Accounts are usually of two types, namely, accounts with authorisation and accounts without authorisation. In the accounts with authorisation, the account holder authorises the banks to invest the money in any project. In the other type, the account holder may choose any particular project for investment of his deposited money. On the assets side, these banks were found to be operating on the basis of *musharikah* and *mudarabah* which are essentially profit-sharing arrangements. Besides, business is conducted on the basis of *murabaha* under which the bank buys a specified item for the client who agrees to pay the bank later, in lump sum or instalments, a price including an agreed percentage of profit.

The performance of the banks in respect of profits earned appeared to have been quite encouraging. The profit rate on capital in the case of Islamic banks included in Fahim Khan's study is reported to have been in the range of 9 to 20 per cent. This was not much different from the profitability of interest-based banks in the same areas. Persons holding investment accounts in these interest-free banks are reported to have received a return ranging from 8 to 15 per cent which is again comparable to rates of return available in interest-based banks.

It appears that the banks included in Fahim Khan’s study showed a preference for financing trade and investment in real estate. They generally seemed to have looked for projects with quick returns. This is not difficult to understand because most of these banks had been only recently established, and to face competition from well established interest-based banks they must have been anxious to show good profitability even in the initial years of their operation. Moreover, appraisal of long gestation investment projects requires technical expertise of a high order which it takes time to assemble. One ought to remember also that these banks are operating in a scenario which is dominated by interest-based banks which have close inter-bank relationship and can also get financial support from the central bank of the country in time of need. The interest-free banks, on the other hand, have no support of this type as they cannot borrow from interest-based institutions. Viewed in the context of the handicaps they face their performance appears to be commendable. The real value of their contribution lies in the fact that they have blazed the trail for others and prepared the ground for further advancement in this field.

IV

ROLE OF FISCAL POLICY

There was a wide-ranging discussion on the role of fiscal policy in an Islamic. economy which touched on almost all aspects of public finance. The starting point of the discussion was whether the objectives of fiscal policy in an Islamic economy were in any way different from those in other countries. The papers presented by Faridi, Salama, Kahf and Metwally strongly emphasise that fiscal policy in an Islamic state should have an ideological orientation. Specifically this means that fiscal policy in an Islamic economy has to be evolved in the ideological framework of Islam and cannot be value-neutral. It is the responsibility of an Islamic state to promote Islamic values and, since Islam gives equal attention to both material and spiritual welfare, the state policies including fiscal policy have to reflect this basic philosophy. This then is the distinguishing feature of fiscal policy in an Islamic economy.

An Islamic state has to defend both its geographical and ideological frontiers. It should have enough resources to maintain a strong defence capability. It has also to guard the faith of the people and to keep them Islamically motivated. Further, it has to ensure that basic economic needs of the entire population are adequately met. Like other states, an Islamic state has also the responsibility for maintaining law and order and for providing the necessary infrastructure to promote economic growth. There was no difference of opinion among the participants in the Seminar in regard to these basic functions of an Islamic state. There was a shade of difference, however, in regard to the responsibility of an Islamic state to raise the living standards of the poor beyond subsistence level by direct state action. Kahf is of the view that the responsibility of the state ends after ensuring the fulfillment of a "socially determined subsistence standard of living" for the poor which includes indispensable food, clothing and shelter. Most others feel that the Islamic state should also be active in reducing inequalities of income and wealth and in promoting an egalitarian economic and social order.

The view one holds about the responsibilities of an Islamic state has an important bearing on his views about the taxation policies that should be followed. Thus Kahf stands for a low level of taxation and quotes the views of early Islamic thinkers like Imam Malik, Ibn Hazm and Kattani that imposition of taxes over and above *Zakah* is justified only to meet defence needs, assurance of a subsistence living for the poor and the indispensable expenses that safeguard the collective interests of Muslims. Kahf is also against the use of taxation for pur poses of income redistribution. He is in favour of giving maximum scope to private effort and enterprise so that economic activity proceeds without being inhibited by high levels of taxation. Other participants took a more pragmatic view about the scope and justification for additional taxation in an Islamic economy. They felt that the state has a wide discretion in determining the limits of taxation. They favoured active use of tax policy for achieving the goals of an Islamic society which, they believed, include promotion of an egalitarian socio-economic order, acceleration of economic growth and maintenance of monetary stability. However, all were agreed that to keep taxation within reasonable limits, all wasteful expenditure should be avoided and administrative expenditures should be kept to the minimum.

A good deal of attention was focussed in the Seminar on the potentialities of *Zakah* as an instrument for eradicating poverty, as an income redistributive measure and as a stabilisation device. *Zakah*, it was recognised, was the most important component of the social se curity system of Islam. However, ability of *Zakah* alone to eradicate poverty depended on the number of people who needed *Zakah* assistance in a particular country. If the teachings of Islam are faithfully followed in a society, glaring income inequalities would not exist nor would there be many people subject to abject poverty. In such a situation proceeds from *Zakah* should suffice to eradicate poverty. However, if for historical reasons and neglect of Islamic teachings, the number of poor people in a country is very large, it is the duty of an Islamic state to supplement the resources obtained through *Zakah* by other means to meet the minimum basic needs of the poor.

The importance of *Zakah* as an essential income redistributive mechanism in an Islamic economy was emphasised by several participants. The payment of *Zakah* is obligatory on Muslims possessing *nisab* while those who do not possess *nisab* are eligible to receive assistance from *Zakah* funds. Faridi is of the view that *nisab* allows for a dynamic interpretation in terms of cost of living index and reasonably defined current standards of living. He brings in the concept of the "poverty line" in this context and suggests that government may designate a poverty line based on current living standards. Persons having income above the poverty line would be required to pay *Zakah* and those having income below the poverty line would be eligible to receive the transfer payment. This view of *nisab* differs from the traditional view according to which *nisab* is fixed not in terms of income but in terms of possession of a certain quantity of gold or silver or assets equivalent in value to that quantity of gold or silver. There was not enough discussion on this point in the Seminar and it would perhaps be useful to take it up again on some other occasion. Another point made in connection with the redistributive aspects of *Zakah* was that if glaring inequalities of income and wealth exist in a society, *Zakah* alone may not suffice to achieve the desired reduction in such inequalities, especially because the *Zakah* rates are fixed and cannot be changed. It follows from this that an Islamic state would have to use other fiscal policy instruments, including progressive taxation, for redistributive purposes.

The use of *Zakah* as a stabilisation device also figured in the discussions. Some participants pointed out that *Zakah* could be used as a counter-cyclical device as it is not obligatory on the state to disburse all the *Zakah* proceeds within a particular time period. Thus, some part of *Zakah* proceeds could be withheld in an inflationary situation and these funds could be released to increase purchasing power in a period of depressed economic activity. However the general feeling was that as *Zakah* rates are fixed and the purposes for which *Zakah* proceeds can be used are also prescribed in *Shari'ah*, there is not much scope for using *Zakah* as a stabilisation device. Moreover, the primary aim of the *Zakah* system is to help the poor and it would not be appropriate to withhold disbursements from the *Zakah* collections to serve as an anti-inflationary purpose in the face of persistence of poverty.

The theme recurred again and again in the Seminar that though *Zakah* is a basic pillar of Islam and serves a highly important purpose, it should not be expected to achieve all the objectives of an Islamic state. Faridi puts it explicitly when he says that "Islamic tax system should be so structured as to fill the 'objectives gap' indicated by or incidental to *Zakah*". He goes further and states that there is nothing wrong in using other instruments of fiscal policy even to modify the economic effects of *Zakah* if this is considered necessary from the viewpoint of the general welfare of the *Ummah.* On the other hand, if certain developments in the economy tend to frustrate the objectives of *Zakah,* other fiscal policy instruments should be used to arrest or control them.

Metwally assigns highest importance to fiscal policy in an Islamic economy to achieve the economic objectives of an Islamic state. He is of the view that major reliance will have to be placed on fiscal policy to achieve stabilisation and equilibrium in the money market in an Islamic economy because monetary policy without the availability of the interest rate weapon will not be able to achieve this objective. In this connection he puts forward the idea of "economic dues" on "both incomes and idle assets" whose rates may be varied from time to time for stabilisation purposes. An increase in the rate of dues on idle cash, he claims, can be used to bring about a reduction in the quantity of money demanded at a given level of income. By making the alternative to investment more costly, the enhancement of economic dues can stimulate private investment. Metwally's proposal is theoretically attractive but its practical implementation will not be easy. Moreover, the main problem with his idea of variable economic dues on idle cash is that it may in effect amount to varying the rate of *Zakoh* which is not permissible in *Shari'ah.* His fear about the inability of monetary policy to achieve an equilibrium in the money market in the absence of interest rate weapon also appears to be unfounded as models have been developed by Muslim economists which show that alternative mechanisms are available in an Islamic economy to bring about the necessary equilibrium in the money market.

Attention was also given in the Seminar to ways and means of meeting the budgetary deficits of the governments in Islamic countries. It was recognised that taxation has its own limitations as a means of raising resources, and government may need to borrow to meet inescapable needs. One way of meeting the situation is suggested by Chapra in his paper. This consists of making a provision for interest-free borrowing by the government from the commercial banks in some proportion to the interest-free demand deposits held by them. The other option consists of central bank making the needed resources available to the government on interest-free basis. Borrowing from the central bank has of course to be kept within reasonable limits to safeguard monetary stability but there appears to be nothing wrong in government borrowing from the central bank from the viewpoint of *Shari'ah.*

V

GROWTH, STABILITY AND RESOURCE ALLOCATION IN AN ISLAMIC ECONOMY

Apart from monetary and fiscal issues, the participants in the Islamabad Seminar had an occasion to discuss the macro-dynamics of growth, stability, equilibrium and resource allocation in an Islamic economy. While reviewing contributions in this field, one has to bear in mind that a full-fledged Islamic economy does not exist anywhere in the world at present. Many of the propositions advanced in these contributions are therefore in the nature of hypotheses rather than definitive conclusions derived from observed behaviour of an Islamic economy. This, however, does not detract from the value of these contributions. In fact, theoretical constructs of this nature are essential building blocks for the science of Islamic economics. Moreover, they help in envisioning the inner working of an Islamic economy consequent to its taking practical shape in any country.

The theme that an Islamic economy would be a dynamic, growth oriented economy recurs frequently in the literature on Islamic economics. As mentioned in the first section of this introductory note, an Islamic economy has two main distinguishing features. Firstly, it does not allow transactions based on interest. Secondly, it has a well-functioning *Zakah* system. Both these features can be expected to provide a powerful stimulus to growth. That the interaction between the incentive and disincentive effects arising from these two basic features of an Islamic economy serves to promote growth is demonstrated once again by Metwally in his paper. He first states the familiar proposition that by penalising idle resources, the *Zakah* system discourages hoarding and stimulates investment. He then proceeds to demonstrate formally that the demand for investment at a given expected rate of profit will always be higher in an Islamic economy compared to other economies. Since investment is one of the most important determinants of the rate of growth, it follows that an Islamic economy would have a pronounced growth orientation.

An apprehension is sometimes expressed that savings which are essential for capital formation and growth, would be discouraged in an Islamic economy because of the prohibition of interest. In fact, some writers go to the extent of suggesting that all savings will cease at a zero rate of interest. The argument employed is that people have a positive time preference, and unless the interest rate is positive, the positive time preference cannot be transformed into negative time preference which is necessary for savings to take place. Anas Zarqa questions the tendency to take positive time preference for granted. In his paper he conclusively demonstrates that positive time preference is neither a principle of rationality nor an empirically established predominant tendency among consumers. It is simply one of three patterns of inter-temporal choice (the other two being zero and negative time preference) each of which is rational and observable under its own conditions. Intuitively also one finds it difficult to believe that people will stop saving if the interest rate is zero because motivations for savings are many and varied and most of them would continue to operate to bring forth positive savings even if the return on savings is zero.

However, even if it is assumed that everyone has a positive time preference, it does not follow that a society cannot do without the institution of interest. What is needed to transform a positive time preference into a negative time preference is the existence of some return on saving. This can be either a fixed return or a variable return. As the CII Report points out, abolition of interest does not mean that the saver will not get any return on his savings. In a system based on Islamic principles, the saver will continue to get a return on his savings; the only difference would be that instead of being fixed in money terms the return would be variable.

It is necessary to probe into this matter further for it can well be argued that the fact of variability of return on saving, including the possibility of making a loss, may discourage saving. However, this argument also does not bear close scrutiny. We know that savers in the interest-based system too are faced with uncertainty of return because while the nominal rate of interest is fixed, the real rate of return on saving is uncertain on account of the unpredictivity of the actual extent of the change in the price level in a future time period. In fact, savers in an interest-based system get a negative return, which means they suffer a loss in real terms, whenever the rate of inflation exceeds the rate of interest. It is true that savers in an Islamic economy face a double uncertainty, that is, uncertainty about the nominal yield and the uncertainty about the inflation rate. However, it is by no means axiomatic that the saver in an Islamic economy will be worse off because of this double uncertainty because, under a profit-sharing system, increases in the nominal price level are likely to be associated with increases in the nominal return on investment and this could even reduce the variability of the real yield on saving.

Nejatullah Siddiqi has sought to demonstrate in his paper that change-over to interest-free system will not only foster growth but would also lead to greater equity. In the interest-based system, the entrepreneur has to bear all the risks and all the losses. Losses often arise from unexpected developments and changing valuation of products by society which, due to imperfect foresight, cannot be accurately foreseen by the entrepreneurs. Losses are a natural concomitant of the changing economic scene and serve as guides in the restructuring of investment and redirection of productive enterprise. The entrepreneur performs a socially useful function in the society. He is often an agent of change and his productive activities create employment opportunities for others. In line with its humanistic approach, the Islamic system gives a fair deal to everyone. It does not give a privileged position to providers of capital by insulating them from all risk. The price the society has to pay for changing valuations and imperfections of human foresight is, in a profit-sharing system, shared by the providers of capital and entrepreneurs in a manner which does not disable or destroy anyone and serves the ends of equity.

Consideration was also given in the Seminar to the implications of a change over to an interest-free system for the stability of the system and for allocative efficiency. In his paper, Nejatullah Siddiqi seeks to demonstrate that replacement of interest by a system of profit-sharing will cause no problems as regards its smooth functioning and stability. In this context it seeks to dispel the apprehension expressed in certain quarters that a profit-sharing system will be exposed to wide fluctuations as the changes in the entrepreneurial profit will be communicated back all along the line. The two profit-sharing ratios on which attention is concentrated in the paper and which have relevance for the stability of the system are the ratios in which business profits are shared between the bank and the entrepreneur, and the ratio in which bank profits are shared between the ban k and the depositors. The paper employs a partial equilibrium approach to analyse the likely behaviour of these two profit-sharing ratios in a changing business situation. The original version of the paper presented at the Seminar gave the impression as if the author believed that his main thesis has been proved by demonstrating the long run stability of these ratios. Some of the deficiencies of the analytical apparatus employed by the author and the arguments used by him in reaching this conclusion were pointed out by Ziauddin Ahmed and other participants in the Seminar. In the revised version of the paper, included in this volume, the analysis has been considerably refined but it is doubtful whether the point that the author is trying to make is even now fully established. However, this does not detract from the value of his contribution. In fact, the paper by Nejatullah Siddiqi has served a very useful purpose by stimulating further thought in a difficult area of macro-dynamics of an Islamic economy.

It might be in order to mention at this stage that fluctuations in the money rate of return on deposits under a profit-sharing system should not be a cause for concern. Neither should this be regarded as a factor necessarily militating against the stability characteristics of an Islamic economic system. In fact, if the rate of return to depositors rises in money terms in an inflationary situation, it would help preserve the real rate of return on deposits and will serve an economically useful purpose. In recent years even the interest-based economies have witnessed considerable fluctuations in money rates of return. In fact, gyrating interest rates and continuously fluctuating exchange rates are now a familiar part of the economic scenario in Western economies.

Allocative efficiency of an interest-free economy has been an area of major concern for the Muslim economists. The paper presented by Anas Zarqa at the Islamabad Seminar, the revised version of which is published in the second volume (Fiscal Policy and Resource Allocation in Islam), represents a great step forward in this field. The main contribution of the paper lies in an effective refutation of the thesis that interest is indispensable for an efficient allocation of resources. Anas Zarqa does not deny that investment efficiency requires the use of discounting to take proper care of the time dimension of costs and benefits. He, however, emphasises that use of an interest rate is not inescapable for discounting purposes. In fact, he forcefully argues that interest rate is not the proper discount factor under conditions of uncertainty even in interest-based economies. Under conditions of uncertainty, the rate of return on equity is the proper discount rate. Since the real world is a world of uncertainty and since no real investment in any economy can be undertaken without facing risks, cash flows of such investment should be discounted not by a riskless interest rate but by the true opportunity cost of venture capital.

Participants in the Seminar were unanimously of the view that discounting as a technique of computing the present value of future cash flows does not violate any Islamic injunction. Work is necessary, however to determine an appropriate discount rate for an Islamic economy. Anas Zarqa suggests rate of return on equity as the appropriate discount rate but does not suggest any specific procedure for choosing a representative rate for the purpose. Masudul Alam Choudhry, in his paper, outlines a methodology for calculating an appropriate discount rate for an Islamic economy. This turns out to be a sum of the marginal efficiency of investment determined through a process of inter-temporal allocation of income to real investment and of the price for risk bearing in a *mudarabah.* This is one possible approach to project evaluation in an Islamic economy and opens the way for further work in this field.

VI

AREAS FOR FURTHER RESEARCH AND STUDY

A survey of the available literature on Monetary and Fiscal Economics of Islam, including papers presented at the Makkah and Islamabad Seminars, shows that there is vast scope as well as need for further research and study in this specialised field of Islamic Economics. The following areas appear to deserve special attention.

1. Reform of the Monetary-Institutional Framework in the Islamic Perspective

The present monetary-institutional framework in Muslim countries is the product of an era in which Muslim societies had lost their dynamism and ideological orientation. It is necessary to examine what changes are needed in the existing framework to achieve the goals of an Islamic society. Such an examination may reveal the need for the setting up of some new institutions and the reform of some of the existing institutions. The Islamic financial system is pivoted on equity financing but this has remained a neglected field in many Muslim countries. Stock exchanges, which specialise in dealing in equity issues, are not well developed. Some of the existing practices in stock exchanges may also not be in conformity with *Shari'ah.* Very few countries have Investment Trusts. Cooperative financing institutions are also not well developed. It would be useful to study the present monetary-institutional framework in Muslim countries and to suggest measures for reform in the perspective of Islamic teachings.

2. Mechanics of Credit Creation and its Equitable Distribution in an Islamic Society

The debate whether commercial banks should be subject to 100 per cent reserve requirement or allowed to create credit has gone on among Muslim economists for quite some time. However, the differing views on this issue are not irreconcilable. There is need to carry out an in-depth study to help reach a consensus in the matter. Since the controversy in regard to the legitimacy of credit creation by commercial banks centres mainly on its bearing on distributive justice, this aspect has to be given special attention in further studies on the subject.

3. Techniques of Islamic Banking

Basic material on the subject is already available. There is need, however, for further work in regard to the operational details of Islamic banking techniques. The financing needs of various sectors differ in content and character. The Islamic banking techniques have, therefore, to be evolved keeping in view the distinguishing characteristics of different forms of productive activities. The principle of profit-sharing, for example, cannot be applied in a uniform, standardised fashion in all sectors. It has to assume different forms in the context of objective conditions in each sector. In evolving different operating procedures, however, care has to be exercised that they conform to the basic philosophy underlying the principle of profit-sharing. Special attention needs to be given to determine as to how the principle of profit-sharing may be applied in practice in financing the needs of small scale agriculture, small scale business and other fields of activities where the accounts are not maintained in accordance with recognised accounting principles.

4. Indexation of Deposits and Loans

Some Muslim economists feel that indexation of deposits and loans can be used as one of the methods for replacing interest. However, *Ulema* have generally been opposed to it and have expressed the view that it is not in accordance with the principles of *Shari'ah.* Indexation could of course if permissible, be used with advantage in a selective way in situations where there are some practical difficulties in applying the principle of profit-sharing. For example, there is no possibility for the government to borrow from the general public to meet its budgetary deficit on the basis of profit-sharing. However, this could be done on the basis of indexation of government loans. It would be useful to give the question of indexation further thought. This is a field where joint research by Muslim economists and religious scholars is indicated.

5. Financing the Needs of the Government Sector

Governments do stand in need for borrowing to finance a part of budgetary deficit as taxation beyond a point causes undesirable economic repercussions. It is worth-studying as to how best the borrowing needs of government be met. One possibility is indexation of government loans which has already been mentioned. The other possibility is that the borrowing needs of the government be met through borrowing from the commercial banks or the central bank on interest-free basis. However, different modes of borrowing will have different economic effects. The economic effects of borrowing from the commercial banks will be different in several respects from those of borrowing from the central bank. It would be useful to study this matter and to determine whether any criteria can be evolved to serve as guidelines in this field.

6. Economics of Profit-Sharing

A good deal of literature is already available on this subject. How ever, there is considerable scope for refining and extending the analysis. It is necessary to give particular attention to the principal determinants of supply and demand for investible resources in an Islamic economy. The consequences of introduction of profit-sharing on the demand for and supply of money have also to be rigorously studied. The interaction between the monetary and real sectors in an interest-free economy has to be traced in all its ramifications. It is also necessary to develop an alternative analytical framework which may suitably replace the familiar IS-LM framework applicable to interest-based economies.

7. How the Discount Rate for the Purpose of Project Evaluation Should be Calculated in Practice

In theory, it may be convincing that the rate of return on projects of equivalent risk may serve as a discount rate in project evaluation. But how the rate of return is to be calculated, how the risk is to be defined and calculated, how the divergence in the rates of return and risks should be reconciled, are the issues that need to be solved before the concept can be made practicable. The definition of a discount rate for public sector projects is another issue that still needs to be resolved. In theory, social rate of return on capital can be said to be the appropriate discount rate but how this is to be calculated in practice is a subject open for the researchers. The preparation of a Manual of Project Evaluation in Islamic Perspective should also be considered so that it is available for the planners of the Muslim countries for practical use.

8. Non-interest Pricing of Capital and General Equilibrium in an Islamic Economy

In an Islamic economic framework a positive rate of interest will no longer be available for the pricing of capital goods. The interest rate plays a crucial role in the general equilibrium inter-relations in interest-based economies. It is necessary to develop a general equilibrium framework for an Islamic economy in which interest is non-existent.

Editors

FISCAL POLICY AND RESOURCE ALLOCATION IN ISLAM

Part – I

FISCAL POLICY

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A Theory of Fiscal Policy in an Islamic State

Dr. F. R. Faridi*

INTRODUCTION

The present study attempts a theoretical exposition of the fiscal dynamics of an Islamic economy. In view of the absence of any empirical base in the modern world, the exposition relies heavily on the following techniques of analysis:

1. The norms and values that are relevant to and direct the economic aspect of individual and collective behaviour in an Islamic society have been spelt out in terms of their likely impact on the allocation, distribution and stabilization branches of public economics.

2. The behaviour of an Islamic economic system in the past has been taken as the datum for theoretical projection in future. In other words, the total absence of any empirical base in the modern Muslim societies has been partly compensated for by a selective adoption of the past Islamic societies, as the sample.

The use of latter technique could render the whole analysis anachronistic. But this has been avoided through the complex device of introducing the significant elements of current economic systems and integrating them, as far as possible, with an Islamic economy. This has helped us to visualise the future working of an Islamic economic system.

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[This paper has been revised in the light of the lively discussion that took place in the Seminar. The author expresses his gratitude to all the participants and in particular, to the discussants, Dr. Ahmed Sakr, Dr. M. Uzair and Dr. Anas Zarqa, although he finds it difficult to agree with some of their views.]

The main elements of this theory may be summarised as follows:

1. Islamic economy has been characterised as a three-sector economy, namely, the private sector, the voluntary sector, and the public sector. The three sectors working in conjunction, furnish the institutional framework of an Islamic economy.

2. *Zakah* provides the base of the fiscal system and defines its scope of operation within the general institutional framework of the Islamic economy.

3. The allocation, distribution and stabilization functions of an Islamic economy are processed and implemented through all these sectors jointly.

4. Public sector's role is minimal but crucial in so far as it operates continuously to ensure an optimal allocation of community's resources, rectifies sub-optimal distribution of income, and introduces an element of stability.

Is a Fiscal Policy Possible in an Islamic State?

It has been argued in certain knowledgeable quarters of Islamic theorists that a fiscal system beyond what is defined by *Zakah* is un-Islamic. The argument relies on the sanctity of private property recognized by Islamic *Shari'ah* and contends that any compulsory government charge on it is patently unjust. Since taxes constitute the core of modern fiscal policies, an Islamic fiscal policy is contradiction in terms. A refutation of this assertion may be briefly stated in few paragraphs.

The socio-economic policy goals of an Islamic state are as follows:

1. Justice and equity.

2. Provision of the socio-economic needs of the community or socio-economic welfare.

3. Enhancement of the community's economic resources or economic growth.

4. Improvement in the cultural milieu of the community.

These policy goals have been derived from the Qur'an and *Sunnah* and implemented in the simple socio-economic system prevalent during the Prophet's (peace be upon him) lifetime and the Caliphate. Later, as the Islamic society became more complex, Islamic thinkers such as AI-Ghazzali[1], Abu Ubaid[2],

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1. Abu Hamid al-Ghazzali: *AI-Mustasfa fi ilm ol-usul* (Cairo: Maktabah al-Tijariah al-Kubra, 1937).

2. Abu Ubaid Qasim ibn Sallam: *Kitab al-Amwal* (Cairo: AI-Maktabah al Tijariah al-Kubra, A. H. 1353).

Imam Yusuf[3], Ibne Taymiah[4], Al-Shaatbe[5], and others dealt with these policy goals and their implications and also suggested appropriate devices for their attainment. Recent additions to this literature are extremely valuable in view of their contemporary relevance and modern exposition[6]. We can take them as given and envisage the path along which the fiscal mechanism in an Islamic state is likely to operate.

It may be correctly argued that *Zakah* is the most important fiscal and distributive mechanism of an Islamic economy. But as pointed out subsequently, *Zakah* may generate certain incidental effects on the economy, which can be redressed only by an appropriate mechanism of secular levies. For instance, a situation may arise where *Zakah* levies may lead to such a diversion of resources that is not desirable from the point of view of general socio-economic goals of the society. To prevent this, an appropriate fiscal device may be required. Moreover, the policy goal of an Islamic society to alleviate poverty, may in certain situations, necessitate the imposition of subsidiary welfare levies. Later in this paper we have specified such situations.

The argument that *Zakah* receipt may sometimes fall short of resource requirements for welfare expenditure, has been recognized by the Qur'an itself inasmuch as it has exhorted the Muslims to expend voluntarily a part of their resources. Many Islamic thinkers have also taken note of it, as discussed in the following paragraphs. Although such situations may not ordinarily arise, they are nevertheless important in the context of many Islamic countries of today, where the phenomenon of mass poverty co-existing with a relatively small member of wealthy people may call for additional mobilization of resources. Moreover, equitable distribution of income in a situation where exogenous developments have led to *an* unprecedented rapid accumulation of personal incomes, may not be wholly attainable through *Zakah* levies alone. In such a situation *Zakah* may be interpreted as the minimum rather than the maximum effort to alter the situation. But it seems probable on the basis of evidence recorded in early Islamic literature

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3. Abu Yusuf: *AI-Kharai,* AI-Matba al-Salafiya.
4. Abd ai-Salam ibn Taymiah: *AI-Siyasah al-Shariah fi Islah al-Rai wa al-Raiy-yah* (Beirut - 1961) and *AI-Hisbah fi ai-Islam* and *AI-Mawardi, al-Ahkam 01-Sultaniah* (Cairo, 1960).
5. Abu Ishaq Ibrahim al-Shatibi: *AI-Muwafiqah fi usul al-Shari'ah* (Cairo: Maktabah al-Tijariah al-Kubra).
6. See for instance, Al-Qardhawi: *Fiqh al-Zakah* (Beirut-1969); Abu Said Mahmud: *Khutut Raisla fi al-Iqtesad al-Islami* (Beirut-1965); *Mustafa al-Sabi: Ishtirakatul Islam* (Damascus - 1960); Syed Qutub: *al-Adalah al-litimiah fi alIslam* (VII ed.) 1968; M. N. Siddiqi: *Islam ka Naziriay Milkiyat* (Urdu), (Lahore, 1968).

that a compulsory additional charge on such extraordinary income is permissible under Islamic law[7].

The allocation function of the Islamic economy may also require an appropriately devised tax system. An optimal allocation of community's resources between different sectors of the economy and within each sector is likely to call for a tax policy geared to this need. Similarly, the allocation of resources along the time and spatial scale requires a judicious use of tax policy together with monetary policy and other regulatory measures. Economic welfare of the Islamic community may involve a more appropriate time and spatial allocation of its resources. The intertemporal allocation of scarce resources or their conservation in the interest of the Islamic collectivity through state conscription or public management has been alluded to in the Qur'an itself in the *Surah* Yusuf[8].

The verses regarding *Fay* have specifically laid down an equitable intertemporal allocation of the *Fay* proceeds. Although initially all such proceeds were distributed without regard for the succeeding generations, Hazrat Umar changed this policy in respect of the distribution of the conquered lands of Iraq and Egypt[9]. These lands were retained by the state not only to prevent concentration of wealth but also in the interest of future generations as the argument of Mawaz reveals.

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7. See, for instance, Ibn Taymiah *op. cit.* and Abu Yusuf: *AI-Kharaj.* Also see Abu Yusuf Yaqub ibn Ibrahim: *Kitab AI-Kharaj* (Cairo: Matba al-Salafiyah A.H. 1352) and also Abu Ubaid: *Kitab al-A wwal.*

8. AI-Qur'an XII.

   'And the harvest that ye reap, ye shall leave
   them in the ear except a little, of
   which ye shall eat.
   Then will come after that (period)
   seven dreadful (years) which will
   devour what ye shall have laid by
   in advance of them - (All) except
   a little which ye shall have
   (specially) guarded.
   Then will come after that (period)
   in which people will have abundant
   water, in which they will press'
   (wine and oil). (47, 48, 49).

9. See for a brilliant exposition of the entire gamut of this issue: Siddiqi M.N., *Islam Ka Naziriay Milkiyat* (Urdu) (Lahore, Islamic Publications 1968). Also see Mohammad Baqar al-Sadr *'Iqtisaduna* (Arabic) (Beirut; Dar al-Fikr, 1968).

An Islamic state may require additional mobilization of tax resources to: (a) regulate price movements; general concern of *Shari'ah* in this respect is reflected in its prohibition of speculative hoarding of essential goods, although specific instructions in regard to control of prices are absent for obvious reasons; and (b) to provide such goods as are imperative for the welfare of the society and cannot be left to the private enterprise. That the Islamic state is entitled to additional mobilization of resources, through *ad hoc* levies or other methods when and if the conventional resources of the state exchequers are not able to meet emergency requirements, has been ably argued by classical Islamic thinkers. During the *Aam-E-AI-Rimiadah;* Hazrat Umar is reported to have underlined the fiscal power of an Islamic state clearly[10].

In a different context Ibne Hazam has also recognized the compulsive economic power of the Islamic state in extraordinary situations[11].

System Constraints on Taxation

The above analysis highlights the usefulness and necessity of a tax system to serve the socio-economic, objectives of an Islamic state. An attempt has also been made to prove that it is permissible for the Islamic state to conscript resources to meet its ordinary and welfare expenditure. It will be argued, however, in the succeeding paragraphs that there are certain in built constraints in the Islamic socio-political organization that prescribe the permissibility frontiers of taxation by the Islamic state. The limitation lies in the ideological-cum-moral parameters of an Islamic society and applicable to normal conditions only. It is these which point to an optimum level of taxation which, if exceeded, results in the diminution of aggregate socio-economic welfare of an Islamic society.

The permissibility frontiers of taxation, envisaged here are not quantifiable. Nor the optimum level translatable in terms of certain universally valid magnitudes. Abstracted from its quantitative implications the optimum level may be derived from two characteristically unique inbuilt system constraints of the Islamic economy. I n the first place, the Islamic taxation policy will be so designed as to compensate or supplement the "resources gap" arising out of or incidental to *Zakah* and *Sadaqat*. It will not be an independent variable but a derived one. Its dynamics will operate within the outer limits set by *Zakah* and voluntary contributions to the aggregate socio-economic welfare of the community. The Islamic taxation system will be an adjustment to the resource flow originating in these sources. An assessment of the "resource gap" thus left

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10. Abu Ubaid: *Kitab al-Amwal,* p. 59. Mawaz is reported to have argued thus: "Then will come after them people who will defend Islam (to the best of their ability) and will find nothing. So consider the stand that suits the first and the last of them."

11. See Ibne Hazam: *AI-Muhalla,* Vol. VI, p. 156.

uncovered compared to the overall fiscal needs of the public authorities, given the socio-economic goals of the community and its stage of economic development will determine the quantitative aspect of the tax effort, and as a corollary thereof, its structure and rates. It will define the assessment base of direct taxation in so far as the equity and ability to pay considerations intrinsic to *Zakah* levies are not negated through a thoughtlessly conceived system of secular levies.

In the second place, Islamic tax system will be so structured as to fill in the ‘objectives gaps’ indicated by, or incidental to *Zakah.* It will serve to promote primarily the same ends for which *Zakah* has been levied. If certain aspects of the economic impact of *Zakah* tend to frustrate the general design of the *Shori’ah* and act to the detriment of economic growth, Islamic tax policy will be accordingly adjusted. For instance, if in full employment, or in comparatively rigid supply conditions, the transfer of resources exerts an upward pressure on the price level, taxation policy will be suitably adjusted to arrest the price spiral. Or if *Zakah* levies cause a sudden diversion of resource$ from savings to overspending, or from investment in *Zakah-able* to *Zakah-free* economic activities whose overall impact on the economy is likely to be detrimental to general welfare of the Islamic community, tax policy will have to be readjusted. Similarly, any difference in the burden of *Zakah* incidental to the rates applicable on varying forms of wealth-saving may result in an unbalanced intersectoral allocation of community’s resources, say, between agriculture and manufacturing, the tax policy will have to take due account of it in so far as this unbalancing effect runs counter to the overall objectives of an Islamic society. On the other hand, if certain developments in the economy tend to frustrate the ultimate objectives of *Zakah,* taxes will be used to arrest or control them. A general inflationary rise in prices may be the case in point, as it releases forces that tend to increase the income disparities and distort the flow of resources.

This analysis, however, does not make the assertion that Islamic taxation policy will be a 'residual' exercise only. It does maintain, however, that it will be primarily a ‘compensatory’ policy or one that is complementary to *Zakah.* It will be clear as we proceed through this analysis that the Islamic taxation policy will nevertheless be an effective allocative and distributive device pivoted to the central Islamic levy – *Zakah.* Somewhere it will appear to enjoy a comparatively freer hand. Even so, the general system constraint can never be lost sight of.

It may be argued, however, that 'resource gap' concept is inadequate for the dynamics of modern economy that involves a much wider scale of governmental economic activities which need financing on such a large-scale that render the ‘resource gap’ formula derived from *Zakah* impracticable. But this objection is not so formidable as it appears to be. In the first place, development finance depends only partly on taxation. Bulk of finance for public investment has traditionally come from non-fiscal sources of budgetary receipts, such as public borrowing, both internal and external, money creation, and income from economic activities of the state. In the second place, aggregate public expenditure in an Islamic society will necessarily tend to decline for many reasons. For one thing, an Islamic administration will be a less-expensive one in view of its distinctive cultural milieu. Secondly, it will depend, to a large extent, on private initiative for development. Thirdly, a sizable part of its welfare expenditure, will be met out of *Zakah.* Thus taxation will surely decline in importance, as a means of public budgeting.

Another significant system constraint taxation policy derives from the distinctive nature of the Islamic economy. Islamic fiscal policy conceived in the terminology currently in vogue, and with reference to modern fiscal theory, will be a fruitless and self-defeating exercise. It is imperative to have a clear vision of not only the value base of an Islamic economy but also to spell out its *modus operandi.* Without such an effort, we are likely to fall in line with other economists and paint the economic landscape of an Islamic society largely similar to that of a value-less and profit-based society.

Elements of an Islamic Fiscal Theory

An economy has to deal with four basic problems. The limited supply of productive resources leads to the problem of scarcity which involves a specific decision as regards the allocation of the available productive resources and the institutional means through which the desired allocation is to take effect. Closely linked to it is the problem of distribution which relates to the manner in which the 'real output' is divided among the various individuals and family spending units of a society. The attempt to increase the productive base of the society to bring about an improvement in the societal welfare over time, creates the problem of economic growth and the institutional means through which it has to be vigorously pursued.

Contingent upon the devices chosen to tackle all these problems, economic disturbances of varying intensities occur, which require a set of measures, conveniently summed up as stabilization policies.

The nature of decisions taken by a particular society to effectively tackle one or all of these problems, and the institutional means already in existence or freshly designed for that purpose do not depend on only economic considerations of cost and benefit. Nor is there any degree of specificity associated with the economic targets or institutional means such that defy their total or partial substitution. A particular decision as regards the allocation of productive resources which determines both the volume and composition of real output to be produced and its division between the market or government sectors arises out of the preferences, values, and the political influence of various sections of a society. Similarly the distribution of effective demand between the various spending units of a society is vitally linked with a given state of income and wealth distribution and desire of the society to alter it.

It will be wrong to assume, therefore, that the superficial similarity of tools of economic policy used in different societies prove the “means specificity” of the economic issues stated above.

ISLAMIC ECONOMY: A THREE-SECTOR MODEL

Modern economies offer two institutions to tackle the allocation and distribution problems, namely the market and the government. Alter natively, the two may be referred to as the private and the public sectors. Private sector is characterised by the forces of demand and supply, price and profit motive. The public sector acts not in defiance of the forces of demand and supply as reflected in the price phenomenon but as a corrective mechanism and as a supplement to it. In this sector profit motive is substituted by social welfare. In the so-called free enterprise economies, private sector is the prime allocative and distributive mechanism whose excesses, lapses and distortions are corrected by the public sector. The socialist economies reverse this role. Public sector is the prime allocative and distributive mechanism while the private sector acts as the minor partner in the process. How ever, an Islamic economy may be characterized as a three-sector economy. It will comprise of the private sector motivated by profit, the private sector free of any profit motive (the voluntary sector) and the public sector. Alternatively, we may describe the three institutions as the market, voluntary economic institutions, and the government. The three-sectoral characterization of the Islamic economy derives from the value premise of an Islamic society which involves the voluntary flow of a sizable part of its total resources in such activities as are considered to attain the welfare of *AI-Akhira* but have significant economic implications for the society.

To avoid confusion, it may be appropriate, at the very outset, to define the third sector. It encompasses all such individual and social activities, which are not by intent or design, undertaken to attain any economic or material benefit for the doer or doers, but generate wide ranging economic repercussions. Thus though some of these operations may appear outwardly similar to the private sector but are essentially different in object and conduct. For instance, the cash disbursement of *Sadaqat,* creation of *Auqaf,* organization of education and health services for the poor, contribution (voluntary) to state’s defence needs, construction and maintenance of mosques, provision of shelter and meals to the way-farers and various forms of charitable activities fall within this sector. To this, we may add that part of *Zakah,* which may be left for assessment and distribution to the individual assesses – we mean *Zakah* on *Amwal-Batinah* (as specified, for instance, in recent Pakistan legislation). Empirical and historical evidence suggests that substantial economic and financial resources have passed through this sector in Muslim countries[12]. The volume of the economic resources flowing

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12. See, for instance, Mustafa al-Sabi: *Min Rawa-e-Hadharatna.*

through the third sector will be a function of the state of *Taqwa* of an Islamic community. It will be, so to say, a barometer of the state of moral health of the *Ummah.* It will be distinct from the public sector inasmuch as it will be totally free from any element of compulsion. Even in an Islamic society state operation will in effect be compulsive in nature even if overall design may be decisively moral and religious. Moreover, there is nothing wrong if the public sector is actuated by economic benefit and aims at maximization of profit or of eventual social good. But the third sector will lose all, if it aims at economic benefits.

The Allocation Function

The allocation function in an Islamic economy will be performed through each one of these institutions separately as well as jointly with each institution working complementarily to the other. But each sector will operate in its own characteristic way. The market mechanism, however, will not be the only institution in the allocation branch. Its allocative function will be implemented through the price mechanism acting in conjunction with the profit motive. The pattern emerging out of the market mechanism will, however, be modified by the voluntary institutions operating through *Sadaqat* and non-profit economic activities of the economy. This modification may basically alter certain economic magnitudes and flows.

In the first place the allocation of sizable monetary resources through the voluntary institutions may increase private expenditure in some crucial avenues of productive activity where the market fails to operate. For instance, it is likely to increase private expenditure on the production of goods and services beyond the equilibrium indicated via the equality of marginal revenue and marginal cost. In modern market based economies such a shortfall in production is compensated by supplementary public expenditure. It may also channelize privately-owned savings in such avenues that do not indicate a reason able rate of return to private investment. As an illustration, we may cite the production of coarse textile fabrics. The profit motive of the private businessman prevents him to expand his supplies to meet the full societal requirements. For such an expansion is likely to exercise a downward pressure on prices, thereby reducing the reasonable rate of marginal return, a calculation not wholly based on objective cost assessments but partly derived from subjective evaluation of what constitutes a reasonable rate and the expected rate of return in alternative investment. The second case may be illustrated through the provision of rent-free schools, development of shrines etc. Thus voluntary institutions may do two specific things. They may make-up the shortage of output of goods and services which the market fails to do, and secondly invest in such avenues as do not attract private capital motivated by profit.

Public and Quasi-Public

Goods Modern economists usually classify goods into two separate categories, namely, private goods and public/social goods. The latter defined as those economic goods which the entire community consumes, and in whose respect cost and revenue calculations are not possible on account of the indivisibility of benefit derived therefrom. For instance, defence is a public good. Radio and T.V. networks are other examples. It will be more appropriate, however, to define public goods not on the basis of the indivisibility of the benefit derived there from but on the basis of their being non-profit goods, that is to say, goods required by the society whose benefit is not translatable in terms of economic revenues. For example, investment in education, science research, health, certain items of social overheads etc. In all modern economies production of public goods is usually reserved for the state. The state ensures allocation of a part of the community's resources to the production of public goods, usually through conscription, or borrowing. In an Islamic economy, however, the voluntary institutions will playa significant role in certain areas of public and quasi-public goods. Private resources may be passed to the state for some activities, or may be directly expended on their production. For instance, education is one important area where considerable private resources may flow without the scantiest regard for a reasonable rate of return. In this respect it may be pointed out that religious, general and scientific or technical education are all treated at par insofar as they jointly improve the quality of a Muslim community and its prowess. That is the reason why all knowledge has been strongly recommended by the Prophet's tradition as the goal of the *Muslims.* Next is the provision of health. The care of the diseased, incapacitated, weak and poor is necessary. Thirdly, defence may also claim sizable part of resources channelized through the voluntary institution. We may, therefore, envisage that in an Islamic economy voluntary institutions will provide not an inconsiderable part of the resources required for the production of public and quasi-public goods and services.

Gross National Output and its Composition

The voluntary institutions will exert a direct influence on consumption and national output. The disbursement of accruals from *Auqaf, Zakah* and *Sadaqat* to those who do not have financial resources to buy certain goods/services in desired quantities are likely to enter the market and thus raise the money demand. With higher marginal propensity to consume, the receivers of these funds are likely to spend proportionately greater part of their income on consumption. Given excess capacity and unemployed resources, this phenomenon may release forces that increase output of such consumption goods as enter the poor man’s budget. That may result in a different pattern of intersectoral and intrasectoral allocation of resources and alter the composition of society's output. It is obvious that the resultant change in the composition of output will be in favour of poorman’s goods and services. This will be an indirect allocative impact of the voluntary institutions which will express itself through the market.

Optimum Allocation

An optimum intersectoral and intrasectoral allocation of resources is a desirable objective of every economy. The market mechanism fails to bring about a desirable pattern of intersectoral allocation of community's resources for the obvious reason that it acts on the basis of profit - the only relevant factor in its behaviour. Its decision as regards the priority of investment in different sectors may not coincide with the optimum required by the sum total of socio-economic benefits or costs. Any deviation from this optimum is corrected by the state both through regulatory techniques and direct participation in the economic process. In the three-sector model we have presented above the distortions emerging out of the market mechanism will be rectified by the voluntary institutions as well as the government. We have already indicated above that an allocation pattern weighted in favour of luxury goods/or comforts will be suitably altered by the activities of the voluntary institutions. Thus within the industrial sector (intrasectoral) itself an altered allocation of resources may be brought about. As between industry, agriculture and services, the allocation emerging out of the market will be similarly modified. We have already discussed above, the way in which social services will attract not an inconsiderable part of resources flowing through voluntary institutions.

Role of the State

It may be safely asserted that a significant part of the role associated with government in correcting distortions OF deviations from the socially optimum allocation of resources will be taken over by the voluntary institutions. Even though minimal, the government's role will not be in any way less important. First, the government may alter the pattern of voluntary institutions' expenditure through its educative effort. It may provide the necessary information in respect of the needs of the poorer classes, expend a part of the resources handed over to the public sector in accordance with its own assessment of priorities, alter the time and spatial distribution of *Zakah* and *Sadaqat* resources, use or cause to be used a part of these resources in directions where the play of market forces has resulted in supply deficiencies. As indicated above the voluntary institutions' economic behaviour is likely to change the market allocation of resources through its impact on consumption demand. But the government sector’s allocative function will not be limited to indirect or complementary/supplementary measures. Its allocative function will also relate to direct public expenditure in those avenues where neither of the two sectors, jointly or separately, are able to enter, or where supply deficiencies require a larger share of community’s resources than that allocated otherwise. It may also involve the removal of sectoral disparities generated through the economic activities of the two sectors.

Deviations from, or failure to attain, the socially optimum allocation of resources will, therefore, be corrected by the government sector. Although such a failure of the market mechanism may be partly compensated by the voluntary institutions in an Islamic economy, gaps are still likely to remain for the reason that this sector too, by reason of its individualistic approach, will fail to take a total view of society's economic and social needs. Although proceeding from different value premises, and working under different assumptions, both the market and voluntary institutions may result in socially sub-optimal allocation of resources. An example may help in understanding this situation better. Roads connecting the market with the production point may be translatable in terms of cost/revenue calculation of an entrepreneur. But roads connecting far off villages to the town are most likely to be excluded from the list of profitable investment of the private sector as well as the voluntary institutions evaluation of what is useful for the under-privileged in the society. Similarly industrial projects with long gestation periods are likely to attract much less capital than necessary. Hence, the government sector will be required to step in.

Given its concept of social welfare, and given its value premise the Islamic economy will decide the mix of its resource allocation between the three sectors. Where and if, the actual and optimum intersectoral allocation of resources do not coincide, the government will strive to correct the intersectoral imbalance of resource allocation through the devices indicated above as well as taxes. Contemporary discussions of optimal intersectoral allocation of resources, may be traced back to Hansen and Galbraith[13]. Hansen contends that public sector should be used to promote the educational and cultural development of Americans, the "submerged tenth". He believes that economics in a mature society should emphasize social priorities rather than goal of maximum national output. Galbraith asserts that due to traditional bias against public sector spending and what he calls a "dependence effect" there has been an under-allocation of resources to the public sector. This discussion, however, does not indicate a theoretical principle which may guide an optimal allocation of resources, except that of relevance of social objectives. The attempt made by some economists to work out a precise formula of resource allocation through the indifference curve technique is at best arbitrary. The production potential of the society, as determined by its resources and technology is brought into a relevant relationship to society's preference for public and private goods, as made effective by the state of income, wealth and political choice and shown through an indifference map. But that is an effort which proves conclusively that no criterion based on "value free" marginal analysis of a universally valid optimum intersectoral allocation of resources is possible. The Islamic economy will determine the optimal allocation of resources between three sectors with reference to its social norms and value premises. Its guiding principle will be the maximization of aggregate social welfare which has both a material as well as spiritual dimension.

An optimum allocation of resources in an Islamic economy may be defined as the one that establishes an equilibrium between the moral and economic

13. See Alvin H. Hansen: The American Society (N. Y. McGraw Hill Book Co., 1957); and John K. Galbraith: The Affluent Society (London: Andre' Dentsch 1977).

imperatives of the society, given its income, and the state of technology. As indicated above moral imperatives will be primarily taken care of through the voluntary institutions, while the institution of market will reflect its economic imperatives. The public sector will not only supplement the economic activities of the two but will also act in a way calculated to ensure a better performance by both. In addition to this aspect of the government's economic activities, the allocation function of the public sector will also involve direct public expenditure to help the economy reach the equilibrium indicated above.

Figure 1 shows an optimal allocation of resources between the private sector and voluntary sector. The public sector has been shown on Y axis together with voluntary sector. S_1, S_2, S_3 are social indifference curves. The point where S_2 is tangential to production possibility curve AB is that of optimal allocation. The distribution of resources shown in Figure 1 has only an illustrative significance. It is subject to change in response to the general economic and technological requirements on the one hand, and the state of moral consciousness of the Islamic society on the other.

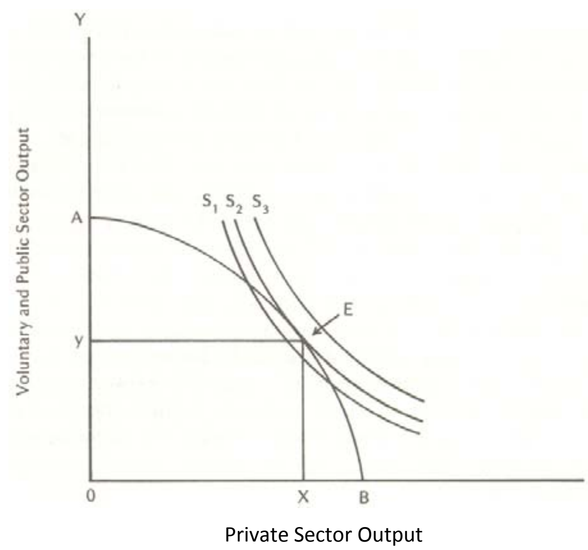

Figure 1: Optimal Intersectoral Allocation of Resources in an Islamic Economy

The Distribution Branch and Islamic Economy

Although in an Islamic economy the distribution function will be performed through the activities of the voluntary sector aided and supplemented by government operations but for purposes of the present analysis, let us assume that most part of *Zakah* resources – the chief distributive device – are imbursed through the state. Thus distribution function may be initiated through any facet of the government budget ranging from expenditure policies to various forms of government revenue-gathering activities.

The main objective of distribution function may be achieved through either an exhaustive public expenditure programme or a scheme of negative taxes and/or transfer payments or other secular taxes on income and wealth. Since *Zakah* proceeds are envisaged as the principal redistribution mechanism in an Islamic economy and since it is traditionally a form of transfer payment let us start with it.

Zakah as Negative

Tax The transfer of funds between individuals through *Zakah* disbursements or other taxes may redistribute real income amongst the members of the society via the redistribution of purchasing power. *Zakah* payment may be conceived of in terms of what is described as a "negative tax". Under the concept an individual is considered to be capable of making a positive tax contribution to the government if his personal income exceeds poverty level but is considered eligible to receive the negative transfer of funds from the government if his personal income is below a designated poverty level of income. Under *Zakah/transfer* payment the government may similarly designate a poverty line based on current living standards and make payment to those individuals whose income falls below the poverty line so designated. But the calculation of such eligibility will be more complex in an Islamic scheme of things. Any poverty line designated with reference to current standards of living will have to be adjusted in the light of *Zakah Nisab. Nisab* allows for a dynamic interpretation in terms of cost of living index and reasonably defined current standards of living[14]. But sometimes there is a loose link between current incomes which fall short of needs and one's saving in terms of gold/jewellery, which exceed *Zakah Nisab*. Hence, the disbursement of transfer payments, will have to take into account both of these aspects of the situation.

A 100 per cent payment* of transfer/*Zakah* funds to bring individuals above the poverty line may have to be revised for its likely disincentive effect on work effort. Thus a trade-off may necessarily arise between the goal of alleviation of poverty and protection of work efforts. In case 100 per cent transfer/*Zakah* payment conceived as negative income-tax to bring individual above the designated poverty line involved an expenditure in excess of *Zakah* proceeds, a trade-off may inevitably arise between the goal of mitigation of poverty, preservation of labour incentive and loss of revenue. In that situation a 40 per cent or 50 per cent payment may be considered as sufficient.

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14. See al-Qardhawi, *op. cit.*

* A 100 per cent payments means payment to the full extent of the difference between one's income and the poverty-line level (Editors).

Exhaustive Public Expenditure and Redistribution Function

Modern governments have the option to redistribute real incomes either through transfer payments or direct availability of certain important quasi-public goods to the poor. A mix of both the approaches, however, is a realistic policy goal. There are some pertinent questions that arise in this respect when we proceed to analyse the approach of an Islamic state to its distributive function. As we have seen above *Zakah* disbursements in the form of transfer payments/or negative income-tax have traditionally been considered valid. But the formulation of an exhaustive public expenditure programme intended to make available to the poor certain important public or quasi-public goods financed out of *Zakah* revenues is received with mixed feelings by Muslim scholars. At any rate, two forms of public expenditure programmes for the poor are universally approved. These are education and health programmes. Educational programmes not only improve the ideological and cultural receptivity of the poor but enhance their income-earning capacity as well. Empirical studies have conclusively proved a positive functional relationship between human resource development and aggregate economic performance of a nation/community/group of people. The tendency of the market to under supply education stems from its nature of being a quasi-public good, that is to say, a good whose benefits defy easy quantification or pricing. But increase in the supply of education to the poor has a redistributional role as well. If free of charge, it confers direct financial benefit on the recepient and ensures future financial returns in terms of increased earnings. In this regard technical education is of greater importance. It benefits the poor more by increasing their skill and income earning capacity.

An Islamic state's distribution function may, therefore, be performed through an expenditure programme of education, medicaid, medicare facilities. These items belong to allocation as well as distribution branch of fiscal economics. But direct provision of a number of private goods, such as textiles, shoes, medicinal drugs, etc., free of cost or at cheap rates to the poor, and financed out of *Zakah* funds are also permissible from the *Shari'ah* point of view.

Stabilization Function and Islamic Fiscal Policy

If we assume that Islamic economies are expected to belong to that part of the present world which is characterized as underdeveloped, many of the destabilization problems, such as the deflationary or inflationary gaps of the intensities experienced by advanced economies will not be relevant. Still some such problems as monetary inflation, temporary recession may be experienced depending upon the financial organization of the Islamic economy.

If the Islamic economies opt for a fractional reserve monetary system, where banks have the power and ability to create bank money, excess credit situations may occur. The substitution of interest by *mudarabah* or profit-sharing and consequent restructuring of the capital market, are expected to establish a direct link between bank money and productive investment. But the urge of the banker to seek more and more avenues of investment will still be there, with the significant difference that he will be directly exposed to losses, if the investment is not profitable in the strictly economic (not financial) sense. It is sometimes argued that such a direct involvement is most likely to dissuade the banker from excess credit creation since marginal investment may be highly risky. But the fact that bank portfolio may be quite wide ranging and that losses in some investments may be absorbed partly by the cushion provided for this purpose, and the specific provision in terms of reserves may insulate the shareholders from shock of losses, may still encourage the banker to create excess credit. Any amount of credit that does not correspond to the real resources elsewhere in the economy may generate inflationary pressure. To this urge we may add differing interpretations of what is an economically profitable investment. The banker, intent upon maximizing the earnings of his shareholders, may include not only productive investments in his list of sound investment projects but quite an impressive schedule of commercial transactions as well, which do not add an iota to GNP. In the absence of speculative transactions involving bonds and stocks, wide fluctuations in market conditions are not feasible. Hence such investments will continue to be attractive. Thus bankers in an Islamic state may also be prone to excess credit creation. Financing of public expenditure through the printing press, or bank borrowing (free of interest) may accentuate the inflationary gap.

Zakah collection and its disbursement may act as effective stabilizing agents against such a situation. *Zakah* levies even though not directly connected with current income will, in effect, constitute a charge on it. With fixed rates, *Zakah* levies will, therefore, constitute an inbuilt fiscal stabilizer. *Zakah* disbursements, however, may work as discretionary fiscal stabilizers as well, with the government managing it as it does the transfer payments, or exhaustive government expenditure programme.

It may, however, be pointed out that because of the *Zakah* rate and base being given, it may not be adequate to the needs of the situation in some periods. In that situations, other taxes, whose rate may be varied, and transfer expenditure, which are not financed out of *Zakah* may be used to that effect.

A comprehensive set of fiscal measures appropriate to an Islamic economy may be designed to remedy such a situation. The elimination of modern varieties of purely financial papers and speculative trading in them, will exercise a restraining influence on excess money supply. In addition, the state may devise discriminatory penal taxes on some investments and business that exert relatively higher destabilizing effect on the economy. Moreover, it may decrease/increase public expenditure depending upon the needs of situation.

Comments

Dr. Muhammad Uzair

The paper by Dr. F. R. Faridi is an excellent attempt to present the fiscal policy of an Islamic state in a scientific manner. In the very beginning the learned author summarises the basic elements of his theory, namely: (a) the three-sector economy, i.e. public sector, private sector and voluntary sector; (b) *Zakah* as the basis of Islamic fiscal system; and (c) the functions of Islamic economy defined in terms of allocation, distribution and stabilization. In connection with methodology he explains that the source of guidance is the experience of the early stages of the Islamic state and the writings of the jurists. Later in the paper he develops his three-sector model. While elaborating the three sectors he also mentions the motivations of the respective sectors. The motivation of the private sector is *profit,* while the motivation of voluntary sector is the fear of Allah Almighty (*Taqwa*) and reward in the life-hereinafter (*AI-Akhira*). However, he does not clearly specify the motivation of public sector and its implications. It would seem to include the 'compensatory' or 'balancing' role. It may be pointed out that the public sector, as it is prevalent in the modern times, would also have an angle of 'welfare' besides regulation as its motivation.

With regard to the fiscal functions of an Islamic economy, the learned author confines his treatment to allocation, distribution, and stabilization functions. Stabilization function has been taken to include the problem of inflation. However, sufficient justice to the problem of inflation has not been done, while the more recent phenomenon of 'stagflation' has not been touched. Perhaps he does not deal with inflation because the problem was not there in the early period of Islamic stage from which he derives his theory. However, the demands of the present day are such that the problem of inflation is going to be with us for quite sometime. Another important omission with regard to the functions of Islamic economy, is the problem of 'growth'. The learned author has not given due place to the problem. It has been accepted as an important objective of fiscal policy and a function of the present day states. Moreover, unlike inflation, there does exist the importance of this objective in the Islamic literature as well as in the early days of Islamic history. In fact, the term *Zakah* itself includes the connotation of growth to which the author has not paid much attention. Moreover, the objective of economic growth and betterment has been recognised as a proper desire and need of individuals. The motivation of betterment has been mentioned in the Holy Qur'an in terms of endeavour to seek the bounty from the Allah Almighty (*/btigha* Min *Fadlil/ah).* This occurs in several places in the Holy Qur'an. Moreover, there are some *Ahadith* of the Holy Prophet (peace be upon him) wherein people have been advised and encouraged to use the funds and assets for .income generation so that these are not exhausted and depleted through the process of *Zakah.*

While enunciating the principles of fiscal policy and its tools, there is a mention of taxation. However, problems of public borrowing, programmes of public expenditure etc., have become an integral part of fiscal policy today, and con not be brushed aside. The learned author has not devoted much attention and space to these problems. The author has paid some attention to permissibility of taxation other than of *Zakah.* This was not really needed because there is not much dispute left now with regard to permissibility of taxation other than *Zakah.* Later he mentions that *ad* hoc levies or imposts for supplementing welfare expenditure for defence purposes are administratively difficult to operate and also uneconomic. This can be questioned. There are precedents of special donations demanded by the Prophet (peace be upon him) for the purpose of defence. However, in more recent history we have examples of special levies and imposts, by secular governments, during and immediately after war – the World War II. These were not only operationally successful in raising funds but also economically helpful in mopping out excess liquidity with the trade community because of inflation. He maintains that taxes other than *Zakah* would not be 'residual' but 'compensatory' in terms of Islamic economics. In this regard he indicates the resource gap as a basis for taxes other than *Zakah.*

Dr. Faridi has casually mentioned a possibility that *Zakah* levies may mean a sudden diversion of resources from saving to spending or from investment in Zakah-able uses of funds to non-Zakah-able uses of funds. However, due attention has not been paid to the problem of "capital formation" in an Islamic economy, especially as a result of imposition of *Zakah, Ushr* etc. It is well known that even in non-Muslim economies fiscal administration faces a paradox in terms of fiscal objectives pursued. The objective of improvement in distribution would suggest some transfer of resources from relatively higher income groups – possessing higher marginal propensity to save – to relatively lower income groups – having lower marginal propensity to save or higher marginal propensity to consume. Moreover, promotion of capital formation is an important and necessary, though not sufficient, condition for the process of economic growth, the importance of which can hardly be minimised in today's world. Growth and development implies not only increase in per capita income and GNP - usually taken as a measure of growth - but also development taken in a wider sense including growth of technology besides capital formation. Every country today aims at growth and development as an important objective. This is especially true because an overall economic growth now-a-days is a symbol of 'strength' of Muslim countries viz-a-viz non-Muslim countries. The learned author has not tackled this problem of 'paradox' in the objectives of fiscal policy.

The learned author has devoted quite a bit of effort and space to develop his three-sector model. In doing so public sector and government have in some places been taken as synonymous. The two terms have been used interchangeably. In fact there is a difference between the government and public sector as we understand them today, both in respect of legal and administrative entities and in respect of functions and objectives pursued by both. The author gives an impression that 'profit' is the motive force for private sector alone, while the public sector has only regulatory and a balancing role to perform. In many Muslim countries of today and even in some non-Muslim countries public sector is reasonably large, comprising a large number of public enterprises producing a variety of commodities and services. Being business units, these public enterprises also have a 'profit' motive besides other objectives and goals of public sector. In fact some Muslim countries have their entire industrial activity in the public sector, and these enterprises inevitably try to operate with a profit motive. Thus, the balancing role and profit motive are not necessarily mutually exclusive. The fact that the author has taken government and public sector as one entity is also evident from the fact that he assigns the allocative role to the public sector. In reality allocative role is a function of the government, which is performed partly through government policy measures, and partly through instrumentality of the public sector, which is legally and operationally an independent wing under the government.

The concept of voluntary sector as the third sector of his model seems to be the major element of the theory of fiscal policy as presented by the author. In this connection two points need to be mentioned. In the first place, voluntary sector is not the characteristic of an Islamic system alone. Even in capitalistic system there is a reasonably large sized voluntary sector, or subsector of the private sector. In case of U.S.A., for example, there is an institution of 'non-profit' corporations and organizations in different fields of life. Most of the hospitals and the universities in the United States constitute part of this voluntary subsector of private sector. This vast field is not motivated by profit but by social, moral, and spiritual considerations. Moreover, even in case of primary and secondary education, the Catholics and the Jews have their own private network of higher and primary schools because the sponsors do not like their children to go to the government-sponsored schools where 'secular' education is given. Similarly, there are certain small television and radio networks sponsored by religious groups and motivated by moral and spiritual considerations. Then, of course, there are huge foundations for social and welfare purposes such as Ford Foundation and Rockefeller Foundation, to name just two of them. The budgets of some of these foundations are larger than the total budgets of certain Muslim countries. Thus, voluntary sector is not a unique or distinctive feature of an Islamic economy.

The second point, in connection with voluntary sector, is that the learned author has built his framework of voluntary sector on the basis of 'voluntary' payment of *Zakah* and *Sadaqat* in a Muslim country. However, if a Muslim country wants to enforce *Zakah* and *Ushr* etc. as part of Islamic system as a whole, collection of *Zakah* would have to be on a compulsory basis and at the state level. This would mean that much of what Dr. Faridi has put in voluntary sector, would in fact be a part of *Baitul Mal* or state treasury, and thus constitute an activity of the government or public sector as he prefers to describe it. When Islamic system is enforced the collection of *Zakah* would not be confined to *Alamwal ul Batinah* (invisible or non-apparent assets), alone, but would also include *Alamwal uz Zahirah* (visible or apparent assets). Collection of *Zakah* from *Alamwal uz Zahirah* would be much larger than the collection of *Zakah* from

Alamwal ul Batinah, because we are living today in a monetised economy where financial assets, invest ments, bank deposits, insurance policies, provident funds, and many similar assets have become very important, and certainly larger in value on a collective basis than the *Alamwal ul Batinah.* Naturally, when the Islamic economic system is sought to be enforced, as a beginning has been made in Pakistan for example, the collection of *Zakah* can hardly be included as an exclusive part of voluntary sector. This will have to be a different subsector of public sector or an independent wing of the government machinery. Moreover, any country which decides to enforce Islamic economic system must also introduce collection of *Ushr* through the government. **In** Muslim countries with agricultural orientation, the collectiun of *Ushr* would be substantial, and in some cases may exceed the collection of *Zakah* from *Alamwal ul Batinah.* If we add up *Zakah* on *Alamwal uz Zahirah,* collection of *Ushr* and *Khums,* the sum total would be several times larger than the collection of *Zakah* on *Alamwal ul Batinah.* Thus linking *Zakah* and *Ushr* with the voluntary sector, does not hold good on either a conceptual basis or an operational level. Whether or not there is a voluntary sector in the sense and form presented by Dr. Faridi, his point that motivation for *Zakah* and allied activities is fear of Allah, or *Taqwa* and *AI-Akhira* is well taken. This is what distinguishes *Zakah* and *Ushr* from taxes.

Dr. Faridi has given a detailed treatment of allocation and distribution functions of fiscal policy. Although a good part of the discussion is based on the usual discussion of fiscal policy in the standard Western literature, some interesting additions have been made. He maintains, for example, that an optimum allocation of resources in an Islamic economy is the one that establishes an equilibrium between the moral and economic imperatives of the society given its income and the state of technology. As we have mentioned earlier we may not agree that income and technology be taken as given. In our view, growth as a symbol of strength is in itself an important objective of fiscal policy. However, the concept of equilibrium between moral and economic imperatives is a sound policy guide. We wish this were dealt with more clearly and elaborately inasmuch as this mix or blend is the characteristic of an Islamic society. The discussion on moral imperatives not nearly as adequate as one would wish it to be.

In connection with distributive function, he uses the concept of Poverty Line. However, income tax exemption is not a very valid criterion for its determination. Empirical research alone can determine a sound and acceptable Poverty Line. Income tax exemption limit varies from country to country, as the author admits later. Then, there are certain Muslim countries where income tax just does not exist. Income tax exemption limit, or existence of income tax itself, are all policy variables constituting in themselves the parts of fiscal policy mix of a particular state or government. Although the author has gone in great length to discuss allocative and distributive functions of fiscal policy, he does not discuss much about fiscal operations. In fact the two go together. Perhaps, this is why much attention has not been paid to guidelines for public expenditure programme and the question of public borrowing – as mentioned earlier - which constitute an important part of fiscal system in any type of economy. Anyhow the learned author has done some good groundwork for the theory of fiscal policy in an Islamic society. Others can later take up some of the issues which have received insufficient attention of Dr. Faridi.

Dr. Anas Zarqa

The author maintains "that the distribution function of an Islamic economy may be discharged largely by *Zakah*".* I do not think that this is strictly correct to say that *Zakah* is the major tool of redistribution in an Islamic economy. It will be a very big omission not to point out that there are other major devices for redistribution in the Islamic economic system. They may not have as large an influence as *Zakah,* but they are very significant and they should be pointed out. One of them is *Nafaqat-ul-Wajiba* which is an obligatory family support, not only for one's own immediate family members but also for relatives. In *Maliki Fiqh,* a support for poor relatives can be imposed by state. Another is the law of inheritance, which hardly needs any elaboration. Then comes the Islamic rules of ownership and of the use of natural resources. Islamic laws about mineral wealth on or below the ground and such other compulsory injunctions also fall into this category. It is provided in Islamic injunctions, that certain natural resources must be reserved for the whole community. Finally, there is the prohibition of interest. This also has a positive effect on income distribution. All these tools tend to make income more equally distributed. Keeping in view all these measures we can not say that the income distribution function in an Islamic economy is *largely* discharged by *Zakah.*

There is also a confusion about the intended functions of *Zakah* and the functions of taxes. Dr. Faridi has mentioned that in the provision of public or quasi-public goods by the state, the disbursement of *Zakah* can be used.† This may sound on the surface to be acceptable but, in fact, it is not. *Zakah* cannot be spent to produce public or quasi-public goods. There are strong indications in Qur'an that *Zakah* is essentially for the poor. Almost all sects of Muslims prohibit expenditure of *Zakah* on building a mosque because it is used by both rich and poor. Thus we should not say that *Zakah* would help produce public and quasi-public goods. No! It can be transferred to the poor only. Some may interpret the spending on welfare goods as *Fi SabilIillah* but the most authoritative interpretation would not allow this.

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* In the revised draft this statement has been replaced by the statement that "the *Zakah* is the most important fiscal and distributive mechanism of an Islamic economy". (Editors)

† The author has dropped this assertion in the revised paper. (Editors)

Dr. Faridi maintains that the tax system in Islam will serve to meet primarily the same needs for which *Zakah* has been levied. I do not think this is an accurate statement. The tax system in Islam, to the extent it is permissible, is to produce public and quasi-public goods and has nothing to do with what *Zakah* was meant to do. The idea to harmonise the tax system with *Zakah,* on the face of it, may seem to be very innocent but it is a complicated issue.

Three-sector model (the third sector) is very significant and deserves a separate paper.

It is good idea to use negative income tax concept to analyse the concept of *Zakah.* We, however, should be careful in applying the concept of negative income tax to *Zakah* in view of the fact that negative *income* tax has been found to work as a disincentive to work. This will not be so in case of *Zakah* because *Zakah* is *Haram* for those who can work. There is a moral stigma in case of *Zakah.*

Mohammad Ahmed Sakr

I should first congratulate Dr. Faridi in the beginning for presenting a lucid and imaginative paper. He tackles his topic with depth and clarity and without repeating earlier rudementary approaches to fiscal policy in Islam.

However, paper can be improved in style if it can get rid of some repetitions while dealing with such problems, as allocation, distribution, stabilization and more precisely when dealing with what be calls the third (voluntary) sector.

I fully agree with Dr. Zarqa that there are devices other than *Zakah* in the Islamic system which will improve income distribution. It is well known that *Zakah* is primarily meant for meeting the economic needs of needy persons. Eliminating poverty is its prime objective. It is true that *Zakah* will transfer income or wealth from those who have to those who have not. But it was never designed to achieve full equitable distribution of income in the Islamic society.

Dr. Faridi is of the opinion that other taxes and fiscal measures are needed to attain the socio-economic goals of society. I agree with him. But he fails to show his preference whether he is largely for direct or indirect taxes. Perhaps direct taxes (on income and wealth) are more equitable and more in conformity with Islamic norms. It is true that Muslim countries of today are developing and the general practice is to depend heavily on indirect taxes. There is a difficulty in the assessment of income and wealth and in the prevalence of tax evasion. But we expect that the introduction of *Zakah* coupled with the introduction of fully integrated Islamic policy in all spheres of social life, will improve greatly the fiscal apparatus. Income and wealth can be assessed more correctly. *Zakah-payers* will feel when they are assessing their *Zakah* that they are discharging a religious duty. Hence more use can be made of direct taxes, which is almost impossible in the present secular state of mind and policy. Direct taxes can hit the right source and thus decrease the sufferings of low income groups or rather increase the net gains from new taxes.

There is a discussion about *Nisab* where it seems that there exists some misunderstanding about it, when Dr. Faridi makes the point that *Zakah* should be paid only to those who fall below *Nisab* and those who have the requisite *Nisab* but still fall below poverty line may receive *non-Zakah* transfer payment.

Here we have to be clear about the real meaning of *Nisab. Nisab* means that minimum level of income (or savings) which is left over after meeting all necessary living costs of the Muslim. Some jurists made long list of these costs to include such things as expenditure on food, rents, working tools, house furniture, servant salary, means of transportations, debts and expenditure on education and buying books of knowledge (See Qardhawi, Vol. 1, pp. 151-153).

كل ما يدفع الهلاك عن الإنسان

This list has been derived from the saying of the Prophet (peace be upon him) (No *Zakah* or *Sadaqah* is due except out of abundance).

لا صدقة إلا عن ظهر غنىً

The relevant point in this regard is that those who possess the *Nisab* are not poor and definitely they are above the poverty line*.

Dr. Faridi rightly points out that the government should formulate an expenditure programme in the field of education and health to help the poor. He seems reluctant to advise that government can indulge in long-term projects from *Zakah.* Islamic government can embark on a range of productive projects in industry and agriculture which will provide permanent employment for the poor and as such will create continuous flow of income. Such projects will be financed out of *Zakah* proceeds. Supplying the poor with food, clothing and the like is just one form but it is not the only permissible and accurate form. (See Qardhawi, *Islamic Economics,* p. 247).

We come now to the role of the voluntary sector. Although we are all in agreement about its importance, yet it seems that this role is highly exaggerated, to the extent that the government role is left completely outside its social responsibility. The role of the public sector in developing economy is vital in the

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* The author has revised the relevant portion of the paper. He now seems to point out the possibility of current income falling short of current needs in spite of the fact that one may possess some assets e.g. gold/jewellery worth the amount of *Nisab.* However, no clear-cut recommendation is made as to whether such persons should receive transfer payments or not. (Editors)

allocation of resources to the infra-structure facilities, to the heavy industry to revolutionize agricultural methods and to train the workers and the like. His contention that public expenditure in an Islamic society will necessarily tend to decline and Islamic administration will be less-expensive seems strange. On the contrary the economic and social responsibility of the government will increase in the Muslim society and in regard to the outside world.

Dr. Faridi does not mention any fiscal tool other than taxation to cope with public expenditure. There is a limit for taxation. Why not suggest public borrowing? That raises many questions. Should the borrowing voluntary or compulsory? How such sources can be tapped in an economy with no interest rate? The paper should have taken up such important issues.

Fiscal policy cannot be drawn in a vacuum. Dr. Faridi could have served the purpose better if he had given us the overall policies of an Islamic government with specific concentration on Islamic economic policy as a whole. Integration of economic policies is very crucial for the success of fiscal policy or any other policy. Monetary policy and fiscal policy are perhaps more related, the paper deprived us from seeing how this link can be worked out.

Discussion

M. Akram

This is not correct to say that *Zakah* cannot be used for the public and quasi-public goods. This is based on orthodox interpretation of the use of *Zakah.* There is a liberal interpretation of *Zakah* expenditure and people have been contending that *Zakah* can be spent on such projects as roads or hospitals or such industries where people can be provided employment opportunities.

My second point is that though non-profit institutions exist in non Muslim countries also (as Dr. Uzair pointed out) the difference is that such non-profit activities in Islamic societies are done for the sake of reward in *Akhira.*

Mrs. Rehana Islam

I have to disagree on the point that *Zakah* can be spent on public or quasi-public goods. This is a general misunderstanding. I think it cannot be spent on general *welfare* projects like constructing bridges, roads and for the provision of education and health facilities etc. I would like to refer to *Surah Taubah* in support of m~ contention, wherein the categories, for which *Zakah* can be used, are explicitly mentioned.

It is very important for us to note that whereas the rate of *Zakah* has not been specifically mentioned in the Qur'an, the eight categories of expenditure have been specified by God Almighty. If you try to extend the list of beneficiaries of *Zakah,* it will never reach to those who are in real need. The other point is that *Zakah* has been levied in a way that it least impairs the growth of wealth. It is levied in a way that encourages the circulation of wealth in the economy and also lead to further production of wealth. That is why we have to follow the path laid down in the Holy Qur'an with lot of care when spending *Zakah.* My last point is that *Zakah* is compulsory. Sustenance of those who are in need cannot be left to the voluntary actions.

نأخذ من أموال الصدقات

خذ means take and, therefore, it cannot be considered voluntary.

Dr. Omar Zubair

We should not call *Zakah* a tax. Tax is something which is paid with discomfort. *It* is a burden; that is why we calculate tax-burden. *Zakah* is an obligation that has to be paid with pleasure. The other point which Prof. Faridi has mentioned is about the poverty line. He seems to be engaged in finding another tax so that those who fall above the *Nisab* but are considered to be poor, may be paid by that tax. Poverty line is a relative concept. We do not have an absolute poverty line. It. depends upon the state of the economy and the relative position of the people. An other point in this regard is that there may not be any need of this extra tax. In the *Fiqh* of Abdul Malik you can pay from the *Zakah* even to those people who are paying *Zakah* and we have many examples. Hazrat Umar paid *Zakah* to such people, who were above the *Nisab* level. I do not agree with Dr. Zarqa that the able bodied people should not be paid *Zakah.* One person came to our Holy Prophet (peace be upon him). He was healthy and sound but was poor. He gave him certain means of production, e.g., tools of construction. So those people who are able to work but do not have the means of production should be paid from *Zakah.*

Prof. Rafiq Ahmed

I should not be misunderstood if I say that if you want to make *Zakah* really a powerful fiscal tool, then following four points will have to be kept in mind: Firstly, the basic rate of 2.5 per cent and other rates will have to be manipulated. Secondly, the scope might have to be enlarged. Thirdly, the base might also have to be enlarged. Fourthly, for the *Nisab* we will also have to do a little rethinking.

Since this is impossible, because they are based on devine message, *Zakah* is not really a powerful tool to serve all the objectives of fiscal policy. It will not be able to playa powerful role unless it is complemented by other taxes. Take the example of Pakistan where *Zakah* legislation has been able to generate a total of Rs. 480 million. This amount has been spent on roughly 2 to 3 per cent of the total population about which records are available. Nobody knows accurately, but roughly the number of persons needing support range from 15 to 20 per cent of the population. So *Zakah* really cannot playa powerful fiscal role in developing countries like Pakistan unless it is supported by other taxes.

Prof. Syed Nawab Haider Naqvi

I think most of the problems have arisen from the title of the paper wherein he says a theory of fiscal policy. So far he has been talking of practice of fiscal policy. In actual practice I think what he is saying makes sense. But I think a paper on the theory is expected to cover ideal situations. From this point of view, Dr. Faridi’s paper cannot be accepted as a paper on the theory of fiscal policy.

Secondly, I would like Dr. Faridi to work out the equilibrium conditions for his model. I think the third sector will not exist under equilibrium.

Dr. Mohamed Ariff

There is a tendency to regard *Zakah* as a tax in the modern terminology and that is why people come up with all types of suggestions. *Zakah* is an *lbadah* and not a tax. Moreover, it is a devine commandment and we should not entertain the ideas of broadening the base and uses of *Zakah.*

Dr. Sultan Abu Ali

The author has defined the optimum allocation of resources with respect to given income and technology. I think this is a rather static definition. The optimum allocation of resources should aim at maximising income and other objectives. Dr. Faridi's paper also lacks the discussion on the trade-offs between growth and equity objectives of fiscal policy.

Dr. F. R. Faridi

I agree that it was probably a mistake on my part not to recognise the role of other measures in the distribution of income and wealth as pointed out by Dr. Zarqa. The second point that I would like to make is that there is a misunderstanding about what I have said about the use of *Zakah* on public and quasi-public goods. I have not made a general statement that all kinds of welfare activities would be financed out of *Zakah.* I think I have only stipulated that some public and quasi-public goods which cater to the needs of the poor may be financed out of *Zakah.*

It is logically wrong to compare the Ford Foundation and such other institutions with the poor developing countries. What would be logically right, is to try to compare the budget of these voluntary institutions in the United States with the budget of the private, profit motivated sector there and then compare this with the same in Muslim countries. That would be a correct comparison. The voluntary sector is an integral part of the entire economic operation of an Islamic society. It is not grafted. It is something which is inherent in the Islamic economy. Whether you like it or not, it will be there. Even today some of the Islamic countries are maintaining *Auqaf.* Can you imagine that in a non-Islamic society *Auqaf* had been created for maintaining the horses and cattle and for dogs and for a lot of other activities and some of these *"Auqafs"* still exists.

I have not said that the role of public sector should be minimised. I have also not said that there will be no government sector or that it will stand in the corner. If my statements can be interpreted like that I do not know how else it can be expressed. I do not agree that the equilibrium in my paper is a static equilibrium. It is a dynamic equilibrium.

Fiscal Policy in an Islamic Economy

Dr. M. M. Metwally*

Macroeconomic literature is reasonably rich with discussions on fiscal policy (i.e. government tax, expenditure and debt policies) in both developed and developing free-market economies[1]. The aim of this paper is to show that fiscal policy in Islamic economies [Le. economies which would be *strictly* ruled by Islamic laws[2] derived from the teachings of the Holy Qur'an, the traditions of the Holy Prophet, Muhammad (peace be upon him), and the practices of early Muslims] would differ in its role, objectives, measures and mechanism from that in non-Islamic economies.

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This paper has b'een extensively revised in the light of comments of discussants (Editors).

1. The interested reader might refer to: B. Hamen, *The Theory of Fiscal Policy,* Harvard, 1958; R. A. Musgrave, *The Theory of Public Finance,* McGraw-Hill, 1955; and W. J. Baumol and M. H. Peston, "More on the Multiplier Effects of a Balanced Budget", *American Economic Review,* March 1955. Also, A. Ando, E. C. Brown, J. Kareken and R. M. Solow, "Lags in Fiscal and Monetary Policy" in Commission on *Money and Credit, Stabilization Policies,* Prentice-Hall, 1963; A. M. Okun "Rules and Roles for Fiscal and Monetary Policy" in issues in *Fiscal and Monetary Policy: The Eclectic Economist Views the Controversy,* James J. Diamond, ed. (De Paul University, Chicago, 1971).

2. These laws will be enforced both by faith and by civil laws. Thus there will be no place for evasion or "tricks". Actually the paper assumes that Islam in its "ideal" form will be practiced.

I

ROLE OF FISCAL POLICY IN AN ISLAMIC ECONOMY

Fiscal policy would playa much more important role in an Islamic economy than in a non-Islamic free-market economy for the following reasons.

(1) The role of monetary policy will be relatively much more limited in an Islamic economy than in a non-Islamic free-market economy for at least two reasons:

(a) The rate of interest does not play any role in an Islamic economy. Muslims are forbidden to receive any interest on any type of loan (personal or otherwise)[3]. Thus in an Islamic economy a variation of interest rates as an important tool of monetary policy does not exist.

(b) Islam does not permit gambling[4]. This applies not only to races, games of cards and other conventional gambling activities but also to many types of speculation and certain forward transactions which take place in non-Islamic economies[5]. This has two implications: (i) Open market operations would not be very effective in an Islamic economy. Stock exchange would definitely not playas great a role in these economies as in non-Islamic free-market economies where speculation is an integral part of economic life. (ii) There would be no speculative demand for money in the Keynesian sense. However, the possibility of holding cash to wait for more profitable opportunity is allowed. This opportunity demand for money would be subject to both *Zakah* and dues on idle cash. The absence of "Keynesian speculative demand" for money and the non-existence of interest imply that the bond market will not play an important role in Islamic economies.

(2) Irrespective of the economic conditions in an Islamic economy, a strictly Muslim government must ensure that the tax of *Zakah* (a religious tax) is collected from every Muslim whose wealth exceeds a specific minimum value and that the proceeds are used for the purposes specified in Chapter (or

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3. The Qur'an (2:275); (2:276); (2:278); (3:130); (4:161) and (30:39).

4. The Qur'an (2:219); (5:90) and (5:91).

5. See, A. I. Qureshi, *Islam and the Theory of Interest,* Sh. Muhammad Ashraf, Lahore, 1967, pp. 87-93.

Surah) 9, verse 60 of the Holy Qur'an[6]. This built-in fiscal policy device is unique to Islamic economies[7]. However, as we shall see later the tax of *Zakah* even though it has important repercussions on the major economic variables, can not be used in Islamic economies as a discretionary fiscal tool in the same way as other taxes. Economic dues other than *Zakah* are the crux of fiscal policy in Islamic economies.

(3) There are substantial differences between Islamic and non-Islamic economies in respect of the role and management of public debt. Since all loans in Islam are interest-free, much government spending is financed either from the proceeds of taxes and dues or (in case of productive projects) on a profit-sharing basis. Hence, the size of the public debt is much smaller in Islamic economies than in non-Islamic economies. In a national war, Islam conscripts not only labour, but also capital[8].

II

OBJECTIVES OF FISCAL POLICY IN AN ISLAMIC ECONOMY

Fiscal policy in an Islamic economy would be used to achieve the same objectives as in non-Islamic economies (i.e. the objectives of economic stability, growth and an acceptable distribution) plus other objectives which are embodied in the Islamic doctrines or must be achieved in order to apply the Islamic laws. At least three of these objectives can be distinguished.

(1) Islam establishes a higher degree of economic equality and democracy through, among other principles and laws, the basic *principle* that "wealth should not be permitted to circulate amongst the wealthy only". This is clearly stated in the Holy Qur'an[9]. This makes it imperative that the economic system should be such as to provide, for all able members of society, a fair

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6. Payment of *Zakah* is mentioned in the Holy Qur'an in (2:43,83,110,177 and 277); (4:77 and 162); (5:12 and 55); (7:156); (9:5, 11,18 and 71); (18:81); (19:13), 3, and 55); (21:73); (22:41 and 78); (23:4); (24:37 and 56); (27:3); (30:29); (31 :4); (33:33); (41 :7); (58:13); (73:20) and (98:5).

7. Other important taxes imposed in early Islam include: *Kherai* or land-tax; *lazia* or toll tax. Also, early Islamic sources of revenue included the spoils of war, Treasure Trove and estates of deceased persons. See, S. A. Siddiqi, *Public Finance in Islam,* Sh. Muhammad Ashraf, Lahore, 1962.

8. The Holy Qur'an (9: 3).

9. The Holy Qur'an (59:7).

measure of equality of opportunity for securing a decent livelihood, thereby sharing honourably in the national wealth through honest labour and sincere achievement. The disabled secure their basic needs honourably, though the religious tax of *Zakah* and other dues imposed on well-to-do members of the society. The economic implications of the tax of *Zakah* will be discussed in the next section.

(2) Since Islam prohibits the payment of interest on any type of loan, it follows that an Islamic economy would not be able to manipulate the rate of interest in order to achieve equilibrium in the money market (i.e. between the supply of and demand for money). Hence the Islamic authorities must find an alternative tool to achieve this equilibrium. This alternative tool is the rate of dues on idle cash. These dues are kinds of taxes which would naturally fall within the scope of fiscal policy. Economic dues are the basic tools of discretionary fiscal policy in Islamic economies. It follows that Islamic economies would use fiscal policy in achieving equilibrium in the money market. The mechanism of this will be explained in detail in the next section.

(3) An Islamic economy would be committed to assist other less-developed Islamic economies and to spread the message and teachings of Islam as widely as possible[10]. Thus, part of government expenditure will be devoted to activities which promote Islam and increase the welfare of Muslim brothers in other, less-developed Islamic economies. The taxpayer in Islamic economies realizes that part of the taxes he pays are committed to the service of Islam.

III

MEASURES OF FISCAL POLICY IN AN ISLAMIC ECONOMY

An Islamic economy would use most of the fiscal measures designed for a non-Islamic economy, although, as we shall see, the application and impact of such measures would be different. There are, however, unique fiscal measures, which may be considered an integral part of the Islamic economic policy. Only two measures will be examined here: (a) the tax of *Zakah,* and (b) the economic dues.

(a) The Tax of *Zakah*

We have already mentioned that *Zakah* is one of the cornerstones of Islamic doctrine. Its collection is, therefore, independent of the economic conditions of the Muslim society. It is, nevertheless, a form of tax. Hence it must be considered a

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10. The Holy Qur'an (49:10); (4:95); (5:67) and (33:39).

fiscal measure. Yet it cannot be considered a fiscal tool that the authorities can use to achieve economic objectives in the same manner as they can use other taxes. This is so for three reasons:

(i) The tax of *Zakah* is a religious tax. It must be collected by Muslim authorities at all times whatever the economic situation may be.

(ii) Although no form or ratio of the tax of *Zakah* has been prescribed by the Holy Qur'an, the Prophet (peace be upon him) prescribed certain ratios on different types of incomes and assets. According to religious views, these ratios are fixed and unchangeable[11]. It follows that the rates of the tax of *Zakah* cannot be changed (increased or decreased) to achieve economic objectives. In other words it cannot be used as a fiscal tool.

(iii) Not only are the ratios fixed but the purposes for which the proceeds of the tax can be used are quite explicit. These objectives are stated in the Holy Qur'an in Chapter 9, verse 60. The proceeds shall be allocated to: (1) the poor, (2) the needy, (3) the officials over them, (4) those whose hearts are made to incline (to truth), (5) the (ransoming of) captives, (6) those in debt, (7) those in the way of God, and (8) the wayfarer. With regard to those whose hearts are made to incline, the law has ceased to operate since the time of the Prophet (peace be upon him) because he bestowed *Zakah* upon them as a gratuity to prevent their molesting Muslims and also to secure their occasional assistance. But when the faith gained strength, the custom of bestowing this gratuity was abandoned[12].

There is for each kind of wealth, a minimum exemption called *Nisab.* In the case of silver it is approximately 21 ounces; in the case of gold 3 ounces. For other forms of wealth, the *Nisab* is judged by the value in silver. *Zakah* is not due from the necessaries of life such as dwelling houses, articles of clothing or household furniture. According to contemporary religious views, *Zakah* is imposed at a levy of 2.5 per cent (or 1/40th portion) on *assets* which are capable of growing (including cash in hand, idle deposits with banks, silver, gold and other jewellery) and on *net eornings from tronsoctions* and at a levy of 10 per cent on *net returns from investment* (i.e. after allowing for depreciation).

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ll. See Y. Qurdhawi, *Jurisprudence of Zakah* (Fiqh EI-Zakah) in Arabic El-Resala Press, Cairo, 1977.

12. A. M. F. Karim, *AI-Hadis: Mishkat-UI-Masabih,* Calcutta (1939).

The preceding paragraphs imply that Muslim authorities cannot manipulate the tax of *Zakah* or its proceeds in response to changing economic conditions. However, despite the fact that *Zakah* is not a too/ of discretionary fiscal policy, its existence has an extremely strong impact on the major economic variables in an Islamic economy. We shall examine its impact on the consumption function and the investment function.

1. *Effect of* **Zakah** *on Consumption*

The Mathematical Appendix shows that *Zakah* would have two effects on total consumer expenditure in an Islamic economy. Firstly, because of the tax of *Zakah,* both the average and the marginal propensities to consume would be higher in an Islamic economy than in a non-Islamic economy which does not have a similar fiscal measure. Secondly, because of the tax of *Zakah,* the investment gap at each level of income would be smaller in an Islamic economy which does not have a similar fiscal measure. The effect of *Zakah* on consumption is shown in Figure 1.

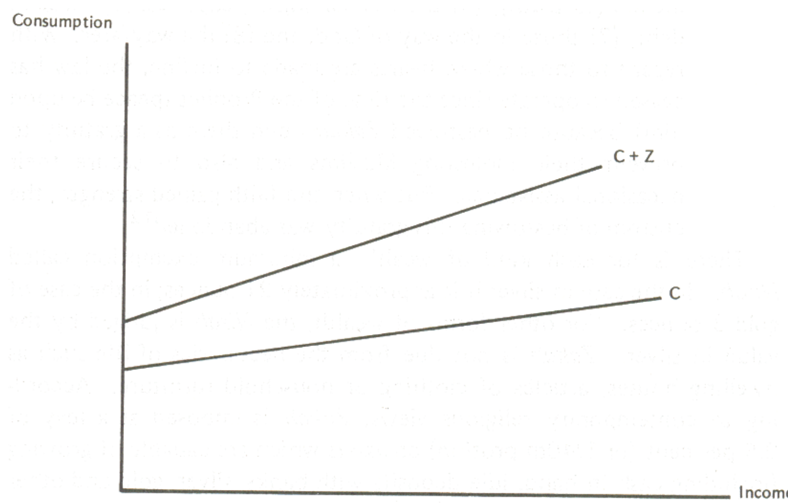

Figure 1: Effect of *Zakah* on the Consumption Function

C = A consumption function without *Zakah*
C+Z = A consumption function with *Zakah*

2. *Zakah and Progressive Taxation*

Keynes advocated progressive taxation as one of the important measures for alleviating unemployment, because it takes a relatively larger part of the incomes of the wealthy than it does of the poor, thereby providing some relief from the inadequate demand for consumption manifested in capitalist economies.

Progressive taxation is not, however, a panacea for unemployment. There are distinct limitations on the extent to which progressive taxes can be used to promote high levels of economic activity. The whole tax system must be progressive for effective results. Also, an inevitable limitation on the extent to which progressive taxation can be used arises from the fact that not all the money which is taxed away from the rich can be given directly to the poor, although to *some extent* this is done in the form of pensions, relief payments etc. The government which collects taxes for purposes of redistribution must either subsidise private citizens or expand the scope of its activities in order to provide social services for lower-income groups. Services such as education, medical care and public recreational facilities are illustrations. Although services of this type are of great social significance, they do not enable the low-income groups to increase the money income out of which they must feed, clothe and house themselves. Subsidies for housing, or low-cost government housing, are, of course, possible but tend to be strongly opposed by private interest groups. A further limitation to redistributing income by means of progressive taxation is the danger that high rates on large incomes may discourage private investment, upon which the private enterprise economy primarily depends for filling the gap between income and consumption at high levels of employment. If progressive taxation increases the community's propensity to consume at the .expense of weakening the inducement to invest, the losses in employment from the latter may more than cancel the gains from the former.

These limitations clearly show the superiority of the Islamic economic democracy and equality. They also show the superiority of the tax of *Zakah,* introduced over 1400 years ago, to the measures of progressive taxation introduced by Keynes. First, *Zakah* has a wider base than progressive taxation; it is imposed not only on incomes but also on idle assets. Secondly, the proceeds of *Zakah* go mainly and directly to the poor and needy and hence act immediately to raise the propensity to consume. Thirdly, the tax of *Zakah* falls heavily on assets which are capable of growing and would, therefore, have a stimulating, rather than a discouraging, effect, (as with taxation), on investment. Fourthly, *Zakah* is a religious tax which must be collected at *al/* times irrespective of the economic circumstances. Fifthly, the rates of *Zakah* are fixed and cannot be changed. Sixthly, the purposes, for which the proceeds of *Zakah* are used, can only be those stated in the Holy Qur'an.

3. *Effect of* Zakah *on Investment*

Because of *Zakah,* the demand for investment at a given expected rate of profit will always be higher in an Islamic economy than in a non-Islamic free-market economy. This is proven in the Mathematical Appendix. The relationship between the demand for investment in Islamic economies and the tax of *Zakah* is shown in Figure 2. It can be seen from Figure 2 that investment in Islamic economies can take place even if the expected rate of profit was zero. Only when the expected rate of profit drops to a negative value given by

$$r = \in' /(\in - 1)$$

where $\in'$ is rate of *Zakah* on idle assets and e the rate of *Zakah* on net returns from investment, would investment cease to take place.

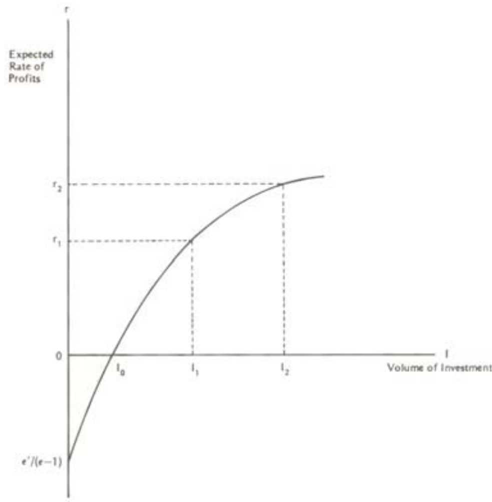

Figure 2: The Demand for new Investments in an Economy Ruled by Islamic Laws

(b) The Economic Dues

We have already seen that the ratios of *Zakah* are fixed and unchangeable. Therefore, *Zakah* cannot be used as a discretionary fiscal tool to achieve economic objectives by manipulating its rates or by varying the use of its proceeds. For this reason, the economic dues are the most important taxes in Islamic economies. And it was for this reason that early Muslims imposed additional dues on incomes and wealth as economic conditions necessitated.

These extra dues are imposed on both incomes and idle assets with rates which vary with economic conditions and for purposes which could differ from those of *Zakah.* The dues need not be collected at the end of the year as with *Zakah,* but may be imposed at any time.

Manipulation of the rates of dues on idle cash balances could be used in an Islamic economy to achieve equilibrium in the money market; a task which is carried out through variations in interest rates in non-Islamic economies. This implies very important differences in the roles of fiscal policy in Islamic and non-Islamic economies.

In an Islamic economy, money would be required to satisfy both the transactions and precautionary motives. No money would be demanded for speculative purposes in the Keynesian sense since, as we have seen, no gambling is allowed in Islam. However, the possibility of holding idle cash to improve one's opportunities to invest is allowed in the analysis. The amount of money needed to satisfy the transactions and the precautionary motives in Islamic economies would be a function of income given the rate of dues on idle cash which the Muslim authorities may impose in addition to *Zakah.* An increase in income will, other things remaihing the same, lead to an increase in the quantity of money demanded.

An increase in the rate of dues on idle cash results in a reduction in the quantity of money demanded at a given level of income. This can be shown diagrammatically as in Figure 3.

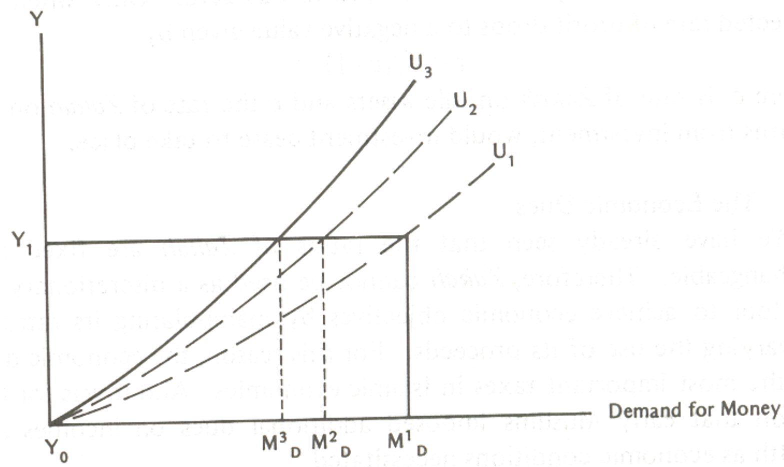

Figure 3: The Demand for Money in Islamic Economies

In this Figure, income (Y) is measured on the vertical axis and the demand for money (M_D) on the horizontal axis. Y_0 represents that level of income which equals the *Nisab* and the necessaries of life. When income is Y, and the rate of dues is U" the quantity of money demanded is $M^1{}_D$.

An increase in the rate of dues to U_2 will lead to reduction in the quantity of money demanded at Y_1 to $M^2{}_D$' a further increase in the rate of dues to, say, U_3 will lead to a further reduction in the quantity of money demanded to $M^3{}_D$.

Equilibrium between the money supply and the demand for money can be achieved in Islamic economies (where interest does not exist) through the manipulation of the rate of dues on idle cash. This is illustrated in Figure 4. In this Figure, the horizontal axis measures the quantity of money (supplied and demanded) while the vertical axis measures the rate of dues on idle cash. The curve representing the money supply is vertical, indicating that money supply is determined by the state and is independent of the dues. The demand for money is shown to vary inversely with the rate of dues on idle cash. At a rate of dues of U_1 equilibrium will be reached at point E_1. If, at the present level of income there is a greater tendency to hold cash (say $M^2{}_D$) for, say, opportunity purposes, at the existing rate of the dues on idle assets, the state will raise the dues to a level high enough to discourage this greater tendency to hold idle cash. In Figure 3 the new level of dues on idle cash is given by U_2. At this level, only $M^1{}_D$ will be demanded and thus equilibrium will be restored. The important point is that the state will not restore equilibrium by expanding the money supply to a level equal to $M^2{}_D$ but by raising the rate of dues on idle cash. This will ensure that the money supply will not expand in an inflationary way simply in reaction to an increased demand for hoards which may later be disbursed without a corresponding increase in the flow of goods and services.

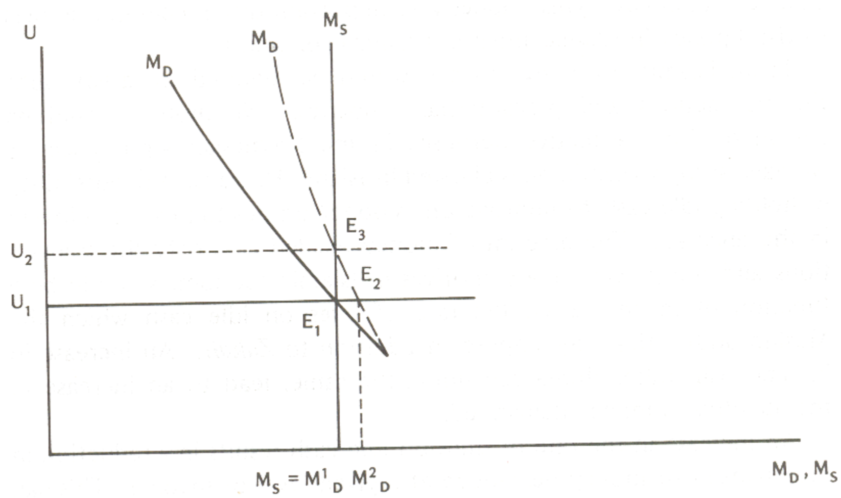

Figure 4: Relationship between Money Supply, the Demand for Money and the Dues on Idle Cash in Islamic Economies

It is also important to mention here that the dues on idle cash are taxes and can therefore be imposed by the Muslim authorities irrespective of the actual rate of inflation.

IV

MECHANISM OF FISCAL POLICY IN AN ISLAMIC ECONOMY

In trying to achieve the desired economic objectives, an Islamic economy may use its fiscal tools differently as compared to non-Islamic economies. In this section we shall examine the mix of fiscal tools avai1able in an Islamic economy to achieve full employment, to curb inflation and to mobilize savings in order to accelerate economic growth. We shall also consider the issue of the “balanced-budget multiplier” and of public debt policy. In so doing, we shall concentrate on new dimensions and leave aside those aspects which are discussed in macroeconomics textbooks[13].

Use of Fiscal Policy in an Islamic Economy to Cure Unemployment

It is possible that, in an Islamic economy, the aggregate demand curve intersects the aggregate supply curve at a point which corresponds to a level of employment less than that of full employment. This would occur if investment were not sufficient to close the gap between national income and consumption expenditure. In other words, the highest expected rate of profit may be inadequate to induce businessmen to undertake sufficient new investment. Pessimistic business expectations result in a shortfall of investment for securing full employment. But because the only alternative available to savers is to hold idle assets, including the holding of cash, the Islamic authorities can easily stimulate aggregate demand by raising the rate of dues on idle assets. This would have two effects:

(a) It would stimulate private investment because the alternative to investment is likely to be more costly. Thus more investment would be forthcoming at the present level of business expectations. In other words, if the rate of dues on idle assets were higher than the expected rate of loss on investment, more investment would be forthcoming.

(b) A significant portion of the increase in the revenue from the dues could be passed over, in the form of transfer payments, to the poor and needy whose marginal propensity to consume is usually relatively high. This would stimulate consumption expenditure and contribute towards closing the gap between income and consumption. Moreover, the stimulation of consumption expenditure would push the expected rate of profit upward and this would stimulate private investment even further.

Hence, the rise in the rate of dues on idle assets would result in an increase in aggregate demand until full employment is achieved.

The use of dues on idle assets in Islamic economies to solve problems of unemployment during severe depressions is more effective than the use of expansionary fiscal policy in non-Islamic free-market economies[14].

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13. Refer to footnote 1.

14. See M. M. Metwally, "General Equilibrium and Macroeconomic Policies in Islamic Economies", *International Centre for Research in Islamic Economics,* King Abdulaziz University, Jeddah.

In the latter economies, the increase in government expenditure to solve the problem, could, depending on how it has been financed, results in an increase in the price level which would cause the real money supply to decrease. The decrease in money supply will cause the rate of interest to rise and this will cause investment to fall. The net expansionary effect of the increase in government spending will, therefore, be reduced. Clearly, such an adverse effect on investment does not occur when the rate of dues is used as an economic measure to achieve full employment in Islamic economies.

During periods of moderate recessions, the above analysis would still hold, i.e. the Islamic authorities would stimulate aggregate demand by raising the rate of dues on idle assets. This would still be more effective than the use of fiscal policy in non-Islamic free-market economies in which, in periods of moderate recession, an expansionary fiscal policy will be, for the most part, offset by rising interest rates so that the resultant increase in aggregate demand will be modest. The reason fur this is that a significant divergence from the normal rate of interest does not occur during these periods and the demand-for-money curves would be almost vertical in this interest range. In addition, there exists a sizable lag between recognizing the need for economic stimulus and the chosen policy having its effect. This means that the increase in aggregate demand resulting from the fiscal policy may not come into force until the economy is well into the expansionary phase of the cycle. This ill-timing of the stimulus would produce excess aggregate demand and inflation. Instead of producing economic stability the policy results in greater instability. This would not be the case with raising the rate of dues on idle assets since such a rise would have an immediate impact on the economy. Savers would feel immediately the burden of the tax if they continued to hold idle assets and the poor and needy will get more income most of which is likely to be spent quickly.

This does not mean that in Islamic economies government expenditure will not be used for stimulating demand. History tells us that public spending in Islamic economies of the medieval period was extremely important. Thus Ibn Khaldun 'insisted on the role of the State in the economy before Keyness'[15]. He explained that the government performs a function on the demand side of the market. If the government stops spending, "business slumps and commercial profits decline because of the shortage of capital"[16].

There is, of course, no need to repeat here what is written in most macroeconomic textbooks on the use of government expenditure in stimulating aggregate demand.

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15. D. C. Boulakia, *Journal of Political Economy,* 79 (1971), p. 1117.

16. 1bn Khaldun, "The Muquaddimah", (2:92).

Use of Fiscal Policy in an Islamic Economy to Curb Inflation

In non-Islamic free-market economies, demand-pull inflation can originate in the real sector or in the monetary sector while cost-push inflation results from imperfections in either the labour market or the product market.

In a closed Islamic economy, demand-pull inflation is more likely to take place than cost-push inflation, given the economic postulates of Islam[17]. This, however, does not mean that trade unions can not exist in an Islamic framework. It only implies that in such framework, harmony is brought about through a social contract reached between the employers and the employees in order to avoid social exploitation.

The above implies that, in an Islamic framework, the aggregate supply curve will not shift to the left because of monopoly power on the part of either employers or employees. Hence, the possibility of inflation accompanied by unemployment is not likely to exist in a closed Islamic economy[18].

Let us assume that the economy is at full employment and that, for some reason, the government decides to increase its expenditure and to raise the necessary finance by an increase in dues on personal income equal to the increase in expenditure. Since we started from a position of full employment, the increase in aggregate demand (due to the fact that not all the dues would have been spent by the tax-payers) cannot result in an increase in real national income but must manifest itself as a rise in money incomes. In other words the same level of output will now be demanded at a higher price level.

There are two curves for inflation in Islamic economies. The first is through an increase in the rates of dues on personal incomes. This will result in a decline in consumption which will cause a shift in aggregate demand towards the equilibrium (full employment) price level. The second method is to make use of the reserves accumulated in *Baitul Mal.* These reserves are made up of the proceeds of *Zakah* and dues which were not spent during a particular time period. These reserves can be manipulated in a manner which ensures economic stability. During periods of inflation, the Muslim government could spend less than its reserves from full-employment proceeds. This would result in a high degree of economic stability.

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17. It must be clearly understood, however, that the existence of bottlenecks and non-competitive situations which are not forbidden by Islam can cause cost-push inflation in Islamic economies.

18. See the comments in the above footnote.

Use of fiscal Policy in an Islamic Economy to Accelerate Economic Growth

In a developing Islamic economy, accelerated economic growth may become the primary objective of fiscal policy. Since growth is a function of the rate of savings, fiscal policy should aim at achieving the maximum mobilization of savings in these economies.

Also, increased government expenditure may be needed to build the necessary infrastructure and to invest in projects which are not attractive to the private sector.

Since interest is prohibited by Islam, mobilisation of savings in Islamic economies takes place through direct participation of savers in entrepreneurship. Savers themselves may start small enterprises or may combine with partners to organize a bigger concern or subscribe towards the large capital of a joint stock company. Shares rather than bonds will predominate in a financial market with zero interest rate. There is no barrier, under such conditions, to a government's raising funds for productive public enterprises by issuing shares rather than bonds, and dividends can replace a fixed rate of interest.

The financing of profit-producing government projects is carried out in an Islamic economy through the application of the principle of "partnership". The government institutions carrying out these projects can obtain the necessary finance directly from the public through the issue of ordinary shares of small denominations. The shareholders will share profits and losses. Their liability, however, will be limited to the values of their share. In this way public investments (railways, hydroelectric works, canals, large iron and steel works, shipyards and similar works) can all be built up without borrowing money at interest.

Non-profit-producing government projects may be financed from one or more of the following sources: (i) the general revenue; (ii) the imposition of a special tax; and (iii) the surplus of government's profit-producing enterprises.

Of special interest here is finance for military purposes. No-interest-bearing war loans are allowed by Islam. In a national war, Islam not only conscripts labour, but also conscripts capital. The Qur'an says "God hath bought from the believers their lives and their wealth, for theirs (in return) is the Garden (of Paradise): They shall fight in His cause and shall slay and be slain. It is a promise which is binding on Him in the Torah and the Gospel and the Qur'an. Who fulfilleth his Covenant better than God?"[19]. According to Islamic doctrine both soldiers and capitalists should share the burden of national wars and if the physical brunt of the war is borne by the same generation.

19. The Qur'an (9: 3).

The above suggests that the quantity of public debt outstanding in an Islamic economy would be minimal (not zero) and that such debt would be interest-free. This means that its management would not be as difficult as in non-Islamic economies, for three reasons. (i) The government does not have the problem of servicing the debt, interest being zero. (ii) The debt, even though it would have to be repaid eventually, could be regarded as a "roll-over" debt since its age of maturity can be postponed with no cost to the government. (iii) Because the debt is relatively small, the government does not have to run substantial surplus-budgets at relatively frequent intervals to service it.

This last point suggests that Islamic economies would tend to use balanced-budgets; i.e. the government increases its expenditure and its taxes by equal amounts. This would result in an increase in income equal exactly to the increase in government expenditure. The multiplier in this case is equal to unity[20].

This, however, may not prove to be the best strategy for the Islamic economies since these economies would have to rely more heavily on fiscal policy in achieving economic stability because, as we have already seen, monetary policy is relatively less effective in these economies and because the tax of *Zakah* has a built-in expansionary effect in the economy.

The best course of action may be to relate government expenditure plus *Zakah* to the amount of taxation (dues and others) in the following manners.

$G = \overline{T} - Z$ at periods of full employment

$G < \overline{T} - Z$ at periods of inflation

$G > \overline{T} - Z$ at periods of depression

Where G = government expenditure in a particular year,

Z = amount of *Zakah* collected and distributed in a particular time period, and

$\overline{T}$ = amount of taxes corresponding to the full employment level of income.

The magnitude of the surplus during the periods of inflation and that of the deficit during the periods of depreciation *would be determined in the light of experience.*

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20. See R. L. Crough, *Macroeconomics,* Harcourt-Brace, Jovanovich, 1972, pp. 342-344.

CONCLUSIONS

This paper investigates the basic differences between fiscal policy in an Islamic economy and in non-Islamic economies. It shows that there are substantial differences in the role of fiscal policy, its objectives, its measures and its mechanism in the two types of economies.

The paper determines the effects of *Zakah* on the consumption function and on the demand for investment in Islamic economies.

The paper also explains how fiscal policy can be used to achieve equilibrium in the money market in Islamic economies where interest does not exist.

Moreover, the paper demonstrates how to tackle problems of inflation and unemployment in Islamic economies by the manipulation of the "dues" on incomes and idle assets.

Finally, the paper suggests a methodology for budgeting in Islamic economies to achieve economic stability. The findings of this paper have policy implications for Islamic economies and open the way for further research in the area.

MATHEMATICAL APPENDIX

1. The Effect of *Zakah* on Consumption

To demonstrate mathematically the effect of *Zakah* on consumption we assume two consumption functions: a linear function, and a nonlinear function.. The analysis is based on the following set of assumptions:

(i) *Zakah* is due not only in capable-of-growing assets but also on *all* kinds of incomes.

(ii) The number of people receiving *Zakah* is very small.

(iii) *Zakah* is assumed to be collected at *all* times despite the economic conditions of the country, as long as, there are some whose income exceeds the specified *Nisab*. But the rates of *Zakah* are assumed to be fixed. Also assumed to be fixed are the purposes for which the proceeds from *Zakah* are used.

(iv) The propensity to consume of those who receive *Zakah* is much higher than that of those who pay it.

(v) In estimating the non-linear function, it is assumed that there will be enough observations to cater for the number of parameters.

(vi) Muslims would have strong enough faith so that they would not try to evade the payment of *Zakah*. Also, the payment of *Zakah* would be enforced by law.

Case (i) - A Linear Consumption Function

Let the consumption function for a non-Islamic economy (with no *Zakah* and no other similar fiscal means, i.e. $Z = 0$) be

$$C = a + by \qquad \text{……………………………………………………….. (1)}$$

where:

C = consumption

y = income

a and b are constants such that

$a > 0$

$0 < b < 1.$

In this case we have:

The average propensity to consume:

$$APC = \left(\frac{c}{y}\right)_{z=0} = \frac{a}{y} + b \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (2)$$

and the marginal propensity to consume:

$$MPC = \left(\frac{dc}{dy}\right)_{z=0} = b \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (3)$$

Now, let us assume, for simplicity, that in an Islamic economy, the amount of *Zakah* is given by

$$z = \alpha y \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (4)$$

where $0 < \alpha < 1$

Let βy = income of those who pay *Zakah*

$(1-\beta)y$ = income of those who receive *Zakah*

where $0 < \beta < 1$

Also let δ = the marginal propensity to consume of those who receive *Zakah*[21];

where $0 < b < \delta < 1$

The corresponding consumption function in an Islamic economy becomes

$$C = a + b(\beta y - \alpha y) + \delta[(1-\beta)y + \alpha y] \ldots\ldots\ldots\ldots \quad (5)$$

According to this equation, we obtain for an Islamic economy:

$$APC = \left(\frac{c}{y}\right)_{z>0} = \frac{a}{y} + b\beta - \alpha b + \delta(1-\beta) + \alpha\delta \ldots\ldots\ldots\ldots \quad (6)$$

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21. The case where $\beta = 1$, implies that those who receive *Zakah* have no other source of income. It must be true, however, that the overwhelming majority of the receivers of *Zakah* would be relatively much poorer than those who pay for it. Hence, for the community as a whole, δ must be greater than b. Actually, δ could be close to unity. Assumption (2) would ensure that α is independent of β.

$$\text{MPC} = \left(\frac{dc}{dy}\right)_{z>0} = b\beta - \alpha b + \delta(1-\beta) + \alpha\delta \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (7)$$

It follows from (2), (3), (6) and (7) that

$$\text{APC} = \left(\frac{c}{y}\right)_{z>0} - \left(\frac{c}{y}\right)_{z=0} = \delta\,(1+\alpha-\beta) - b(1+\alpha-\beta) \ldots\ldots\ldots (8)$$

$$\left(\frac{dc}{dy}\right)_{z>0} - \left(\frac{dc}{dy}\right)_{z=0} = \delta\,(1+\alpha-\beta) - b(1+\alpha-\beta) \ldots\ldots\ldots\ldots\ldots \quad (9)$$

Clearly $\left(\frac{c}{y}\right)_{z>0} - \left(\frac{c}{y}\right)_{z=0}$ and $\left(\frac{dc}{dy}\right)_{z>0} > \left(\frac{dc}{dy}\right)_{z=0}$

as long as $\delta > b$. This condition will always be satisfied.

Case (ii) - A Non-Linear Consumption Function:

Let us assume a function with the following (more realistic) properties

(a) at $y = 0$; $c > 0$

(b) $\frac{c}{y} > 0$ but $\frac{d}{dy}\left(\frac{c}{y}\right) < 0$

(c) $\frac{dc}{dy} > 0$ but $\frac{d^2c}{dy^2} < 0$

In other words, there is an autonomous (positive) level of consumption and both the average and marginal propensities to consume are positive but decline as income increases. The above three assumptions imply that $0 < \frac{dc}{dy} < \frac{c}{d}$.

One function which satisfies the above properties is:

$C = a + gy^b$

Where

$a > 0, g > 0, 0 < b < 1.$

In a non-Islamic society (with no *Zakah* and no other similar fiscal measures) we have

$$\text{APC} = \left(\frac{c}{y}\right)_{z=0} = \frac{a}{y} + gy^{b-1} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (10)$$

$$\text{MPC} = \left(\frac{dc}{dy}\right)_{z=0} = bgy^{b-1} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (11)$$

In an Islamic economy we have[22];

$$C = a + g(\beta - \alpha)y^{b} + g(1 - \beta + \alpha)y^{\delta} \ldots\ldots\ldots\ldots\ldots\ldots \quad (12)$$

$$\text{APC} = \left(\frac{c}{y}\right)_{z>0} = \frac{a}{y} + g(\beta - \alpha)y^{b-1} + g(1 - \beta + \alpha)y^{\delta-1} \ldots\ldots\ldots \quad (13)$$

and

$$\text{MPC} = \left(\frac{dc}{dy}\right)_{z>0} = bg(\beta - \alpha)y^{b-1} + \delta g(1 - \beta + \alpha)y^{\delta-1} \ldots\ldots\ldots \quad (14)$$

From (10), (11), (13) and (14) we obtain

$$\left(\frac{c}{y}\right)_{z>0} > -\left(\frac{c}{y}\right)_{z=0} = g(1 + \alpha - \beta)\,(y^{\delta-1} - y^{b-1}) \ldots\ldots\ldots\ldots\ldots \quad (15)$$

And

$$\text{MPC} = \left(\frac{dc}{dy}\right)_{z>0} - \left(\frac{dc}{dy}\right)_{z=0} = g(1 + \alpha - \beta)\,(\delta y^{\delta-1} - by^{b-1}) \ldots\ldots\ldots \quad (16)$$

Clearly, for $\delta > b$:

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22. 1t is obvious that if $b = \delta$ then, in an Islamic economy $C = a + gy^{b}$ as in non-Islamic economies. Assumption (5) would ensure the availability of enough degrees of freedom to estimate the complicated parameters (b and δ) in (12).

$$\left(\frac{c}{y}\right)_{z>0} > -\left(\frac{c}{y}\right)_{z=0}, \text{and} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (17)$$

$$\left(\frac{dc}{dy}\right)_{z>0} > \left(\frac{dc}{dy}\right)_{z=0} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (18)$$

Also, for $\delta > b$, it can be shown that:

$$\frac{d}{dy}\left(\frac{c}{y}\right)_{z>0} - \left(\frac{d}{dy}\right)_{z=0}$$

$$= g(1-\alpha-\beta)\,[(\delta-1)y^{\delta-2} - (b-1)y^{b-2}] > 0 \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (19)$$

and

$$\left(\frac{d^2c}{dy^2}\right)_{z>0} - \left(\frac{d^2c}{dy^2}\right)_{z=0}$$

$$= g(1+\alpha-\beta)\,[\delta(\delta-1)y^{\delta-2} - b(b-1)y^{b-2}] > 0 \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (20)$$

In other words, because of the tax of *Zakah,* the rate of decline of both the average and the marginal propensities to consume is smaller in an Islamic economy than in a non-Islamic economy which has no similar fiscal measure. Hence *Zakah* helps in closing the gap between income and investment at all levels of income.[23]

2. The Effect of *Zakah* on Investment

If π represents the expected level of profits in a particular time period, M the value of the investment and r the expected rate of profit, we have

$$r = \pi/M \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (21)$$

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23. There are, however, some Islamic teachings which discourage extravagant consumption, luxury spending and remind Muslims with the reward in the Hereafter. These teachings may offset, to some extent, the expansionary effects of *Zakah* on consumption.

Let the tax of *Zakah* on profits be Z_π then at the rate of $\in$,

$$Z_\pi = \in \pi \quad \text{......(22)}$$

and the expected net rate of return on investment (after tax) becomes

$$r_n = r(1 - \in) \quad \text{......(23)}$$

Since lending for interest is not permitted, the alternative to real investment is holding *idle* funds.[24] *Zakah* will be payable on these funds at the rate $\in'$. The amount of *Zakah* which savers would pay if they decided not to invest is Z_m where:

$$Z_m = \in' M \quad \text{......(24)}$$

It follows that the *effective* expected rate of return on investment will be:

$$\bar{r}_n = r(1-\in) + \in' r_n \quad \text{......(25)}$$

Investment will continue as long $\bar{r}_n > 0$, i.e. as long as

$$r > \left(\frac{\in'}{1-\in}\right) \quad \text{......(26)}$$

and investment will cease when the expected rate of profit drops to a negative value given by:

$$r = \in'/(\in - 1) \quad \text{......(27)}$$

In Islamic economies, the case where the opportunity cost of not investing idle assets is zero does not exist. In other words, all idle assets (including interest-free loans) whose values exceed the *Nisab* and other necessaries of life, are subject to the tax of *Zakah*.

Hence the possibility for

$$r(\in - 1) > 0 \quad \text{......(28)}$$

does *not exist*.

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24. Another alternative, of course, is to increase consumer expenditures.

Comments

Dr. Asghar Qadir

In his paper on 'Fiscal Policy in an Islamic Economy', the author claims that *Zakah* causes the average and marginal propensities to consume to be higher than any other fiscal measure of a non-Islamic economy, and hence that it helps in closing the gap between income and investment at all levels of income. Without doubt, his basic thesis, that *Zakah* will increase consumption, is true. However, the other claims are not so clearly valid. Certainly, the proof of some of his propositions is erroneous. It is on this aspect of the paper that I would like to comment.

It is clear that any form of tax on wealth, being a disincentive to saving, must tend to reduce saving and hence increase consumption, *Zakah*, being such a tax, must tend to increase consumption and reduce savings. However, will the consumption, so achieved, increase investment? The effect is not clear. There could be an increased expenditure on consumer goods which does not contribute to investment, or there could be an investment boom, depending on the rate of inflation, the rate of interest, the level of confidence in investments, etc. A zero interest rate does not, by any means, ensure an increase of investment. (The topic has been dealt with extensively by Prof. Syed Nawab Haider Naqvi in various works.) It is clear that a progressive taxation scheme must lead to more consumption than a constant ratio scheme fixed at the lowest tax level. We see that the conclusions reached in the paper are clearly wrong. Let us now try to understand where the author went wrong.

There are various errors in the paper, some of a more technical kind and other of a more fundamental, logical, kind. Consider, for example, his equation M(4), (we refer to the equations in the paper under discussion by using an M with the equation number).

$$Z = \alpha Y \qquad (1)$$

Here the equation is not entirely meaningful. The problem lies with definition of the Y and Z. Y is taken to be the total income of the community and Z the total *Zakah* collected. Equation (1) then purports to say that 'Total *Zakah* is in a constant ratio to total income'. The statement is true only in a tautological way.

[These comments were made on the original version of the paper, and have been largely accounted for by the author by Introducing new (and not obviously reasonable) assumptions]

One might as validly say that 'the total amount of *Zakah* is in a constant ratio to the total number of butterflies', or more generally 'One constant is in a constant ratio to another constant'. For the statement to be meaningful it must relate variables. Let us look at the assumptions implicit in the derivation of the simple looking Equation (1).

We know that the *Zakah,* Z, paid by an *individual,* is given in terms of *his* wealth, we, by

$$Z = \alpha'(w - n) \quad \text{(2)}$$

where n is *Nisab* and α' is a number, usually taken to be 2.5 per cent. Now, if there are N individuals in the community, βN of whom pay *Zakah,* the total *Zakah* collected will be obtained by summing Equation (2) over all *Zakah-payers* to give:

$$Z = \alpha' W_Z - \alpha' \beta n N \quad \text{(3)}$$

where W_Z is the total wealth of the *Zakah-payers.*

The author clearly wants to assume a linear relationship between the wealth and the income, y, of all individuals. This assumption is invalid, but may be taken as being approximately correct. Since the income can be from sources other than stored wealth, we must take

$$y = \alpha'' w + \gamma \quad \text{(4)}$$

where α" is some constant measured in inverse units of time, as income is measured in units of money per unit of time, and $\gamma > 0$ is salary, wages, etc. Clearly γ is unrelated to w. Summing over all *Zakah*-payers we get the total income, Y_Z, of all *Zakah-payers.*

$$Y_Z = \alpha'' W + \Gamma_Z \quad \text{(5)}$$

Γ_Z being the total salary of the Zakah-payers.

Replacing W_Z in Equation (3) from Equation (5) we get

$$Z = (\alpha'/\alpha'')\,(Y_Z - \Gamma_Z) - \alpha' \beta n N \quad \text{(6)}$$

instead of Equation (1). Any attempt at seeing the variation of Z with Y must rely on Equation (4) and not on Equation (1).

The error in Equation (1) is now quite clear. It lies in dealing with Z and Y as variables instead of as constants. Consider the ideal situation of an economy in which wealth is fully distributed. There Z = 0 and Y should be greater than in cases where wealth is not as well distributed. Thus, as Z *increases,* Y should *decrease* opposite to Equation (1). This point is brought out by Equation (6) which says that the *Zakah* increases with an increase of *income due to wealth* of the Zakah-payers but decreases with salary income increases. If there is no wealth beyond *Nisab* with any individual *Zakah* will obviously be zero and adequate redistribution of wealth will have been achieved. This point has been arrived at here by the use of mathematics, *but it is economically obvious.*

Let us now turn to the main proposition of the paper. The author starts with some assumptions which amount to the assumption that the average propensity to consume is greater than the marginal propensity to consume, which is positive thus

$$0 < \frac{dc}{dy} < \frac{c}{y} \qquad (7)$$

Dividing Equation (7) through by y we obtain

$$\frac{1}{y}\frac{dc}{dy} - \frac{c}{y^2} < 0 \qquad (8)$$

which gives us

$$\frac{d}{dy}\left(\frac{c}{y}\right) < 0 \qquad (9)$$

which yield the required conditions. Thus the economic assumptions of the author are just those mentioned above about average and marginal propensities to consume.

The author now makes the assumption that

$$C = a + gy^b \qquad (10)$$

where $a > 0$ and $0 < b < 1$, $g > 0$. No attention is paid to the units in which quantities are measured. Clearly C is taken to be measured in units of money per unit time, a (in the same units) is just the minimal (subsistance) consumption. Now, since y is measured in the same units but is raised to some fractional power, g must be measured in units such that gy^b is measured in units of money per unit time. When the author now postulates that with *Zakah* Equation (10) is replaced by

$$C = a + g(\beta - \alpha)y^b + g(1 - \beta + \alpha)y^\delta \qquad (11)$$

we see that there are serious problems. Let us look at the problems individually in some detail.

The first problem we are faced with is that Equation (11) makes no sense because g has to be measured such that gy^b has the same units as gy^δ, which is not possible except when $b = \delta$. Thus if Equation (11) holds in dollars it will not hold in cents. What is more is, if it holds in 1978, it will not hold in 1980 (due to inflation). Thus Equation (11) would have to be rewritten, to be meaningful as

$$C \quad = \quad a + g\,[(y/y_1)^b\,(\beta - \alpha) + (y/y_2)^\delta\,(1 - \beta + \alpha)] \ldots\ldots\ldots\ldots \quad (12)$$

where y_1 and y_2 are some constant (specified) incomes and g is measured in units of money per unit time. There is a serious problem, now, of specifying y_1 and y_2, but at least the equation may be taken to be meaningful. This problem is dealt with by the author by taking b and δ to be estimated statistically for some units, and changing with change of units. This method does not work as b may be less than δ in some units and not in others.

Another problem is the meaning to be given to band δ. There is no question of claiming that, there are marginal propensities to consume for Zakah-payers and non-Zakah-payers. That was only true if $b = \delta = 1$, as can be seen easily. Let us ignore the problem of why b and δ should be supposed to be unequal when the dependence on income of the individual is already taken into account in the consumption function. Anyhow, now is the total consumption function being supposed to have the same (non-linear) functional form as that of the individual consumption functions. In fact, summing up Equation (12) [or Equation (11) for that matter] will *not* yield.

$$C \quad = \quad a + g\,[(\beta + \alpha)\,(y/y_1)^b + g(1 - \beta + \alpha)\,(y/y_2)^\delta] \ldots\ldots\ldots\ldots \quad (13)$$

as band l.i are not supposed to be unity.

The result obtained nevertheless contains some true part. Let us see where this comes from. The functional form taken in Equation (11) clearly increases C above its value given by Equation (10), for all values of income, the difference increasing for larger values of income. Thus all values of consumption and their derivatives must be greater in the form given in Equation (11) than that given in Equation (10). This fact is due to our having started off by saying that the introduction of *Zakah* brings in a higher propensity to consume ($\delta > b$). Having assumed this fact to start with, it is certainly not surprising that we find it in the conclusion. Since this assumption was valid economically the result is true in spite of the erroneous analysis in so far as the assumption itself is true - *but no further.*

The author now makes a logical error. Having shown that the MPC and APC with *Zakah* are greater than those without any tax (which he has in fact assumed) he goes on to say that the MPC and APC with *Zakah* are greater with any tax on wealth or otherwise. This is simply not true. Any wealth tax must have the same effect. Worse still, the author's analysis purports to show that a constant ratio *income tax* leads to an increase in MPC and APC. This is surely nonsense.

In the next section there are more simple (technical) errors. Thus, when the author writes

$$\bar{r}_n = r(1-\in) + \in \qquad (14)$$

he forgets about the units in which the quantities are being measured, e is just a number between 0 and 1 while r is measured in units of inverse time. Taking the equation to be meaningful nevertheless, the requirement that $\bar{r}_n > 0$ means that

$$r\,(1 - \in) + \in > 0$$

or $$\in > r\,(\in - 1) \qquad (15)$$

which is just the positivity of $\in$ as $\in < 1$. The author's requirement that

$$r(\in - 1) > \in \qquad (16)$$

is wrong as $0 < \in < 1$, because he requires that a negative quantity should be greater than a positive one.* Clearly the subsequent discussion is equally absured.

Let us now consider what can be reasonably said about *Zakah.* Historically, it is one of the earliest forms of wealth tax, and is the progenitor of all modern taxes on wealth. The purpose of *Zakah* is to provide social welfare. Notice that the modern idea of social welfare as a desirable goal also originates in Islam. However, when *Zakah* was originally introduced the economy was nearly static and very simple.

The modern, more complicated economies require more elaborate taxation schemes to ensure social welfare and social justice. For example, a sliding scale scheme may be preferable to the previous fixed ratio. It is not the name of *Zakah,* or the fixed ratio, that is the essence of *Zakah,* rather it is the purpose. Any wealth tax whose proceeds go to social weal fare is *Zakah.*

To sum up, I would like to stress the need to study the difference between a fixed and a sliding scale wealth tax before implementing it. In my opinion the paper under discussion has not done justice to the subject. To take true pride in the great achievement of Islam of introducing *Zakah* we should not revert to the early form of *Zakah* but try to find the most efficient way of achieving the goal of *Zakah* – social welfare. A more comprehensive view of Islamic requirements and goals, as is provided by Naqvi *et. al* is greatly needed to develop a meaningful Islamic economics.

It is a great pleasure to thank Prof. Syed Nawab Haider Naqvi and Dr. A. R. Kemal for many illuminating discussions on the subject, and for some detailed comments which have been incorporated into this discussion.

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* The author, in the revised version, has corrected part of his error by introducing a new $\in'$, but part remains.

Sultan Abu Ali

It is useful to remember what early Muslim scholars did in the domain of scientific research. They started by appraising the state of affairs, discarding theories and postulates which did not conform to Islamic principles. As for the rest of knowledge which did not run counter to Islam, they kept it and added to it. In addition, with the progress of the Islamic community, they developed new branches of scientific knowledge, such as Algebra, as well as deepening and improving the state of existing sciences.

It seems to me that in economics, at the present time, the task lying ahead is to do the same as our former scholars did. Our task as Muslim economists is neither to show that Islam can accept this theory or that idea, nor to show Islamic superiority over wordly theories. Islamic principles and tenets are superior par excellence and this is to be taken for granted. A further step would be to develop new economic theories and policies steming from Islamic principles.

Dr. Metwally's paper could be looked at from this angle. He divides his paper into four parts, which deal with: the role of the fiscal policy in an Islamic economy; objectives of fiscal policy in an Islamic economy; measures of fiscal policy in an Islamic economy; and mechanism of fiscal policy in an Islamic economy. We shall discuss these parts successively.

I. Role of the Fiscal Policy in an Islamic Economy

Dr. Metwally considers the role of fiscal policy in an Islamic economy to be more important than in a non-Islamic free-market economy. It is known that the role of fiscal policy in Western market economies is manifold, namely allocation, distribution, and stability.* If we add to this the objective of growth and development, it looks to me that the role of fiscal policy in an Islamic economy would be the same.

In this section the author rightly states that gambling is forbidden. But speculative demand for money is not always gambling. Thus speculative demand for money may exist in an Islamic economy. This is due to search for more profitable opportunities even in the absence of a bond market.

A further point stated by Dr. Metwally is that "open market operations would not be very effective in an Islamic economy" I cannot see why? Furthermore stock-exchange would play a greater role in Islamic economies because of the extensive use of sharing as a substitute for borrowing. *Zakah's* rates although cannot be changed between periods, are different for different assets. This may be so, among other things to stimulate productive activities.

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* R. Musgrave, *The Theory* of *Public Finance.*

II. Objectives of Fiscal Policy in an Islamic Economy

My main observation on this section is the confusion between the money "market" and fiscal policy. Since the Islamic economy will be monetized, there will be a scope for monetary policy. The abolition of interest rate does not mean that there are no other variables which govern demand for and supply of money. The rate of dues on idle cash suggested by the author is not sufficient for determining the demand for money. It should be complemented by the rate of return on investment in permissible activities. I feel that the introduction of the rate of return on investment (in assets other than bonds) would keep the post-Keynesian analysis intact. We shall discuss this point later.

III. Measures of Fiscal Policy in an Islamic Economy

The measures of fiscal policy examined by the author are *Zakah* and economic dues. Here the role of expenditure, is not discussed. This is done in Section IV. Therefore I would have preferred to label this part as sources of public revenue. The paper then discusses the effect of *Zakah* on consumption, investment and the demand for money.

As for *Zakah* on all idle assets, it is applicable to cash and deposits with banks, only if they remain idle for a complete year. This condition is important to mention because there can be some demand for money for speculative purposes, in the Keynesian sense, without being subject to *Zakah.*

The collection of *Zakah* is not subject to changing economic conditions. The proceeds of *Zakah,* however, will vary in boom and recession. On the other hand the domains for spending *Zakah* embrace all possible activities and these could be reallocated, and has been reallocated at the time of Umar Ibn Abdulaziz, between various uses in conformity with prevailing economic conditions. The author states a different point of view.

As far the effect of *Zakah* on consumption, I disagree with the author's statement that "both the average and marginal propensities to consume would be higher in an Islamic economy than in a non-Islamic economy. The pattern of consumption is determined by a host of factors. Islamic values urge people not to be spend-thrift. It is true that *Zakah* will lead to a more equitable distribution of income and wealth. This does not mean, however, that the overall propensities to consume will be higher. In effect Duesenberry has shown, with the use of Veblen's demonstration effect, that consumption as a proportion of a given level of income could be higher under inequality than under a more equitable distribution of income. I believe that in an Islamic economy, consumption would be less than that in a non-Islamic economy with the same level of income and size of population. It is not difficult to work-out an example which shows this.

The imposition of *Zakah* on idle money will not necessarily make any investment opportunity with the rate of profit(r) > 0 acceptable. However, one would be tempted to agree with the author that "the demand for investment at a given expected rate of profit will be always higher in the economies of Islam than in non-Islamic economies (at the same level of income)." (parenthesis are mine).

As far the effect of *Zakah* on the demand for money, I think that the three motives for the demand for money would exist in an Islamic economy. This matter needs a detailed analysis.

With respect to economic dues, I have a different point of view. My views in this regard are: (a) demand for money for speculative purposes is different from speculation in the general sense. If the latter is not allowed, the former need not be so; and (b) demand for money for transactions and precautionary motives is dependent mainly on income in both Islamic and non-Islamic economies.

The author states that "money supply in an Islamic economic framework will expand at a constant exponential rate equal to some proportion of the rate of growth of national income".* I fail to see why this should be the case.

IV. Mechanism of Fiscal Policy in an Islamic Economy

The mechanism detailed in this section follows the accepted philosophy of stimulating demand during recession and constraining it if there are fears of galloping inflation.

My remarks on this section are:

(a) In the discussion on the use of fiscal policy in an Islamic economy to cure unemployment, it would have been better to distinguish between developing and advanced Islamic countries.

(b) I think in an Islamic economy, the possibility of experiencing both demand-pull and cost-push inflation does exist. It would have been better to discuss both cases rather than discarding cost-push inflation.

(c) The statement that we would expect the marginal revenue of a Muslim entrepreneur to be equal to the product price, and the real wage paid by him to Muslim labourer to be equal to marginal product† assumes that perfect competition exists both on the product and factor markets. This is a farfetched assumption.

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* In the revised draft, the author has withdrawn this statement (Editors).

† The author has dropped this contention in the revised draft (Editors).

(d) Translating *Baitul-Mal* in English to "the Central Islamic Bank"*, is not accurate. *Baitul-Mal* is the Ministry of Finance or Treasury. The Central Bank is something different.

(e) As for sources of financing government projects, I would add borrowing. Islam forbids interest but does not forbid borrowing when the need for it arises.

(f) The possibility of a "roll-over debt" (which bears no interest) might be an additional source of inefficiency in government activities which should not be encouraged.

(g) Adding *Zakah* to government expenditures and comparing it to the "amount of taxes corresponding to the full employment level of income" we might: (i) confuse the issues involved, because how do we add revenues to expenditures, and (ii) do we know what is the amount of taxes corresponding to the full employment level of income? An alternative formulation would be:

$G = Z + U$ with $U = 0$ in full employment

$G < Z + U$ $\quad U > 0$ in periods of inflation

$G > Z + U$ $\quad U < 0$ in periods of depression

Conclusion

Public finance in Islamic thought is a field distinct from other fields of economics. Muslim scholars have discussed it since the early years of Hijra. Dr. Metwally tried to relate Islamic thinking to current thoughts on public finance. In conclusion, I would have liked, before suggesting the use of "economic dues", to see an estimate of *Zakah* proceeds as a percentage of GNP. Then to assess how this could affect-the economic life of the society. I would expect that the proceeds of *Zakah* if properly collected and spent could more efficiently tackle the various economic conditions which might prevail in a country, than the secular management of public finance.

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* The author has dropped the translation altogether in the revised draft (Editors).

Discussion

Prof. Syed Nawab Haider Naqvi

On the whole I think that the paper by Dr. Metwally has been presented in a very thought-provoking way. As a matter of fact it provokes us so much that sometimes we do not understand what he means. I will skip the first part of the paper because I think it has already been commented upon. I will start from the section, wherein he is talking about the use of fiscal policy in an Islamic economy to curb inflation. Just by way of an illustration of how he makes sweeping statements without making explicit the essentials on which these are based; he says that in Islamic economic framework only demand-pull inflation can take place and this can originate only in the real sector and then he substantiates this claim by referring to the fact that you will not have any monopoly. I think that this will happen only if you assume that Islamic economy is a closed economy. If you open the economy then cost-push inflation can come irrespective of what the market structure is. For instance, if the price of oil goes up the cost of production will go up and therefore, you will have cost-push inflation*. Secondly, the author seems to feel that in an ideal Islamic economy there will be no conflict of interest of any kind. In other words, he assumes that a perfect social contract has already been written, between the employers and the employees, for instance, and for that reason he rules out the possibility of trade unionist†. I would say that the trade unions ought to be there in an Islamic economy because the labourers are the persons who are most likely to be exploited in the social order that we have, particularly if we start with a capitalist system.

So I think that in order to restore *‘Adl* in the society, it is essential that we should have countervening powers both on the side of employers as well as the employees and for that purpose if we have trade unions, it does not do any harm to the kind of society that we are thinking of. Similarly, he maintains that demand-pull inflation originate in the monetary sector since money supply in Islamic economies increases at a constant exponential rate equal to some proportion of the rate of growth of GNP. This is again a thing where he is assuming the best of all possible worlds and that the rest will follow. This is a way of analysis which is not

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* The author has revised the relevant part of his paper in the light of this comment.

† The author has changed his position to accommodate this comment and has revised the paper accordingly.

strictly scientific. Then he makes a statement that *Zakah* will increase the average as well as the marginal propensities to consume, but later on he says that economic dues will result in a downward shift in the consumption function. These statements are contradictory.

Dr. Ziauddin Ahmed

I feel like so many others here that too many assumptions have been made in the paper.† It is quit~ permissible for somebody who is building a model to make assumptions, but I think there is a need to reduce the number of assumption to bring the model closer to reality and I suggest to rethink about some assumptions. Even though the author has not said it, but it is implicitly assumed that nobody is paying *Zakah* to begin with. Otherwise if people are paying *Zakah* then whatever is its effect on the marginal propensity to consume, it would already be there. The second assumption is that whenever consumption increases production also increases. Now in fact, when you have a situation not of full employment but of full utilization of resources in a developing country then you have bottlenecks and if you open up the economy you have a foreign exchange constraint. In such a situation this kind of assumption becomes very unrealistic. Finally it is stated by the author that if a tax is imposed on idle cash balances then people will reduce their idle cash holdings. But another possibility in an Islamic economy is that they can move to *mudarabah* deposits, in the banking system which do pay a return and something has to be said as to what happens if people move from idle balances to *mudarabah* balances but nothing is said in the model about that.

Dr. M. Nejatullah Siddiqi

It is a clarification that I want to seek. I ask a simple question. Suppose there are 3 persons, one has one million in cash, the second has one million in goods i.e. inventory, arid the 3rd has one million worth of plant, machinery and equipment etc. I want to side-step the controversy that whether it is necessary in case of all things subject to *Zakah* that a full year should have passed or as in Hanafi School *male-mustazad* (increment in value) can be added to something which was already there. Whatever school of thought you follow apply the same rule to all three cases. My question is very simple. Are they all three subject to *Zakah?* What I feel from the paper is that you have a particular answer in your mind which I fear is not true in Islamic law and if my fear is correct then one major conclusion on which your model is based will fall apart. Let me make it explicit. You seem to

† The author had given quite a long list of assumptions in the beginning of the paper. In the revised version this list does not appear. The assumptions that he still retains appear in Mathematical Appendix (Editors).

think that whereas a person with a million in cash is subject to *Zakah*, a person who has invested it in some form has escaped *Zakah.* If you do not mean this then you can take the other stand that people will like to invest so that they earn enough to pay *Zakah* out of that, but this will not support the conclusion which your model requires. The presentation gives an impression that whereas cash is subject to *Zakah*, once you invest it, it is not subject to *Zakah.*

Dr. Anas Zarqa

I think that even if we accept Dr. Siddiqi's worry, Dr. Metwally's model will not fall apart. The point that he mentions implies that investment function instead of having a negative intercept will have a positive intercept and no substantial change will take place in the whole structure. However, it is sufficient for Dr. Metwally's arguments to hold that the *Zakah* rate on fixed capital should be less than the *Zakah* rate on cash and tradeable goods i.e. inventory. Of course, if they are equal, Dr. Siddiqi's argument will be true but still the old functions will stay the same. Only the investment function will shift a little bit. However, as far as I know we have very many *Fiqh* authorities who emphasize that the rate of *Zakah* on fixed investment is less than the rate of *Zakah* on cash and inventories. So I think Dr. Metwally is well covered on this point.

I think it is a fine paper but Dr. Metwally does have a tendency to make sweeping statements. It is desirable to have more restrainted statements. For example, I will join with Dr. Naqvi in the point that we cannot say that an Islamic economy must have a constant exponential rate of growth of money supply*. I think that Dr. Metwally should say that in his own understanding Islam permits such a policy. He might go further and say that in his opinion it is a desirable policy but we cannot say that an Islamic economy must have its money supply growing at a rate equal to its rate of growth or a certain multiple of it. It is one option, if we want to say something stronger we must support the stronger statement with some *Fiqh* evidence.

Dr. Monzer Kahf

The ascription that the presence of *Zakah* is expansionary, I think, does not hold unless we add some dynamic assumptions to it. We are talking only about comparative statics between non-presence of *Zakah* and presence of *Zakah.* So it is only on shot which cannot be said to be expansionary. Secondly, I think the major effect of the presence of *Zakah* and the prohibition of interest which taken together imply that we are relating savings to investment i.e. incorporating into

* The author has changed his position on this point and revised his paper accordingly.

savings function certain consideration of investment, is missing from the paper. He tries to say it implicitly by saying that the rate of return will compensate for the *Zakah* paid but I think that, the point should be stated in a clear way. We are incorporating certain considerations about investment into savings function itself. So we have different formula for the allocation of income. The third point which was raised by Dr. Anas, I think even if we take the stand that he takes in reformulating the *Zakah* on fixed assets by saying that *Zakah* is to be imposed on their output and not on the assets themselves, even then it does not follow that the *Zakah* on these fixed assets will be less than the 2½ per cent that I ascribe to unless he makes very limiting assumptions about the capital-output-ratio. Unless he assumes that the capital-output-ratio does not fall below say 4 or something like that then the *Zakah* according to him, the 10 per cent on the output, will be even more than the 2½ per cent on the capital.

Dr. Abdel Hadi El-Naggar

I have general comments. Firstly, hoarding is forbidden in Islam. Islam seeks to achieve reasonable standard of living for the Muslims. That is why I think speculation in all its forms specially forward transactions is prohibited in Islam. Muslims have to work and to contribute through their productive activities to the whole of economy. Secondly, I think that Islam establishes a high degree of equity and not equality as the author said in his paper. Because God says, "We raise some of them above the others",

نحن فضلنا بعضكم على بعض

The *Ayah* that he quotes, "wealth should not be permitted to circulate among the wealthy only", relates more to the problem of distribution of income and not to equity. Thirdly, the author says that the alternative to the tool of interest for achieving equilibrium in the money market in an Islamic economy is to raise taxes. I think that to raise taxes is not an easy solution because it depends on firstly, what kind of taxes and secondly, we have to take into consideration the taxable capacity or the ability to pay. We have to take into consideration a margin above the minimum exemption limit in order to provide some incentive to the people for economic activity.

Dr. Mahfooz Ali

I would like to add to a point made earlier that even as a result of the redistribution of income because of *Zakah,* the living standard of the beneficiaries may not rise. If the output of the wage goods does not expand it might happen that the additional money income made available to the beneficiaries of *Zakah* may end up buying the same quantity of goods at higher prices. Therefore, I would like to suggest that in an Islamic economy due care should be taken to assign higher priority to the production of wage goods.

Dr. Sharafat Hashmi

I would like to have a definition of idle cash. Whole cash is idle in a sense. Therefore, you have to define how long it has to stay to be considered as idle*. You have also to define the minimum cash to be held in order to pay the economic dues and you have a concept similar to *Nisab*. So in this case you end up having a tax which is very similar to *Zakah*. In fact it might be the same and if you are doing that you are really raising the rate of *Zakah* on cash which will not be acceptable on religious grounds. If you want to raise more taxes you have to think of some other alternative instead of trying to raise the rate of *Zakah* unless it is permitted by Muslim jurists.

Dr. Vagar

It is being mentioned here that there is no interest in an Islamic economy. I think that in an Islamic economy we cannot say that capital has no price and as long as capital has a price it does not matter what we call it, call it interest or something else. In the prohibition of usury, what you are concerned with is to prohibit certain transactions. This does not mean that the economic analysis will be different from the point of view of the functions of capital in the economy. This is my point of view and I would like to be corrected if I am wrong.

Dr. Omar Zubair (Chairman)

As you have sought an answer to your question I think that it is our responsibility to respond to it. I feel that there is a difference between the rate of interest and the rate of profit. The rate of interest cannot reflect the productivity of capital and for that reason we are substituting the rate of profit as a measuring rod for productivity of capital. Muslim economists and jurists reject the idea of equating the rate of interest with the rate of profit.

Dr. Mohamed Ariff

I want to make a point regarding *Zakah* and inflation. I feel that the impression that *Zakah* is inflationary is quite wrong. It very much depends on expenditure and productivity. In the first place it is not clear to me if the marginal propensity to consume will really increase as a result of *Zakah*. That will depend on the kind of economy that we are dealing with and it is very difficult for us to

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* Before any tax is imposed, the period for which it is held has to be spelled out and if you say it is one year then it will coincide with *Zakah*.

make any generalization. Secondly, even if we assume that the marginal propensity to consume will increase because of *Zakah,* it does not necessarily follow that it will be inflationary. As a matter of fact *Zakah* distribution will lead to better nutrition, better health, etc., and thereby productivity would increase and you may not have inflation as a result of *Zakah* distribution.

Dr. M. M. Metwally

There are a number of points which have been raised in the discussion. I cannot respond to all of them but I will take up the more important ones.

In general terms it is true that what I have written does reflect an ideal state. I would have thought that Islam is an ideal situation. May be I am wrong. Naturally I will have to go back and read about Islam and try to understand it better. Most of the comments that are being raised here relate to the earlier draft of the paper. But I do not see why, certain points have provoked the people so much. For example, it is true that I have mentioned the assumption that the rate of growth of money supply will follow the rate of growth of gross domestic product. That might have disturbed some people but certainly it was not very crucial for the model. The model will hold with or without this assumption[†]. The other point is that even though I have not mentioned trade unions, I have nothing against trade unions. All I have said is that if we have an idealistic situation, employer-employees relations will not result in a conflict. After all, Islam should really promote the spirit of cooperation. If you are talking about what is going on at the moment, it is a different question altogether because I think what is going on is not Islamic. Another point that I would like to mention is about the dues. What I have introduced here are the dues on idle cash. Those dues are not the same as *Zakah.* In other words they will not be collected every year. All you need to do is, for example, to instruct the banks that the average deposit held within a month or two should be taxed at say 2 per cent or 1 per cent or whatever.

† The author has dropped this assumption in the revised draft (Editors).

Fiscal Policy of an Islamic State

Dr. Abidin Ahmed Salama*

I

OBJECTIVES OF FISCAL POLICY IN AN ISLAMIC STATE

Fiscal policy in secular economies aims at achieving welfare where welfare is defined as attaining maximum benefits for individuals in this world. No regard is given to spiritual needs of man. Fiscal policy in those countries aims efficient allocation of resources, economic stabilization, economic growth and an equitable distribution of income. In an Islamic state fiscal policy is one of the various tools which work to achieve the goals of *Shari'ah,* which as explained by Imam EI-Ghazali include promoting welfare of the people by safeguarding their faith, life, intellect, posterity and properties. Whatever safeguards these five or anyone of them, serves public interest and is desirable. Ibn Al-Qayyim emphasised that the basis of *Shari'ah* is wisdom and welfare of the people in this world and in the Hereafter *(AI-Akhira).* The welfare lies in complete justice, mercy, happiness and wisdom. Anything that departs from justice to injustice, from mercy to harshness, from welfare to misery and from wisdom to folly has nothing to do with *Shari'ah.* This, while the objectives of fiscal policy of an Islamic state may appear to be the same as that of a secular state, the goal will not be achieving the welfare of man in this world alone. The concept of welfare would be expanded to include his life in the Hereafter. Thus, moral values of Islam are to be kept in view while framing the fiscal policy of an Islamic state.

1. Fiscal Policy and Allocation of Resources in an Islamic State

Fiscal policy in a secular state aims at achieving an efficient allocation of resources which yields maximum material benefits to the society. I n an Islamic state the concept of efficiency may be interpreted to include harmony between the spiritual and material desires. Resources should be utilized only in a way that achieves welfare of man in world and the Hereafter. Resources should be utilized optimally i.e. without extravagance and catering for the needs of future

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generations also. Only those goods should be produced, whether by private or public sector, which are permissible by Islamic *Shari'ah.*

Public sector should produce goods which serve the public interest in general. Such goods are usually indivisible and also generate externalities. Many Muslim jurists have listed the goods which a Muslim state should provide. Ibn Taymiyyah, for example, thought that a Muslim state should cater for national defence, internal security, roads, bridges, canals, water-ways and education. Nowadays we may add to this list the goods that provide military strength which in turn depends on economic development.

Public goods to be provided by contemporary Muslim state include national defence and security (which should be geared to the protection of the nation at large and not to that of certain interest groups within the society), provision of infrastructure such as roads, telecommunications as well as other facilities needed by all sectors of the economy. Social capital should also be developed through provision of education, sports facilities, public health, medical facilities, environmental facilities, piped water supplies, drainages, severage facilities and housing. The public sector should also look after the moral values of the society. The government should see to it that enough resources are provided for achieving this goal. There is no doubt that free operation of the market system, within the rules laid down by *Shari'ah,* has been emphasized by many Muslim jurists. However, it must be remembered that policy in a Muslim state is not value-free. The government has to regulate the market system in order to ensure the welfare of human beings in this world and the Hereafter. Private and public sectors have to work together for the achievement of that objective. Ibn Khaldun thought that the public sector operations could be the source of success or failure for the market system unnecessary consumption in the private sector and rationalizing government expenditure. The latter will be achieved by rigorous appraisal of government expenditure both before and after the start of a public sector project. Projects that yield maximum benefits to a Muslim society and cause least harm to economic, political and social stability, should be preferred to others. For example, projects which lead to least immigration of labour force should be preferred to those which entail massive immigration and decay of rural life. Having decided projects that serve the goals of a Muslim state, such goods should be provided with the least-cost possible without impairing efficiency.

2. Fiscal Policy and Economic Stabilization

In recent years fiscal policy has played an important role in stabilizing the economies of the West, especially after the great-depression of the 19305. In an economy where the productive capacity is well developed, fiscal policy can play an important role in regulating aggregate demand. In such countries, developed tax and social welfare systems a low fiscal policy to work flexibly in combating inflation or deflation.

In an Islamic state the stability of the real value of money is considered to be obligatory and is essential if such an economy is to proceed smoothly on the path of development. Inflation may generate a distribution of income and wealth which by concentrating wealth and income in the hands of rich may be harmful to welfare of people. Deflationary conditions are also harmful. Ibn Khaldun observed long ago that if the Sultan stops his financial flows to the public, this will generate recession. Recently compensatory finance is found to be essential to prevent a fall in aggregate demand and supply. Fiscal policies to reduce aggregate demand and enhance productivity will be necessary when the economy is under inflationary conditions. To achieve economic stabilization efficiently a Muslim state, as any other state, needs flexible and elastic revenue and expenditure systems. Progressive taxes on income and expenditure as well as social security payments can act as automatic stabilizers for the economy. Discretionary measures may also be taken if they do not generate adverse effects for the economy.

3. Fiscal Policy and Economic Growth and Development

Fiscal policy nowadays, is entrusted with promoting economic growth through mobilizing resources from non-essential consumption and channel izing those resources to investment through improving productivity and by providing incentives to save and invest. Fiscal policy should also create conditions that are conducive to economic growth by designing tax and expenditure policies that have least disincentive for the desire to save and invest and for work effort. Fiscal policy in an Islamic state should not be a retarding factor. Tax and expenditure policies should be geared to serve this purpose and any conflicts that may arise should be resolved. More emphasis should be given to growth as with economic growth revenue base will also increase. Ibn Khaldun warned against possible adverse effects of excessive taxes on desires to invest to work hard and subsequently on economic growth.

Most Muslim countries of today may be considered as economically developing countries. (Emphasis here is on the world “economically”, as the world developing alone is often used to mean developing in all aspects of life vis-a-vis developed countries. This may not always be true.) Fiscal policy in case of countries which are still developing will have a primary role to play in raising capital formation. Capital formation encompasses all expenditure that increases productivity and includes investment of the private sector as well as of the public sector. Capital formation in a Muslim state will include investments on development of human and material resources as well as investment on development of spiritual and moral values of the people. Material development should be a means to achieve the goal of creation of man in this world which is to worship Allah and as such economic development should operate within the constraints of Islamic *Shari’ah.*

Fiscal policy in a Muslim state should aim at achieving full employment of all its resources. All persons who can work should be provided jobs that suit their abilities and in line with Islamic *Shari'ah.* Hoarding of financial resources is not allowed in a Muslim state and is penalized via *Zakah.* Land taxes such as *Kheraj* that are based on fertility and site rather than on productivity and improvement will deter under utilization of land. To achieve the goal of full employment of resources the state has to take fiscal and non-fiscal measures that penalize those who keep resources unutilized. In the past a Muslim state could impose *Zakah* and *Kheraj* or land tax. Non-fiscal measures could also be taken in addition to moral instructions of Islam which urge able Muslims to work. Fiscal tools available to Muslim states today are many and may be used to achieve increased productivity. Some of the measures that may achieve this goal are:

(1) Shifting resources from non-essential consumption to capital formation. Fiscal policy may achieve this via taxes on lavish consumption or progressive income taxes designed in such a way that they do not have a disincentive effect and do not lead to any distortions in the market system. Government expenditure should be rationalized and restricted to outlays that achieve the objectives of a Muslim state.

(2) A Muslim state has to increase investment and ensure that it is directed to high priority areas. Public investment in particular has to be carefully evaluated and properly managed. Private investment has to be encouraged. This may be achieved through lower taxes on corporations investing in high priority areas. Funds reinvested by the corporations may be favourably treated and dividends may be taxed lightly. Resources may be generated for investment through favourable tax treatment to savings.

(3) Natural resources are finite. Their depletion deprives future generations from making use of those resources. They should be, therefore, utilized efficiently. When the state is using such resources as a source of revenue, it has to rationalize government expenditure and make sure that equity between different generations is achieved. User charges and taxes on potential yield are also important.

(4) Given the state of technology in the Muslim World, investments from outside Muslim states may be essential if improvement and expansion of productive capacity are to be achieved. In this area tax concessions may be given such as loss-carry-forward scheme. Accelerated depreciation allowances allowing for a shorter write-off of the capital expenditure and tax holidays. Beside these tax concessions, other fiscal concessions such as government subsidies grants, easy loans and improved communication facilities may also be provided. Other non-fiscal facilities include free land lower transport and electricity charges and guaranteed purchase of a percentage of the production by the government. However, the efficiency of such concessions is still unsettled. It is, therefore, important to rigorously evaluate the utility of introducing such a scheme before a Muslim state embarks on it.

4. Fiscal Policy and Income Distribution

Equity is a well-established principle in Islam. In distributing rewards the *Khulfai-Rashedeen* followed the practice of the Prophet (peace be upon him) by distributing those rewards evenly. This was a clear indication that Islam aims at an equitable distribution of income and wealth and abhores its accumulation in a few hands. Abu-Bakr is quoted to have refused distributing *al-Fay* according to piety and instead distributed it evenly. Umar is quoted to have said that if he lived for another year he would distribute the funds available in such a way that the poor will be equal to the rich.

Islam stands for both horizontal and vertical equity. The Prophet (peace be upon him) is quoted to have given the married double the share of a single person while distributing *al-Fay*. In this respect Umar is also quoted to have given the single half the share of the married. Equity and fair treatment is not limited to Muslims alone. It extends to non-Muslims as well. Umar Ibn Abdulaziz is quoted to have asked Audie Ibn Arta'a to look after disabled to protect non-Muslims and to help them from *Baitul-Mal* (the treasury at that time). This decision was based on what Umar Ibn EI-Khatab had done to an old *Dhimmi* whom he saw begging. Umar is quoted to have said to the *Dhimmi* that we have not done justice to you by taking *jazia* from you while you were young and taking no care of you now that you are old. The *Dhimmi* was then ordered a regular pay from *Baitul-Mal*.

Measures taken in the past to redistribute income and wealth in Islamic history are numerous. Most important was the decision taken by Umar not to distribute *al-Fay* lands to the *Sahaba*. This was done in order to prevent accumulation of wealth in a few hands. The act was described by some scholars to be of great benefit to Muslims because the newly conquered lands became the property of the whole Muslim nation. Also important for the finances of the Muslim nation was his decision to collect *Kheraj* and distribute the revenue among Muslims beside spending it on the defence of the nation. This was also a fiscal measure to redistribute wealth.

Recently many economically developing countries have sacrificed the goal of equitable distribution of income at the alter of economic growth and many Muslim countries joined the hand-wagon. The maldistribution is found to be greater in these countries than in economically developed countries. Such mal distribution may be related to many factors. Most important among these are discussed below.

In the developing countries the tax systems are lopsided due to easy taxes on consumption, and on the salaried class, inefficiency of tax systems and its inadequacy to reach the windfall gains and the predominance of agricultural sector. These factors make the tax system regressive, thus violating the equity criterion. Social security systems are in many cases either non-existent limited in coverage to a privileged sector of the population. Besides, many of these countries have adopted policies of development orientated towards import substitution, capital intensive techniques in the industrial sector, development programmes concentrated on urban areas and have continuously resorted to deficit financing thereby creating situation of inflation and hyper-inflation.

It has now become easier to establish whether acute maldistribution exists or not through various techniques. It is essential that Muslim countries ,should from time to time investigate the position of income distribution in order to prevent acute disparities which are contradictory to the teaching of Islam. Also when a small percentage of the population owns a sizable percentage of income, this group becomes extravagant and as Ibn Khaldun put it the masses follow suit, or in the language of today, demonstration effect operates which leads to the decay of the Muslim nation. A Muslim state should provide at least a minimum standard of living to all its citizens beyond which people will be allowed to compete freely. However, equality of opportunities has to be ensured. In the past the system had its built-in distributive mechanism, such as *Zakah,* the inheritance rules, allowances paid to Muslims and needy non-Muslims from *Baitul-Mal.* Fiscal measures available to a Muslim state today beside the above measures are numerous, e.g. distributive expenditures, progressive taxes on income, capital gains taxes, land taxation and taxes on luxury consumption.

A salient feature of the Islamic fiscal system is the existence of *Zakah* as a separate distributive mechanism. It is an earmarked levy with fixed rates and the budget has no control over its rate or categories of recipients. If properly applied it will achieve equitable distribution of income. Hence, the budget may concentrate its efforts on achieving the other set of goals. In my view, the advantage of such a system is to reduce the conflicts that exist in achieving economic stabilization, growth, resource allocation and income distribution simultaneously. For example, there may be a conflict between the objectives of economic growth and distribution. The existence of *Zakah* in an Islamic state greatly reduces this conflict. But this does not preclude using the budget to redistribute income through progressive taxes. Distributive government expenditure and non-fiscal tools may also be used to prevent a growing maldistribution of income and wealth.

The goals set above for fiscal policy in a Muslim state need fiscal tools. In the past, Muslim states used *Zakah* and *Kheraj* plus other sources of revenue. These were used to provide for some public goods such as defence, education, postal services and many other services which are well documented in the literature. *Zakah* was collected by the state. *Kheraj* was also an important fiscal tool to achieve economic growth, resource allocation and economic stabilization. Nowadays with the development of fiscal systems in the West (which definitely has some roots in the Islamic civilization), a Muslim state may utilize developed techniques in formulating its fiscal policy. The following section reflects the past experience of fiscal tools in Muslim states, reviews the new developments and attempts to formulate a framework for fiscal policy in Muslim states of today.

II

SOURCES OF REVENUE IN AN ISLAMIC STATE: PAST

A major source of revenue for an Islamic state since the days of Umar Ibn El-Khatab and until the decay of the Islamic civilization was *Kheraj* levy, or land taxation. In this paper a fiscal analysis of this levy will be presented highlighting what *Kheraj* means, and how it meets equity, economic efficiency, administrative convenience and revenue criteria. Implications of how this levy meets those criteria will be drawn which may serve as guidelines for Muslim states while imposing levies. Sources other than *Kheraj* will also be described.

1. Definition of *Kheraj*

Kheraj was used for levies in return for leasing a land. The Arabs used to call land rent or house rent as *Kheraj*. Umar leased conquered lands to people in return for fixed levy and it was called *Kheraj*.

The Imam has the right to determine the rate of *Kheraj* in the best interest of the Muslim nation. This flexibility makes *Kheraj* an important fiscal tool and gives an answer to those who try to use *Zakah* as a fiscal device by suggesting flexible rates. *Kheraj* was a broad based levy and was used to achieve the goals of fiscal policy in Muslim states. Also *Kheraj* was different from *Zakah* in that its revenue was used for payment of salaries of the army, and child allowances to the whole Muslim nation while *Zakah* is an earmarked levy. *Kheraj* was, therefore, the main source of revenue used by Muslim states of the past to provide public goods and distributive expenditures.

2. Assessment of *Kheraj*

Kheraj since the days of Umar and until EI-Mahdi's reign during the Abbasaid era, was levied on acreage basis and not on crop. A major development occurred during El-Mahdi's reign and the state adopted *El-Mugasama* or crop-sharing instead of the acreage system. The state under the new system shared the crop with the tenant on the basis of a certain percentage of the harvest. This implied that *Kheraj* revenue would not be fixed but would vary with variations in total crop. The main reason behind the change was suggested to be the continuous downward trend of prices of crops which prevailed during that time, and the new system was suggested to reduce the burden of fixed *Kheraj* on farmers. Abu Ubeid the founder of the new system, suggested new rates which varied according to difficulties in irrigation. Rates were reduced wherever difficulties existed. Rates also varied according to vicinity to markets. This gives a clear indication that vertical equity was catered for in Islamic levies.

Abu Yusuf later supported the new system as being consistent with Islamic *Shari'ah.* He suggested that fruits should also be subject to *Kheraj.* He also suggested that the ruler could vary *Kheraj* according to the ability of the tenants. The advantage of the acreage system in general is that it led to increased productivity as unutilized lands will pay *Kheraj* and this leads, to increased agricultural production. The state in order to prevent acute decline of tenants' incomes and consequently a decline in agricultural production changed the system of assessment to take into consideration changing conditions. That indicates that *Kheraj* was used to secure stabilization and to prevent economic retardation. This gives the Muslim states of today a precedent to follow when designing and changing their tax systems. Also *Kheraj* was not limited to levies on land but was also applied to shops by Al-Mansour indicating that a state may resort to a wider base during periods of need.

3. Equity Criterion

Kheraj was levied in a way that meets both horizontal and vertical equity. When it was based on acreage, Umar ordered *Kheraj* officials to charge each farmer no more than four dinars and to collect that after harvest. Here the ability to pay criterion was met in that farmers should pay the levy when income is received. A further economic implication is that taxes should be paid when income is received to avoid lag problems between consumption and income.

Abu Yusuf emphasized that *Kheraj* imposed excessively, i.e. beyond the capacity of the tenants would be inequitable and would contradict the *Shari'ah.*

Vertical equity was satisfied in *Kheraj* levy since rates were varied according to difficulties of irrigation and vicinity to markets.

4. Economic Criterion

Kheraj was designed in such a way that it should not destroy the levy-base. Umar Ibn Abdulaziz is quoted to have urged *Kheraj* officials in Kufa to look after *Kheraj* land by constructing roads. Ibn al-Muqaffa counseling Abu Gafaar AI-Mansour described two types of *Kheraj* officials, one who excessively collect *Kheraj* and second who levy *Kheraj* on those who cultivate their lands leaving those who do not, hence penalising those who contribute most to economic development. He advised Abu Gafaar to fix specific *Kheraj* rates on all lands and that such rates should be properly recorded. This indicates that Muslim scholars recognised that a levy should not impede economic growth as with growth tax base would expand and consequently revenues would expand.

Abu Yusuf emphasised this point when he said that justice in *Kheraj* will lead to increased *Kheraj* revenue and to economic growth. *Kheraj* collected with injustice according to Abu Yusuf leads to economic recession and to a decline in *Kheraj* revenue. He quoted an empirical evidence that *Kheraj* during the time of Umar reached 100 million dinars due to adherence to justice. Abu Yusuf suggested that the harvest should not be left for months awaiting *Kheraj* assessment. This in his view would retard economic growth and create shortages in food-stuffs. This implies that administrative efficiency is necessary in any levy. The inadherence to this concept had led to inefficiencies in tax administration in Muslim countries of today.

Abu Yusuf advised Haroun EI-Rashid to spend on embankment of rivers or reclamation of lands if such expenditure would lead to in creased *Kheraj* revenue. He advised Haroun to send a trustworthy expert to confer with local people to see if such expenditure would generate *Kheraj* revenue that would exceed expenditure on such reclamation provided no harm is caused to other *Kheraj-payers'* lands. The advice of Abu Yusuf implies that a Muslim state of today should take care of. revenue bases and should prevent any decline of the base as erosion of the revenue base may lead to increased rates and hence further reduction in the revenue base.

Abu Yusuf maintained that part of the expenditure on the irrigation of *Kheraj* lands may be met from the treasury. Estimation of such expenditure should be undertaken by persons whose honesty is well established. Such an advice gives a further indication of the fact that *Kheraj* revenue was used in developing agriculture and hence economic growth. Little attention in many of the Muslim countries is given to agriculture and agricultural land. Designing taxes on the framework of *Kheraj* may have been instrumental to economic development in general and agricultural production in particular. Efficient evaluation of government expenditure in developing revenue bases is also an implication that could be drawn. Efficient administrative set-up should be established which will be given authority to take decisions about developing revenue bases. This does not exist nowadays since revenue base is exogenous to tax administration. Such a reform may be essential and Muslim countries may take it into consideration while designing their tax systems. Bases of revenue in many of our countries are declining and due consideration is not given to this phenomenon.

5. The Administrative Criterion

Muslim scholars have emphasised that *Kheroj* collectors should be efficient, honest and pious. In the past many abuses were reported. Abu Yusuf quoted that some of *Kheroj* officials punished *Kheroj*-payers. He saw that *Kheroj* officials were not judged according to the above criteria. The past history of those officials should be rigorously investigated. Abu Yusuf suggested that persons known for their honesty and piety should investigate the behaviour of *Kheroj* officials and those found to have committed injustices or misuse of public funds, should not be given any public responsibilities and should be severely punished. This stands as a good guide to Muslim countries of today for keeping a watch on tax administrators. Continuous checking of their assessments and their own financial and real holdings should be carried out to prevent corruption and over assessment which will lead to increased tax compliance.

In the Abbasaid era, El-Gibala was introduced whereby the collection of *Kheroj* was given to a person in return for a fixed sum to the treasury. A person accepting such a responsibility was responsible for cultivating the land, maintaining canals and bridges besides his responsibility to pay the due *Kheroj*. Abu Yusuf did not like the system and in his view such persons could impose levies beyond the capacity of *Kheroj-payers* which may lead to adverse effects on agriculture and ultimately reduce *Kheroj* revenue. Changes in administrative procedures, have to take into consideration that they do not lead to injustice or any adverse effects. Sometimes ease of administration is given utmost priority and many injustices are committed due to this. For example, taxes which are easy to administer, are resorted “to e.g. taxing imports and productions which may lead to inequity and to adverse effects on economic growth.

Major sources of revenue should be independently administered. *Kheroj* since the days of Suleiman Ibn Abdul Malik was run by a separate department in each of the main provinces. That also indicates the significance of this levy.

6. The Revenue Criterion

No systematically collected data on *Kheraj* revenue is available but such data exist in a scattered form in *Kheraj* literature. El-Rayes, for example, estimated that total *Kheraj* revenue from Iraq, Egypt, Berga, Africa and Cyprus during the *Khulfai-Rashedeen* era reached about 200 million dirhams. During the Amwi era El-Mawardi suggested that *Kheraj* revenue reached 102 million dirhams. Haroun El-Rashid is quoted to have left 900 million dirhams. El-Migrizi estimated that Egypt’s *Kheraj* during EI-Mamoun era reached 4,257,000 dirhams. Al-Mansour is quoted to have told his son that he had left revenues that may last for ten years. It is estimated that he left about 810 million dirhams. This indicates that Muslim states during their glorious periods had enough sources of finance which made it possible for them to defend Islam and provide decent life to their citizens. Any levy has to produce enough revenue and the broader the base the greater the revenue generated. Today Muslim states should resort to such levies rather than impose numerous taxes on one base or few bases as is the case in many countries, which will lead at the end to reduction of revenues.

7. Other Sources of Finance

(a) Taxes on Trade

Umar imposed a levy on, non-Muslim traders reciprocal to that imposed by non-Muslims on Muslim traders. He imposed a levy at the rate of 10 per cent on fibers and 5 per cent on food items. A lower rate on food items was kept in order to increase food supplies to Medina. Nowadays a Muslim state may resort to the same measures by imposing reciprocal levies on trade coming from outside the Muslim nation. Preferential treatment may be given to Muslim countries or if a Muslim economic union (MEU) is established, trade may flow in these countries without tarrif barriers. As a result, welfare of Muslim nations will be increased.

(b) Jazia *or Personal Tax*

Abu Yusuf stated that *jazia* on non-Muslims was imposed tantamount to *Kheraj* on Muslims. The rates were varied according to ability to pay. This indicates that Muslim states could impose on non-Muslims levies equivalent to those imposed on Muslims.

(c) El-Mustaglat *or Government Investments*

This was a new source of revenue introduced by Walid Ibn Abdul Malik. He established a new department responsible for investments undertaken by the government. The investments were undertaken shops, mills, government lands and other buildings. Nowadays operations of government enterprises may be an equivalent source. Government enterprises should be run to generate revenues and not to incur continuous deficits and become burden on the budget. Pricing policies and costs of government enterprises operations have to be rigorously investigated and continuously revised.

(d) Sales Taxes and Market Fees

Ibn Khaldun has continuously referred to sales taxes and market fees imposed on urban areas. Taxes on retail sales may be better than many other forms of indirect taxes. Such taxes are found to have elastic revenue yield, little distortions to distribution channel or to resource allocation, and little excess burden on consumers as compared to other forms of indirect tax. They are broad-based and could easily reach consumption which make them useful as a stabilizing tool.

III

SOURCES OF FINANCE FOR PRESENT MUSLIM STATES

In this part application of various taxes in present Muslim countries is suggested. Sources available to Muslim states of today are numerous ranging from land taxes, income taxes properly designed, indirect taxes, public enterprises, user charges, and fees. Where these sources are not adequate or may not be feasible, debt policy may be used. A problem that would have to be resolved concerning debt policy is what instruments could the government use to issue public debt. Should it be the shares of public enterprises or inflation-proof bonds or bonds linked to security scheme or *mudarabah* bonds. This has to be settled before any debt policy is adopted.

Taxation on the other hand does not pose much difficulties. Modern taxes applied on income, wealth and domestic transactions properly designed may not be inconsistent with Islamic *Shari'ah*. Jurists' views in this regard have been presented in another paper.

1. The Role of Taxation in Muslim Countries

Taxation could play an important role in Muslim countries of today whether rich or poor. It is agreed that taxation may achieve the following goals:

(1) Curtailing unnecessary consumption for poor countries this enhances resources available for capital formation. In oil-rich countries it is necessary to reduce lavish consumption prevailing in those societies and reduce consumption of some goods which are harmful to health, or domestic industries or the habits and way of life in those societies.

(2) Taxation may serve as a means to reallocate resources from investments that have little beneficial effect upon development to those having greater benefit for growth. Corporation taxes could play such a role. Those investing in sectors needed by the nation could be subject to lower taxes. Also resources may be directed to poor regions by tax incentives. In general corporations should be subject to taxes as they make use of government expenditure, they cause spillover effects, and they can grow into monopolies.

(3) Taxation could be used as a tool to alter economic behaviour in creating incentives to save, to enter the market sector, to utilize resources and to encourage private capital formation.

(4) Taxation provides sources of finance for a modern Muslim state to execute government programmes.

(5) Taxation could be utilized as a means for stabilizing the economy and reducing aggregate demand. Where taxes are elastic functions of incomes,

especially in countries which rely on few exports, it may serve as a tool for stabilization of incomes.

(6) A progressive tax system may help in reducing income inequalities and hence achieve social harmony in Muslim states.

2. Designing an Optimal Tax Structure in a Muslim State

Taxation is not always without some adverse effects. If taxes go beyond a certain limit, they become a factor for economic retardation rather than growth. Tax structure in case of any country must meet equity, economic efficiency, revenue and administrative criteria. Those criteria are, in my view, broadly consistent with what Muslim jurists in the past have laid down for *Kheraj*. Certain fundamental requirements that should be satisfied by the tax structure include:

1. Taxation should reduce unnecessary consumption without imparing output and should help accelerate capital formation.
2. Where foreign exchange gap is wide, luxury imports should not be encouraged and should be subject to higher taxes. Where foreign exchange gap does not exist, it is consistent with Islamic teachings that luxury imports should not be expanded and import duties may help in reducing consumption of those goods where they are price elastic.
3. Burden of taxation on profits of firms contributing most to economic growth must be minimal.
4. In order to encourage economic activity excessively high marginal rates on incomes must be avoided.
5. To avoid continuous revision of tax rates, the built-in flexibility of the tax structure is significant if the tax is to provide maximum revenue productivity. A very elastic tax is also effective in reaching additional incomes generated by the growth process, thus providing a fiscal stabilizer as well as adequate financial resources at the hand of the government. In this respect fiscal experts sometimes caution against a fiscal drag that may occur due to increased progressivity.
6. The tax structure must conform to accepted standards of equity and ability to pay. However satisfying vertical equity is not easy to achieve but a goal Muslim states must work to achieve while designing tax structures.

The economic structure in many of our countries poses some problems for the tax structures; such as the predominance of agriculture which may necessitate land taxes. The yield of land taxes applied in some countries like Ethiopia and Bolivia in 1973 was substantial. It is well known that Japan relied on land tax for its development in 1870. Designing a broad-based tax on the line of *Kheraj* may be a break-through for countries endowed with fertile land resources. Land taxes imposed on acreage basis may produce sizable revenues to a country like Sudan as found by the writer.

Other problems are related to methods of assessment where presumptive methods are used when income taxes are applied in the absence of proper accounts. Such methods in many cases contradict the equity criterion, and in many cases, the economic criterion as well. Such methods encourage corruption and also discourage wider adoption of book-keeping especially where corruption prevails. Also departures from equity arise when personal income taxes effectively reach wage-income receivers compared to its inefficiency to reach business income and incomes generated from capital sources. Evasion rate is found to be very high in many developing countries. It was found that one-third of the population of Western Nigeria evades taxes. This may be reduced in an Islamic state by emphasising holiness of the levies, rationalizing expenditure programmes, proper design of levies imposed on the criteria spelled out in this paper and efficient administration of the imposed levies.

IV

GOVERNMENT EXPENDITURE IN AN ISLAMIC STATE

Islam gives much emphasis to the role government expenditure should play in achieving welfare of the nation.

The government is not free to handle public money the way it likes. Public money should be spent to achieve goals of the Muslim state. The duty of the government in a Muslim state as seen by the second *Khalifa* Umar is not to squander public money but to utilize it to improve living standards of the public and to increase their allowances. Al-Mansour stated that public money should not be spent in lavish consumption but it should be spent to provide defence, security, improving living standards of the people by provision of accommodation, necessary aminities and safeguarding their souls and properties.

Such remarks as well as very many other remarks scattered in Islamic literature indicate that government expenditure should be utilized to provide public goods and should be utilized to improve the living standards of the people which entail preventing errosions in real value of their incomes and subsidising necessities as well as providing public health. Public expenditure must be used to prevent inflationary conditions and recession. In case a government is combating inflation government expenditure should be reduced where inflation is due to increased aggregate demand and in cases where inflation is due to shortages in production, government expenditure may be used to expand production. Today in many Muslim countries governments generate inflationary conditions by continuous increase in government expenditure especially outlays related to security and expenditure on salaries of officials and favourites. This clearly contradicts the constraints laid by Islam on how public money should be spent. It is quoted that the Prophet (peace be upon him) had said that anyone who takes even a needle from public money will be accountable for it on the Day of

Judgement. Abu-Bakr at the time of his death is quoted to have told Aeisha to hand over to Umar whatever was left in his house from *al-Fay*. Only a few items were found and they were returned to Umar. Umar is quoted to have told the *Sohaba* that he should be paid what would provide him a winter and a summer dress, and his living expenses as an average person and that he, like any other person, should suffer the same during periods of hard times. Ali Ibn Abi Talib is quoted to have taken only a few dresses from *Baitul-Mal*. The *Khulfai-Rashedeen* in general saw themselves trustees of public money.

The ruler and the governing body in general must set a precedent to the whole nation in taking the minimum out of public money and not setting their wages beyond the ability of the nation otherwise they will generate more wage demands and inflationary conditions. Development projects will be impeded and continuous resort to deficit financing will also have adverse impact on the foreign balance due to increased demand for imports. To finance growing government expenditure many governments resort to taxes on consumption, especially, on necessities which are price inelastic, hence adding to the inflationary spiral.

Distributive Expenditure in Islam

The state by providing public goods especially public health, education, provision of accommodation as well as other services, generate a great impact on the distribution of income. Beside providing those goods the government in an Islamic state has to design a social welfare system which will alleviate poverty. This is not simply a theoretical assertion but is a reflection of what prevailed in Muslim states in the past. It was reported that such a system covered even debts incurred by deceased Muslims. It was reported that the Prophet (peace be upon him) ordered payment of debts of deceased Muslims from public money. It was also reported that Umar Ibn Abdulaziz ordered payment of debts for those who did not incur such debts due to lavish consumption. He also ordered to pay loans incurred by *Kheraj-payers* who were unable to improve their lands. It is also quoted that Umar Ibn Abdulaziz ordered his officials at a time when financial resources were abundant that all debts incurred by Muslims should be covered despite the fact that some of them had furnished homes and kept servants, since he considered such needs to be basic necessities.

This may sound strange given the conditions of today; but seen in the light of Islamic teachings, a consistency is found between the welfare system and the overall economic system. Islam does not permit interest or usury. The state has to ensure flow of loans by acting as a guarantor in case of death for debts not incurred in extravagance. Credit institutions will as a result, not fear extending such loans as bad debts will not be accumulated; if they apply Islamic criteria on those loans and extend them only to needy persons. Only debts created to meet essentials of life will be covered by the state. It is clear that expansion of the welfare system, whether to meet narrower or wider needs depends on affluence of a Muslim state. Muslim countries with huge financial resources should provide an expanded social welfare system like the one established by Umar Ibn Abdulaziz.

Where financial resources were limited the Prophet (peace be upon him) used to pray for those who incurred debts. Only when financial resources began to flow abundantly, the Prophet (peace be upon him) ordered coverage of debts of deceased Muslims.

Muslim states also introduced payment of children allowances. Nowadays such allowances prevail only in some economically developed countries. Umar used to pay children allowances when a child was no longer breast fed. But this led to hurried halt of breast feeding and the system was changed to pay allowances immediately after birth. Osman varied allowances with age, a newly born baby was paid 50 dirhams and a one year old child was paid 100 dirhams.

The system also introduced direct allowances to be paid to all Muslims who applied for it. Umar used to say that if financial resources were abundant, he would have paid every Muslim, one thousand for buying a horse, another for weapons to go to *Jihad,* a third for travel expenses and a fourth to subsist his family while he is away propagating and defending the cause of Islam. Muslims according to Islam should work for propagation of Islam and the security of its territories and the government should provide the individual with his necessities so that each person should work for this goal.

Later Abu Ubeid laid out minimum requirements which must be provided by Muslim states. According to him those were, a house, a dress and an ounce of gold. Ibn Taymiyyah thought that allowances should be distributed according to needs of persons and benefits accruing to a person from those allowances. A system that provides such minimum requirements will in turn provide equal opportunities to all individuals. As a result all those who belong to this state feel that they are part of an institution, which provides them with shelter. This will increase social harmony and reduce political upheavals. But it may be said that, disincentive effects may arise. When people find that the state will cover all their basic necessities, they may substitute leisure for work. Whether this effect is stronger than the income effect, i.e. people may be motivated to increase their incomes, should be investigated. Also costs of not providing such necessities may outweigh any adverse effects arising from application of the system.

Islam also guaranteed for those who work for the government some extra benefit. The Prophet (peace be upon him) is quoted to have said that those who work for the state will be given marriage allowances, a means of transport and a servant. Umar is quoted to have distributed public money such that army commanders were paid between seven to nine thousand dirhams. Extra allowances were paid to public officials, scholars, soldiers and security officials.

To conclude, Islam concerns itself with alleviating poverty and providing a decent life to all its people through an expanded welfare scheme and provision of public goods that are essential for all Muslims. Islam urges the rulers to prevent a decline in the standards of living of their subjects and hence they have to concern themselves with stabilizing their economies and assuring sustained economic growth.

V

CONCLUSIONS

1. The objectives of fiscal policy in an Islamic state may be summarised to be; achieving material development that is consistent with *Shari'ah* economic stability; efficient allocation of resources and an equitable distribution of income by reducing signs of mal distribution and reducing lavish consumption.

2. Fiscal policy will be an important economic device in an Islamic state. Past fiscal tools during the peak of Islamic civilization were taxes on land *Kheraj, Zakah* as well as other sources of revenue, social welfare payments and government expenditure policies. Such tools must be used and they may be enhanced with taxes optimally designed to achieve the objectives outlined for fiscal policy in an Islamic state; rationlizing government expenditure and designing a debt policy that is consistent with Islam.

3. Sources of finance in an Islamic state must be designed such that they will not impede economic growth. They should generate maximum revenue with least costs in administration and minimum adverse effects on incentives to work, to save and to invest.

4. Government expenditure should be rationalized. Public money must be spent where it is most needed without extravagance. Governments should not be destabilizers to the economy by spending beyond financial resources and resorting to confiscation or by constantly relying on deficit financing or taxation beyond what is optimally desired.

5. An equitable distribution of income and wealth is a goal an Islamic state must try to achieve using various distributive measures allowed by Islam. In this sense fiscal policy of an Islamic state aims at providing minimum necessities to all members of the state. It also aims at preventing huge accumulations of incomes and wealth in few hands.

6. Finally, the area of fiscal policy in an Islamic state needs further exploration. More time and effort should be put in this area in order to work out a detailed fiscal policy, which would outline in great depth various sources of finance, social welfare system, government expenditure policies, public enterprise operations, public debt and distributive policies of an Islamic state.

Comments

Dr. Sabahuddin Zaim

Dr. Salama has made a successful analysis of such a crucially important subject of economics. But, if I may be permitted to say, the following points might increase and improve the high quality of this valuable paper.

(1) The author first sets out the objectives of current fiscal policy as allocation of resources, stabilisation, economic growth and distribution. In the same section he tries to show how these objectives will suit the Muslim countries. But the two points are mixed with each other. To my mind, it would be better to write this section in the following manner:

(i) First, set out the objectives of modern fiscal policy of industrial nations.

(ii) Then show by comparison the objectives of fiscal policies of the present Muslim countries in transitional period.

(iii) Then set out the objectives for an ideal Islamic state.

(iv) Then compare, if it is possible to do so, with these ideal objectives, the current practice of Muslim countries with those of other industrial nations and try to show, if possible, the one which is closer to the ideal objectives. In this paper, it is difficult to have a clear picture of these three categories.

(2) In the second and third sections he has analyzed the sources of finance. There he has emphasized mostly the past experience, particularly on *Kheraj* levy. He has devoted little space both to the other financial sources of the past and to the policy of the present states. He has not made any distinction between the transitional and final stages of Islamic economies. Two thirds of the section is devoted to the explanation of *Kheraj*. All other sources, like taxes on trade, *fazia,* (personal tax), *El-Mustaglat* (government investment), sale taxes etc., are briefly summarized on one page.

(3) The third section related to the financial sources of the present Muslim states and supposed to be the most important part of the paper, is very brief and half of it is related to historical explanation which covers the topics of: (a) the scope of taxation; (b) designing an optimal tax structure; (c) government expenditure; and (d) distributive expenditure in an Islamic state. Here again there is no distinction between the policies of transitional and ideal stages of an Islamic state.

(4) The core of the subject of this paper is related to the third and fourth sections. The first two are introductory. Up to that point the paper is not well-balanced.

Perhaps due to the shortage of time and facilities, the author could not go deep enough into his subject. Realizing this shortcoming, he himself has mentioned at the end of the paper that more time and efforts were needed for a detailed fiscal policy, which would outline in great depth various financial, social welfare, government expenditure, public enterprise operations, and public debt distributive policies of an Islamic state.

It might be desirable that each section of this paper be studied by independent Ph.D. candidates. If we had such documents in our hands, then specialists could go through them and try to reach operational models of related subjects.

At this stage, I am afraid, we have to satisfy ourselves with the already known sources, elaborated by some other authors.

Beyond these general points, I would like to add a few remarks:

(1) It is stated in Section I that in secular economics, no regard is given to the spiritual needs of Man. If we take the SECULAR ECONOMICS as a theoretical model, it may be relevant. But if we take the policies of the Western economies, this statement might be an over-simplification, because, in current policies, they, compared to the present Islamic countries, sometimes pay more attention to spiritual needs, e.g. as far as I know in West Germany church tax is an integral part of income tax policy, collected by the government compulsorily from the church members and given to the church to provide for the spiritual needs of man, including support of missionary activities.

(2) Again in Section I it is stated that "moral values of Islam are incorporated within its fiscal policy", as a point distinguishing Islamic economy from current Western economies. Are not their (mostly Christian) moral values incorporated within their policies?

(3) Again in Section I, as a distinguishing point of Islamic state, it is mentioned that resources should be utilized optimally, without extravagance, and needs of future generations in utilizing those resources should be catered for. It is done in secular countries as well. In USA an independent ministry is dealing with that policy.

(4) In the same section it is stated that" the concept of efficiency may be extended to include harmony between the spiritual and material desires. Resources should be utilized only if they achieve welfare of man in the world and the Hereafter. It is also stated that a Muslim state, to emphasize, is not value free. The government in such a state has to regulate the market system which is given an important role in the provision of private goods that are in line with goals of achieving welfare of human beings in this world and in the Hereafter. These are accepted Islamic value judgements, and expressed in previous papers. But the question is: how would you put these in operation? That part is not explained in the paper. There are several Islamic value judgements, which are not put in operations, in the context of Islamic economics.

(5) In Section 1.2 the author defends an Islamic state's progressive taxes on income and expenditure system for economic stabilization policy. On the other side, for economic growth he defends lower taxes on corporations investing in high-priority projects and on reinvested funds and dividends. Different measures are proposed for different goals. But how do we put them together in an optimal tax structure in operation? That is not answered.

(6) The author has analyzed *Kheraj* levy, and recommends it for the present Islamic countries. But in many industrializing countries, the share of agricultural output in GNP is decreasing. Therefore, the incidence of *Kheraj,* which applies only to the agricultural output, will be minimal. An important portion of income is subject to the other sources. It is also mentioned that, AI-Mansour had imposed *Kheraj* on shops. How did he do it? Is it applicable today to industry, trade and other sectors? This also needs to be explained. I wish and hope that the valuable paper of Dr. Salama stimulates further research on this subject and helps in a better understanding of Islam.

Dr. Syed Waseem Ahmad

The author of this paper has brought to the four special features of fiscal policy of an Islamic state, compared and contrasted them with those of non-Islamic and secular states. The most salient point is that Islamic state is not value free as many secular and non-Islamic states claim themselves to be. Fiscal policy of an Islamic State does not exclude the objectives of the fiscal policies of modern states but it further enlarges them to include the welfare of man and society in the world Hereafter. It aims at bringing about a balance between the material, moral and spiritual needs of man. Hence moral values of Islam have to be incorporated within its fiscal policy. In other words the fiscal policy of an Islamic state has to achieve its objectives within the constraints (limits) set by *Shari'ah.* However the author does not *explicitly* point out the effects that would follow from the inclusion of the moral principles of Islam on: (i) the sources of revenue, (ii) the methods of mobilization of financial resources, (iii) the loss of revenue that is likely to occur, and (iv) alternative sources of revenue compensating for the loss of revenue.

It may be said in defence of the paper writer that he. has left further empirical work to be done later.

With reference to the allocation of resources, according to the author, the concept of efficiency may be extended to include harmony between the spiritual and material desires. Safeguarding of the faith is one of the objectives of the fiscal policy in an Islamic state. However, it is not clear how much resources be allocated to it in order to bring about the desired harmony and also achieve optimal utilization of the resources available.

A description of public goods that an Islamic state would provide is given. The production, distribution and consumption of goods and services provided by the private sector would be regulated and controlled so as to conform to the principles laid down by *Shari'ah.* In this regard it would perhaps be more appropriate to go a little further and categorise the goods and services into three broad categories:

(i) Those which shall not be produced/imported and consumed at all by the society as whole.

(ii) Goods and services that may be produced and consumed but whose consumption shall not be encouraged. In this category would fall goods and services that may be classified as luxuries (in whatever manner they may be defined). Encouraging luxurious and conspicuous consumption by richer classes is likely to lead to the demonstration effect on those unable to afford them and hence would lead to waste of resources and result in less than optimal utilization of resources.

(iii) Goods and services that are essential. The production of these goods should be encouraged both for material needs and for moral and spiritual development of the society. Fiscal policy by way of subsidies and tax exemptions can be used for this purpose.

There is no dispute as to the type of public goods and services that an Islamic state should provide. But the question whether the Islamic state can mobilize adequate financial resources for their provision has not been dealt with directly and sufficiently in this paper. Instead of quantifying the meaning of adequate financial resources (in terms of proportion of gross domestic product), two broad and generally accepted principles viz - (a) reducing unnecessary consumption in the private sector, and (b) rationalisation of government expenditure have been discussed.

The major difficulty lies in defining in a pragmatic and practical manner what would constitute unnecessary consumption for various income groups in the society and then develop the mechanics to apply it rigorously in the private as well as in the public sector. The application of the Islamic concept of *Israf* would be most relevant here.

Discussing the role of fiscal policy in economic stabilization the author rightly makes the assertion that in an Islamic state the stability of the real value of money is considered obligatory and is essential if such an economy is to proceed smoothly on the path of development. It is however not clear to the reader by what measures (short of Indexation) the Islamic state would be able to maintain the stability of the real value of money when modern states with all the built-in flexibility of revenue systems and advanced social welfare systems have not been able to stem the tide of inflation which has been ravaging the modern economies today. The second part of the paper provides a historical view of the sources of revenue in an Islamic state. It has presented a detailed fiscal analysis of *Kheraj* - (land taxation) - the major source of revenue of Islamic state in the past. The assessment of *Kheraj* presented by the author is the best exposition of how this fiscal tool had been used in the past and can be used by the Islamic state. The writer, however, does not raise the issue of the difference between *Ushr* and *Kheraj)' Ushr* lands and *Kheraj* lands. Whether *Ushr* and *Kheraj* can be realised from the same piece of land and if so would it not amount to double taxation of the same sources of revenue. This is an important issue which needs clarification.

To be practical and pragmatic it would be necessary to examine what proportion of national output can an Islamic state raise by way of various taxes, rates, fees etc., keeping in view the average per capita income and the distribution of wealth and income in the country. Such an assessment would provide the knowledge with regard to the capability of the Islamic fiscal system to be able or not to bear the burden and responsibilities of the state in the present era. The paper seems to assume without making it explicit that the Islamic state's fiscal system has that capability.

The system of *Zakah* on which the author has another paper is not discussed here in detail. *Zakah* works in an Islamic state as a means of providing social securities, as a method of redistribution of income and wealth and as a remedy against the concentration of wealth in a smaller section of the society. Thus a broad based system of *Zakah* combined with other fiscal tools as described by the author seem to provide the Islamic state with sufficient means to enable it to bear its responsibilities. An empirical study of the feasibility of such a system in the Muslim countries of today is necessary to provide empirical evidence and support for the theoretical framework.

The third part of the paper discusses the sources of finance for present Muslim states. It has been asserted that where those sources of finance may not be adequate or may not be feasible debt policy may be used. The unresolved issues of what instruments could the government use to issue public debt have been pointed out. Islamic state cannot use inflationary methods of finance as it is obliged to maintain the stability of the real value of money. All inflationary methods of finance bring a decline in the value of money. Hence it is necessary for an Islamic state to use the system of indexation. The indexation appears to be the way out for an Islamic state to maintain the stability of the real value of money. This has to be examined in detail.

On the whole the paper is a well-written paper and highlights the problem areas as well as the capability of the Fiscal Policy in an Islamic State. As an initial attempt to formulate a fiscal policy that may be consistent with Islamic *Shari'ah,* the writer of the paper deserves to be congratulated for this effort.

Discussion

Dr. Monzer Kahf

First-of all, I would like to congratulate Dr. Salama for an excellent paper. However, I have two short questions that I would like to ask the author. First, it seems to me that it is not clear in the paper whether the rich states like the oil-rich countries today, may also impose taxes; whether it is permissible for the”1, that in addition to the funds which they have and which are not absorbed externally or internally, to go ahead and impose more taxes also. The second question is that whether the objectives which can be achieved by taxes, mentioned in Section III.1 can also be achieved, and may be in a better way, through other means. Would it be advisable to still put more taxes?

Dr. Rafiq Ahmed

I must congratulate the writer of this paper which is really very illuminating but there are one or two questions regarding *Kheraj* which I would like to ask him. Prof. Waseem Ahmad has said that his doubts regarding the difference between *Ushr* and *Kheraji* lands have been dispelled by the honourable author, but I hope that he will also take us into confidence about that. My question is concerning the difference between *Ushr* and *Kheraji* lands. As far as I have been able to understand, according *to Fatawa-Alamgiri* all those lands which were conquered by the Muslims are considered to be *Kheraji* lands and they are not subject to the rules and regulations which are devised for *Ushr* lands. This issue is very important for Pakistan where *Ushr* Ordinance has been promulgated and we should be clear in our mind about this question. The second aspect of my question is that even in the case of the discussion on *Kheraj*, the author has not given a clear indication of the way of assessments. Not a very clear idea is given as to how it has actually been assessed, although he has given different rates. What actually were the methods and if changes are made in them from time to time what was the basis? We shall be grateful if he can enlighten us on this point.

Dr. Mahfooz Ali

I have only two or three minor points. I feel that the ghost of Western economists is still ruling supreme. In Islam I think a man who is leading an immoral life, will have no claim on funds from *Zakah* whereas from the social security point of view, even a man leading an immoral life, even a drunkard, has a legitimate claim over social security. These are fundamental differences between two types of economies. Islam is completely different and I think that earlier we get rid of the Western terminology, the Western values, the Western system, the better it is. Then again I am afraid I will have to be a little critical of the assertion that the Islamic state helps the poor people in terms of providing education and health. This is not helping the disabled. This is helping the able-bodied so that they could function productively in the society. I think that these sectors, the education sector and health sector, have nothing to do with *Zakah.*

Dr. Munawar Iqbal

I want to make a couple of points. First of all, I think that the author has ignored one very important element in the Islamic fiscal system, i.e. the imposition of *Ushr* which is also an obligatory levy and the author has not discussed it at all. He has emphasised *Kheraj* rather too much. In the present day world, the scope of *Kheraj* is very limited. My second point is that he seems to be pre-occupied with the Western criteria for the imposition of taxes. I think we are not obliged to follow Adam Smith's canons of taxation religiously. In an Islamic economy we have to use our own criteria. If the criteria given by Adam Smith or any other Western scholar are in conformity with Islamic values, there is no harm in using them but there is nothing sacrosanct about those critieria. In an Islamic economy for example, we may have a "social justice criterion" or a "piety criterion" etc. etc.* Then, we should not feel ashamed of having non-material or value-oriented creteria in the evaluation of our taxation system. For example, the imposition of a 10 per cent levy on irrigated land and 20 per cent on non-irrigated land may not be justified according to the economic criteria which Smith has given but is well-justified on our own criteria. My third point is that the author has given objectives of fiscal policy in an Islamic state but he has not discussed how these objectives will be achieved by the instruments that he has suggested. I am not sure how the *Kheraj* levy will achieve monetary stability for example. This brings me back to Dr. Monzer Kahf's point as to whether or not it would be better to leave some of these objectives to be achieved by some other instruments of economic policy?

R. M. U. Suleman

I have one or two brief questions to ask. First whether or not there is a list of taxes that are un-Islamic. In our country, there has been a lot of mis-informed talk about taxes on income being un-Islamic, especially after the levy of *Zakah.* Another question that I want to ask is that *Zakah* afterall impinges on the same taxable capacity as some of the existing taxes and our law provides credit for the payment of *Zakah,* in the assessment of the existing taxes. Is it proper or appropriate? If credit is given for the payment of *Zakah* in tax assessment, does it reduce the element of religious levy that *Zakah* is supposed to be?

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* As the author rightly points out, economic policies in an Islamic state are not value-free.

Dr. Umer Chapra

Although the paper of Dr. Salama is very valuable, it has not elaborated some of the important points which need to be discussed in the area of fiscal policy in an Islamic economy. There are a number of things that the Muslim scholars have been studying in this field but it seems that there has been very little effort to coordinate the discussion to see the implications of what they have been saying. To give just one example, the author has elaborated the objectives of the Islamic state in the field of fiscal policy. The objectives are very very good and there is no doubt that they need to be persued, particularly the objectives of development and welfare. The question, however, arises as to how do we find resources to undertake all these functions for the state without generating inflationary pressures? Naturally, we would look towards the field of taxation. And it is here that we have often failed to do the job. Dr. Salama has put a great deal of emphasis on *Kheraj.* Although this will be important land revenue and is certainly important in an Islamic state but not to the extent to which it was important in the past. We have to talk in terms of a number of other taxes and the extent to which these taxes can be levied and the extent of revenue that we will be able to realise through these taxes without over-burdening people. Then we have to look to the other side of the picture also. There have been scholars like Dr. Monzer Kahf, who have indicated that in an Islamic framework the state has a limited power to levy taxes. Then there are others who have stated that in an Islamic state they do not favour income taxes etc. Although most of us will agree that the State has the power to tax, nevertheless it will not be able to collect unlimited amount to finance all its functions. This brings us to the expenditure side. What priorities are we going to give to the various roles which the Islamic state is expected to perform and where we are going to make the savings? It is in this specific area that we have failed most. I do not know of any paper which has been written in this field which would indicate the various functions of the Islamic state and indicate where savings can be made. We all tend to emphasise defence and this is substantial part of the expenditure of the Muslim countries at this moment. Although we may be able to save a substantial amount through elimination of waste and corruption but we need to see how much we will be able to save in this area. In other words what we need to do is to coordinate all these things together and to see really how much we can achieve and we will have to set up priorities for the functions of the Islamic state and then go according to these priorities. We also need to make adjustment in our tax system and in our expenditure pattern so as to be able to avoid the inflationary pressures that we might otherwise generate.

Dr. Monzer Kahf

I do not have further questions. I just want to correct a few points which have been made here. First is about the *Ushr* and *Zakah.* In *Shari'ah* especially in the Arabic writings *Ushr* is a form of *Zakah,* so it is included in the word *Zakah.* Secondly, concerning *Ushr* and *Kheraj,* you can make the rate of *Kheraj* equal to the rate of *Ushr* so, there is no problem. It may be simply a sementical point.

Lastly, it was said that an immoral person has no right in *Zakah.* Well, it is a capable person who has no right in *Zakah.* Immoral has right in *Zakah* for his living and other things but definitely, we will not pay him for his drinking.

Dr. Ishaq Nadri (Chairman of the Session)

To close the discussion, I would like to put one or two questions to our learned speaker which I think might be useful for his revision. One is the issue that in Islamic economy, you may still have conflicts of objectives. How will these be resolved? Related to this problem is the question brought up by Dr. Chapra that you may not have enough financing to achieve all the objectives. Dr. Salama has given an historical purview of what has been done in earlier times in the Islamic economy which can serve as a precedent, to build on. Another aspect of the paper is analytical. Weaving of various elements of what ought to be the fiscal policy and instrumentation and the like of it in an Islamic economy which might meet the test of Islamic principles and at the same time will be useful in the economic growth of under-developed economies of Islamic nations. I think that he has been quite concerned with the first category, i.e. the historical review which is very valuable. However, I would suggest that if time permits, and if resources are available, it will be useful to review some of the experiences of say, the Islamic governments in Spain at the time that the Arabs were in Spain and to review some of the experiences of India, so on and so forth. It is useful to see what are some of the other experiences because what is important is to see whether there was any evolution or a re-interpretation of the basic doctrines or not.

Dr. Salama

I would like to thank the Chairman and the floor for this constructive discussion. This will be of course taken into consideration in the review. I would just reply to some of the questions.

As to the question whether the oil-rich countries should impose tax or not, of course this is up to the countries. I would like them to impose taxes because this would save us great problems especially of imports. I think it is in the interest of these countries to reduce lavish consumption especially in the case of imports. As far as future resources are concerned, if we want to conserve these resources for future generations, we have to find alternative sources of financing the budget than the oil revenue. This will be in the interest of non-oil-producing countries as well. On the question whether other tools can achieve the objectives listed or not, nobody would say that no other tool would achieve these objectives. Whether fiscal policy is more efficient in this case or not is still a question. I think that even with its limitations, taxation is still one of the most effective tools to achieve some of these objectives either with the alternatives or separately. But I agree with Dr. Chapra that we should see which objectives are more important and we should try to avoid the conflict between these objectives.

One of the commentators has said that I have used the Western type of analysis. In fact I think that the Western analysis have used the Islamic analysis. This is a theory in which I believe and which I hope I have the resources to prove. In the case of canons of taxation, for instance, they were taken directly or indirectly from the books on *Kheraj* by Abu Yusuf and from the works of Ibn Khaldun. I do not think that using Western terminology is against Islam because everything coming from West is not necessarily against Islam.

On the question about taxes on income as to whether they are Islamic or not, I personally believe that there is no harm if taxes are imposed on the criteria laid here. I would totally agree with the Islamic government to impose whatever taxes they feel necessary to achieve these objectives.

Taxation Policy in an Islamic Economy

Dr. Monzer Kahf

This paper consists of three parts. In Part I, the theoretical foundation and the rationale of taxation policy as provided by the Muslim writers will be discussed. Part II will be devoted to the priorities of the Islamic state and its economic role. And Part III will explicate the principles of taxation policy in Islam.

I

FOUNDATIONS OF TAXATION POLICY

The foundations of taxation policy in the Islamic state can be discovered if we understand the role of the state and its fundamental commitment within the framework of the Islamic society. Several thoughts and ideas are presented in the contemporary Islamic literature in attempts to describe the role of the Islamic state, in general, and its economic function in particular. Out of the several proposals of Muslim writers who studied the economic role of the Islamic state, the following three are the most important:

a. The Islamic state is a welfare state. The prosperity of the economically lower sections of society is its major consideration.

b. The Islamic state is a development state for which economic growth is extremely important; it plays the predominant role in shaping the state's policy.

c. The Islamic state is responsible for economic equilibrium. The main objective of its economic policy is to maintain economic balance and equilibrium.

These three concepts will be discussed at some length in this part and an alternative approach will be put forward.

a. Islam and the Welfare State

The commitment of the Islamic state to welfare is derived, according to Dr. Chapra, from the mercy (*Rahmah*) that the Prophet (peace be upon him) was sent with.[1] Thus, "welfare" and "good life" become synonymous. Ironically, welfare must be understood in its general and comprehensive meaning that includes all aspects of human life, the economic aspect is but one of them. Chapra feels that there exists abundant evidence to make it "absolutely unjustified not to term the Islamic state as a welfare state".[2] El-Ghazali expresses this concept of welfare saying: "The objective of *Shari'ah*, as far as people are concerned, is five-fold: The protection of their religion, life, mind, offspring, and property. Thus everything that implies promoting these five things (or any of them) is *Maslahah* (interest) and everything that implies harming them is *Mafsadah* (harm)."[3] The economic implication of this comprehensive welfare concept is that the Islamic state is responsible for the following:

"1. to eradicate poverty and to create conditions for full employment and a high rate of growth,
2. to promote stability in the real value of money,
3. to maintain law and order,
4. to ensure social and economic justice,
5. to arrange social security and foster equitable distribution of income and wealth,
6. to harmonize international relations and ensure national defence."[4]

In the course of the fulfillment of these responsibilities, the Islamic state resorts to tools like planning, undertaking social and physical infrastructure, providing measure for ensuring just wage rates and just prices, economic assistance to the elderly, the disabled, and the handicaped.[5]

The financial resources suggested by Chapra to meet the requirement of this role of the Islamic government are four: *Zakah*, income from natural resources, taxation, and borrowing.[6] *Zakah's* ratio, collection and disbursement are very well treated in the original sources of Islam leaving not much to be added, while taxation and borrowing still need more elaboration. Chapra suggested that the "right of the Islamic state to raise resources through taxes cannot be challenged."[7]

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1. Umer Chapra: "The Islamic Welfare State and its Role in the Economy" in *Islamic Perspectives*, edited by Khurshid Ahmad and Zafar Ishaq Ansari, The Islamic Foundation, Leicester, United Kingdom, 1979, pp. 195-221.
2. *Ibid*., p. 197.
3. Imam Muhammad El-Ghazali: AI-Mustasfa, Mataba'at Mustapha Wahbah, Cairo, 1937, V.I. pp. 139-140.
4. Chapra, *op. cit*., pp. 202-203.
5. *Ibid*., p. 202-210.
6. *Ibid*., p. 211.
7. *Ibid*., p. 212.

Loans may be obtained from the public on the basis of profit-sharing in certain projects or on the basis of their zeal and inspiration. Loans from central bank, although inflationary in nature, may be reverted in a few cases where the anticipated harm of price instability is less than the expected benefit of such borrowing.[8] Although Chapra stressed the principle of justice as far as the size and the distribution of the tax burden are concerned, he did not articulate this principle with respect to the validity of the use of taxation in financing different activities of the Islamic state. How much of these activities can be financed through taxes and how much through borrowing? And how could the economic priorities be listed? What reflects more justice having higher standard of living for the poor and more taxes, or lower standard and less taxes? What expenses of the state can be financed from each of these three sources: taxes, *Zakah*, and borrowing?

Questions of this kind deal with the legitimacy and the extent of tax levying. Their answers represent constraints on the economic behaviour of the Islamic state. The role of promoting "economic" welfare that Chapra assigns to the Islamic state requires two sets of activities: production activities that can be summarized as the promotion of better utilization of economic resources which he called, "full employment and high rate of growth"; and distribution activities that may be summarized as the reduction of income differential between the rich and the poor.[9] This is the goal of social and economic justice and the equitable distribution of income and wealth of Chapra. The extent of these two major economic functions of the Islamic state depends on three factors, namely, the endowment of natural resources, the level of technology and the amount of financial resources that can be raised from within and from outside the economy. But since both natural resource endowment and the state of technology are given in any short and medium-term analysis, and the ratio and categories of disbursement of *Zakah* are also given, the amount of taxes that the state can legitimately collect becomes a principal determinant of the level of its performing the above-mentioned functions in any Islamic society (one should not forget foreign aid and borrowing).

b. Islam and Economic Growth

The concept of a welfare state was further expanded by Dr. Chapra to include growth and development. However, the welfare function is usually focused on the distribution aspect. Mannan describes the welfare state established by the Prophet (peace be upon him) as following "a broad policy of expenditure for balanced distribution of wealth among the various sections of the community."[10]

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8. *Ibid*., pp. 212-214.
9. Monzer Kahf: "Fiscal and Monetary Policy in Islamic Economy", paper presented at the Seminar on Fiscal and Monetary Economics of Islam, Makkah, October, 1978.
10. M. A. Mannan: Islamic Economics, Ashraf Publications, Lahore, Pakistan, 1970, p. 311.

The Islamic state's role in development and growth is discussed by many writers. Khurshid Ahmad emphasizes that "Islam's main concern is in encouraging economic development with social justice."[11] The state, as the politico-economic leadership of the Islamic society, has the responsibility of carrying out the task of implementing a balanced strategy toward the realization of the objectives of development and has to ensure that the means exist to achieve these objectives.[12] Raquibuz-Zaman adds that taking an "active part in resource allocation" is a must for the Islamic state inasmuch as it is its duty to collect and to distribute Zakah.[13]

While Chapra, Khurshid Ahmad and Raquibuz-Zaman establish their economic development concept on a welfare concept, Abd al-Muniem al-Ghoosi considers economic development as a necessity for attaining might and power for the Islamic state. He further asserts that not only economic development is a must, but that planning is also a necessity since planning is the indispensable means of development."[14] It should also be noted that the Muslim writers' approach to development is comprehensive and humanistic. Thus development in Islam includes all aspects of the Muslims life, be it moral, spiritual, or material.

Four sources of revenue are proposed by the Muslim writers to finance the state developmental activities: taxes, borrowing, revenues of government enterprises, and partnership shares sold to the public. Mannan believes that taxation is a basic means of financing economic development after the private sector's saving since "raising revenue by taxation is justified in Islam"[15]. While internal borrowing is advocated by a few writers,[16] Abu Sulayman sees in international borrowing a means of obtaining capital with a "price" be it interest or rent.[17] The basic source of revenue for government enterprises comes from the extraction of natural resources whose ownership is assigned to the Islamic state by most of the Muslim writers. The fourth source of revenue, partnership shares, is similar to internal borrowing in that it draws on the private sector's savings.

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11. Khurshid Ahmad: "Economic Development in an Islamic Framework", published in Islamic Perspectives, pp. 223-240, see p. 226.
12. *Ibid*., p. 229.
13. Raquibuz-Zaman: "The Role of a Government Planning Institution in an Islamic State", paper presented at the 8th Annual Conference of the Association of Muslim Social Scientists, held in Indianapolis, Indiana, U.S.A., p. 1.
14. Abd al-Muniem al-Ghoosi: "Comments and Discussion on the Role of Government Planning Institution in an Islamic State", 8th Annual Conference of Association of Muslim Scientists, p. 1.
15. M. A. Mannan, *op. cit*., p. 332.
16. See Chapra and Mannan, *op. cit*.
17. Abdul Hamid Abu Sulayman: "The Theory of Economics in Islam" in Contemporary Aspects of Economics Thinking in Islam, American Trust Publications, Indianapolis, Indiana, U.S.A., 1970, p. 31.

The only difference between them is that income is given to the holders of the partnership shares, while coercion or zeal and patriotism are reverted to, in the case of borrowing.

Keeping in mind that the principle of justice is invoked in the distribution of the tax burden and of the development's fruits; very little is usually said about the validity of the use of taxation to finance economic development that brings prosperity to later generations. Abd al-Muniem al-Ghoosi's concept of development for might and strength differs from most of the others who see in economic development increase in welfare for future generations in the society. The question, however, arises in both cases whether it is just and lawful to charge the present generation for projects whose benefits will be harvested by future generations. Depending on the answer to this question, a preference should be established between taxes and borrowing.

c. Islam and Economic Equilibrium

Economic equilibrium is one of the objectives of the Islamic state. We have seen earlier that Chapra considers price stability as one of the objectives of the Islamic welfare state. The effort of the state to achieve and maintain economic equilibrium implies fighting two economic evils: inflation and recession. Among the tools suggested to achieve and maintain general equilibrium, two relate to fiscal policy: a general equilibrium tax, and the management of the degree of monetization of *Zakah*.

M. M. Metwally suggests a variable rate of *Zakah* whereby variations are done by the state for equilibrium purposes.[18] Later, he substituted the variation of the rate of *Zakah*, by *Zakah* with a constant rate plus a variable-rate-general-equil ibrium tax,[19] because a variable rate of *Zakah*, was considered a violation of *Shari'ah* by many Muslim scholars. Kahf proposed the variation in the degree of monetrization of *Zakah*, as a leverage in equilibrating the economic activity. *Zakah*, according to *Shari'ah*, may be collected and distributed in money and in kind. Thus, variations in the proportion of *Zakah* collected (distributed) in money would affect the quantity of money in the market as well as the quantity of consumer's goods available.

The general equilibrium tax is of special importance to this paper because of the theoretical foundation underlying it. According to its advocates, th is tax is justified by the need for equilibrium and since equilibrium is good, then a means that achieves good is considered good too.

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18. M. M. Metwally: “Macroeconomic Models of Islamic Doctrines” manuscript, pp. 66-76.
19. 1n a lecture held at King Abdul Aziz University, jeddah in December, 1978.

The Islamic State: Its Nature and O1aracteristics

The Islamic state evolved in Medina at the time of the Prophet Muhammad (peace be upon him) and his first four successors. Thus, the principles of this state should be found in the Quran and the *Sunnah*. The essence of the Islamic state is the notion that "all sovereignty belongs to Allah." Thus, the state is but one of the means that brings human beings closer to Him. Consequently, we find a Muslim scholar like Mawardi defining the purpose of the Islamic state as "to continue the function of prophethood in safeguarding religion and managing the worldly affairs"

لخلافة النبوة في حراسة الدين وسياسة الدنيا [20]

Ibn Taymiyyah adds that the objective of statehood is "that religion be all to Allah and that Allah's word be supreme"

حتى يكون لله وتكون كلمة الله هي العليا [21]

In the same line of thought, Ibn Khaldun explains the relation between "the management of the wordly affairs" سياسة الدنيا "and "Allah's word being supreme" كلمة الله هي العليا

"by saying "because according to *Shari'ah*, the wordly affairs are all considered with reference to their benefits in the Hereafter"[22]

إذ أحوال الدنيا كلها ترجع الشارع إلى اعتبارها بمصالح الآخرة

Hence, Ibn Khaldun clarifies the function of the Islamic state as "getting all and everybody to follow the intent of the position of *Shari'ah* in their Hereafter and wordly affairs

هي حمل الكافة على مقتضى النظر الشرعي في مصالحهم الأخروية والدنيوية [23]

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20. Abu aL-Hasan al-Mawardi: *Al-Ahkam al-Sultaniyah*, Maktabat al-Babi al-Halabi, Cairo, 3rd edition, 1973, p. 5.
21. Ahmad Ibn Taymiyyah: *Al-Hisbah fi al-Islam*, Dar al-Kutub al-Arabiyah, Beirut, no date, p. 2.
22. Ibn Khaldun: *Al-Muqaddimah*, Dar al-Sha'b, Cairo, no date, p. 169.
23. Ibn Khaldun, *Ibid.*

In this definition of the function of the Islamic state, two elements can be pointed out as distinct and unique; they are:

1. *A system of rationalization* is utilized by the state to determine the relevance, usefulness and efficacy of political decisions and the process of their making. However, it is recognized that every political system has its own rationale, and Ibn Khaldun, himself distinguished among three different kinds of political rationalization: namely, monarchic, democratic, and Islamic. The monarchic rationale is based on a set of values that surrounds and nourishes the desires. zeals and drives of the monarch,

   مقتضى الغرض والشهوة

   The democrate rationale is based on the human reasoning without being value committed or guided by Godly revelation,

   مقتضى النظر الشرعي

   While the Islamic rationale is based on the human reasoning which is committed to the Godly revelation in both values and methodology,

   مقتضى النظر العقلي

2. *The domain and the scope of the Islamic state include the worldly affairs as well as the affairs of the Hereafter.* Thus, the responsibility of the Islamic state towards the members of its society are extended to cover their interests in the afterlife in the sense of having people work toward their own salvation and success in pleasing Allah. Imam Shatibi says: "the interests of religion are absolutely higher than the interests of the worldly life

   المصالح الدينية مقدمة على المصالح الدنيوية على الإطلاق [24]

24. Imam Abu-Ishaq al-Shatibi: *Al-Muwafaqaf fi 'Usul al-Shari'ah*, al-Maktabah al-Tijariyah al-Kubra, Cairo, 2nd edition, 1975, V. 2, p. 370.

It is by virtue of this kind of definition and its two fundamental elements that the Islamic state is uniquely and distinctively characterized as a vicegerent of Allah, subhanahu wa ta’ala, Who is the source of religion. The Islamic state “represents Him in promoting religion and administering the world according to His Commandment.[25]

The main characteristics of the Islamic state can be summarized in the following:

1. The Islamic state derives its authority from the concept of “vicegerency of Allah”.
2. The safeguard of religion and the supremacy of the word of Allah are the first and primary objectives of the Islamic state. Every other thing becomes secondary to that.
3. The policies of the state are drawn within the limit of the intent of *Shari'ah*.
4. The implementation of *Shari'ah* is the target of the Islamic state and it is the purpose of its very existence. This applies on all aspects of the state behaviour: political, economical, social and military; and it also applies on all the relationships between the state and the individuals.

Comparison with the Welfare State

The preceding definition of the Islamic state is the cornerstone of the Islamic system of government. It stands in contrast with each of the capitalist state, the communist state, and the welfare state since each of these three states is limited to the worldly affairs only and is a product of non-Islamic ideology.

The capitalist state came about as a result of the individualism and utilitarianism that prevailed in Western Europe and Northern America. Its economic content is laissez-fake. The communist state came as a result of the radical reactions to the miseries and exploitation of the capitalists and their political model in Europe. Its economic content is complete state authority on production and distribution.

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25. Ibn Khaldun, holds the following comparison in distinguishing between three systems: monarchy, democracy, and Islam. Monarchy wants people to fulfill the desires of the king. Democracy wants people to fulfill the intent of their rational judgement to manage their worldly affairs, and the Islamic state wants people to manage the worldly affairs in consideration to their benefit in the Hereafter. *op. cit*., pp. 169-170.

فقد تبين لك من ذلك معنى الخلافة وأن الملك الطبيعي هو حمل الكافة على مقتضى الغرض والشهوة ، والسياسي هو حمل الكافة على مقتضى النظر العقلي في جلب المصالح الدنيوية ودفع المضار ، والخلافة هي حمل الكافة على مقتضى النظر الشرعي في مصالحهم الأخروية والدنيوية الدافعة إليها ، إذ أحوال الدنيا ترجع كلها عند الشارع إلى اعتبارها بمصالح الآخرة فهي في الحقيقة خلافة عن صاحب الشرع في حراسة الدين وسياسة الدنيا بها .

On the other hand, the concept of the welfare state is attached to social policies and relief for the poor. The first step to the "welfare state" came only after the inadequacy of the capitalist state had become widely accepted, i.e. since the middle of the nineteenth century.[26] The term "welfare state" itself is a British invention.[27] By the year 1948, social security was expanded in Britain to virtually all people, national health insurance came in full application, unemployment benefits were enacted and extended to cover more workers, widows, orphans, and old-age pensions became more comprehensive, the principle of secondary education for all was accepted, and the practice of building houses and letting them at subsidized rent was well established.[28]

The emergence of the notion of "welfare state" from the thoughts of the British politicians and economists and the practices of the British government contributed a lot to the shaping of this notion and its dimensions. The "welfare state" is the result of eco-political compromises that took place within the British form of democracy. It is, consequently, an English combination of individualism and collectivism. According to T. H. Marshall, "the welfare state has not rejected the capitalist market economy, but gives it only qualified approval since there are some elements in civilized life of greater importance which can be attained only by restricting or supplanting the market."[29]

Titmuss suggested a comprehensive outlook of the aims of the welfare state, to include: (1) increasing the economic efficiency by increasing productivity, facilitating workers' mobility, and enhancing growth; (2) affecting the birth rate in the desirable direction; (3) integrating minorities into the society; (4) reducing inequality of income and command over resources.[30]

From the aims, the policies, and the evolution of the welfare state, its characteristics can be derived. Since the welfare state is democratic in nature, the combination of collectivism and individualism and their proportions become a matter of political choice. In pursuance of the democratic practices, the public vote is the determinant of the rights and duties of individuals. The extent of the obligations of the individuals to the state becomes subject to the social contract. This contract of the majority vote defines the degree of political freedom as well as the share of taxes.

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26. R. C. Birch: *The Shaping of the Welfare State*, Longman, London 1974, pp.8-19.
27. It came in the press during the early post-Second-World-War years and was first used by Archbishop Temple. See R. M. Titmuss: *Essays on the Welfare State,* George Allen and Unwin Ltd., London.
28. J. F. Sleeman: *The Welfare State*, George Allen and Unwin Ltd., London, 1973, pp. 23-38.
29. William Robson: *Welfare State and Welfare Society*, George Allen and Unwin Ltd., London, 1976, p. 12.
30. As quoted in Robson: *Ibid.,* p. 24.

Moreover, the welfare state defines welfare and happiness in the utilitarian context. Thus, it tends to measure its achievements in terms of economic gains. Moreover, it is also nationalist, whereby its scope of concern is the economic well-being of the nation. It does not have a universal vision. And lastly, the welfare state is bureaucratic. It creates a huge administrative apparatus.[31]

II

THE PRIORITIES OF THE ISLAMIC STATE AND ITS ECONOMIC ROLE

The definition and the characteristics of the Islamic state imply a certain approach to its priorities. This approach, though unique, may coincide at certain points with that of the capitalist, socialist or welfare state, the differences between the Islamic state and each of these states should not be overlooked. The purpose of this section is to remove the ambiguity surrounding the priorities of the Islamic state. This ambiguity resulted from the very frequent generalizations and sweeping statements. Further, this section should serve as a check point and a warning signal to that segment of the contemporary Islamic literature which approaches the economies of Islam with preconceived ideas infiltrated from the non-Islamic systems.

In the Islamic state, the safeguard of religion and the supremacy of the word of Allah are the primary objectives. All the resources, human and material, are geared towards the best implementation and expansion of religion.

> *"taking people out of the worship of other creatures and into the worship of God, and liberating them from the narrow-mindedness of the worldly matters to the vast vision of the whole universe, and freeing them from the oppression of religion to the justice of Islam."*[32]

The scope of the Islamic state goes beyond the worldly affairs of its people and beyond its boundaries. El-Awa, and before him Mawardi include into the duties of the state: "preservation of faith in its established principles and in the form in which *al-salaf* (the predecessors) of the *Ummah* had unanimously agreed: Jihad against those who oppose Islam after calling upon them to embrace it, or to accept protection as non-Muslims, so that the right of Allah is upheld in proclamation of the religion in its entirety.[33] Consequently, the political

31. D. C. Marsh: The Welfare State, Longman, London, 1970, pp. 8-16.
32. As declared by Rib'i bin 'Amer, the Companion of the Prophet (peace be upon him) to Rustum, the chief of the ancient Persians before the battle of Qadisiyah.
33. M. S. EI-Awa: *The Political System of the Islamic State,* American Trust Publications, Indianapolis, Indiana, 1980, p. 77.

responsibility of the Islamic state gives a new dimension to the role of the state which allows it to adopt policies that help Muslims to perform their religious obligations. In reality, this role of the state may reach as far as the individual acts of worship such as prayer and fasting.[34] Furthermore, the Islamic state is obliged to protect the Muslim minorities outside the Muslim state and to preserve their Islamic identity: "But if they seek your aid in religion, it is your duty to help them…."

إن استنصروكم في الدين فعليكم النصر

Moreover, the Islamic state is responsible to make the "word of Allah" reach the non-Muslims both inside and outside the state. It is further required to do its best to remove any obstacles that may come in the way of Islamic *da'wah*, preventing it from reaching the non-Muslims.

The priorities of the Islamic state represent a clear deviation from traditional welfare economics and policies in terms of both objectives and measurements. The objectives of economic development, economic equality, and economic equilibrium become .but of secondary importance. Prior to them comes the economic performance in production (of goods and services) in areas that relate to the ability of the society to defend Muslims and Islam both as a political entity and a spreading *da'wah* worldwide.

It should be noted, however, that there are two kinds of social services that are usually provided by the welfare state. The first kind of services is provided as a relief to disaster-stricken areas, where the survival of people and the salvation of their essential properties are at stake. Included in this category are aids and services provided to people stricken by a natural phenomenon, war, famine, or lack (or big reduction) of production to below subsistence level, etc. The second kind of social services aims at improving the economic living of the poor.

The first kind of social services falls within the boundaries of safeguarding religion, i.e. by safeguarding its people. Thus the Islamic state's function covers it because it is one of the broad objectives of *Shari'ah*.

The second kind of social services which aims at improving the quality of life rather than maintaining it, is not necessary. Thus the Islamic state is not obliged to guarantee the provision of these services. However, if there is any remainder of *Zakah* after fulfilling the necessities, this remainder may be used for this kind of social services.

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34. For example, the *Fuqaha* have discussed that the Islamic state is not only required to provide a minimum religious education, but it must also punish those who do not establish their own prayers.

The distinction of these two levels of “welfare” is essential to the uniqueness of the role of the Islamic state. Therefore, *Shari’ah* provides the guidelines that draw such a distinction. One of these guidelines is the determination of the poverty level with respect to the deservedness of *Zakah*.[35] Another criterion is the level that determines the lawfulness of begging. The Prophet (peace be upon him) is reported by Ibn Mas’ud to have said:

من سأل وله ما يغنيه جاء يوم القيامة ومسألته في وجهه خنوش أو خدوش ، أو كدوح قيل يا رسول الله : ما يغنيه ؟ قال : خمسون درهماً أو قيمتها من الذهب (أخرجه النسائي وأبو داود وابن ماجه والترمذي وإسناده صحيح) .

Whoever begs while he has what suffices him will come on the Day of Resurrection with his begging like a scratch (of humiliation) on his face. It was said: 0 Messenger of Allah and what suffices him? He said Fifty Dirham or its value of gold.

(Related by Nasa 'ii, Abu Daud and Tirmithi.)[36]

A third criterion could be that suggested by Ibn Hazm in determining the necessities of the poor, he said:

فيقام لهم بما يأكلون من القوت الذي لابد منه ومن اللباس للشتاء والصيف بمثل ذلك وبمساكن تكنهم من المطر والصيف والشمس وعيون المارة

They should be provided with the food that is indispensable, the cloth for winter and summer that is also indispensable, and the residence that protects them from rain, heat, sun and the eyes of others.[37]

Moreover, the concept of richness, (*Ghani*) was defined by the Prophet (peace be upon him) as self-contentment.[38] Also, the concept of modesty (*'Afaf*) is used in

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35. This is the same as *Nisab* which equals about 1500 Saudi Rial. See, Sayed Sabiq: *Fiqh al-Sunnah*, Dar al-Kitab ai-Arabi, Beirut, second edition, 1973, V. 1, pp. 324-5. Also see, Shawqi I. Shahata: *al-Tatbiq al-Mu'aser lil-Zakah*, Dar al-Shuruq, Jeddah, 1977,p.112.

36. Monzer Kahf: "al-Nusus al-Iqtisadiyah fi al Qur'an Wa al-Sunnah", manu-script, Text No. 3576.

37. See al-Qardawi: *op. cit*., p. 98l.
38. Reported by Bukhari and Muslim; see Kitab al-Mardha, “Riches does not mean having a great amount of property, but riches is self-contentment.”

ليس الغنى عن كثرة العرض ولكن الغنى غنى النفس

the Quran to mean the satisfaction with the little that one may have to the extent that one appears rich.[39]

With the elements of Thawab, *'Afaf* (modesty), and *Ghina al-nafs* (self-contentment) entering in the welfare of Muslims there is a need for creating new criteria for the measurement of poverty in order to include the cases of poverty and economic need that do not come into the knowledge of the state because of these concepts.

Thus the first level of welfare can be called the level of subsistence. This subsistence is not mere biological. . It includes a social level which is determined on the basis of *Shari'ah* also. For example, the required clothing of women is different from that of men. By the same token, the necessary level of education for girls may be different from that of boys. The second level of welfare is not necessary though it may be desirable.

This distinction between the subsistence welfare and the desired welfare is essential to the understanding of the economic role of the Islamic state. The guarantee of the subsistence level is not only an objective of economic policy, but it is also an obligation, whereas the provision of an adequate .standard of living is only desirable. Consequently in fulfilling what is required, the state has to acquire the necessary resources while in providing what is desired, it is limited to the use of the available resources only.

Accordingly, Al-Mubarak considers that one of the objectives of economic policy of an Islamic state is to "provide public service and realize the public benefits in regard to the material living of people and enhance their economic well-being".[40] But it should be noted that the regular resources of *Baitul-Mal* alone can be used to achieve this objective since all measures taken by the state towards this purpose must be within the limits of *Shari'ah*.

On the other hand, the provision of the subsistence level is an obligation on the state and should be achieved even through non-regular resources of *Baitul-Mal*.[41]

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39. "The ignorant man thinks because of their modesty, that they are rich."

يحسبهم الجاهل أغنياء من التعفف

Also in his prayer, the Prophet used to say: "My lord, give me only the bare sustenance." Reported by Muslims. اللهم أرزق محمداً كفافاً

40. Mohammad al-Mubarak: Nizam aI-Islam, al-Iqtisad, Dar al-Fikr, Beirut, 1972, p. 124.

41. Al-Mubarak: *Ibid*., p. 134.

Thus far, it was established that the main raison *d'etre* of the Islamic state is the establishment of religion and the nourishment of the religious interests المصالح الدينية as compared to the worldly interests المصالح الدنيوية. A question arises about the distinction between these two groups of interests. This question from the realization that Islam is a balanced way of life and it is not that kind of religion which "leaves what belongs to the Caesar to Caesar and what belongs to God to God".

On the other hand, even a balanced religion has to have its own set of balanced priorities and Allah sets up these priorities in the Quran:

وابتغ فيما آتاك الله الدار الآخرة ولا تنس نصيبك من الدنيا

> *"But seek with the (wealth) which God has bestowed on thee the Home of the Hereafter, and do not forget thy portion of this world" 28: 77.*

The distinction between the worldly interests and the religious interests is found in many texts of the Quran, the *Hadith*, and the writings of the Muslim scholars. The worldly affairs of the Muslim society include all matters relating to providing better food, clothes, residence, transportation, health, and material and emotional comfort. The religious affairs include all matters relating to the preservation of *Shari'ah* in the position of power, the spread of the call of Islam, and defence of Muslims. This kind of distinction is essential to comprehend the priorities and functions of the Islamic state.

III

PRINCIPAL OF TAXATION POLICY

The general principles of taxation policy in an Islamic state will be derived on the basis of the foregoing definition of the Islamic state, its priorities, and its economic role. This part will concentrate on two areas of taxation' policy: (1) the conditions for imposing new taxes, and (2) the determination of the taxpayers and the tax procedures.

I. The Conditions for Imposing New Taxes

Needless to say that the Islamic state is bound by this religion whose Messenger (peace be .upon him) laid the ground for relations among people and between all (or anyone) of them and the state on the basis of:

“what is lawful is clear and what is prohibited is clear.”[42] الحلال بيّن والحرام بيّن

Consequently, the Islamic state is not free in setting the economic and political priorities, nor it is free in imposing any pattern of government spending, taxes, or any political, social, or economic limitations on its people that may violate their freedom and rights given to them by Allah, knowing certainly that *Shari'ah* provides means for dealing with exceptional cases.

Many Muslim scholars, ancient and contemporary, have dealt with the question of whether or not the state can impose taxes other than *Zakah*. Their answers are generally negative in the case of the old schools and affirmative in the case of the contemporary writers. However, a survey of the texts, verses and sayings,[43] provided as arguments on the two sides allows us to deduce the following points:

1. Texts of sayings that directly allow or forbid imposing taxes in addition to *Zakah* do not withstand *Hadith* scrutinization and are not generally acceptable.
2. If *Zakah* is defined in a way to include duties on agricultural products and cattles, there is no text that can be used as a basis for analogy to allow the state to levy additional taxes.
3. The verse 177 of *Surah* 2 deals with spending on categories of recipients exactly similar to those included among the recipients of *Zakah*. Therefore, the most that can be said about this kind of spending is that it becomes obligatory only if *Zakah* is not sufficient.
4. Specifically, purposes of welfare, development, and/or economic equilibrium have no references in texts of Quran or *Sunnah* whether explicit or implicit.
5. Texts of general cooperation and solidarity among Muslims do not serve as evidence for allowing taxes to be imposed on specific people for specific purposes unless it can be proven that there art: no means of cooperation and solidarity other than such taxes.
6. There are clear and strong texts that protect private property from any act of aggression whether by the state or by individuals.

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42. Reported by Bukhari and Muslim.

43. Yusuf al-Qardawi gave a good survey of these texts. See *Fiqh al-Zakah*, Dar al-Irshad, Beirut, 1969, V. 2, pp. 964-984.

7. There are many texts that allow the violation of a less important rule for the safeguard of a more important rule, and the sacrifice of a minor benefit for a higher benefit in application of: "necessities make forbidden things allowed",

   الضروريات تبيح المحظورات

8. Necessities must not be exaggerated and must be measured with a correct yardstick, " دمائهم وأموالهم عليهم حرام إلا بحقها" because the general rule is that killing or taking property is forbidden unless through the right application of *Shari'ah*,

In practice, these eight points were carefully utilized in determining the legitimacy of taxes by the early Muslim scholars throughout history. For example, Imam Malik, who is often quoted as an advocate of taxes,[44] says that:

> إذا خلا بيت المال وارتفعت حاجات الجند وليس فيه ما يكفيهم فللإمام أن يوظف على الأغنياء ما يراه كافياً في الحال إلى أن يظهر مال في بيت المال
>
> *"if there were no funds in the treasury or the needs of the army increased above the capacity of the treasury, the state has the right to levy taxes on the rich up to the level that sotlsfies that need immediately and until the revenues of the treasury appear."*[45]

It is worth noticing that Imam Malik mentioned five important conditions: (a) regular revenues are depleted, (b) defence expenses exceed current resources, (c) taxes are levied temporarily, (d) taxes are imposed to the extent not exceeding needs, and (e) taxes are levied on the rich only.

Ibn Hazm is also quoted to support taxation. However, he restricts the levying of taxes to the case where Zakah proceeds are not sufficient to fulfill the needs of poor. According to him, the poor people "should be given the indispensable food and clothes for winter and summer and a shelter that protects them from rain, sun, and eyes of passers-by."[46]

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44. See Abd al-Sami' al-Misri: Nazariyat aI-Islam al-Iqtisadiyah, Maktabat al-Anglo-Misriyah,Cairo,1971,pp.151-152.

45. See Mohammad Abu Zahra: Imam Malik, Cairo, 1963, pp. 400-401.

46. See Yusuf al-Qardawi: *op.cit.,* p. 981

Abd al-Haiy al-Kattani discusses the collective duties that strengthen the interests of Muslims both in religious affairs and in worldly affairs such as salaries of military personnel, students and researchers in *Shari'ah* studies, and teachers of young children and concludes that such payments should be provided by the treasury and in case of shortage of its revenues, Muslims are collectively responsible for raising the necessary funds.[47]

Thus, the imposition of taxes over and above Zakah is justified according to Malik, Ibn Hazm, and Kattani in cases of defence needs, assurance of a subsistent living of the poor and the indispensable expenses that safeguard the collective interests of Muslims. These three thinkers did not mention development, equilibrium, and welfare for justifying taxes.

From the above discussion, it becomes clear that the levying of taxes, in addition to *Zakah*, is an exception and not a rule.[48] Taxes can be imposed by the Islamic state under certain circumstances and conditions. Therefore, it is extremely important to determine these circumstances in a clear way. Two areas deserve our attention in determining these exceptional conditions that provide justification for taxes: first, the kind and urgency of necessities, and second, the alternatives available to fulfill these necessities.

1. Necessities that Justify Taxation

Generally, the cases that justify imposing taxes may be summarized as follows:

a. Internal and external security, e.g. the cost of regular and emergency forces at times of peace and war to the extent that these provide security and safeguard of the religion, Muslim land and people including freeing Muslim captives in other countries.

b. Current expenses of activities of the Islamic state such as the political apparatus (the cost of running the executive and *Shura* branches of government), the judicial and *Hisba* apparatus, and the safeguard and promotion of the ideological and ethical values of Islam.[49]

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47. Abd al-Haiy al-Kattani: *al-Tarateeb al-Idariyah*, published by Hasan ja'va, Beirut, no date, V. 1, pp. 394-396.

48. Qardawi, *op. cit.*, pp. 991-992.

49. See Mohammad al-Mubarak: *Nizam al-Islam: al-Hukam wa al-Dawlah*, Dar al-Fikr, Beirut, 1974, pp. 86-96.

c. The maintenance of a socially determined subsistence standard of living for all people in the Islamic state. The subsistence level includes what Ibn Hazm described as indispensable food, clothes, and shelter or what Ali described as preventing hunger, nakedness, and hardship.[50] Al-Shatibi's definition of necessities provides not only for material and biological needs but also for needs arising from social and religious living, i.e. the subsistence standard of living must include such services as minimum education, transportation, and health care.

   A distinction is needed, however, between subsistence and welfare. The difference is basically a matter of degree, and with the help of Al-Shatibi's definitions of necessities, الضروريات wants, الحاجيات and luxuries, التحسينات, one can shed some light on this difference. Necessities are indispensable for human-beings in areas of religion, life, mind, geneological reproduction, and property. The satisfaction of wants improves the quality of life and removes "bearable hardship and difficulty". While the luxuries add beauty, elegance, and fragrance (not reaching the prohibited extravagance).[51] The concept of subsistence deals with the necessities, whereas, the concept of welfare includes the wants and sometimes the luxuries.

d. The development of a production capacity in the society, adequate to provide the subsistence living mentioned above if the private sector is not providing such production.

e. Relief of economic, social, and psychological pressures resulting from natural disasters, war; or any similar emergency.

2. Alternative Means of Finance

Theoretically, taxes are the last resort in Islam. Muslim scholars have no disagreement that taxes may be levied when the state has no other resources and in quantities not exceeding the deficit of funds. In practice, the early financial history of the Muslim state tells that taxes were not imposed unless in the very exceptional emergencies.[52] It is a fact that the cases of tax imposition were very few in the history of Islam because the state was rich and rarely needed more resources. This fact, in itself, has two implications: (1) taxes were considered as a last resort by practicing politicians, and (2) there were several other resources

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50. Qardawi, *op. cit.*, p. 983.

51. AI-Shatibi, *op. cit.,* V. 2, pp. 6-12.

52. An example of that is the ruling of Shaikh ai-Islam Izzuddin ibn Abd al-Salam to Qutuz the ruler of Egypt that he may impose taxes only after selling the slaves owned by the state. See Qardawi, *op. cit.*, pp. 1079-1181.

available to the Islamic state. Consequently, in stating what may be available to a modern Islamic state, one should take time to see if these old and traditional means of finance are to be included.

a. Kheraj. Kheraj is a rental fee on the land that becomes a property of the Islamic state as a result of its liberation by Muslim troops. It was total agreement, *Ijma*, of the Companions to keep such land as a property of the state and collect rental fees for it so that all generations of Muslims may benefit from these lands. Almost all the lands of the Middle East and North Africa with the exception of the Arabian Peninsula are of this category. The fees are not necessarily constant at the level laid at Umar's time,[53] nor can they be eliminated when holding of the land is transferred to Muslims.[54] Further, the state may not interfere in the form of use of the land, kinds of production, and transfer of holding of land because of its right to the rental fee.[55] Consequently, there is no reason for not continuing this rental fee in all countries whose lands are *Kheraji* land, whether this land is used for agriculture, industry, or urban services.

b. Jazia. Jazia on non-Muslims is, at least, equal to the Zakah on Muslims.[56] It is a toll tax on all non-Muslim adults in the Islamic state.

c. Revenue of Public Enterprises. According to many Muslim scholars, the ownership of minerals and public natural resources such as rivers and top-of-ground minerals is vested in the Islamic state.[57]

d. Public Debt. By public debt we mean voluntary and obligatory internal borrowing, and borrowing from abroad. All loans must be interest-free. Voluntary domestic loans are motivated by Islamic inspiration and patriotism. Obligatory loans may be obtained directly from the public or indirectly in the form of loans obtained from the central bank to the extent that they do not destabilize prices. Forced borrowing from the public is a viable alternative to taxes in cases of emergencies coupled with expected revenues.[58] Borrowing from the central bank is a form of forced borrowing, but it reflects badly on the general price level.

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53. Ahmad al-Sharabasi: *aI-Islam wa al-Iqtisad*, al-Dar al-Qawmiyah li al-Tiba'ah wa ai-Nashr, Cairo, 1963, pp. 50-53. See also Mawardi.

54. Mawardi, *op. cit.,* p. 147. 55'bid., p.151.

55. *Ibid*., p. 151.

56. Abu Ubaid al-Qasim ibn Sallam: *Kitab al-Amwal*, al-Maktabah al-Tijariyah al-Kubra, Cairo, 1353H, pp. 28-29. See also Abd al-Azees ai-Nairn: *Nizam aldhara'ib fi aI-Islam*, 2nd Edition, 1975, pp. 129-133.

57. Mohammad al-Mubarak: *Nizam al-Islam*, al-Iqtisad, *op. cit*., pp. 103-105.

58. This is particularly the view of al-Shatibi. See Mohammad Abu Zahra: Imam Malik, op. cit., p. 401.

Therefore, its use should be restricted to the extent that does not destabilize prices.[59] Loans from other countries on an interest-free basis are generally hard to find and, therefore, one may not count much on their availability.

e. Equity Finance. Financing many development projects through the sale of their shares to the public is an important means of recruiting participation, involvement and resources of the public for the development scheme. Equity-sharing on the basis of *Qirad* may be practiced domestically and internationally, provided that the foreign shareholding does not adversely affect the economic and political independence of the Islamic state.

f. Fees. Many local government services may be provided against fees that cover all or part of their costs. However, fees may not exceed the cost of services rendered.

g. Voluntary Contributions. The Islamic state has an important source of revenue by voluntary contributions that are donated by individuals in response to its appeals for financing specific projects and ventures. This was the most promising source at the time of the Prophet (peace be upon him) and there is no reason why it should dry up at our time. It should be noticed that while Zakah receipts are appropriated for distribution to one or more of the recipient's categories mentioned in the Quran, the proceeds of most of the above sources are not, and the Islamic state is free to make the choice of financial-resource utilization in the light of the general guidance in the Quran and the *Sunnah*.[60] This is supported by Umar's policy in distributing the funds coming from the war booties in Medina until everybody became practically rich, while he did not impose taxes on the wealthy in order to make the non-poor better off, i.e. in order to make the distribution of wealth and income more equitable. However, certain resources are restricted to specific purposes such as borrowing and contributions to special projects and equity-sharing. On the other hand, although *Zakah* proceeds are designated, they, wholly or partially, may be used for the development of a productive capacity adequate to support the defence activities and the subsistence level of living. Consequently, the state revenues, including *Zakah*, may be classified into general and designated. General revenues should be used: firstly, to supply adequate satisfaction of such necessities as internal security, and government apparatus, etc.; and secondly, to support the objectives of the designated revenues. Taxes, other than those mentioned above, may be imposed only if the regular revenues are not sufficient to face the necessities discussed earlier.

Moreover, forced borrowing is similar to taxes in that they both are imposed by coercion on the basis of the state authority. Hence, if taxes are the last resort, compulsory borrowing is the one before last. Consequently, forced borrowing

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59. Umer Chapra, *op.cit.,* pp. 213-214.

60. A.A. N'aim, *op. cit.,* pp. 203-206.

represents a close alternative to taxes when the state expects future revenues usable for the same kind of necessity. For example, for defence expenses, the state may not be allowed to levy taxes if it can borrow and pay back from future Zakah and *Kheraj*. By applying the same rationale, a general equilibrium tax is not allowed as long as the state can substitute it by forced loans from the public obtained at times of boom and retired at times of recession, since for the purpose of general equilibrium, there is no need for financial revenues but the purpose is to withdraw some means of payments from the hands of the public at some time and to return them at another time. Consequently, a tax is not justifiable while a loan may be.

II. Taxpayers and Procedures

A survey of the texts of sayings, the statements of Companions and great scholars, and the practice of the early Islamic era indicates the following principles:

a. Concerning the determination of the payees of taxes, other than those clearly mentioned in *Shari'ah*, we find three main principles:

1. The financial capacity is a basic criterion in determining tax liability. The concept of "excess" and richness are the main indications of taxability. While the guarantee of the subsistence level is the determinant of tax levying, taxes may not be imposed on those having "adequate" means of living, i.e. above subsistence but below the rich category. Taxes are only imposed on the rich and inasmuch as they can afford. It should be noticed that while *Zakah* is fairly determined as far as its incidence, rate and exemptions are concerned, additional taxes, if levied, are generally restricted in their incidence, i.e. the payees, whereas, the rates and exemptions are left to the needs and necessities in the society. The restriction of additional taxes to the "rich" is important in the Islamic thinking because it runs counter to the commonly used argument that sharp progressive taxes adversely affect the "rich's" incentives to invest. On the other hand, this restriction is consistent with the Islamic objective of "let wealth circulate and change hands" and the Islamic concept of economic justice. An implication of this principle is that the state should take sufficient measures to ensure that the final incidence of the tax may not be shifted to the poor through pricing policies and other means. Moreover, this principle has a heavy and adverse bearing on taxes levied on basic commodities consumed by the masses in the developing Muslim countries since these taxes affect the poor at least as much as they affect the rich.
2. Taxes on windfall profit and windfall capital gains may be imposed especially in cases where the possibility for an explicit or implicit exploitation of a political position or extraordinary economic condition is involved.

3. Custom duties on non-Muslim merchants may be imposed, especially when the entry of foreign merchandise is governed by treaties specifying such duties on mutual grounds.

b. Concerning the procedures of tax assessment and collection, we find three main principles:

1. The assessment of all revenues (*Zakah, Kheraj, Jazia*, taxes, etc.) should be just and easy. The payee should be left with a feeling of comfort and satisfaction, errors should be taken to the favour of the assessee, and his claim of exemptions, such as debts is acceptable unless there is clear evidence to the contrary. The assessee should leave out the fractions in calculation to the favour of the assessee and the collector must avoid "taking the best of their property"

لا يحاسب المكلف على الدانق ونسوق كرائم أموالهم

2. The burden of the duty must be distributed evenly among the equals. Justice in the distribution of the burden of any state revenue implies that the ultimate incidence of the tax burden is what matters in the final analysis. Accordingly, a careful study of incidence shifting must be made in order to avoid injustice in the distribution of the burden of the state revenues.
3. Many *Fuqaha* rule that escaping of an unjust levy is permissible if such an action does not result in a "bigger" injustice.

Comments

Dr. Anwar Siddiqi

I find myself almost in total disagreement with the thesis put forward by Dr. Monzer Kahf. What he has done in this paper runs counter practically to all the work done by contemporary Muslim writers on fiscal policies and on the role of Islamic state. He challenges the validity of the assertion of Muslim thinkers that welfare, development and equilibrium are major functions of an Islamic state. He also challenges the right of the Islamic state to raise taxes except for providing the minimum basic needs of people. He also challenges the validity of the use of taxation of finance economic development. In his discussion about social services he maintains that only basic needs are obligatory on an Islamic state whereas the welfare and development needs can be considered only, if something is left over after taking care of the basic needs. He does not consider taxation for these purposes at all. Now in h is discussion of the principles of taxation in Islam, there are two or three interesting things that he has said which I would like to point out here. He says that levying of taxes in addition to *Zakah* is permissible only as an exception and he brings Imam Malik, Ibn Hazm and Kattani to his support. He says that the objectives of development, welfare and equilibrium are redundant and should not be financed through taxation. He says that taxes in the early Muslim history were imposed as the last resort. Two other interesting statements he has made are that custom duties can only be levied on non-Muslims and that *Fuqaha* have allowed the Muslim citizens to escape unjust levies. Finally, he argues for taping some sources of revenue other than taxes and *Zakah* and he mentions *Kheraj, Jazia*, revenue from public enterprises, equity-sharing, public debt, fees and voluntary contributions as some of the sources. He particularly asks us to concentrate on *Kheraj, Jazia* and as they are the traditional sources. Now when I look at this presentation, the vision of the Islamic state that comes to my mind is of an extremely conservative state which is not concerned at all with the development or welfare of its citizens and only operating at the minimal level of maintenance of law and order and security of the state.

My comments on the paper are of two kinds. Firstly, I think that serious errors of methodology have been committed in writing this paper, and secondly, I would make some comments on the substantive points that he has made. On matters of methodology, I feel that in writing this paper he has confused Islamic principles with Muslim practices. There is no evidence in this paper at any place from the Quran and *Sunnah* or from any *Ijma* of the *Ummah* on any of these issues. The Muslim in later generations cannot be bound by the practices of the early Muslim period. We may look for guidance and inspiration but to deduce laws and principles from early Muslim practices without any references to the basic sources. After all we are bound by *Hadood*, and *Halal* and *Haram* prescribed by the Quran and *Sunnah*; but I am sorry to say that in supporting his arguments he has not brought any evidence from these basic sources. Another error of methodology is that he has completely disregarded the changing role of state. He has assumed a static situation analogous to the early Muslim period and he has chosen to neglect the march of civilization and the expansion in the functions and the role of Government. Now whereas we are all proud of the early Muslim period and look to it for inspiration; but to assume that all the practices and institutions evolved in that period would be relevant to our conditions is, I think, a serious methodological error. He has placed almost a blind reliance on *Fiqh*. Once again I say that we have great respect for jurists who have made great contributions and we look to them for guidance but to blindly follow the sayings or rulings of some of the *Fuqaha* would lead us to serious errors. For example at one place he says that some *Fuqaha* have allowed the citizens to escape the payment of taxes if they consider it as *Zulm*. Now who will decide whether levying of a certain tax is *Zulm* or not. This will be giving a free licence to evasion of taxes. I do not know to whom he is referring because he is not giving any name; but it is quite possible that in a period of oppression and autocracy some *Fuqaha* might have allowed the Muslims to escape from certain levies, but to argue it now in a responsible system of government, would be opening a flood-gate of evasion of taxes. Similarly, he maintains that custom duty can be levied only on non-Muslims. I do not know in what circumstance this principle was evolved. At present it would raise serious questions of equity. Then in writing this paper, he has made very selective use of the opinion of *Fuqaha* which again is a very serious methodological error. He has only referred to Kattani and Ibn Hazm and has conveniently forgotten about Mawardi and Imam Abu Yusuf and the very basic principle of Islamic jurisprudence whereby taxation is sanctified. Another serious error in this paper is the legalistic approach. He does not recognize the socio-economic factors in defining the nature and role of the Islamic state. He only takes a very narrow legalistic view and considers the implementation of *Shari'ah* as the only function of the Islamic state which I think is not a very healthy approach.

Now coming to the substantive issues, I find that there is a complete disregard of fiscal policy in the treatment of this paper. Because of his disbelief in taxation and development, welfare and equilibrium as the objectives of the state, he has chosen not to relate at all to fiscal policy considerations in an Islamic state and how taxation would behave to achieve the objectives of fiscal policy. Then the second substantive comment which I have on his paper is that he has completely disregarded the welfare, equilibrium and development functions of Islamic state. Somehow he visualise that the Islamic state is only concerned with taking care of basic minimum needs and that also through *Zakah*. I think that we cannot ignore the egalitarian nature of the Islamic society. The whole emphasis so far in our work on fiscal policy has been on improving the quality of life, equity, growth, social justice, and some of the other aspects of economic development. To achieve all these objectives an upward push in public expenditure has to take place in Islamic state and this upward push in public expenditure can be taken care of, to a large extent, only through taxation since some of the other sources are not that easily available. As for his classification of social services, I suggest that although it may be useful in terms of focusing on basic needs, but we may again run into an error because of this classification by disregarding or deemphasing development and improving quality of life in Muslim society. Also in his paper he refers, time and again, to only available sources as determinants of public expenditure whereas in contemporary fiscal economics it is the level of public expenditure that determines the level and sources of public revenue and not the other way round. Finally, he has identified number of sources for financing an Islamic state other than taxation. His sole reliance is on *Zakah* and some of the other things that I will refer. As far as *Zakah* is concerned, the only practical example in contemporary history is that of Pakistan and I want to refer to it. In Pakistan, we have, to the best of my knowledge, collected only US $ 100 million from *Amwal uz Zahira* and this is hardly a fraction of the national budget. Even if we extend the coverage of *Zakah* and even if we plug all the loop holes, I think that reliance on *Zakah* as a major source of revenue of the present day state, leads us nowhere. Many scholars have also been arguing on that and let us be realistic about our expectations from *Zakah*. As for other sources of financing that he has pointed out, take *Kheraj* for example, I think that even if we get out from the legal difficulties about which lands are subject to *Kheraj*, it does not offer any real source of revenue. Agriculture has been heavily subsidised by all the governments. Therefore, we can hardly expect anything from that sector. As for *Jazia*, I doubt very much whether we can talk about *Jazia* in the contemporary world and can really rely on it as a source of revenue. With respect to voluntary contributions from the public, one could expect something in times of emergency or war, but can we rely on voluntary contributions as a regular source of income? I very much doubt. The only useful item he mentioned is the equity participation where the application of *sharakah* and *mudarabah* probably would result in some financing but that would also relate only to agricultural and industrial sectors. In the end I would make a suggestion for improvement in this paper. I think the quality of the paper would have been considerably improved, if he had undertaken a goal-oriented analysis. Defining the goals of Islamic state, then coming down to objectives of fiscal policy and then further defining the objectives of taxation policies in achieving the objectives of the Islamic state and of fiscal policy. That kind of precise and consistent goa1 analysis might have been much better.

Dr. Abdel Hadi EI-Naggar

My first comment on the paper is that the choice of the title is not right. The subject of the title (taxation policy) has been dealt with only in one quarter of the paper. A better title for the paper would have been “Issues of Public Finance in an Islamic Economy”.

The paper hardly contains any original idea. Also the paper lacks logic and coherence. At least some new contribution was expected from the author. He could at least find a suitable name for the Islamic state. To call Islamic state a welfare state is confusing because this ignores the religious aspect of the Islamic state. A Justice State could be a better title for Islamic State.

The author seems to imply that provision of an adequate standard of living is desirable but is not necessary. This would disappoint the poor mass in Muslim countries who look at Islam as their only saviour.

The question of imposing taxes is related to economic goals of the Islamic state like stability growth and efficiency. Therefore, one has to take a flexible approach. The position that the author has taken is rather extreme.

To say that custom duty should be imposed only on non-Muslims is not correct. Umar applied it on both Muslims and non-Muslims.

Finally, the author seems to insist that contemporary economists must apply Islam in the same way as it was applied in early periods of Islam. This is not justified. It is this approach that causes Muslims of modern times to be reluctant in Islamizing the economy.

Discussion

Dr. F. R. Faridi

I find that there are conceptual errors in the treatment of the entire subject. The first error that I point out is that there seems to be a misconception about the individual rights that are recognised in Islam and the rights of the society.

Secondly, a narrow approach has been adopted in respect of the objective of Islamic state. The author has a misconception about protection and nourishment of religion. Protection and nourishment of religion has much more connotation than what he suggests. I would refer the author to the *Ayah* in Quran which suggests a clear integration of *Dunya and Akhira* (ربنا آتنا في الدنيا حسنة وفي الآخرة الآخرة حسنة).

The author has treated the subject of taxation not from the economist's point of view but from the legal point of view. He thinks taxes are encroachment on individual rights. If state offers some services or facilities and in return demand certain levies then this cannot be considered as an encroachment on individual rights.

I am not clear about the author's plea that taxes can be imposed as a temporary measure only. How can we define temporary? There are situations that demand levying taxes which are not of temporary nature.

Author has a very static approach towards the concept of subsistence to be provided by the state. Subsistence level is a relative thing.

Dr. A. A. Salama

I think that this paper needs to be rewritten in such a way that it will formulate a theory of public goods which is consistent with what author believes in. Author agrees that some goods should be provided by the state. If he agrees to this then he should develop a theory of public goods. What would be the pricing policy for goods where the principle of taxation cannot be applied!

Prof. Syed Nawab Haider Naqvi

I would agree with the author that government should not be allowed to indulge in taxation arbitrarily. But the author is not consistent in his argument because he also provides a blank cheque for defence. We all know that so many arbitrary things happen in the name of defence.

Similarly author is against the government spending for welfare but then he also pleads for the maintenance of a subsistence level which I think is a part of welfare.

In short, I would say that the intentions of the author are alright but sometimes he has made statements in a very contradictory manner.

Dr. Mohammad Sakr

We have to be clear about all economic objectives of the Islamic state of today.

Some welfare spending has been done in early periods of Islam also. For example, Umar, the second Caliph, used to give certain aid to all children. This is a welfare spending. The welfare activities of state are bound to increase over times. Taxes should, therefore, be elastic to meet these expenditures.

Islamic government has the right to impose additional taxes for various reasons and they cannot rely on voluntary contributions.

While suggesting public debt as a source of government financing, the burden of public debt should not be ignored.

Dr. Ziauddin Ahmed

The question of the extent of taxation will differ from state to state. We cannot have a generalized or standardized approach. The author has not provided enough references from *Fiqh* to substantiate his arguments. I would like to clarify one point that has been raised by Anwar Siddiqui and others. It has been said that *Zakah* collected is so small that it cannot be substantially used to alleviate poverty. I want to clarify that current small collection of *Zakah* does not reflect the overall potential of *Zakah* in the country. The foreign participants should not take the impression from the current Pakistan experience that Zakah cannot be a significant tool in alleviating poverty.

Dr. M. M. Metwally

The paper lacks originality. Secondly, the plea that we should do only what has been done in the early periods of Islam irrespective of how the present economies differ from the earlier economies, is not a reasonable attitude.

Prof. Khurshid Ahmad

It is very much needed for all of us that there should be some one who should try to challenge us particularly when we are trying to apply Islamic principles to a modern economy. I feel that such voices of caution are needed so that we do not get off the track. I also value that part of his discussion which deals with the taxation capacity and its use for equity considerations.

I, however, express my concern about the first part of his paper where he refers to the simplified work of the Muslim writers on welfare, development and equilibrium aspects. Those who have offered their ideas on these issues have not tried to take lead in this area. They have simply tried to look upon the issue from an Islamic perspective and have tried to come up with an Islamic understanding of all these objectives.

I agree with the other discussants that there are some contradictions between the first and last part of the paper.

There is no difference of opinion among us that at least providing subsistence for the population is one of the responsibility of the Muslim society. The question is that, is this subsistence to be provided merely out of charity or are we also going to take into consideration the question of generating economic opportunities for the people to enable them to meet their needs by themselves? I think Islamic system does not want people to live on charities. Only those who are incapable of making efforts are to be supported by the society through charities. Otherwise we need to create opportunities for them. The generation of economic opportunities so that people could make an honourable living is an integral part of public policy. This brings me to the central issue, i.e. what is the role of the Islamic state? What are its functions? This is a critical issue that has to be examined. Taxation policy, fiscal policy and commercial policy will have to be seen in that perspective.

I agree with the author that we are clear what is *Halal* and what is *Haram*. But there is a vast area between *Halal* and *Haram*. The area of *Mubbah* should not be treated as entering into the realm of *Haram*.

About the question of defence expenditure I would point out that the defence does not mean simply protecting the word of God. The relative itrength of Muslims vis-a-vis non-Muslims is important and this should be taken into account while formulating policy on public expenditure. Another point on which I want him to reflect upon is that he should try to study taxation system during the period of *Khilafat-e-Rashida*. In period of *Khilafat-e-Rashida*, whenever need arose, new taxes were imposed. Later on, however, in the period of feudalist systems, Muslim *Fuqaha* became cautious in giving arbitrary powers to the state to play with the wealth of the people. This thing should be kept in mind. The author should not forget that taxes in modern society which come through *Shura* and *Ijma* will be quite different from those arising out of *Zulm*.

Dr. Muhammad Uzair

With regard to the definition of those eligible from *Zakah* funds the author clarifies the population into three classes: the rich, the middle class and the poor. According to him the last should be completely exempt. I think he must consider a suggestion that middle class is a blank category. It can be further divided into sub-sections, that is, a lower middle class and upper middle class and perhaps upper middle class could be shifted towards the rich and the lower middle class could be shifted into the poor.

Dr. Fouad Agabani

Author has restricted himself to the *Fiqh* consideration only. It is quite legitimate because *Fiqh* is not obliged to take account of being progressive or reactionary or things like that. It has its own sources. Therefore, the comments of the discussants have been a little besides the point. They do not give any reference of *Hadith* or *Ayah* against what author has said. I think his approach is commendable.

FISCAL POLICY AND RESOURCE ALLOCATION IN ISLAM

Part – II

PROFIT-SHARING RESOURCE ALLOCATION AND PROJECT EVALUATION

Digital Composition for Web by:
Syed Anwer Mahmood
Islamic Economics Research Centre
Published on Net May 2008

Economics of Profit-Sharing

Dr. Nejatullah Siddiqi*

One of the basic changes envisaged in the wake of the Islamic transformation of a modern economy is replacement of the institution of interest by profit-sharing, in pursuance of the Quranic precept: "Allah has permitted trade and forbidden interest..."[1]

There is consensus that the permission to trade implies the permission to profit thereby. The legitimacy of sharing profits under a variety of arrangements, including the one in which money capital is supplied by one party and enterprise by another, follows being also established by Sunnah.[2]

To appreciate the rationale of this change, one has to grasp the Islamic view of the relations between man and man and the nature of the world in which men engage in productive enterprise. It is an uncertain world in which the value product of enterprise cannot be predetermined. To claim a predetermined positive return to money capital when capital and enterprise jointly engage in production runs counter to this reality. It amounts to *Zulm*, especially exploitation of the entrepreneur by the capitalist, as the entrepreneur is left alone to bear the uncertainty which in reality develops on both. It is an unjust arrangement. Islam abhors injustice and exploitation and seeks to forge human relationships on the basis of justice and cooperation. A replacement of the unjust and exploitative institution of interest by the just and cooperative arrangement of profit-sharing is, therefore, a socio-economic as well as a moral and spiritual imperative. Let all men, being equal brethren in the community of Allah, face the uncertainties of life equitably and share the consequences, good or bad.

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l. The Quran, II :275.

2. Siddiqi M. N., "Shirkat and Mudarabat ke Shar'i Usul." Islamic Publications, Lahore, 1969.

This brief study seeks to demonstrate that as regards smooth functioning and stability of the system the replacement of interest by profit-sharing will cause no problem. We do so by studying the behaviour of the ratios of profit-sharing between suppliers of capital and its users in productive enterprise. It examines and rejects the hypothesis that a profit-sharing system will be exposed to wide fluctuations as the changes in the entrepreneurial profits will be communicated back all along the line. The paper does not deal with all aspects of a profit-sharing system but it does indicate that the changeover will ensure a better allocation of resources and a more equitable distribution of income and wealth.

Certain methodological issues must be cleared before we proceed further. We recognise multiplicity of objectives both at the entrepreneurial and the financier's levels, profit-seeking being only one of these objectives. In an Islamic society behaviour of all economic agents is expected to be socially oriented, ready to sacrifice profits for the social good, if and when the social priorities so require. It is not possible, however, to introduce multiplicity of objectives in this brief study at this stage of analysis. We assume profit motive at the private level, conscious of the fact that our conclusion will need modification when specific non-profit objectives are introduced.

We have also assumed competitive behaviour though the Islamic spirit would call for cooperation among economic agents for the achievement of common goals. Profit-sharing is, indeed, one form of cooperation, but other forms of cooperation may also emerge. It will require a separate study to identify these forms and analyse their consequences. Meanwhile retention of the competitive market as well as the profit motive has the advantage of enabling us to focus exclusively on the consequences of the replacement of interest by profit-sharing.

It may be noted that the possibility of losses is admitted only at the microeconomic level; aggregate profits at the macroeconomic level are assumed always to be positive. This seems to be a reasonable assumption in the light of history as well as the literature on the subject.

We assume a closed economy and do not take growth explicitly into account. The temporal dimension is considered only in the context of allocation of income to present consumption and future consumption (savings) or allocation of resources to current production and future production (Le. consumer goods industries and capital goods industries).

The Rate of Profit

Profits of trade or industry are the difference between revenue (sales proceeds) and costs. Should this difference be negative it is called losses. More precisely, it is the difference between the money value of the product and the money value of the goods and services used up in the process of production since its initiation till its culmination in the sale of the product. It is a magnitude determined by the market through the price of the products and factors. Functionally it is related both to entrepreneurial decision making in face of uncertainty and to the subjecting of money capital to this decision making, thereby exposing it to risk. Profit belongs, therefore, to both enterprise and capital. Should both entrepreneurship and money capital come from one person, all profits go to him, should several parties jointly undertake entrepreneurial decision making as well as supply money capital, they may share profits in proportions agreed upon, should enterprise and capital come from separate parties, they share profits according to agreed proportions. Losses are regarded by *Shari'ah* as diminution in money capital and are to be borne by the supplier or suppliers of money capital in proportion to the capital supplied.[3] As the *Shari'ah* sees it, the entrepreneur who prefers, in expectation of profits, to face uncertainty rather than sell his services for a salary, runs the risk of going unrewarded. The capital which prefers exposing itself to uncertainties of productive enterprise in expectation of profit to lying idle or being lent with guaranteed repayment, runs the risk of being returned diminished to the extent of the loss. The Islamic principle of 'no gain without risk of loss' is applied both to enterprise as well as capital.

The nature of entrepreneurial profit and its determination is a subject long discussed by the most eminent economists of every age, from Smith and Ricardo to Knight, Keirstead and Shackle. As a result of these contributions we have a clear idea of how the uncertainty surrounding entrepreneurial decisions in a dynamic economy causes unimputed value residues to occur after contractual claims are met. But the uncertainty theory does not fully explain the magnitude of profits. One of the contractual claims taken into account is interest on capital - a product of the institutions of capitalism. Since it is stipulated that profits and interest are synonymous in the perfectly competitive equilibrium characterised by absence of uncertainty, we are left with an elusive concept of pure profits with no clues to its magnitude. In more recent times attention turned to the macroeconomic concept of profit defined as non-wage value added whose determination is easily possible at the aggregate level, but it has little operative value for behavioural studies.

For the operational needs of this study we find the accounting concept of profits as defined above more relevant. It would include the reward for capital as also some kinds of rent as defined by the economists, besides the reward of enterprise. The divergence of the value product of productive enterprise from the value of inputs (costs) is regarded as one integral phenomenon, caused by the forces of the market reflecting changing social valuations and incapable of being objectively subdivided into pure profits and 'productivity of capital' (or interest).

3. *Ibid*., pp. 25-30.

Profit-Sharing*

Rather than discuss in detail how entrepreneurial profits are determined, we analyse how they are shared between the entrepreneurs and the suppliers of capital. In what follows we shall first proceed on the assumption of a given expected rate of entrepreneurial profits, P, relaxing this assumption later to trace the consequences of fluctuations in this rate. Before we proceed to do so, it is advisable briefly to state the model of interest-free banking underlying the subsequent discussion.

Banks are established on the basis of share capital. They accept demand deposits on usual terms. They also accept deposits into 'investment accounts' entitled to an agreed percentage share of the profits accruing to the banks on the profitable employment of these deposits in a pooled manner. These are *mudarabah* deposits and the percentage of ban k profits given to these depositors is described as the Depositor's Ratio of Profit-sharing, abbreviated as drp. These depositors are liable to losses, their liability being limited to the extent of their deposits. Banks invest their funds (share capital and *mudarabah* deposits less reserves, and part of the demand deposits) in a variety of ways, chief among them being supply of *mudarabah* funds to business. The banks are entitled to an agreed percentage share in the profits accruing to these funds in the business enterprise in which they are invested. This percentage is called the Banker's Ratio of Profit-sharing, abbreviated as brp. *Mudarabah* funds invested in business enterprise are also liable to losses, the liability being limited to the extent of the funds supplied.

Banks operate on the basis of fractional reserves subject to regulation by a central bank. The central bank is the only source of high powered money. It has sufficient powers to control the volume of credit and regulate[4] the ratios of profit-sharing, besides guiding the activities of the banks in public interest. Besides the banking sector and other financial intermediaries operating on the basis of profit-sharing, there is also a share market on which one can buy and sell. More about of this market will be discussed later. The Ratios of Profit-Sharing It will be noted that drp and brp are not the rates of profit earned by the depositors and bankers respectively. drp is the ratio in which depositors share the profits accruing to

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* This section and the next section were not included in the original paper. These sections have been included in response to Dr. Ziauddin Ahmed's comment that concepts about profit-sharing were required to be more explicitly defined. (Editors)

4. Since these ratios are contractual, central bank regulations may not affect the past contracts. They may, sometimes, take the form of fixing ceilings and floors for the two ratios in order to ensure equitable sharing of profit. The central bank may also fix the ratios themselves as a means to control the volume of credit.

deposits as they are employed profitably by the banks. Similarly, brp is the ratio in which banks share the profits accruing to *mudarabah* funds supplied by them to the entrepreneurs. For the sake of convenience both ratios are expressed as percentages. The rate of profits (as proportion of capital invested in enterprise), p' accrues to the entrepreneurs in the first instance. Since entrepreneurs are operating with *mudarabah* funds supplied by banks, they surrender brp X p' to the banks. The banks, in their own turn, pass on drp times the profits accruing to them to the depositors. Thus the actual rate of return on deposits equals drp x brp x p'. The rate of profit earned by the banks as intermediaries, on the deposits they supply to entrepreneurs as *mudarabah* funds equals (l-drp) x brp x p', and the rate of profit earned by the entrepreneurs on funds obtained from the banks equals (l-brp) x p'.

But p', the rate of profit realised in business, is an ex post category, and so are the other rates derived from it. These are not known when the decisions to make deposits, supply *mudarabah* funds or embark on business enterprise are made. Behaviour is determined by what the respective parties expect the relevant rates to be. These expectations are built around p', business profits realised in the previous period or periods, taking into consideration changes in cost conditions, state of demand, new entries, etc. We can, therefore, treat $p'_{t'}$ the expected rate of business profits in period t to be a function of P't-i' profits realised in period t-i (or an average of the profits realised in period t-1, t-2, t-3, . . .).

$$p't = f\,(P'_{t-i}),\ i = 1, 2, \ldots\ldots, n$$

In the above equation f denotes the expectations of the entrepreneurs. Bankers and depositors may have different expectations about what business profits are going to be, though these expectations are also built around p'_{t-i}. But we make the simplifying assumption that depositors as well as bankers share the expectations of the entrepreneurs so that all concerned expect the current rate of business profit to be p_t as in the above equation. This will enable us to focus our attention on drp and brp, the variables whose determination we want to study. At a later stage, this assumption is relaxed and a variety of expectations regarding current business profits is introduced and its consequences are traced.

Determination of the Banker's Ratio of Profit-Sharing, (brp)*

Given p, the rate of profit entrepreneurs expect to earn in the first instance, their demand for *mudarabah* funds from the banks is an inverse function of brp. Banks' willingness to supply *mudarabah* funds is a direct function of brp, given p. But their ability to supply these funds depends on the volume of deposits. As shown below the chief determinant of the volume of *mudarabah* deposits in the short run is drp, the percentage share of bank profits going to depositors. In the

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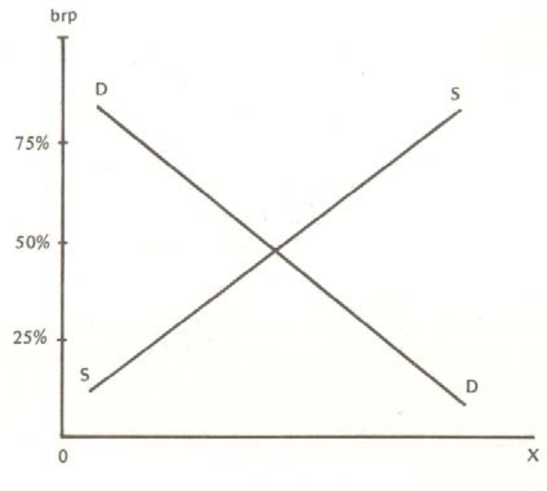
* This section has been substantially revised to incorporate the comments of Dr. Ziauddin Ahmed. (Editors)

long run changes in National Income, variations in the monetary base of the banking system and the credit multiplier exercise a more decisive influence on the supply of *mudarabah* funds, either through changes in the volume of deposits or directly. Assuming these to be given in the short run, the supply of *mudarabah* funds can be treated as a direct function of brp. Given p and drp, the equilibrium level of brp is determined by the supply of and demand for *mudarabah* funds. This has been shown in Figure 1.

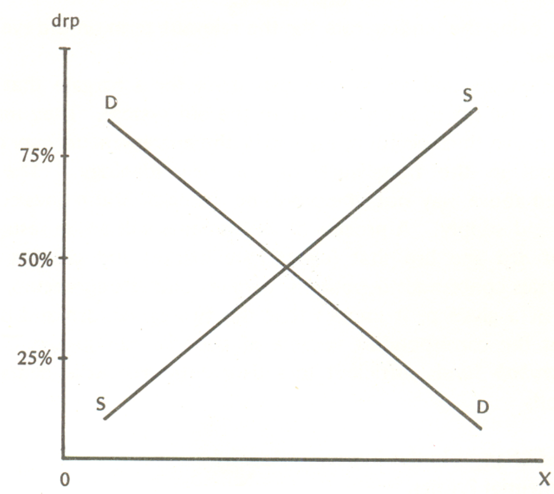


Mudarabah Funds

Figure 1: Determination of brp, given p and drp. No effect has been made depict the probable shapes of the demand and supply curves.

Determination of the Depositor's Ratio of Profit-Sharing, (drp)

The volume of savings in an economy is largely a function of the level of income. The channeling of these savings in to bank's investment accounts in preference to hoarding and placement of funds in the shares market will, however, be determined by the rate of profits the depositors expect to earn. As we have seen above, given p and brp, this rate depends on drp. Other things remaining the same, the supply of *mudarabah* deposits can, therefore, be treated as a direct function of drp. Banks demand for *mudarabah* deposits is an inverse function of drp. The lower this ratio the more the banks stand to gain out of the investment of these deposits, given p and brp. The equilibrium level of drp is determined by the supply of and demand for *mudarabah* deposits, given p and brp. This has been shown in Figure 2.



Mudarabah Deposits

Figure 2: Determination of brp, given p and drp. No effect has been made depict the probable shapes of the demand and supply curves.

From Interest to Profit-Sharing

As the interest-based system switches over to profit-sharing, the banks will, in the first instance, offer a drp which would ensure an expected rate of return on deposits equal to or larger than the rate of interest on time deposits on the eve of the switch-over, so that the supply of deposits is not affected. This implies that

$$\text{drp} \times \text{brp} \times \text{p} \geq r_1$$

where r_1 is the rate of interest on time deposits on the eve of the switch over. In a similar manner, they will make a start by fixing brp at a level such that

$$\text{brp} \times \text{p} \geq r_2$$

where r_2 being the lending rate for the relevant term on the eve of the switch-over.

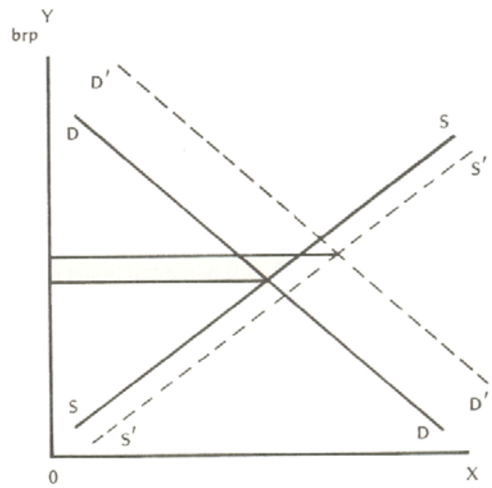
Entrepreneurs and savers will also strive for a bargain that leaves them no worse off than on the eve of the old system. They may also try to improve their position, especially the entrepreneurs may claim a better deal in the framework of the new ideology. The ratios mentioned above may not, therefore, be the equilibrium ones equating demand and supply. A process of adjustments will ensue resulting in a pair of drp and brp that (clears) the market and satisfies all the three parties concerned: depositors, bankers and entrepreneurs. In the context of a given p, it implies that the two ratios, drp and brp, are such that the corresponding volume of deposits can sustain a supply of *mudarabah* funds sufficient to satisfy entrepreneurial demand for these funds.

Effects of Changes in the Expected Rate of Entrepreneurial Profits, p

It may be noted, as we relax the assumption of a given p, that no empirical evidence relating to the operations of the above model is available so far. The only course open to us for further analysis is to make an intelligent guess on the behaviour of the various variables in response to any particular changes, stating our reasons as far as possible.

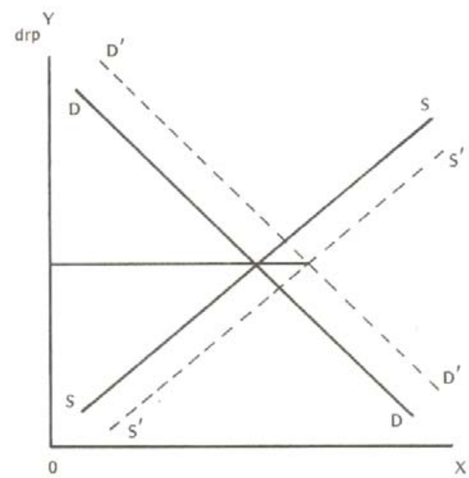
A rise in P will shift both the demand for and supply of *mudarabah* funds curves to the right, more being demanded and supplied at the same ratios of profit-sharing, brp, as a rise in P raises the expected returns for both banks and the entrepreneurs. But the shift in demand curve is likely to be larger than the shift in supply curve so that brp tends to rise. This has been shown in Figure 3. This disparity in response is caused by the constraint exercised by the volume of deposits as determined in Figure 2. Even in a fractional reserve system, the supply of *mudarabah* funds has a ceiling. The supply of and demand for deposits curves in Figure 2 are drawn on the assumption of a given p. As p rises these curves also shift to the right, since a rise in p, given brp, raises the expected profits of depositors and banks in the same proportion. These shifts may, therefore, leave the equilibrium level of drp unchanged. But the new equilibrium being to the right of the old one, the volume of deposits is now larger, enabling banks to increase the supply of funds. This tendency for the volume of deposits to increase, increasing the supply of funds to entrepreneurs, is reinforced by a possible rise of brp as noted above, since the DD and SS curves in Figure 3 are also drawn on the assumption of a given brp. A rise in brp raises the expected profits of depositors and banks in the same proportion shifting both the supply of and demand for deposits curve. to the right. The combined effect of a rise in p with a possible rise in brp on the determination of drp are shown in Figure 4. The expansion in the supply of funds consequential to expansion in bank deposits may results in the new equilibrium level of brp being to the right of but equal to its old level. It is not likely that the two shifts in the supply of funds curves, one caused by the rise in p and the other caused by increase in the volume of deposits, would add to an amount larger than the shift in demand for funds curve with the result of bringing the brp lower than its old level. The banks can prevent this by manipulating the supply of funds. They will have no incentive to let this happen as a fall in brp will cut into their profits as well as into the rate of return on deposits, affecting the supply of deposits. The prospects of a smaller percentage share in business profits in the face of a rising demand for *mudarabah* funds is not very plausible for the banks.

A rise in p, the expected rate of entrepreneureal profits would either leave brp unchanged or raise it to a level not far above its old equilibrium level. It is likely to leave drp, the percentage of bank profits accruing to depositors, unchanged.



***Mudarabah* Funds**

Figure 3: Effects of a change in p on the determination of brp.



***Mudarabah* Deposits**

Figure 4: Effects of a change in p on the determination of drp.

A fall in p will shift the demand for *mudarabah* funds curve to the left, less being demanded at each level of brp. But it may not cause a leftward shift in the supply of funds curve, in the first instance, since, given the volume of deposits, a contraction in the supply of funds will decrease the net income of the banks. A contraction in demand with supply unchanged will, however, tend to depress the brp, as shown in Figure 5. On the other hand a lower p will cause both the supply of and demand for deposits curve to shift to the left as shown in Figure 6. This may leave the equilibrium level of drp unchanged, but it would decrease the volume of deposits. As the supply of *mudarabah* deposits contracts the supply of *mudarabah* funds curve shifts to the left arresting the tendency of brp to fall. A fall in brp in consequence of a fall in p may suit the banks since it will arrest the contraction in demand by yielding the entrepreneurs a larger share out of a smaller profit.

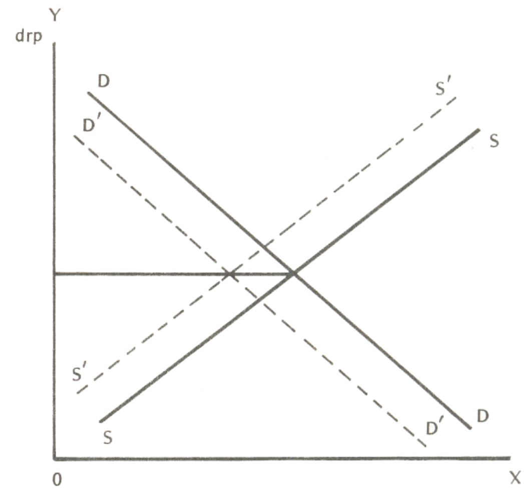
A fall in p is, therefore, likely to lower brp to a level not far below its old equilibrium level, but it is likely to leave drp unchanged.

Responsiveness of Supply of and Demand for Deposits to Changes in p

So far we have concluded that changes in the expected rate of entrepreneurial profits p' are likely to change brp in the same direction in which p changes but they would leave drp unchanged. It is time to scrutinise the stability of drp more closely. In the above analysis it is partly based on the assumption that the shift in the supply of deposits curve in response to a change in p is equal to the shift in the demand for deposits curve in response to the same change. Other things remaining the same, this assumption seems to be quite reasonable as the expected return on deposits as well as the profits expected by banks as they employ these deposits profitably [i.e. drp x brp x p and (1-drp) x brp x p respectively] are both simple fractions of p. But it may be hypothesised that the shifts are not equal, in which case the drp will change when p changes.

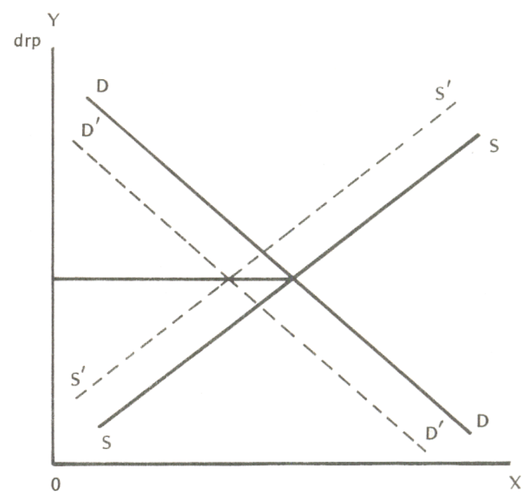
In case of a rise in p, if the rightward shift in the supply of deposits curve is larger than the rightward shift in the demand for deposits curve the drp will fall, increasing the banker's share of profits and, therefore, tending to expand the supply of *mudarabah* funds. This merely reinforces the tendency caused by a rise in p as noted above, arresting the upward trend in brp.

On the contrary, if a rise in p causes the rightward shift in the demand for deposits curve to be larger than the rightward shift in the supply of deposits curve, the drp will rise. A higher drp will reduce the bank's share of profits counteracting the expansion in the supply of *mudaraboh* funds and reinforcing the tendency of brp to rise.



***Mudarabah* Funds**

Figure 5: Effect of a fall in p on the determination of brp.



***Mudarabah* Deposits**

Figure 6: Effect of a fall in p on the determination of drp.

Thus the above conclusion regarding the effect of a rise in p on brp remains substantially valid despite the possible variety in the responsiveness of supply of and demand for deposits to changes in p. A rise in p will either raise brp or leave it unchanged. The drp may fall or rise depending on the relative responsiveness of the supply of and demand for deposits curves to changes in p.

By a similar reasoning, a fall in p will either leave the brp unchanged or cause it to fall, whatever the relative magnitudes of the leftward shifts in the supply of and demand for deposits curve caused by the fall in p. The drp will fall or rise depending on the relative magnitudes of the two shifts.

In the absence of empirical evidence, it is difficult to decide whether the demand for or the supply of deposits will be more responsive to changes in the expected rate of profit, but the odds seem to favour the demand. Supply of savings into bank's investment accounts is likely to be sluggish in its response to changes in p as compared to the response of the banker's demand for deposits to changes in p because the latter are better informed and keener to take advantage of the expected changes. Should this be true, changes in p will cause drp to change in the direction in which p changes. A rise in p will cause drp to rise and a fall in p will cause drp to fall. This will not affect our conclusion relating to brp, which will also change in the direction in which p changes.

Effect of Variety in Profit Expectations

Let us now relax another assumption made above, that the depositors' as well as the bankers' share the entrepreneurs expectations regarding p, the expected rate of profit in business enterprise.

Departure of bankers’ expectations regarding p from those of the entrepreneurs will not affect the conclusions of the above analysis as long as both expect p to move in the same direction and differ only regarding the magnitude of the change. If they expect p to move in different directions, it would only reinforce the tendency of brp to fall when the entrepreneurs expect p to fall and will reinforce its tendency to rise when the entrepreneurs expect p to rise. This follows from the more decisive role of the demand side in the determination of brp in the above analysis. The conclusion relating to drp is not affected.

As regards the depositors, they would generally be guided by the dominant opinions of the bankers to whom they entrust their savings for investment. They are too large and diffused a body to hold strong independent opinions of their own regarding p. Insofar as they do hold expectations contrary to the expectations of the bankers, it will contribute towards instability in drp by causing the supply of and demand for deposits curve to shift in opposite directions. The drp would still rise when the entrepreneurs expect p to rise, and fall when the entrepreneurs expect p to fall. Variety of expectations will only cause the magnitude of rise or fall in drp to be larger in comparison to what it would have been in the case of similarity of expectations.

Stability of the System

We can safely conclude that changes in brp are related to the direction in which entrepreneurs expect the rate of profit to cf1.ange. Minor changes may leave brp unchanged, but when it does change it will change in the same direction in which p changes, rising when p rises and falling when p falls. drp is likely to remain unaffected by changes in p. If it does change, however, it will also change in the same direction in which p changes, but the change would be relatively smaller than the change in brp.

The behaviour of brp has significant implications for the stability of a profit-sharing system in face of expansionary and contractionary trends in the economy as it happens during a boom or a slump. As p rises continuously in successive periods during a boom the consequential rise in brp will arrest the expansion by dampening the increase in entrepreneur's demand for *mudarabah* funds, as a rise in brp reduces the relative share of the entrepreneurs in business profits. The opposite will happen during a slump. The relative stability of drp will ensure a decisive role for brp in contributing towards the system's stability.

Thus the ratios of profit-sharing, brp and drp, seem to have a tendency to gravitate towards their historical equilibrium level never moving very far above or below them. While this can be confirmed only in the light of empirical data when they become available, whatever we know about the ratio of profit-sharing in the past supports this conclusion. It may be noted, however, that the past evidence relates mostly to simple *mudarabah*: the owner of capital contracting directly with the entrepreneur without there being an intermediary. The share of capital has been within the range of one-third to a half of the profits realised in business enterprise in which it is employed by the working partner. A systematic research on the reports relating to profit-sharing in the past is, however, still awaited.

Among the factors held constant in the above analysis has been the level of income, but we have already considered the behaviour of the ratios of profit-sharing during a boom or a slump. A gradual rise in the level of income over time need not call for changes in these ratios as it would affect both the supply of savings and the demand for *mudarabah* funds in the same direction.

Changes in the propensity to save, the banking habits of the community and central bank regulations affecting the credit multiplier will affect the supply of deposits and of *mudarabah* funds calling for readjustments in the two ratios which can be easily traced.

This leaves us with the changes in the state of knowledge, level of technology and the psychological factors influencing the supply of entrepreneurship which operate on the demand side and will exercise their influence through changes in the expected rate of entrepreneurial profits, which have been analysed above. The ultimate determinants of p and the two ratios of profit-sharing are the productive resources of the society, the level of technology, the availability of entrepreneurial abilities and the will to develop. The supply of entrepreneurship is likely to be larger in a profit-sharing system as compared to an interest-based system (assuming the same society) as the obligation of fixed interest payment discourages the marginal entrepreneur.

It may also be noted that the above analysis is not affected if we allow for various ratios of profit-sharing between depositors and the banks, drp varying with the length of time for which a deposit is made, being higher for longer periods. In a similar manner the drp may also vary with the length of time for which funds are tied in a particular enterprise, rising with the length of the period involved. Banks will be in competition with the shares market as well as with other financial intermediaries in attracting savings and serving as sources of funds for entrepreneurs in the various sectors of the economy. In the economy as a whole a spectrum of profit-sharing will prevail taking care of the differences in liquidity and security of alternative avenues of investment.

Profit-Sharing in the Shares Market

The main avenue of profitable investment of savings outside the banking system will be the share market. As explained elsewhere, shares in limited liability concerns, being titles of ownership, will be transferable. Their market value will fluctuate with fluctuations in the expected rate of entrepreneurial profits, p. Elimination of unhealthy speculation in the shares market will see to it that fluctuations in share prices reflect genuine changes in the rate of profit expected on various shares. These changes will ensure a levelling of the rates of profits in various sectors by ensuring flow of savings in directions where the expected rate of profit is higher.

It may be hypothesized that since shares may turn out to be 'more liquid than bank deposits (in *mudarabah* accounts), an average profitability lower than that expected on bank deposits may satisfy the shareholder. But the possibility of capital gain or loss will also influence their demand and supply determining the market price. Thus the allocation of savings between bank deposits and shares market may be influenced more by risk aversion or venturesomeness of savers and by their ability to gather information than by the respective rates of expected profits. The expected rate of profit in the shares market will, on the other hand, normally have to be higher than that on bank accounts to compensate for the greater possibility of capital losses.

Other Avenues of Investment

In the light of the limited experience of the few existing Islamic banks' investment in real estate, machines, means of transport like cargo ships etc., and consumer durables like cars, refrigerators etc., supplied on lease can be an other avenue of profitable employment of the banks funds. The expected rate of profit (net of costs of operation) would generally have to be higher than that obtaining in the share market in view of lack of liquidity. The possibility of default and the resulting cost of litigation may be another reason pushing the (gross) expected rate of profit higher. Theoretically speaking the margin between the rate of profit in the shares market and the real goods market has to be just sufficient to compensate for the two factors noted above – lack of liquidity and extra costs of operation including litigation. If it is any higher, flow of funds into this avenue will bring down the rates, thanks to the competitive process. 'But the real goods m4rket is likely to have greater imperfections, relegating the competitive ideal into the background and necessitating intervention by the social authority for ensuring ‘fair’ rates.

Allocation of Resources

The basic cause of divergence of the value product of enterprise from the value of inputs (costs) involved can be found in the way society values goods and services. Social valuation of objects, old and new, is bound neither by its own past valuation of some of these, nor by its current valuation of the inputs involved. It is, however, an empirical fact that generally its valuation of products of enterprise exceeds its valuation of the inputs, in which case productive enterprise ends up with a profit. Otherwise it could be, and sometimes is, resulting in losses. The society itself is the final arbiter in this regard and no objective criteria exist. Changing tastes and incomes and a number of other factors account for this valuation. This is a phenomenon described briefly by the term “uncertainty” of market values. But the fact that a positive average rate of profit is socially necessary to secure a continuous supply of productive enterprise ensures the empirical reality noted above.

Each successful act of productive enterprise takes the society forward as its resources are transformed into objects of greater value. As the increment in value produced (profits) accrues to the entrepreneur in the first instance, entrepreneurial activities are directed to where it is expected to be maximum. This is how the expected rate of profit allocates the resources of society. Competition ensures that entrepreneurship pushes forward in all possible directions till the rate of profit is equal on the margin – an ideal situation being always approached but never reached.

The sectoral allocation of resources in a competitive economy is fully explained by the expected rate of profit. In doing so resources are also allocated between the consumption goods sector and the production (capital) goods sector. Guided by the expected rates of profits in various industries, say, textile, textile machines, steel and iron ore mining, allocations are made to these industries as they are made for various consumption goods industries like cloth, sugar and transport. The demand and supply mechanism and the technological needs of one industry for the products of another industry gear industries in the capital goods sector to those in the consumption goods sector. And this is done in such a manner as to sustain supplies commensurate with social requirements reflected in market valuation of the products final goods as well as intermediate goods involved. In allocating resources for the capital goods industries, the society is allocating resources for the future. This is, however, done in the present according to current valuations of future as reflected in the currently expected rate of profits. All valuations take place in the present which is the only real time. Valuation of things in past has no relevance, and valuation of things to come in the future is possible only through their significance being realised in the present. Seen in this perspective, intertemporal allocation of resources is a by-product of intersectoral allocation of resources done by the expected rates of profit.

No sanctity is attached to the allocation of resources effected in this manner. Social authority can always sit in judgement over it, modifying it in accordance with the social priorities at a given time and place. Furthermore, competition is always imperfect in the real world. It is not our intention in this brief study, however, to discuss in detail the rationale of social intervention, its modalities, and its guiding principles. It is sufficient to recognise its need, having made our main point that the market does affect allocation of resources without there being any rate of interest.

Allocation of individual incomes between current consumption and savings is done largely on criteria other than profitability of savings, a fact universally recognized after Keynes, and supported by a number of empirical studies on the responsiveness of the volume of savings to changes in the rate of interest. In planning the disposal of his income, the individual takes future needs, provision for posterity and a number of other factors into consideration. The same is done by corporate savers and the government, which has means to manipulate the volume of savings through a series of fiscal and monetary measures as well as through its incomes policy. Allocation of current income between consumption and savings is mostly a planned affair, both at the social and the individual levels. The expected rate of profit plays only a minor role in this process. For the social authority, it indicates through rising rates of profits, the need to mobilise savings in order to sustain current investment demands in the private sector. Mobilization of savings for the public sector is guided by social priorities with expected rates of returns playing a subsidiary role. Falling rates of profit depress investment demands indicating' a reduced social need for additional savings. For the individual increasing or decreasing monetary advantages of savings, indicated by a rise or fall in the expected rate of profits, may necessitate revision of the current allocation of incomes between consumption and savings. But it is generally agreed that the overall direction of this revision cannot be predicted with certainty.

The above is not meant to deny imperfections in the competitive market mechanism, role of power in allocation or resources or of other institutional factors. Our sole purpose is to emphasise that insofar as there is scope for a rational indicator the expected rate of profit serves the purpose. The absence of the rate of interest from the scene does not pose any problem whatsoever. Its role in the savings-consumption decisions is already recognised to be insignificant and uncertain, its role in investment decisions depends on the fact of its existence – an institutional reality rather than an economic necessity. It puts a valuation where none was warranted to suit the class interest of capitalists. Its disappearance restores valuation to where it belongs; to the consumers as far as it is feasible and desirable and to social authority as far as needed and found advisable.

A proportionate sharing of entrepreneurial profits by the supplier of money capital has no effect on the economic role of the expected rate of profit. The entrepreneur's urge to maximise profits and the tendency of competition to ensure equality in the rate of profit in various sectors are not affected by the institutional arrangement that the entrepreneur has to surrender an agreed percentage share of these profits to the financier. This remains true if one or more intermediaries are found between the entrepreneur and the ultimate saver. In contrast, the situation is fundamentally altered if the entrepreneur is obliged to pay a positive rate of interest to the financier irrespective of the results of the enterprise. The risk of loss (which is confined in the profit-sharing arrangement to the entrepreneurial services going unrewarded) now threatens the entire assets of the entrepreneur. The entrepreneur willingness to assume risk is thereby severely constrained.

Fluctuations in the Rate of Profit

Fluctuations in the rate of profit earned by the entrepreneur should occur mainly because of the changing valuation of products by society and the inability of the entrepreneur to foresee these correctly. Society has no perfect safeguards against imperfect foresight or against the vicissitudes of its own valuation. The indicator of profit helps society redirect productive efforts after losses in some directions and extraordinary gains in some other directions. Meanwhile the losses are to be borne, through the extraordinary high profits reaped, by those immediately involved in the process. These are the entrepreneurs, the financial intermediaries and the savers. In case of a loss the entrepreneur (working with *mudarabah* capital) goes unrewarded for his enterprise without his other assets being affected. He is, however, still capable of a fresh effort, though with a diminished chance of securing *mudarabah* capital. This urges him to revise his plans and be more convincing to the suppliers of capital.

The financial intermediary (say, the bank) receives back a capital diminished by the extent of the loss. It is able to absorb this shock by virtue of the pooling of investments. The diminution in capital in one case is made up by profits of other cases, but the would-be average of profits is slightly pulled down. For the future a revision of investment policy vis-a-vis the party, industry, or the sector concerned becomes necessary. Losses serve as guides in the restructuring of investment policy as they do in case of redirection of productive enterprise. For the saver who deposited his savings in a large pool from out of which banks make investment on a diversified basis, the above-mentioned losses would imply a rate of return on their savings slightly lower than it would have been without these losses. The price that society has to pay for changing valuations and imperfections of human foresight is in a profit-sharing system, shared by the public, the financial intermediaries and the entrepreneurs in a manner which does not . disable or destroy anyone. It is a far more efficient way than placing the whole of this burden on the entrepreneur. Needless to repeat that it is highly unjust to spare the capitalists and single out the entrepreneurs for paying this price.

In case of an enterprise making extraordinary profits, the entrepreneur is placed in a relatively more advantageous position as his actual rewards move up more quickly than those of the intermediary or the ultimate saver, both of whom, due to the pooling arrangement, receive a slightly lower rate of profit than they would have received otherwise. This has the effect of urging the entrepreneurs to push further in the same direction, supported by the encouragement coming from suppliers of *mudarabah* capital. Meanwhile, the extraordinary profits are shared with the savers and the intermediaries to an extent which the system of contractually fixed rates of interest is incapable of ensuring.

It is quite obvious from the above discussion that the impact of losses or extraordinary profits felt by the ultimate saver is greatly reduced, first because of the sharing and second because of the pooling at the banks level. As a matter of fact the saver will ordinarily be insulated from all effects of fluctuations that are confined to a few industries or anyone sector of the economy. It is only in case of a general rise or fall in the rate of profit that the effect will be communicated to the ultimate saver.

Stability of the rate of return on savings may seem to be a less plausible assumption when the share market is also taken into consideration. Two observations seem to be in order in this regard. Firstly, competition with banks will oblige the corporations to work for the stability of dividend rates, and consequently in share prices, through building loss compensating reserves and other possible devices. Secondly, investment in shares may largely take place through banks and other financial intermediaries which would be able to reduce the impact of these fluctuations upon the ultimate savers. Those savers who still prefer to deal directly on the share market will do so because of their higher propensity to take risk in expectation of rates of return higher than the banks and other financial intermediaries could offer them.

Thus the hypothesis that the profit-sharing arrangement will expose the whole system to wide fluctuations by communicating back the effects of fluctuations in entrepreneurial profits all along the line has no basis in reality. On the other hand profit-sharing will be a safeguard against bankruptcies and bank failures which, in an interest-based system, distribute these fluctuations in an irrational manner distorting both the distribution of income and the pattern of productive enterprise.

There are reasons to believe that even at the entrepreneurial level the profit-sharing system will be less prone to 'crises' and wild fluctuations than the interest-based system. The main reason lies in the terms on which capital is supplied to the entrepreneur. Since returns on bank’s *mudarabah* funds and even the security of its capital are fully tied with the performance of the productive enterprise the prospects of productive enterprise will be thoroughly examined before funds are supplied. Once it is done the interest of the entire financial sector will continue to lie in the success of the production sector, to which it would still be able to contribute in several ways. No such identity of interest and harmonisation of policies occurs in the present system where credit-worthiness of the borrower is the major, if not the sole consideration, before the lender. As long as the borrower has assets to guarantee repayment with interest the banker is not obliged to care about the prospects or the progress of the enterprise. This basic change in relationship is bound to have far-reaching implications for the policy of the financial sector *vis-a-vis* the production sector during periods of rising or falling rates of profit.

Presently bank's supply of credit is guided by expected changes in the rate of interest, liberal when these rates are expected to fall and tight when they are expected to rise, while the real interest of the production sector may require it to do just the opposite, thus aggravating the possibility of a fall or rise in the rate of entrepreneurial profits. Since the return on *mudarabah* funds supplied by the banks will now be in the form of a proportionate share the banks are expected to be more liberal when the rate of profit is expected to rise and cautious when it is expected to fall, bringing credit supply in harmony with the real interests of productive enterprise.

The creation of credit in a profit-sharing system, whether done by the central bank or the commercial banks, would be fully geared to the genuine needs of the production sector. Elimination of unhealthy speculation on the shares market and of speculation, hoarding and some forms of forward transactions on the commodity market is also likely to make both the money market and the commodity market more orderly and less prone to fluctuations.

A severe crisis in the production sector involving a sharp universal fall or rise in the expected rate of profit could not be caused by sudden changes in human foresight or social valuation, both being relatively slow-moving. Its cause may be exogenous to the system and/or it may lie in a revolutionary change in technology or state of knowledge. These call for action by the social authority by way of planning and regulation. In such cases the market is incapable of effecting a smooth painless transition.

Monetary Policy in a Profit-Sharing System

What are the possibilities of manoeuvrability of the crucial variables in the profit-sharing .system by the Monetary Authority, with a view to regulating the supply of money. Elsewhere we have explored the potentialities of the reserve ratio, the refinance ratio and the lending ratio as instruments of central bank policy for controlling the supply of money, besides direct control and moral suasion. We have also seen how sale and purchase of certain kinds of shares can help open market operations. We would now examine the possibility of the central bank changing the Banker's Ratio of Profit-sharing (brp) or the Depositors' Ratio of Profit-sharing (drp) to effect a change in the supply of money.

Insofar as the supply of savings into banks' investment accounts is responsive to the expected rate of return on bank deposits, raising the drp may increase the volume of bank deposits, and vice versa, increasing the banks ability to supply *mudarabah* funds which may eventually result in the expansion of money supply. Lowering drp will be effective as means of contraction to the extent the volume of deposit declines if the bank has no surplus reserves.

The brp can be lowered with a view to inducing demand for *mudarabah* funds or raised with a view to curbing it. Anti-inflationary policy may require curbing demand as well as reducing the volume of bank deposits, a raising of brp accompanied by a lowering of drp. An expansionary monetary policy requires lowering brp accompanied by a raising of drp. Both steps will have consequences for the bank's profit margin which will have to be taken care of, to the extent desirable, by other measures.

Conclusions

This study has tried to demonstrate that an Islamic economy possesses a rational principle for organising productive enterprise which capital and enterprise jointly undertake. The principle of profit-sharing will ensure mobilisation of savings, its channelling to productive enterprise, and its allocation in accordance with social preferences as indicated by the rate of profit. The intertemporal allocation of resources will also be partly guided by the indicator of profits but it may be largely guided by the indicator of profits but it may be largely effected by deliberate choice and planning according to social priorities. The system is likely to result in fairly stable ratios of profit-sharing between the savers, the financial intermediaries and the entrepreneur. These ratios may change in response to changes in the rate of profit expected by the entrepreneur but they have a tendency to move back towards their original level. The entrepreneurial rate of profit itself will be less prone to fluctuations because of the changed behaviour of the financial sector which is presently the major source of fluctuations. The central bank will be in a position to mitigate the effects of these fluctuations by regulating the supply of money through a number of policy instruments available to it. The impact of such fluctuations as still remain will be communicated back to the ultimate savers in a much reduced degree.

Comments

Dr. Ziauddin Ahmed

Dr. M. Nejatullah Siddiqi's paper may be described as a preliminary exploration in the monetary dynamics of an Islamic economy. The main object of the paper is to demonstrate that replacement of interest by a system of profit-sharing will cause no problems as regards its smooth functioning and stability. In this context it seeks to dispel the apprehension expressed in certain quarters that a profit-sharing system will be exposed to wide fluctuations as the changes in the entrepreneurial profits will be communicated back all "along the line. It also seeks to establish that a system based on profit-sharing will ensure a better allocation of resources and a more equitable distribution of income and wealth.

Most of the contributions, made so far on the subject of interest-free banking, have been concerned with the mechanics and operational details of such banking. Literature on the economic consequences of the replacement of interest by a system of profit-sharing is rather scanty. The contents of Dr. Siddiqi's paper and the analytical framework developed by him provide a good basis for seeking new insights in the working of an interest-free economy.

The author has based his analysis on certain assumptions. It recognises multiplicity of objectives in an Islamic economy both at the entrepreneurial and financier's level but assumes that decision making in the private sector is based on the profit motive. It also assumes competitive behaviour, a closed economy and existence of positive profits at all times at the macro-economic level. Profit is defined in the accounting sense of the term. These are reasonable assumptions to make for facilitating the exposition of the main theme of the paper.

The paper assumes that readers are familiar with the model of interest-free banking presented by the author in his earlier writings. It would have been helpful to include a brief outline of the model in the paper itself. A good deal of the contents of the paper cannot be properly understood unless one is clear about the concepts used by the author. Since the concepts and some of the technical terms used in the analysis have not been defined, one has to deduce their meaning from the theoretical scheme of the paper. The connotation of certain terms even then remains unclear. It is not easy to understand, for example, why the author should use the term "*mudarabah* advances", The use of a loan-specific term "advances" does not go well with the concept of *mudarabah*. A certain amount of ambiguity is attached to the concept of profit-sharing in the paper. It is stated by the author in the introductory part of the paper that "should several parties jointly undertake entrepreneurial decision making as well as supply money capital, they may share profits in proportion to their capitals; should enterprise and capital come from separate parties, they share profits according to agreed proportions". The context in which this sentence occurs leads one to believe that the author regards this principle to be invariable under Shari'ah. Later, in the context of the discussion of the factors determining the Banker's Rate of Profit-sharing (brp) he proceeds on a basis which provides for the profits between the banks and the entrepreneurs being shared according to agreed proportions and not necessarily in proportion to their capitals. A possible misunderstanding of the author's intent could have been avoided if the terms and concepts used in the paper had been defined more explicitly.*

The author has sought to expound the main theme of this paper by employing a partial equilibrium approach. To demonstrate that replacement of interest by a system of profit-sharing will not lead in an unstable situation, the author proceeds in two stages. He first analyses the forces which will govern the determination of the rates of profit-sharing in an Islamic economy. He then sets out to use this analytical framework to disprove the contention that "a profit-sharing system will be exposed to wide fluctuations as the changes in the entrepreneurial profits will be communicated back all along the line." The two rates of profit-sharing that are germane for this discussion are termed Banker's Rate of Profit-sharing (brp) and Depositor's Rate of Profit-sharing (drp). It is envisaged that in an Islamic economy, "the rate of interest paid by commercial banks to depositors will be replaced by a percentage share in the profits accruing to the banks", henceforth called drp. Similarly, Banker's Rate of Profit-sharing (brp) is defined as "the percentage share of the entrepreneur's profit accruing to the banks."

The author postulates that the demand for *mudarabah* advances is an inverse function of brp while the supply of such advances is a direct function of brp so that "the equilibrium level of brp will be determined by the supply of and demand for *mudarabah* advances." The analysis first proceeds on the basis of a given expected rate of profit (p) and given volume of bank deposits, S, which is taken to denote "supply of savings into bank accounts." The impact of change in P is then analysed with the help of the postulated functional relationships. It is claimed that with the rise in the expected rate of entrepreneurial profits p, both the demand and supply curves of *mudarabah* advances will shift to the right. It is stated that initially as prices, the shift in the demand curve for *mudarabah* advances may be more pronounced so that the new equilibrium level of brp may be higher than the old one. However, as bank profits increase, the profits accruing to the depositors will increase, given the drp. This, according to the author, will result in an increase in 5, the supply of savings into bank deposits which in tUrn will shift the supply curve of *mudarabah* advances to the right. From this, it is concluded that the equilibrium level of brp will revert, more or less, to the old level so that" A rise in p may not have any significant impact on brp in the long run.' Similar reasoning is used to reach the conclusion that a fall in P will also not have any significant impact on brp in the long run.

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* In response to these comments Dr. Siddiqi included two new sections in the revised version of his paper. These sections are entitled "Profit Sharing" and the "The Ratios of profit-sharing". (Editors)

Though changes in p in either direction do not affect the long run stability of brp, the author perceives that banks, instead in the event of a persistent decline in p and to arrest the declining tendency in the demand for *mudarabah* advances, would be inclined to allow brp to settle at a lower level. Similarly, they would be inclined to let brp rise during a boom. Both these changes in brp, a fall in slump and a rise in boom, are expected to have a stabilising effect on the economy.

In the scheme of things postulated by the author, drp is also expected to rule at a stable level. The supply of savings to banks, S, which term is used interchangeably by the author for the volume of bank deposits, is treated to be a function of drp. The demand for savings by the banks is determined by the demand for *mudarabah* advances. This fact is depicted diagrammatically by "a family of nearly perfectly elastic demand curves" at various levels of drp.* The equilibrium level of drp settles at the point which ensures a supply of savings into bank deposits just enough to satisfy the demand for *mudarabah* advances. It is postulated that changes in p, the entrepreneurial rate of profit, will not entail instability in drp. A rise in p, by raising the rate of return to depositors if drp remains unchanged may increase the supply of savings into bank deposits beyond the level required by the current demand for bank advances. This may lead to a fall in drp in the short run but it will return nearer to its old level as supply of savings drops in response to a lower drp, persuading the banks to raise it again. By similar reasoning, it is asserted that a fall in P is also not likely to disturb the long-run stability of drp.

The author then seeks to answer the question: How far short run fluctuations in p, the entrepreneurial rate of profit, are communicated back to the ultimate saver, the depositor? Here, the author says, there are two opposite tendencies which balance each other resulting in an expected rate of profit on deposits being far more stable than p. On the one hand, changes in p may induce banks to readjust drp as they have to compete with the shares market for attracting savings, and changes in p have a more direct effect on the shares market. On the other hand, "they would tend to maintain a stable rate of return on deposits sufficient to ensure the desirable supply by adjustments in drp and brp if necessary. It is further stated that "For banks as profit maximisers, sustaining the supply of savings is far more crucial than the rates of profit-sharing, especially when operating on a fractional reserve system. The rate of return on deposits may rise during a boom in sympathy with the rising profitability of investment outside the banking system, but sound banking policy will resist a downward movement in this rate during a slump, as sizable contraction in supply of savings to banks may be disastrous for the banking system which can always hope, in a system based on profit-sharing, to revive demand by accepting a lower brp".

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* Dr. Siddiqi excluded from his revised version, this diagram referred here. (Editors)

The analytical framework developed by the author, which is briefly sketched above, is a good aid for systematising our thinking in respect of the actual working of an interest-free economy. However, the reality is so complex that the two or three sets of relationships postulated by the author are hardly sufficient to capture it even in a rudimentary form. Some of the functional relationships postulated by the author also seem to stand in need of revision. The comments below are intended to stimulate further thinking to help evolve a more refined and a more comprehensive approach to the delineation of the salient features of the working of an interest-free economy.

The analytical framework developed by the author revolves mainly around the question of the determination of brp and drp and their behaviour under changing conditions. If one speaks in ex-post terms the proposition that brp settles at the point where the demand for and supply of *mudarabah* advances are equal is a mere tautology. The real interest attaches to the ex ante magnitudes of the demand for and the supply of *mudarabah* advances and the role played by brp in equalising them. Here it seems that the author has assigned too much importance to brp. There is no serious objection to the demand for mudarabah advances being treated as an inverse function of brp. However, there does not seem to be sufficient justification for treating the supply of *mudarabah* advances as a direct function of brp. While positing a functional relationship in any attempt at model building one has to be very careful in picking up the variables that inter-relate with each other. It is true that brp will exercise some influence on the supply of *mudarabah* advances as it is one of the factors which determines the field of *mudarabah* deposits which in turn generate resources for the banking system. However, the relationship between brp and the supply of *mudarabah* advances is far from direct, and other factors such as changes in national income, variations in the monetary base of the banking system and the credit multiplier are likely to exercise much more powerful influence on the supply of *mudarabah* advances. The author himself seems to be somewhat uneasy about this functional relationsh ip as he states that "The supply of advances is a direct function of brp, given the volume of bank deposits, S (i.e. supply of savings into bank accounts)."* But, if the volume of bank deposits, which crucially determines the capacity of banks to provide *mudarabah* advances, are to be taken as given, it should be preferable to postulate no direct functional relationship between brp and the supply of *mudarabah* advances. In the diagrammatic representation of Figure 1, the "upward sloping curve 5 would then be substitued by a vertical line or a family of vertical lines corresponding to, say, various levels of national income, and the equilibrium level of brp would be determined by the intersection of the downward sloping demand curve for *mudarabah* advances with the relevant vertical line.

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* These comments remain no more valid as Dr. Siddiqi substantially revised his paper to incorporate these comments. (Editors)

The reasoning employed by the author to reach the conclusion that changes in p will not have any significant impact on brp in the long run does not bear close scrutiny. It can be agreed that an increase in p will shift both the demand and supply curves of *mudarabah* advances to the right. However, it cannot be taken for granted that, following an increase in p, the supply of *mudarabah* advances will rise as much as the increase in the demand for *mudarabah* advances so as to keep brp stable. The author has not provided any solid theoretical justification for the equivalence of the two magnitudes. In the absence of such a justification it cannot be assumed that the shift in the supply and demand curves for *mudarabah* advances will necessarily be of the type depicted in Figure 2.* It is apparent that if the relative magnitudes of the shifts in the two curves are somewhat different from those depicted in Figure 2, the diagrammatic representation will not support the conclusion reached by the author.

The discussion relating to the determination of drp is theoretically more plausible. However, the analysis designed to establish the long run stability of drp leans too heavily on the assumed high degree of elasticity of bank deposits to the rate of return on such deposits. It is generally agreed that a large variety of factors influence the level of savings in an economy which in turn have an impact on the level of bank deposits. The level of gross national product, the pattern of income distribution, the state of expectations in regard to inflationary / deflationary pressures and changes in liquidity preference have a vital bearing on the level of savings in an economy. The author himself has stated in other portions of the paper that return on savings plays only a minor role in the allocation of current income between consumption and savings. There does not, therefore, exist sufficient theoretical justification for the proposition that fluctuations in Pare likely to leave drp, inaffected. Moreover, even if a strong relationship between drp and *mudarabah* deposits is assumed, there is no assurance that temporary deviations from the equilibrium level of drp will be exactly self-reversing to ensure long run stability of drp.

It is difficult to understand as to why the author attaches so much importance to the long run stability of brp and drp. The major issue which the author wanted to examine in his paper was whether the profit-sharing system would be exposed to wide fluctuations as a result of changes in the entrepreneurial profits and whether the short run fluctuations in entrepreneurial profits will be communicated back to the ultimate saver, the depositor. It needs to be pointed out that even if it is demonstrated that brp and drp remain stable, it does not follow that fluctuations in entrepreneurial profits will not be communicated back to the depositor. The rate of return to depositors under a profit-sharing system would depend on p, brp and drp. Hence, if p changes, the rate of return to depositors will be affected even if brp and drp remain unchanged. It should also be pointed out that fluctuations in the rate of return to depositors under a profit-sharing system should not be a cause

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* In the revised version this refers to Figure 3. (Editors)

for concern. In fact, if the rate of return to depositors rises in money terms in an inflationary situation, it will help preserve the rate of return on deposits in real terms and will serve an economically useful purpose. Increase in the rate of return to depositors following an increase in p is also likely to help in reducing income disparities. However, in case it is considered desirable to regulate the rate of return to depositors, it can always be done by suitable adjustments in brp and drp. It is relevant to mention here that though a good deal of space in the paper is devoted to attempted demonstration of long run stability of brp and drp, the author himself acknowledges, in the later portion of the paper, that banks "would tend to maintain a stable rate of return on deposits sufficient to ensure desirable supply by adjustments in drp and brp, if necessary."

The analytical formulations in the paper would have gained in realism if the central bank had also been included as a component of the banking system in the model. Dr. Siddiqi does have a few things to say on the central bank and monetary policy in the later portion of the paper but these are not integrated with the earlier analysis which confines itself only to the operations of commercial banks. It is easy to see as to how the induction of central bank in the model would give greater substance to the analysis. It is at once apparent that if a central bank exists, and policy objectives are helped by stability in brp and drp, the desired results can be obtained through monetary policy actions even though self-equilibrating mechanisms to restore stability in these rates may not be present in a disequilibrium situation. The introduction of central bank in the analysis would thus dispense with the need for making certain behavioural assumptions which are of doubtful validity.

Notwithstanding the several limitations of the theoretical scheme presented by Dr. Siddiqi, it must be acknowledged that he has made in valuable contribution to the subject. The model presented by him can be refined and further developed to shed new light on the working of an interest-free economy. New functional relationsh ips can be postulated which will of course make the model more complicated but will increase its utility for a better understanding of the complex reality. A promising line of further research lies in improving the dynamical attributes of the model by tying up changes in monetary variables to changes in real income.

The portions of Dr. Siddiqi's paper dealing with the allocation of resources in a system based on profit-sharing are mostly unexceptionable. The author has used a number of arguments to show that absence of interest will not interfere with an efficient allocation of resources. In fact, as the author has pointed out, closer examination of projects before banks provide finance under a profit-sharing system will help improve the allocation of resources. The author employs sound logic to make his point that interest is "an institutional reality rather than an economic necessity." The ethical superiority of a system based on profit-sharing is also well brought out in the paper.

Dr. Monzer Kahf

I, indeed, should start by commending Professor Nejatullah for two reasons. The first is his elaborate and concise discussion of profit-sharing, and the second and more important, is his daring effort to enter this field of economic analysis and to study analytically the effect of introducing certain new assumptions in the market relationships.

Qirad (*mudarabah*), it should be noted, is well known in the *Fiqh* books. However, it was of minor importance throughout the economic history of Muslims, especially in the early period of Medina. There are only two reports about practising it in the terms of *Sahaba*, though it seems to have been practised in Medina. Ibn Hazm is reported saying, that all cases of *Ijma* have a certain source in Quran or *Sunnah* except for *Qirad* which has no source at all in either of them, yet, it is a correct abstract *Ijma*.*

Qirad, by definition, is based on the separation of ownership and management. Thus its significance is derived from the need for such separation implied by the change in the means and form of production. It is consequently, the Islamic version of responding to this need.

It seems that Professor Siddiqi was motivated by the discussions in the first seminar in Makkah 1978, where the principle of profit-sharing was attacked on the ground that instability may possibly enter the system if interest is eliminated. Thus the purpose of this paper was to show that profit-sharing does not cause any problem. Dr. Siddiqi has been very cautious of this purpose throughout his study and thus reduced the scope of his study only to this aspect.

Before going any further, it should be ascertained that Dr. Siddiqi's paper rightfully emphasizes that the principle of profit-sharing is not merely a reformative economic guideline in the distribution of the effect of risk and uncertainty, but rather a more comprehensive social, moral, spiritual and economic imperative which manifests the total approach of Islam to the human relations. In this sense, it, like other Islamic devices, Zakah for example,is a multi-aspect integrative tool.

He stated some of his assumptions at the outset of the paper. However, he had a few more assumptions which are found scattered in the paper. These include the following:

1. The existence of unlimited investment opportunities (made implicitly in the paper).

2. The presence of a stock market beside the banks.

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* See: Nail al Awtair, V. 5, p. 394.

3. Banks (working on fractional reserves) always use the maximum lending level, thus horizontal expansion (or non-contraction) becomes more important for them than vertical (increasing or non-falling drp).

4. Changes in total savings (Le. saving function of a given income) as a result of a change in drp are ruled out.

The paper deals with one form of profit-sharing; namely, that which is done by the currently existing Islamic banks. This is only a special case, and discussing the general case is to assume *Qirad* is available to everyone and by every channel (insurance companies, mutual funds, individuals, brokers and other financial intermediaries).This assumption requires a careful study of what can be called the "*Qirad* Market" and its comparison with the stock market. From this general case, one may proceed to the special case of profit-sharing through banks. The lack of this general approach in the paper makes it neglect the essential and unique feature of the *Qirad* market which is that this market does not determine a price but a ratio of distributing the uncertain outcome of the enterprise. Thus, while the profit of the entrepreneur, according to the capitalist market, is the residual after distributing wage, interest, and rent; the share of the entrepreneur is determined by the supply and demand in the *Qirad* market. The fact that this market determines a ratio and not a price, has a few implications.

a. The marginal productivity theorem of factor prices does not apply on this market, definitely not directly.

b. Fluctuations in this market are less sensitive to changes in marginal productivity of factors, because changes in the prices of the factors of production and of the final product affect the rewards of both parties on the two sides of the *Qirad* market in the same direction, no matter whatever the ratio is.

Also, short term changes in the commodity and factors markets are less influential on the *Qirad* market since they affect the shares of the two parties in the same direction. Thus, only long term factors are left to affect the ratio of profit-sharing. These include the quantity of entrepreneurship, the level of income and the habit of savings. And this is, perhaps, the reason for a stable ratio of profit-sharing in the Muslim countries throughout time (e.g. it is known in the business community in Damascus that the share of the funds owner is around one-third and never exceed 40 per cent).

Had Dr. Siddiqi studied the *Qirad* market and then looked at the special case, when *Qirad* is done through banks, he would have saved himself a lot of confusion arising from the relations of the bank with the depositors and with the entrepreneurs.

It seems that Dr. Siddiqi had in his mind the case of the Islamic banks operating in some Muslim countries where he assumed "an inherited reference to the interest rate prevailing before having the profit-sharing". But introducing the case of the existing Islamic bank should bring in the analysis a few matters that he did not include. These may include:

(i) The term structure of brp for different times and different projects.
(ii) The government regulations pro or against the Islamic bank.
(iii) The competition with interest banks in the same market.
(iv) The deeper involvement of the Islamic bank in the appraisal of the projects and its effect on the operational cost of the bank.
(v) The matter of fractional reserves and how it applies to an Islamic bank working in an ocean of interest economy, and comparing this with an exclusive Islamic banking system. Moreover, the assumption of fractional reserves is in itself very controversial.

In a market that determines a ratio instead of a price such as the *Qirad* market, the entrepreneurship becomes a quantity whose supply affects the equilibrium ratio. Thus the conclusion of the effect of entrepreneurial profits on the determination of brp is incomplete without including the supply of entrepreneurship.

The relationship between the bank and the depositors is not clear and we think that this is caused by considering the bank as an independent actor in its relation with depositors. If we consider the bank as an agent of depositors (which is the factual contractual relationship in Islamic banks today), then we can establish a direct and constant relation between brp and drp; this means that an increase in the former raises the latter, thus attracting more S. Instead of that Dr. Siddiqi selected the uneven route by first assuming that S is given[†] and then later on relaxing the assumption and claiming S to rise. Moreover, in the Islamic banks of today, the bank practices a mono poly on its religion conscious depositors, because there is only one Islamic bank wherever it exists. This power enables it to keep drp low even when brp rises.

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† This comment may not remain valid in the light of the revised version. This comment refers to the section entitled "Determination of brp" which has been substantially revised in the light of the comments. (Editors)

Discussion

Dr. M. Fahim Khan

The conclusions drawn by Dr. Siddiqi are intuitively correct. But the model needs to be rigorously developed. For example, the brp and the supply of advances has been shown upward sloping. I agree with Dr. Ziauddain Ahmed that this cannot be upward sloping because brp does not directly affect the supply of advances. An indirect relationship can exist only if we can establish a link between brp and drp. So the supply is best represented by a vertical supply curve.

We can visualize that brp, drp, level of advances and level of deposits will be endogenously determined within the system and we can see that brp and drp will be stable. Dr. Siddiqi is of the view that they will be stable in the long run. In the given model as much they will be stable in the short run also.

Dr. Umer Chapra

The paper lacks the explanation as to why specific shapes have been given to the supply curves. Even if it is not perfectly elastic it will tend to be elastic because if there is *Zakah* on liquid funds, there would be a tendency for the people to invest most of the funds that they have.

This type of analysis as Dr. Siddiqi has adopted is used for the determination of the rate of interest. In the capitalist economy interest is not a residual. It is a cost. If it goes up or down, it affects the size of the profit. But here we are dealing with a different situation. The whole profit of a bank and of an entrepreneur is a residual and, therefore, I am not sure if this type of analysis can be used here.

Prof. Syed Nawab Haider Naqvi

I comment on the brp and drp as a tool for monetary policy. Profitsharing is based on the concept of equitable distribution of profit. Once a social contract has been reached between the parties according to the principle of equity and justice it should not be possible for the banks to change this contract. My point is that a tool which is to be used for equity purpose cannot be used for allocative purpose.

Dr. M. Ariff

I am not sure whether the vertical axis indicate a rate or a ratio. If it is not the rate then the whole conclusion will have to be changed.

I do not agree that the supply curve will be upward sloping and I also do not agree that it will be vertical.

Demand and supply schedules do not make any sense. On the vertical side we have profit-sharing. If we change it into loss-sharing the relationship will be reversed.

Rate of profit or return is more crucial in this analysis rather than the profit-sharing ratio.

Agha Mohammad Ghouse

Will the brp be fixed by the central bank as the banks fix interest rate now or the commercial banks will have freedom to fix their own brp? His analysis will be applicable only if the commercial banks have this freedom. But if central bank fixes the brp then some of the analysis will have to be revised.

Dr. Mahfooz Ali

A more efficient technique would have been a model of a 3-person – zero-sum-game and a 3-person – non-zero-sum-game for such analysis. In a static situation where profit rate is fixed, a zero-sum game technique will be applicable and in a dynamic framework a nonzero-sum-game technique should be applied. In this analysis, not only the drp and brp are important but also the quantum of profit is important. I do not agree that the supply curve should be vertical.

Dr. Munawar Iqbal

Supply of advances will not be a function of drp. It will be a function of the relative rate of return on bank's deposit as compared to the rate of profit on all other alternatives.

Dr. Sultan Abu Ali

I think we all believe that there will be smooth functioning of the economy if we eliminate the institution of interest. The profit-sharing system broadens the base for the equity participation whereas the firms resort to the bonds and interest-bearing instrument only to limit the opportunities of profit-sharing. So if we eliminte interest and replace it by profit-sharing, we only increase equity base and nothing happens to the system. The system will work even more efficiently.

It seems to me that Dr. Siddiqi is introducing the theory of loanable funds in a different way which means that he is neglecting the real aspect of the economic activity in an Islamic framework.

Dr. M. M. Metwally

It may not be simple to change the declared rate of profit and may not be possible to make it flexible.

The system might not be complete. We may end up with a number of unknowns greater than the number of equations. We need to include at least the share market to complete the system.*

Dr. Syed Aftab Ali

I regard profit-sharing in an Islamic framework as an attempt of restructuring the socio-economic order. It will not be correct to regard an entrepreneur and a depositor as individuals isolated from the rest of the society.

If profit-sharing is to distribute risk also then elements of risk and uncertainty should -also be included in the analysis.

Dr. Omar Zubair

The ratios in Dr. Siddiqi's paper should be replaced by rates to eliminate the confusions that we have now. These ratios can easily be converted into profit rates. Only then the curves will become meaningful and the theory of loanable fund and theory of savings will be applicable.

I do not agree that the supply curve should be vertical if we acknowledge the existence of other opportunities for investment.

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* This comment has been incorporated in the revised version of Dr. Nejatullah Siddiqi's paper. (Editors)

Mr. Asghar Qadir

It is possible that functional relationships are linear which means that if equilibrium is stable at one point it may not be stable at other points.

Dr. N. Vagar

Commercial banks are also creators of fund. Dr. Siddiqi has not taken this into account. Because if this is true then what something different will happen to his supply curve of advances. This may make the supply curve perfectly elastic.

The vertical supply curve for advances is possible if banking transactions are the only financial transactions in the economy.

Dr. Masudul Alam Choudhry

I have some problem in relating P (profit rate in the economy) with brp and drp as shock absorbers for the fluctuation in p. Given the allocative efficiency and high levels of adjustments in an Islamic economy, it seems to me that an Islamic economy will very quickly adjust to the steady state. If this is true then the fluctuations in p will be very nominal and then the role of brp and drp as shock absorbers for P will be redundant.

Dr. Ishaq Nadri

Dr. Siddiqi did not explain as to how the expected rate of profit in the economy will be determined because the entire stability and the identifiability of the system will depend on this process of determination.

Dr. Muhammad Uzair

While introducing a concept, its operational and mechanical aspects should also be explained to make the concept more clear. It has been mentioned by someone that profit is a residual factor whereas interest is predetermined. We can define the profit as ex-post factor and can calculate a sort of moving average to determine the normal profit rate.

Winding up by Dr. Nejatullah Siddiqi

I agree that I could attend to the questions of how the rate of profit is determined. I left it out of my discussion because it is a problem of general conventional economics. I, therefore, concentrated on explaining the question of stability.

Some confusion did arise about the question of rate and ratio of profit. I agree we can reformulate the paper by using rate of profit for the banks as well as for depositors. But I do not think that this will affect the essence of conclusion because there is a linear relationship between the brp and P, and drp and P.

Regarding Dr. Ariff's reference to the loss-sharing ratio I may explain that I am considering the problem at macro level taking banking sector as a whole and, therefore, I am justified to take only profit-sharing ratios.

I agree that the changes in the expected rate of profit will affect the changes in the rates of return of depositors but what I want to emphasize is that the way they change, it will absorb the part of the shock. So what ultimately reaches the depositor involves lesser shock.

I, however, agree that it needs careful consideration.

About Dr. Vagar's point, I may mention that central bank does not exist in my analysis. I made only a passing remark about the possibility of central ban k using brp and drp as tools for monetary policy. As far as the question of the credit creation is concerned, I am not sure what Dr. Vagar has in his mind. I will discuss this with him.

Winding up by the Chairman

Dr. Siddiqi is right in assuming that the rates will be stable with profit-sharing and we will have a more stable economy than with interest-bearing economy. I would, however, like to point out that there should be some link between profits which result from *mudarabah* and the profits which result from activities other than *mudarabah* like *Murabaha*, *Bai-Muajjal* etc. For instance, the profit rate on *mudarabah* will, in general, be higher than on other activities because there is more risk in *mudarabah* as compared with *Murabaha*.

An Islamic Perspective on the Economics of Discounting in Project Evaluation

Dr. M. Anas Zarqa*

This paper is primarily devoted to those aspects of the economics of discounting that seem to have bothered the Muslim economic mind. But the issues raised would also appeal to all economists - both Muslim and non-Muslim - who are interested in the question of discounting as it relates to capital and interest theories.

The reader, I trust, would tolerate the direct style and the undiluted criticism of opposite views. This is meant to add spice to an otherwise austere subject rather than express bad temper.

Questions of capital and interest -like the legendary Greek sirens have lured many to their demise. I pray that I have survived my brief journey, though certainly not unscathed. The tale' that I came back to tell, I pray again, would not be discounted. In preparing the present revised version of the paper I have been fortunate to receive many valuable comments and critiques of the earlier version.

My thanks and frankly my apologies as well, must go to Dr. M. Ali Khan and Dr. M. Fahim Khan - my discussants in the Islamabad Seminar, January, 1981 – for enduring an incoherent first version. Even though I could not agree with many of their suggestions, their criticism helped me to state my views in a better way.

I am also grateful to Dr. M. Abdul Mannan for many remarks on restructuring the paper; to Dr. Clark Hawkins for detailed comments on the cost of capital (Section 111.4); to Professors Alsiddeeq A. AI-Dareer and Mustafa Zarqa (my father) for detailed discussion of the *Shari'ah* position on discounting (Sections IV.2 and IV.3); to Dr. Omar Zubair for a critique of these two sections and to Dr. M. Umer Chapra for comments on the revised version. Finally, I am most grateful to Dr. M. Nejatullah Siddiqi for comments and discussions throughout the writing and revision of this paper. Much as I dislike it, the responsibility for errors that remain has to be mine alone.

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I

INTRODUCTION AND SCOPE OF THIS PAPER*

Discounting future flows of benefits and costs is important analytically in capital and investment theories, and practically in project evaluation. Discounting is often presumed to be based on, or at least intimately connected with, the rate of interest. Since Islam advocates the complete abolition of interest, the concept and practice of discounting have given rise to several questions in the minds of Muslim economists:

(a) "Shall we apply the method of discounting to arrive at the present value of resources utilized in the productive process. .? Or does that method contradict some fundamental principles of Islamic economics? If there is a contradiction, what alternative method is available. . ." (Abu Ali, p. 9).

(b) Does not the Islamic injunction for zero interest rate logically require the use of zero discount rate with the resulting loss of efficiency in investment?

(c) The same basic questions above have been posed in different words by teachers and students in such courses as finance, engineering economy and cost-benefit analysis: Is it proper to use so-called "Compound Interest Tables" in decision making while condemning interest?

This paper tries to clarify the economics of discounting and to put it in an Islamic perspective in order to answer such questions as mentioned above.

We consider in Section II the economic rationale for discounting; and in Section III the relationship between the interest rate and the discount rate, and the use of the rate of return for discounting under uncertainty. An Islamic view of discounting is given in Section IV followed by summary and conclusion in Section V.

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* This is a completely revised version that was originally presented in the Seminar for discussion. Several references particularly quotations mentioned by the discussants in their comments, therefore, may not be found here. (Editors)

II

THE ECONOMIC RATIONALE FOR DISCOUNTING

Two basic justifications are usually offered for discounting future benefits and costs: one, subjective, based on so-called time preference, and the other, objective, based on net productivity of investment.

1. Positive Time Preference as Basis for Discounting

A consumer is said to have positive time preference if he is unwilling to exchange (or postpone) an extra quantity of consumption now for an extra quantity later unless the amount of consumption later were larger. Negative time preference entails the willingness to sacrifice a unit of consumption now for less than a unit later. Zero time preference can be defined in a similar way.

If positive time preference turns out to be a systematic human tendency (as, say, risk aversion), it means that people naturally discount future consumption, and this should be sufficient justification for discounting future benefits and costs of investment.

It should be noted that the assumption of positive time preference has been used, since Bohm-Bawerk, as one explanation of, and justification for, the existence of a positive rate of interest. We are not directly concerned with this aspect of time preference. Note, in passing, that: *firstly*, the existence of a positive rate of interest in a society in no way implies the validity of the assumption of positive time preference (*Patinkin*, p. 477, Samuelson, p. 613 n). Positive net productivity of investment is sufficient to open the possibility of positive interest rate even if time preference is negative or zero. *Secondly*, even if we grant that people have such a preference, it does not follow that a positive interest rate should be permitted in society. Islam and other revealed religions prohibited such things as usury, fornication and liquor for being unjust, immoral, or harmful, not for being undesired. I would, therefore, propose to view the assumption of positive time preference as a "positive proposition" to be accepted or rejected on empirical rather that on moral grounds.

a. The Case for Positive Time Preference

One trend of thought among Western economists, made prominent by, and since, Bohm-Bawerk, assumes positive time preference to be the systematic or normal pattern of behaviour. Negative (and zero) time preference is viewed as an aberration or at least a rare exception. Some economists (e.g. Alchian and Allen, pp. 199 ff) have even elevated positive time preference to the status of a principle of rationality.

The basic justification for assuming positive time preference can be traced back to Bohm-Bawerk who thought that "If the marginal utility of future goods is lower because of their increased provision, present goods must be preferred" (Ekelund and Hebert, p. 300). This notion is still a popular justification among economists who assume positive time preference (e.g., authors of *UNIDO Guidelines*, pp. 154 and 164-65; and Harrod, p. 74). I paraphrase Harrod (slightly out of context to facilitate the discussion).

If income and consumption per head in an economy are growing, the representative person usually expects the marginal utility of consumption at some future point of time to be less than it is at present. Accordingly, if he is asked to sacrifice present consumption in return for extra consumption in the future, he would require future consumption to be larger, i.e. he would discount it. As for those individuals who expect their income to fall through time, it would be advantageous for them to save even without the prospect of larger future consumption. But on a weighted average, such individuals are a minority in a progressive economy.

b. The Case Against

Quite a few prominent economists have expressed skepticism about the very existence, or at least the positivity, of time preference (e.g., Graaf, p. 40; Baumol, pp. 411-13)[1]. Others have explicitly stated that a rational consumer may have either positive or negative time preference (e.g., Henderson and Quandt, p. 304; Robinson, p. 54). Still others, while not disclaiming positive time preference among individual consumers have deemed it improper for collective choices (Cf. Malenvaud, p. 234 and Naqvi, 115-17).

It is fair to say that the assumption of positive time preference is far from being universally accepted among economists. In the remainder of this subsection we propose to show that negative (and zero) time preference is a normal and quite a rational pattern of behaviour to be expected under a wide variety of common situations such as the following:

(1) *Some counter examples*: To assume time preference to be always positive would lead to the bizarre conclusion that a man *who cannot invest* most of his salary (to guarantee higher consumption later) should consume it all on the first day of the month, nay, the first hour of that day! If we reflect on this extreme example it should provide many insights.

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1. It is worth-quoting from Graaf's celebrated *Theoretical Hlelfare Economics*: “I do not think that the scrapping of time-preference is to be mourned. Indeed, being doubtful of its existence in the first place, I do not think it will even be missed”.

Another instance of widespread negative time preference in capitalist countries has been uncovered by high rates of inflation. Many consumers kept on saving in interest-bearing accounts even when the real expected rate of interest was clearly negative for certain years.

(2) *Changes in income and in needs*: It is commonly observed that a consumer tries to at least maintain the past level of consumption to which he is accustomed. His present sense of satisfaction or level of utility, furthermore, is a function not only of his present level of consumption but also of his expected future consumption *compared with* expected future needs. These two hypotheses taken together would lead us to expect that the following groups of consumers have negative rates of time preference:[2]

- Those expecting a future decrease in income because of approaching retirement, or because current income is temporarily high, etc.
- Those expecting a future increase in their needs (sending a son to college, or getting a daughter married, etc.), with income constant.
- More generally, all those who expect fluctuations in income to be out of step with anticipated needs may well have negative rates of time preference among some time periods.

One glaring weakness of the assumption of positive time preference is that it disregards any changes in needs (or desired level of consumption), i.e. it implicitly assumes needs to be constant. On the other hand, it disregards the possibility of constancy or decline in expected income, and assumes it to be always rising.

(3) *Implications of the relative income hypothesis*: If steadily increasing income is consistent with positive time preference, while declining income gives rise to negative time preference, then an expectation of constant income should lead to zero time preference.

Consider now Duesenberry's relative income hypothesis which states that "the propensity to save of an individual. . . (is) . . . a rising function of his percentile position in the income distribution", i.e. it is a function not of his absolute, but of his relative income (Duesenberry, p. 45). A moment's reflection should convince us that when the absolute incomes of consumers are rising in step, so that expected relative positions are maintained, this should lead to zero time preference. This challenges the positivity hypothesis even in its limited home ground of the rising income case.

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2. An alternative starting point is to assume diminishing marginal utility of consumption, with utility at each point in time a function of current and expected future consumption levels. If the consumer expects income fluctuations he can maximize utility by stabilising his consumption at an average level (thus equalizing the marginal utilities of different time periods which is the first order condition of maximizing total utility).

(4) *Voluntary intergenerational transfers*: It is common observation that the present level of satisfaction or utility a consumer experiences is also a function of his expectation about the future level of consumption of his family. He frequently attaches greater significance to their level of consumption after his death than to his own consumption now. Prophet Muhammad (peace be upon him) is reported in authentic tradition to have said: "It is better to leave your heirs well off than to leave them poor asking people for help" (Related in *Bukhari and Muslim*). It should cause no surprise if some consumers derive more utility from transferring to a beloved heir an extra future pound than from consuming it themselves now.

(5) *The misers*: An interesting and hopefully rare group – the misers – should not be overlooked. They may be defined economically as making the accumulation of personal wealth an end in itself, not a means to increase their own or others' future consumption. A miser may welcome reducing present consumption by one unit if it leads to increasing his wealth by even less than a unit. To him, accumulated wealth is a good entirely distinct from consumption goods, and there is no reason why the marginal rate of substitution, in his twisted utility function, may not be: several pounds of consumption for one pound-worth of wealth.

(6) The pervasive effect of uncertainty: The crucial effect on time preference of expectations about income and needs is evident in the above paragraphs. Since the future is never certain, we must consider the impact of uncertainty as such on time preference. The most likely effect of uncertainty about future income and needs, given risk aversion, is that the consumer would try to play it safe. This he can do by preparing himself, partially or fully, for the worst eventuality–vis., a sudden reduction in income or increase in needs. Such precautionary behaviour (or, if you like sophistication, such minimum regret strategy) should reduce the rate of time preference, making it less positive or more negative. For suppose a consumer is certain that his income will increase. His rate of time preference should, therefore, be positive. Now introduce uncertainty by letting him expect his income to increase with, say, 70 per cent probability. This leaves 30 per cent probability for a decrease or no change in income, and should reduce the rate of time preference, or may even make it negative if the consumer is excessively averse to risk. We thus conclude that the introduction of uncertainty about the future or the *increase in the level* of uncertainty should, *ceteris paribus*, increase the proportion of people whose time preference is negative. It is in fact observed that people increase savings and reduce consumption during crises when uncertainty is keenly felt.

c. *Conclusion on Time Preference*

It seems fair to conclude that positive time preference is neither a principle of rationality nor an empirically established predominant tendency among consumers. It is simply one of three patterns of intertemporal choice (the other two being zero and negative time preference), each of which is rational and observable under its own conditions. The over-emphasis on positive time preference among some Western economists can, perhaps, be ideologically explained by its presumed suitability as a defence of the institution of interest against Marxist attacks.

Since time preference need not be predominantly positive, it cannot provide a rationale for always discounting future costs and benefits in project evaluation.[3]

2. Stochastic Productivity of Investment As Basis for Discounting

Investment is often productive in the sense of giving back over time a total product larger or more valuable than the invested resources. In brief, investment often has a positive net marginal product.

There are three fundamental and *inter-related* characteristics of the net marginal product of investment (MPI) that may be summarized in three "Ps": it is protracted, probabilistic and positive. It is protracted in the sense that it can be realised only through time. Every real investment starts by using up valuable resources, and gives back a stream of benefits spread over several future periods.

MPI is also probabilistic or risky or uncertain. It may be positive, negative or zero in the sense that the value of MPI over time may be less, more, or just equal to the resources used up in investment.

But even though the net MP of any single investment is uncertain and may turn out to be negative, its *expected value* is usually positive. Investment, though always risky, has on the average a *positive* net marginal product.

These characteristics of MPI mean that resources received earlier have the opportunity to be invested longer, and hence are potentially more productive on the average. This justifies discounting future benefits and costs as long as they are exchangeable into investible resources and the opportunity to invest them does really exist. The benefits and costs of most investments are such that the logic of discounting applies to them, but this need not be always true as we shall show below.

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3. Irving Fisher's thorough treatment of the question of time preference (pp. 61-98) basically upholds our conclusions in Section 11.1 on (b), (d) and (f), while cases (c) and (e) are not dealt with by Fisher. He clearly recognizes the possibility of zero and negative time preference.

Discounting, thus viewed, is an application of the concept of opportunity cost of investing resources over time. It stands to reason that the extent of discounting (or the magnitude of the discount factor) should be related to the marginal product of other possible investments having a similar degree of uncertainty.

a. When Not to Discount

It is possible to find exceptional cases where the justification for discounting is lacking. One such case is the lack of suitable investment opportunities because of international or local institutional factors. In some oil countries, for instance, an extra barrel of oil produced now (whose proceeds had to be hoarded or put into dubious investments) is not more productive than a barrel produced later, when institutional changes favourable to effective investment would have been achieved. For such countries it would be reasonable not to discount future proceeds of oil production, or even to apply negative discounting whereby future proceeds are inflated instead of discounted.

Another case emerges when the output of a proposed investment is not conceptually exchangeable into investible resources. For instance:

- a mosque where the number of people attending or praying is one measure of output,
- a hospital or a health unit whose output is the number of people relieved from a certain pain,
- a road improvement to reduce fatal accidents (Le. save so many lives per year).

The costs of investment in all three cases should be subject to discounting because they can be used elsewhere in the economy. But it is not clear why the benefits of such projects should be discounted. Are ten persons relieved from pain (or provided prayer space) twenty years from now less "valuable" than the same number provided the same benefits next year?

III

THE RATE OF RETURN AS A DISCOUNT RATE UNDER UNCERTAINTY

The main points of this section may be outlined in the following way: First of all, we recognize in Section III.1 two basic facts. One is that the major candidates for use as discount rate are the rate of interest (i) and the rate of return on equity (real investment) (r). The other fact is that both rates are identical in the world of perfect foresight, but are distinctly different in a world of uncertainty. This being the case, it becomes important to ascertain whether the assumption of perfect foresight is tenable (Section III.2), and if not, which one of the two rates i or r, is the proper discount rate under uncertainty (Section III.3). The conclusion that r is the proper discount rate gains further support when we consider in Section III.4 the question of the "cost of capital" in corporate finance.

1. Some Basic Facts

Many economists, in their unguarded moments, would think of the rate of interest as the standard rate of discount in project evaluation. Some, rather carelessly, use the rate of return and the rate of interest interchangeably as suitable discount rates. It is very important to recognize, however, that r and i are identical only in a world of oracles who know the future perfectly. For in such a world "of certainty and perfect markets, the ratio of the 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 rent of an asset (net of depreciation and other operating costs) to the original price of the asset, and 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, p. 472).

Needless to say, once we drop the assumption of certainty, rand i become distinctly different. This is not to say that in a capitalist economy the two rates are unrelated. They are related. When r goes up significantly, it becomes attractive to borrow and purchase equities, etc. The difference between rand i is strongly influenced among other things, by the degree of uncertainty associated with r and by the attitude towards risk.[4] That difference disappears completely if we can tolerate the assumption of certainty to which we now turn.

2. The Assumption of Certainty, Ideologically Speaking

In some parts of economics such as the theory of consumer be haviour, it is common and often realistic to conduct the analysis assuming certainty since risk is not such an essential ingredient of consumer choice.

In other parts of economics, such as the theory of the firm, it is common but often *unrealistic* to assume perfect foresight. One of the common and false conclusions that this assumption leads to is that excess profits disappear in the long run. They never do, just because uncertainty is always there to regenerate excess profits in one line after they disappear in another.

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4. The distinction between risk and uncertainty has little bearing on our discussion, so we shall use the two terms interchangeably throughout this paper.

In still other parts of economics, such as investment and capital theory, time and risk are of the essence and the assumption of perfect foresight is false and misleading, not only unrealistic. Real capital is durable, and the net productivity of investment always lies in the unknown future. It takes more than courage to discuss investment and capital under the assumption of perfect foresight.

But beyond the question of the realism of assumptions, there is the question of outlook and ideology. We must understand why Muslim economists have good reasons to reject and some Western economists have equally good reasons to tolerate the assumption of certainty in capital theory.

On the ideological side of the question, the Glorious Quran states:

"Had I knowledge of the unseen, I should have abundance of wealth, and adversity would not touch me." (7: 788)

"No soul knoweth what it will earn tomorrow. . . . . "(37:34)

These two Quranic verses, among several others, emphasize the assumption of uncertainty about the future consequences of present actions.

Turning to the economic side, we note that under the assumption of certainty, profit, which is permissible in Islam, becomes identical with interest, which is forbidden. For there is no difference whatsoever between asking for a specific rate of interest on a loan and asking for a percentage share of the future profits of an equity where those profits, by assumption, are precisely known.

Contrast the above line of thinking with that of some Western economists, who show remarkable tolerance for the certainty assumption while readily conceding that it is false, especially in capital theory. The formal excuse is the analytical convenience of that assumption. But I suspect that its ideological convenience for the defence of the institution of interest (against Biblical than against Marxist attacks) is no less important.[5]

For under the convenient assumption of perfect foresight: profits, rentals of capital goods, and even wages may be viewed as a form of interest income, and some of the economic functions and legitimacy attaching to these incomes may be bestowed upon interest.[6]

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5. For instance: Samuelson (Ch. 30, pp. 598-612 and *passim*), Eckaus (p. 401), and Alchian and Allen (pp. 199 ff.).

   It is interesting to contrast this tolerance for the patently false assumption of certainty with the *intolerance* for the slightly unrealistic assumption of measurability and interpersonal comparability of individual utilities. The latter assumption is ideologically inconvenient because of its strong egalitarian implications for income redistribution.

6. Irving Fisher (p. 332) held that every factor return is some form of interest; " . . . interest is not a part but the whole of income". Corroborating, Samuelson (Cont'd on next page)

Strangely enough, it seems that Marxist economists are equally tolerant of the assumption of certainty as it helps them lump together interest, profit and rentals in one category "surplus value", which makes it easier to denounce them together.

Much confusion in thought has stemmed from the unfortunate tendency to derive results on the shaky foundation of certainty, then carry them over to the real world of investment, which is decidedly uncertain. A prime example of this is the use of interest rate as a discount factor even under conditions of uncertainty as we shall see now.

In conclusion, we note that the assumption of certainty is a misleading simplification in capital theory. It is empirically unsound and Islamically untenable.

3. Discounting Under Uncertainty For A Private Investor

Many project evaluation and engineering economy books and manuals simply refer to rate of interest as the discount rate. This is because they are implicitly adopting the poor "perfect foresight" assumption.

When the fact uncertainty is explicitly admitted in the discussion, economists generally recognize that:[7]

- *Continued*

writes: "In principle, *all* the non-wage part of NNP could be reported as interest on the value of property: if selling ourselves into slavery were not illegal, even wages might be reported as interest on the capital value of man!" (P. 599 n). Such statements are apt to mislead, and make sense only in a world of oracles where profits, rentals, wages and the capital values of buildings, machines and men are perfectly known for all future periods just like the principal and interest payments of a loan. What a myth!

Fisher acknowledges, implicitly on p. 331 and explicitly on pp. 33-34, that the validity of the above quoted statement depends on the absence of risk. Samuelson unfortunately chose to ignore this crucial qualification.

7. Bromwich, for instance, writes:

"In a world of certainty and perfect markets. . . the rate of interest serves as the cost of capital (i.e. discount factor)" ". . . our objective. . (is) . . . to derive discount factors which can, in an uncertain world, serve the same role as did the rate of interest under certainty. . ." (Bromwich, pp. 113 and 114). See also Dorfman, p. 244, Keirstead, pp. 58-60, and (by implication) Samuelson, p. 614.

(a) the rate of interest and the rate of return (on equity) are no longer equal even in perfect markets,

(b) the rate of return and not the rate of interest is the proper rate of discount.

Discounting by a rate of return is based on the principle of opportunity cost. Since no real investment in an economy can be undertaken without facing risks, cash flows of such investment should be discounted not by a riskless interest rate, but by their true opportunity cost. And "the opportunity cost of venture capital (equity investment) is what the funds would earn if invested as venture capital in some other firm" (Dorfman, p. 245). In the words of Lamberton: " . . . . the firm should discount its future income at an outside lending rate which differs from the borrowing rate. . . . . The lending rate could be measured in terms of the rate which the firm believes it could obtain by taking equity interests in other firms that appear to involve an element of risk about the same as that involved by further investment within the firm." (Lamberton pp. 113-14).

Many economists choose to arrive at the rate of return by an indirect route called "*the risk premium method*". In the face of uncertainty, they recommend obtaining the proper discount factor by adding a risk premium to the pure interest rate (Baumol, pp. 478-79; Prest and Turvey, p. 171; UNIDO, p. 114). I recommend, for two reasons to be given now, that this method be rejected even though it leads, when properly applied, to a rate of return which is the correct discount rate.

The first reason for rejecting the risk premium method is based on positive economic grounds. For that method begs the question of how the risk premium is to be determined and "comes with no explicit instructions which permit us to calculate the appropriate value of . . . (the premium, which). . . must usually be estimated on the basis of some sort of judgement or intuition." (Baumol, p. 479).

I wonder why Professor Baumol did not point out an objective way that permits the calculation of the appropriate "risk premium" and that shows at the same time how futile that method really is. The way is to select a premium just high enough to equate the pure rate of interest to the rate of return on a risky venture. Then why not use that rate of return as a discount factor in the first place! It is thus clear that the risk premium method, to be objectively applied, requires prior determination of the rate of return to which it is supposed to lead.

The second reason is ideological. The risk premium method may be used in effect as a face-saving device to avoid saying that the rate of interest is no longer valid for discounting under uncertainty. We should deny the defenders of interest this theoretical crutch.

In the next subsection we survey briefly the question of the "cost of capital" as it further corroborates the use of the rate of return as a discount rate.

4. The Discount Rate in the Theory of Corporation Finance

The question of discounting looms large in corporation finance theory but goes there under the rubric of: "*the cost of capital*"[8]. The theory of the cost of capital has much significance for project evaluation, but has received surprisingly. little attention from economists generally and no attention from Muslim economists in particular. That theory should prove to be a particularly fruitful area of study for Muslim economists because, unlike so much economic literature on capital and interest, it: (a) explicitly recognize uncertainty, and (b) analyzes the consequences of equity *vs*. debt financing of corporations, which should throw some light on the economics of profit-sharing at the level of the individual firm.

The most commonly assumed goal for the firm in the literature of corporation finance is that it tries to maximize the market value of its common stocks, i.e. the value of its share-holders' equity. The "cost of capital" to the firm is that rate of return which newly raised funds must generate in order to maintain the market value of the company's outstanding shares (Lewellen, pp. 2 and 6). The cost of capital, in other words, is nothing but a discount rate that should be applied to prospective investment projects of an existing corporation to best serve the interests of its old share-holders. In still other words, the cost of capital is the required rate of return that a new project must achieve in order to be acceptable to a firm (Bromwich, p. 113).

Let us first pose the question to which the cost of capital theory seems to give an unequivocal answer: What is the cost of capital (discount factor) that an all-equity firm should apply to a new project?[9] The answer is that it is the discount (capitalization) factor applied by the market to the future earnings of the firm, and is equal to:

$$\frac{\text{Earning per Share}}{\text{Pr ce per Share}}$$

This discount factor is nothing but the rate of return of the firm's previous investments (Lewellen, p. 44 and Bromwich pp. 115-120). This answer is shared by both the "traditional" theory of corporation finance as well as by the "new"

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8. The cost of capital is an intricate and large subject and I shall go into it only as far as my limited knowledge permits. I hope that others who are better equipped would give a more authoritative assessment of the matter.

9. An all-equity or unlevered firm is one that is completely financed on a profit-sharing (equity) basis. It is contrasted to the levered firm which finances part of its capital by interest-bearing debt. As is well known, Islam permits only all-equity firms. Interest-free loans (*qard-hasanah*) are meant to alleviate personal hardships and are not a method of financing business in an Islamic system.

theory of Modigliani and Miller (M-M) (Bromwich, pp. 138 and 147).[10] Thus even in a capitalist economy where interest is permitted, an all-equity firm should use a (risky) rate of return and not an interest rate as a discounting factor.

Since Islam permits only all-equity firms, we may let the argument rest here. But I cannot resist the temptation of making a brief excursion into the M-M model as it presently dominates the cost of capital discussion. According to M-M, even if a firm uses borrowed funds at a fixed rate of interest to finance a new project, it should not use that rate of interest for discounting but should use instead the same risky rate of return that an all-equity firm uses. This, in simple words, is M-M famous "proposition 3" (Bromwich, pp. 147-150; Lewellen, p. 72; Mossin, p. 123; and Baumol, pp. 494-95).

Several lucid presentations of M-M model are not available to the interested reader, so I shall not attempt here to summarise that model's premises and logic.[11] Suffice it to say that even after relaxing some of M-M assumptions, it remains true that the rate of interest is irrelevant to a firm's cost of capital while the rate of return is still relevant (Lewellen, pp. 52, 72 and passim.)[12]

To avoid misunderstanding, let me underscore the way in which the question of the cost of capital relates to this paper.

(a) Both M-M model and the traditional view in corporation finance agree that the discount factor of an all-equity firm should be the rate of return of its risk class and not the rate of interest. (This conclusion depends as usual, on simplifying, assumptions, see Bromwich pp. 118-120.) This is quite relevant to an Islamic profit-sharing firm.

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10. The earnings-price ratio is one method of estimating the cost of capital to an all-equity firm. In principle, the traditional theory holds that the cost of capital to a firm is a weighted average of the various sources of finance (new equity, debt, etc.) where the weights depend on the financial structure of the firm. In an all-equity firm, that average reduces to the cost of equity alone. As for M-M's theory, it asserts that regardless of its financial structure or method of financing, the cost of capital to a firm is essentially the rate of return of its risk class (Le. the rate of return earned by other firms that are subject to similar degree or risk.)

11. An introduction and summary is provided by Baumol with characteristic lucidity (pp. 488-96). A clear and thorough presentation of M-M model and the controversy it generated is in (Bromwich, pp. 112-167). Lewellen (pp. 9-106) adopts M-M views and gives a coherent and highly readable presentation. J. Mossin gives a very rigorous elaboration of M-M model, relating it to the theory of general equilibrium. Mossin's work (which I make no pretence to have comprehended) seems an essential framework for a theory of profit-sharing that Muslim economists should work out.

12. Other factors that become relevant are the tax rates.

(b) M-M proposition 3 is not universally accepted. For those who accept it, it provides additional support for taking a rate of return as a discount factor even for a non-Islamic debt-using firm.[13]

(c) The cost of capital discussion underscores the importance of distinguishing the rate of interest from the discount factor. "Confusion has stemmed from the use of cost of capital for both the rate at which funds can be borrowed and the rate at which a stream of future cash flows should be discounted to measure its present value. . ." (Lamberton, p. 113).

5. Additional Methods for Dealing with Uncertainty in Project Evaluation

The first implication of uncertainty for discounting is to make the rate of interest and the rate of return distinct and different, with the latter rate and not the former expressing the true opportunity cost of real investment. This has been the main conclusion of the last two subsections - 3 and 4. Different approaches have been proposed to deal with uncertainty in project evaluation, with the following approaches rather widely discussed:[14]

(a) Discounting for risk, or the risk premium method.
(b) The finite horizon or payback period method.
(c) The conservative forecast method.
(d) Professor G. Shackle approach.
(e) The probability theory approach.
(f) Sensitivity analysis.
(g) Neumann-Morgenstern utility approach.

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13. I do feel, however, that at the common level of abstraction of most economic theorizing, that proposition can hardly be unacceptable to an economist. For it is generally agreed that the most important assumptions behind that proposition are two (see Baumol and Malkiel):
    - the absence of transactions costs, and
    - the absence of taxes (or the absence of differential tax treatment between Individuals and corporations).

    Both assumptions, we need hardly add, are routinely made without ado in much of economics generally, and in capital theory in particular.

14. Consideration of these approaches falls outside the scope of this paper, and is available in the following sources among others: Baumol (pp. 453-60) introduces briefly all these approaches except (c). Reutlinger has an operational monograph on (e); Bromwich (pp. 243-60) explains most approaches including (c), and has an unusually lucid presentation of (e).

We propose now to consider briefly the relationship between these approaches to uncertainty on the one hand and the question of discounting on the other.

Several scholars including Professors Baumol, Prest and Turvey (p. 171) and Bromwich present the above approaches as *alternative* ways for dealing with uncertainty. It is not quite correct in our opinion to view all the above methods as alternatives. The reasons are as follows:

As noted earlier, method (a) is in effect equivalent to the use of a rate of return as a discount rate.

Once uncertainty is introduced, two consequences follow. The first, which is *external* to the project, is that the true opportunity cost of resources used by the project becomes the rate of return on other equally risky projects. To take care of this consequence, one must discount by a rate of return, i.e. must use method (a).

The other consequence, which is internal or specific to the project, is that the cash flow of each future period is no longer a single number held with certainty, but rather a spectrum of numbers, each with a given probability. Methods (b) to (g) above are meant to take care of this second consequence of uncertainty and should be viewed as alternatives to one another and not as alternatives to method (a).

We may say in conclusion that to deal properly with uncertainty, two things or methods must be applied in project evaluation:

- A rate of return (or the equivalent risk premium method) should be used in discounting, to reflect properly the true opportunity cost of project cash flows.
- And in addition, one of methods (b) to (f) should also be applied to reflect the variability or stochastic nature of project cash follows.[15]

6. Discounting for Public Projects

All our discussion so far has been concerned with discounting in private investment projects. To what extent should the conclusions be modified when evaluating investment projects under uncertainty? We now turn to this question.

The essential difference between a private and a public project is that the latter is to be evaluated on the basis of what is good for society as a whole.

15. Intuitively speaking, one may perhaps say that an uncertain sum cannot be well described in less than two parameters (an expected value and a measure of variability). It should cause no surprise if two instruments are needed to deal with it properly.

Western economists have traditionally assumed that redistribution will be taken care of by other public measures such as taxes, and that efficiency is the sole basis for project evaluation in general, and for the choice of a discount rate in particular.[16] Even within that narrow frame of reference, there are two different views, which A. Sandmo summarizes well, about the proper discount rate:

> *"One view, which has been advanced by Hirshleifer . . . . and supported by Diamond. . . . is that differences in rates of return on capital in the private sector of the economy reflect differences in riskiness among alternative lines of investment, and that these differences are of normative significance for the allocation of capital in the public sector. Thus, when discounting costs and benefits of a particular type of public investment, the government should take as its discount rate the rate of return on capital in a private industry of similar riskiness. Another view, which counts Samuelson. . . and Vickrey. . . among its supporters, is that because of the extremely large and diversified investment portfolio held by the public sector, the marginal return from public investment as a whole is practically risk-free and should be equated to the market rate on riskless bonds . . . Arrow and Lind come to the same conclusion. . . "* (Sandmo, p. 192).

Sandmo's own analysis leads him to the first view that:

> *"the public sector's discount rates should always contain a risk margin, and that this margin correspond to the one used in the private sector for investment in the same risk class. In the stock market economy this margin can be inferred directly from market data; in the unincorporated economy an averaging of individual risk margins is required".* (Sandmo, pp. 207-08).

Let us now comment briefly on the Samuelson-Vickrey view that the marginal return from public investment is practically risk-free.

Arguing against Samuelson is seldom risk-free. I shall nonetheless indicate certain practical considerations that undermine the realism of Samuelson and Vickrey view.

We note first that Prest and Turvey (p. 171) take the definite stand that" . . . there is no reason to argue that public investment projects are free from uncertainty. . ." but they fail to elaborate. Secondly, we note that Samuelson-Vickrey argument is essentially statistical: the public sector's investment is large and diversified, hence it is riskfree. This is another way of saying that the variance of the sum of the returns on public investment is less than the sum of variances of

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16. This paper is essentially focussed on the logic of discounting and its Islamic ramifications. We steer away from the still-raging controversy regarding the optimal discount rate.

individual projects. (This is also one well-known argument for portfolio diversification.)

But for diversification to reduce risk, two conditions are required: (a) returns on different projects should be statistically independent and (b) the size of each project should be small relative to the total. Neither of these two conditions are often met in practice, especially in less developed economies. There, a single investment is often quite large relative to a given economy, (e.g. a steel mill or a major dam). Moreover, the same central administration selects and executes most of the country's projects whose outcomes tend to be highly correlated as they are all subject to similar levels of (dis-) honesty and (in-) efficiency. This tends to make the returns on many projects highly correlated. This is particularly likely in marginal investment, which is crucial for decision and which is much smaller and less diversified than total public capital stock. Thus on purely empirical grounds, Samuelson-Vickrey argument is not, in our view, realistic. But in fairness to Vickrey and Samuelson we should add the following points:

(1) Samuelson's (1964) comments are quite circumspect. No-where he says (in pp. 93-6) that the government should apply a riskless interest rate to public projects. He even gives counter examples where a heavy "risk premium" is in order. He basically asserts that public investments have lower risk because of diversification.

(2) Vickrey is quite emphatic in his view (pp. 88-92) that public investments are virtually risk-free. We have given answers to some but not all of his arguments.

The main conclusion of this section is that even from the narrow perspective of mere economic efficiency in capitalistic economy, one major view is that public investments should be discounted by a rate of return rather than by a riskless interest rate. There can thus be no question that in an Islamic economy which rejects interest and permits rates of return, discounting in public projects can and should be based on the latter rates, adjusted, when necessary, to achieve social optimality.

IV

AN ISLAMIC PERSPECTIVE ON DISCOUNTING

In this part of the paper we first consider (in Section IV.1) whether discounting should be accepted on the ground that it is one condition for investment efficiency. An Islamic viewpoint is presented on the logic of discounting (Section IV.2) and the propriety of using so-called "compound interest tables" (Section IV.3). The Islamic stand on discounting is contrasted (Section IV.4) with the Marxist stand. Then we examine (Section IV.5) the need, if any, for using a shadow interest rate in an Islamic economy.

1. Discounting, Efficiency and Ideology

Economists generally agree that to ignore discounting when it is warranted does lead to loss of efficiency. Even Marxist economists, who have ideological reasons to reject discounting (as we shall indicate in Section IV.4) seem to recognise discounting as one requirement for investment efficiency.

It is well known that prevention of *Israf* (waste) is an important Islamic goal which clearly favours efficiency. May we not use this fact to accept discounting Islamically? The answer is: Yes, provided that discounting is not undesirable on other Islamic grounds.

We have pointed out earlier that Islamic uneasiness about discounting stems largely from its alleged connection with interest. If discounting were to require the acceptance of interest, there can be no doubt that it should be rejected, even if doing so entails the loss of some potential output. For Islam places a high premium on achieving economic justice by eliminating interest.[17]

Fortunately, however, there is no need to make this hard choice. We have clearly shown that the rate of return on equity is the proper discount rate in the uncertain world in which we live.

Thus we may conclude, on the ground of efficiency, that discounting by a rate of return is desirable to achieve the Islamic objective of avoiding *Israf*. The Islamic acceptability of this conclusion receives further support in the following section.

2. Permissible Vs. Forbidden Discounting

In order to know whether the logic of discounting as such is acceptable or not in *Shari'ah*, I posed the following hypothetical situation to two prominent *Shari'ah* scholars.[18]

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17. We should not be stampeded into accepting whatever efficiency may require. After all, the price of inefficiency is same lass of output. Unless output is the only goal in a system, overall system optimization logically requires the willingness to sacrifice some output (e.g. disregard efficiency) if necessary for achieving other goals.

18. Dr. AI-Siddeeq A. AI-Dareer Consultant to the Faisallslamic Bank in Sudan, and Sheikh Mustafa Zarqa, Professor of Islamic Law, University of Jordan.

"A man is earning 10 per cent profit on the average on his Invested capital. He is offered the chance to participate in a venture which has the prospect of giving back 130 dinars after three years, on each 100 invested now. He figures that if he keeps 100 dinars invested In his own business for three years, it is expected to grow to 110 at the end of the first year, 121 at the end of the second and more than 133 at the end of the third year. Based on this method of calculation he rejects the proposed venture on the ground that he expects to make better profit in his own business."

Both scholars agree that from an Islamic point of view, there is nothing wrong in this logic or method of calculation for comparing investment alternatives.

As we know, all discounting procedures are basically based on this type of calculation, usually tabulated and repeated for different values of the discount rate or assumed rate of return.

Another way of looking at this matter is to ask: Isn't a Muslim permitted to choose any of several *Halal* investment opportunities open to him? The answer is certainly: Yes! It is equally permissible to choose, out of several *Halal* investments the one which gives a higher return. Discounting the cost and benefit streams of a project is equivalent to the assertion that we have the right and the opportunity to invest any resources used up or released by one project in another whose rate of return is equal to the discount rate. As long as that other project, whether actual or potential, is a permissible type of investment, the process of discounting is quite permissible.

We have been considering in this paper only the discounting of prospective cash flows of investments. We have not considered discounting of bills or promissory notes, as this falls completely outside the scope of this paper. It is important to note that discounting bills is nothing but lending at interest to the owner of the bill. This is clearly and unequivocally prohibited in Islam.

3. Using the "Compound Interest Tables"

Now we are ready to answer the question: Is it proper to use the socalled "compound interest tables" while condemning interest? Our conclusion is that this is entirely proper and involves no contradiction.

We should first of all recognise an often-forgotten truth which Irving Fisher was at great pains to assert, namely - that the rate of return is a primary phenomenon originating from real investment quite independently from the rate of interest which arises from lending borrowing relationships. Robinson Crusoe may be able to calculate rates of return for some simple projects facing him even though an interest rate is inconceivable in his one-man economy. It is meaningless to think of Crusoe lending to himself at interest! Similarly, a modern firm which decides, for whatever reason, to completely shut itself off from the outside capital market (i.e. no borrowing and lending and no new equity financing) can still meaningfully calculate rates of return for various internal projects, and rationally allocate its retained earnings among them.

But even though the rate of interest and the rate of return have two different origins and consequences for economic agents, yet, the two rates have clear apparent similarities. Both are percentages, and have strong interaction as economic variables. And the formula for using one or the other in discounting, just like the physiology of bearing a baby in or out of wedlock, is exactly the same.

It is undeniable, however, that the expression: "compound interest tables" is repugnant to a careful Muslim, is non-neutral and in fact not quite correct as a name. The basic formula from which such tables are calculated[19] have no intrinsic connection to interest nor even to economics. It is, simply, a mathematical expression for any quantity that grows or declines regularly, and has been used by scientists to represent the growth of bacteria, animal and human populations, and the decay of radioactive materials. The same formula has been used by economists and other social scientists to approximate the growth and decline of many economic and social variables. The fact that this same formula can also be used to calculate the growth of an interest-bearing loan is no reason for insisting on calling it "the compound interest formula", nor for avoiding its use if it is so called.

It is useful here to recall a relevant rule of *Shari'ah*: "Contracts are to be judged by their intent and meaning, not by their terminology and form".[20] As long as discounting is permissible, the tool that is used to perform it - be it a table or a formula - is acceptable.

I do recommend nonetheless that Muslims refer to these tables (and the formulas on which they are based) by the neutral and more factually correct name:

- Periodic Growth (and Decline) Table, for that based on the formula:

$$P_t = P_0 (1+r)^t$$

- Continuous Growth (and Decline) Table, for that based on the formula:

$$P_t = P_0 e^{rt}$$

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19. $P_t = P_0 (l+r)^t$ and $P_t = P_0 e^{rt}$, for periodic and continuous growth (or to decline) respectively, where t stands for time, r for the discounting rate and P for the value of the variable at t-0.

20. This is Article No.3 of *Al-Majallah* (the famous Islamic Civil Code of the Ottoman Caliphate) and expresses, in the context of contract law, a fundamental principle of *Shari'ah* (Zarqa, Mustafa, Vol. II, para. 572-73).

It is also desirable in these formulae to use the letter (r) to stand for the rate of return as discount rate, and leave (i) to stand for the rate of interest.

4. Contrasting Islamic and Marxist Positions on Discounting

Marxist theory regards both interest and profit as forms of surplus value which stem from the exploitation of labour and must be eliminated in a socialist state. For this reason, discounting was neglected in the economic planning in most communist countries. After Stalin, several Soviet economists were gradually able to argue that discounting is theoretically essential to optimal investment planning. As a result discounting has been shyly introduced, implicitly under different names,[21] or explicitly as a shadow price.

Some Western economists were quick to depict this matter as a theoretical retreat on the part of Marxist economists (Samuelson, 1976, p. 606; Eckaus, pp. 640-41). Does not the acceptance of discounting by Muslim economists represent a similar theoretical retreat?

I hope the reader will immediately see that such criticism is totally irrelevant to an Islamic economy in which profit is accepted as a legitimate source of income while interest is rejected. Rates of return based on profit provide the discounting factors used in such an economy. In contrast, the Marxists' dilemma is caused by their rejection not only of interest but also of profit. It is understandably embarrassing for them to have to admit that the supposedly exploitative profit rate has a necessary social function even under socialism.

5. Shadowy Argument for Using a Shadow Interest Rate

Some Muslim economists[22] have said that an interest-free Islamic economy must use a shadow or accounting rate of interest to ensure efficient allocation of investments. We shall now contend that to say so is to err twice. Firstly by conceding. the capitalist assertion that efficiency requires an interest rate, and secondly by adopting the Marxist defence that an accounting interest rate may be used instead (a superfluous defence for an Islamic economy which permits profits).

It would help to look first at the genesis of this idea.

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21. Mrs. Joan Robinson, the iron lady of economic sciences, also introduces discounting as one tool in socialist investment planning, politely calling it "a premium charged for investible resources as a determinant of the degree of mechanisation of technique (Robinson and Eatwell p. 280).

    For an authoritative account of the introduction of profits and capital charges in Soviet enterprises after the economic reforms of the 1960s see (Wilczynski, Chs. 2 and 7).

22. For references see Dr. Siddiqi's admirable "Survey", pp. 257-58.

a. *A False Lead*

Professor Samuelson adopts the commonly encountered argument about the role of interest in allocation, and presents it thus:

> *"the interest rate has an important function in capitalistic, socialistic or any other kind of economic system. . .(It) acts as a sieve or rationing device: all projects that can yield 10 per cent are undertaken before any projects that yield only 8 per cent. . . The interest rate must be used to allocate scarce 'capital supplies' optimally and to determine the priority of alternative projects".* (Samuelson, 1976, p. 640).

The grave defect of this argument is that it slurs over the crucial question of uncertainty - so let us examine it from that perspective:

(1) If perfect foresight is assumed, we may validly cross out in the above quotation the words "rate of interest" and write instead "the rate of profit" (or the "rate of rent" or the "rate of return on equity", because all these rates are equal in a world of oracles) (see Section 111.1). Truth is: in such a world, anyone of those rates serve equally well in the allocation of scarce capital.

(2) Coming down to our actual world of uncertainty, we see that Professor Samuelson's above assertion is not valid. For under uncertainty, the rate of interest and the rate of return diverge, and we have seen (Section 111.3) that the latter rate and not the former is then the proper criterion for project choice.

(3) Within the market sphere, it is not interest but profit which allocates scarce real "capital supplies". For it is obvious that interest is what businessmen pay, profit is what they earn. And it is elementary economics, my dear Watson, that businessmen invest not where interest is higher but where profits are higher![23]

b. *Is an Accounting Interest Rate Needed?*

Several Muslim economists, after uncritically conceding that only interest rate can allocate real capital, conclude that an interest-free Islamic economy should rely on an accounting or shadow rate of interest to allocate investment and evaluate projects. The erroneous argument by which that conclusion is usually reached runs as follows:

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23. Briefly, one may say that the interest rate allocates funds among borrowers, while the profit rate allocates real investments among projects. It is worth-noting here Dr. Chapra's important observation that whatever allocative functions interest is deemed to have, would carryover to profits in an Islamic system, as such profits comprise both a pure return on the value of funds invested, and a "risk premium" (both imputed and non-contractual).

(1) Because interest is banned in an Islamic economy, real capital has zero market price.
(2) But capital is scarce and must command a positive price for efficient allocation.
(3) The way out, so the argument goes, is to use an accounting rate of interest as a price for real capital.

But both (a) and (c) are wrong. In the actual world of uncertainty, real equity capital does not have contractual price, but it has nonetheless a real non-contractual opportunity cost that is expressed in the market by rates of return or the earnings-price ratios of common stock (Dorfman, pp. 245-46). Why not use this real price instead of chasing shadow rates of interest![24]

There is however a valid reason of using “a shadow price of capital". It is based on the argument that the market price (in this case the risky rate of return) may not express the true opportunity cost to society, 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 mayor may not use a shadow price of capital. It may need a shadow price for cement or shoe laces or capital etc., 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.[25]

6. Values and Markets in Islamic Allocation

We have tried so far in this paper to underscore the fact that suitable discount rates are generated from the legitimate economic activities within an interest-free Islamic economy. There is neither theoretical nor institutional reasons in such economy to keep looking back at real or shadow interest rates.

But our repeated reference to the acceptability of profits in an Islamic economy, and to the availability of market-determined discounting rates, should be understood in Islamic context. We certainly do not wish to imply that projects, rates of growth or intertemporal decisions generally, ought to be based in an

24. Or in the words of Professor M. N. Siddiqi, "if the idea is (to) . . . keep a certain rate of profit in view and reject such projects as fail to promise a return commensurate with that rate, why insist on calling it an accounting rate of interest?" (p. 258).

25. Further consideration, of why an interest-free Islamic economy can allocate capital efficiently, is provided by Zarqa M. Anas, 1978 from which this last paragraph is taken.

Islamic economy solely on rates of return and other market prices (even in purely competitive markets). Rather, Islam requires such decisions to be based on the economic calculus as well on, other relevant Islamic goals. For the public authorities, such goals are clearly enforceable. For individual, decision makers, non-market Islamic goals remain moral imperatives whose realization depends on the level of *Taqwa* in their hearts. A Muslim society is required, however, to see to it that by education, moral suasion, and if necessary, by compulsory regulation, individual economic decisions do not thwart the realization of Islamic goals.

The market activity in general (including rates of return) is one very important tool for allocation in an Islamic economy. But an Islamic society is goal-oriented and not consumption- and profit-oriented. The moving forces in society are Islamic major goals (some of which are economic) and not markets and profits. Thus the allocation of resources, distribution, and the rate and direction of growth will be aided but not dominated by market forces.

V

CONCLUSIONS

The overall conclusion of this paper is that the discount rate and the interest rate are two distinctly different things. Discounting prospective cash-flows of projects promotes efficiency in investment, and is quite acceptable Islamically. Discounting may be based entirely on rates of return in an Islamic economy which abolishes interest and even in a capitalistic economy which does not.

We recapitulate now the findings of this paper in a simple and positive tone, using the symbols: r, i, to stand for a rate of return and a rate of interest respectively.

1. Discounting is one definite requirement for efficiency in investment at both the private and social levels.

2. The logical and consistent basis for discounting rests on the empirical fact that investment very often is productive over a period of time (has positive expected net value product). Hence resources received earlier have the opportunity to be more productive through risky real investment than resources received later. Therefore, resources received later should be discounted by an expected (r) on real investment. Since funds in an Islamic economy can not be loaned out at interest but can be advanced as equity in real investment, funds received later should also be discounted by an expected (r) on real investment. This may be considered a minimal argument that can hardly be disputed in the context of *riba*-free economy.

3. But even in a *riba*-ridden economy in which funds can be loaned out at interest, it is also true that, because of uncertainty, project cash-flows ought to be

discounted by (r) and not by (i). If i=8%, and the expected internal rate of return of a project is, say, 8.5%, no businessman (and hopefully no economist) would put his money in such a project. By ignoring uncertainty, discounting by an (i) would lead to the acceptance of such projects.

4. It is always correct to say without "ifs" or "buts' that the proper discount rate is (r). This is true in the real world of uncertainty, as well as the mythical world of perfect foresight in which (r) and (i) are identical.

5. We found the alleged dependence of discounting on interest to be largely illusory - the unfortunate remnant of a simplifying but misleading assumption in capital theory that says: all men are oracles! Making this "perfect foresight" assumption seems to be an occupational disease among capital and interest theorists. By concentrating on the trivial case of perfect foresight they developed the habit of using the (i) interchangeably with the (r). We emphasize that in all projects facing uncertainty - that is, in all projects - (r) must be distinguished from, and used in discounting instead of (i).

6. Some economists prefer to reach the rate of return by adding a 230 Fiscal Policy and Resource Allocation risk premium to a "pure" interest rate. Technically, we need not quarrel with this method as it reaches the same destination, though by an un-necessarily round-about road. Ideologically, however, we reject it, because it keeps the interest rate as a reference point. One may say here as much, or as little, as one says about figuring the cost of supporting a wife by adding a housekeeper premium to the "pure" cost of keeping a mistress!

7. A great deal of confusion can be avoided and clarity of thought achieved if we keep a clear distinction among: discounting, the rate of return, the rate of time preference and the rate of interest. Let us consider them from last to first. The (i) arises out of borrowing-lending relationships among economic agents. It is contractual in nature.

The rate of time preference is a psychological concept expressing an individual's relative valuation of consumption that occurs at different points in time.

The (r) arises out of investment phenomenon and is "entirely independent of the institutional arrangements of the economy" (Solow, p. 16). The rate of time preference, one may add, is also independent of such arrangements. That is, rates of return and rates of time preference can be clearly defined and do exist whether society permits or forbids interest, private ownership or even contracts.

Discounting can be squarely based on the (r), or very shakily based on the rate of time preference. Both rates exist and are definable even for a one-man Robinson Crusoe economy where lending and borrowing, hence an interest rate, cannot possibly exist. Thus, discounting is a primary concept that is distinct from, and logically antecedes, the rate of interest. It is quite understandable then, that an economic system may accept discounting while rejecting interest.

8. Discounting is acceptable Islamically, even desirable, to the extent that it promotes investment efficiency. Discounting is mathematically performed using "Periodic Growth (and Decline) Tables" and formulas. Using these is also acceptable, even though they are often misnamed: "Compound Interest Tables."

9. All the above statements are directly applicable to private projects. Regarding public projects, there is an on-going and inconclusive debate on whether efficiency calls for discounting them by a riskless (i) or by a risky (r). Since productive efficiency is not the only goal in an Islamic system, and interest is clearly prohibited on grounds of justice, there should be no hesitation in recommending the discounting of public projects by (r). That recommendation should be made regardless of the outcome of that on-going debate on efficiency. To the extent that public projects are deemed less risky, one simply chooses a less risky, usually lower, rate of return.

10. Rates of return are usually higher than rates of interest. The use of the former rates in discounting public investments may lead, one may think, to a bias towards short-lived projects. This misgiving, however, is not warranted.

Project choice from an Islamic point of view should be based on *several* criteria that include, beside (r), an explicit concern for future generations.[26] Furthermore, economists generally agree that productive efficiency very often requires the adjustment of market data before using them for public decision. *How* to adjust market (r) or (i) in order to obtain a socially optimal discount rate (d) is still an intensely debated issue. Whether the planner starts his search for an optimal (d) from a high (r) or a low (i), you cannot anticipate if his final (d) will be high or low. It all depends on his school of thought and his assessment of the realities of the particular economy. If, for instance, he believes markets to be myopic and/or excessively averse to risk, he will reduce the observed market rates. If, on the other hand, he thinks that the exchange-rate is artificially low and real capital artificially cheap, he will end up recommending high (d). Using rates of return, therefore, need not lead to consistently high or low public discount rates.

Legitimate economic activities within an Islamic economy generate rates of return, not interest rates. To keep on thinking about an Islamic economy in terms of the interest rate – much like counting on one's fingers – is just a bad habit. Most would grow out of it, but with some it may become an old-age syndrome!

Let us theorize about an Islamic economy in terms of its own variables. Let us navigate its peerless skies, guided by its own stars.

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26. For details see Zarqa, M. Anas (1981).

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Comments

Dr. M. Fahim Khan

The article by Dr. Anas Zarqa has been addressed to an issue which is crucial not only because of its importance in the field of applied economics but also because this is likely to be one of the main questions that development economists would be worried about if the proposition of Interest-Free Economy is put in practice.

The paper has been primarily addressed to the following two issues:

(a) Discounting in Islam.
(b) Role of Islamic Values in Project Evaluation.

Whereas the subject of the "Role of Islamic Values" has been touched only in brief, the detailed discussion has been offered to answer the following questions about "discounting" in Islamic perspective.*

(i) Is discounting allowed in Islam?
(ii) Does zero interest on loans imply zero discount rate?
(iii) If discounting is acceptable, what should be the discount rate?
(iv) If a discount rate is established, does not this mean admitting interest through the window after kicking it out of the main door?

The author's answers to these questions, in brief are:

(i) Yes:

"The opportunity and willingness to engage in real investment and assume risk and the fact that the expected value of net productivity of investment is positive together justify discounting".

(ii) No.
(iii) The (risky) rate of return on equity should be the discount rate.
(iv) No:
"Because discounting is based on the (risky) rate of return on capital which is accepted as a legitimate source of income in Islam."

I must appreciate the efforts of Dr. Zarqa in giving an elaborate discussion of discount rate that would not conflict with Islamic Economic principles. I would, however, like to raise a few points that render Dr. Zarqa's paper, in a sense, quite confusing from the point of view of its contribution to the theory of Islamic Economics.

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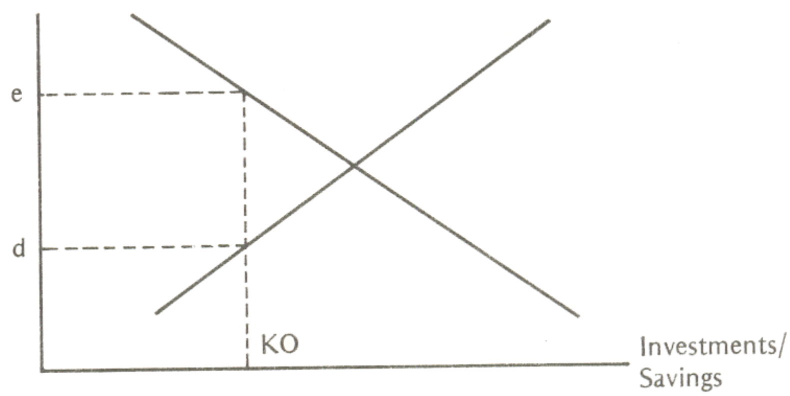
* These questions were derived from Dr. Zarqa's original paper (Editors).

1. The reader, who is keen to look for "the concept of Discounting in Islam" in a paper entitled "Economics of Project Evaluation in Islamic Perspective", is completely lost when the author treats the price of capital and the rate of discount to be the same and then revolves most of his discussion to justify that the (risky) rate of return on equity rather than interest rate is the correct measure of the price of capital. The discount rate and the price of capital can be assumed to be the same only in the conditions of general equilibrium in the economy. As soon as we deviate from the conditions of equilibrium in the economy we are again in dark as to what should be the discount rate. The developing countries, to which most of the users of Dr. Zarqa's paper belong, generally face a situation of excess demand of capital in the economy resulting from various economic and non-economic factors. In such situations, the discount rate will significantly diverge from the price of capital. For illustration, see the following diagram.



The availability of capital at KG is showing a situation of excess demand in the capital market. In this situation, the expected rate of return on capital (e) is higher than the discount rate (d) Dr. Zarqa's formula, to use expected rate of return as a discounting factor, will lead to an' underestimation of future benefits. The efforts that Dr. Zarqa has spent in proving that under realistic assumptions interest rate and rate of return on capital converge (a fact already established in modern economics) would have been more fruitful if he had indicated that under realistic assumptions the discount rate (MRS between future and present consumption) and the rate of return on capital converge in an Islamic perspective (if he really believes that expected rate of return should be a discount factor).

2. I think it is this digression from the discussion of discount rate to the discussion of price of capital, that has led the author to justify the use of the return on equity as a discount rate on the ground that economists have found cost of capital:

$$\frac{\text{(Earning per Share)}}{\text{Price per Share}}$$

as an appropriate discount factor in the investment decisions in the private sector. The economics of project evaluation from the point of view of a development economist is something entirely different from the investment decisions in the private sector corporate financing particularly ~en it is a question of the selection of an appropriate discount rate. Though the author refers to Samuelson to conclude that the "rate of return on capital in a private industry of similar riskiness" can be used as a discount rate for public investment, he does not explicitly realise that Samuelson's approximation for discount rate can have relevance only for Western economies under very restrictive assumptions about the sources of financing and the equilibrium conditions in the economy.

3. Another confusion arises from the author's assertion that "the opportunity and willingness to engage in real investment and assume risk – justifies compounding and discounting". This assertion implicitly assumes not only that all savers save for the purpose of investment but also that they are willing to take risk of losing their savings. In a society, particularly a developing one a large number of savers would not like to take any risk on their savings as the motives are to build-up support for old age, dowry for daughters' marriages, finances for children's education and hedge against accidents and uncertainties (in the absence of proper insurance programmes. These savings can be mobilized for financing the investments in public sector projects (or even in private sector) by borrowing these funds as loans with aguaranteed return of the principal. In an Islamic economy, these loans are not entitled to returns (profits) nor will they bear any interest. I think this is exactly what Dr. Zarqa meant when he raised the question, "Does not this zero interest on loans imply the use of zero discount rate and the disregard of the time dimension of costs and benefits", but Dr. Zarqa does not seem to have answered this question. Obviously, the expected rate of return on equity cannot be -applied to this source.

Though the title of the paper is "An Islamic Perspective on the Economics of Discounting in Project Evaluation" the author concentrated his efforts on determining a discount rate for the allocation of capital in an Islamic economy despite that he had himself pointed out in the beginning of his paper.*

> "Project Evaluation is related to, but different from the question of the allocation of capital"

With such emphasis, the paper on "An Islamic Perspective on the Economics of Discounting in Project Evaluation" was expected to have been addressed in quite a broader perspective, covering:

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* This comment becomes redundant with the revised version of Dr. Zarqa's paper. (Editors)

(a) The economic behaviour of Muslim consumers (and investors).

(b) The objective function of the society with specific reference to arguments of the welfare function in an Islamic economy.

Only passing remarks have been made on arguments of the welfare function of Islamic economy and nothing has been mentioned about the consumption behaviour of Muslims (which is constrained not only by economic injunctions but also by religious injunctions such as "Pay *Zakah* and *Khairat*' and "do not be extravagant". Unless the welfare function of an Islamic economy and the behaviour of a Muslim consumer is clearly distinguished from the existing concepts, the question, "Is discounting allowed in Islam?" does not arise at all. Once this perspective is clear, only then we can go to the next question that whether "price (cost) of capital" can be used as a discount rate or we need to devise some other measures to indicate the discount rate. That the (risky) rate of return on equity and not the interest rate is the appropriate measure of the "price of capital" is only a secondary question.

Dr. M. Ali Khan

Consider a project undertaken either by a private investor or a public authority. and which is expected to yield a stream of benefits bt over the next T years. Such a stream can be reduced to a single number, the present value, PV, of the project, by the well known formula

$$PV = \sum_{t=1}^{\omega} \frac{b_t}{(1+i)^t}$$ [redacted]

The question posed in this paper is whether the discount rate i should be zero or a positive number in an Islamic economy. In the author's own words,

"1. Is the concept of discounting and compounding based on un-Islamic values? If acceptable, does not this amount to admitting interest through the window after kicking it out of the main door?

2. If discounting is acceptable, while interest is prohibited, what should a Muslim firm or public authority use as discount factor in lieu of the rate of interest?"

The questions are clear. The author's answers to these questions are equally clear. His answer to 1 is No and his answer to 2 is "the rate of return on equity." Let us begin by considering the author's arguments underlying his answer to question 1.

As I understand it, the author sees a justification for discounting in that a sum of money earns an *uncertain* rate of return. Thus, he writes:

> ". . . . the opportunity and willingness to engage in real investment and assume risks and the fact that the expected value of NPI (net productivity of investment) is positive together justify discounting and compounding."*
>
> "Only equity funds that share in the risk inherent in investment can obtain a stochastic rate of return. This fundamental Islamic rule is quite in harmony with the concept of a stochastic opportunity cost of investment, which is the basis of discounting. Discounting is thus an entirely legitimate concept in an Islamic economy with a zero rate of interest on loans.
>
> As long as that other project, whether actual or potential, is a *Halal* investment, the process of discounting is entirely *Halal*.†

Also he writes,

> ". . . In an uncertain world - the. only world we know - interest rate and equity rate diverge, with the latter and not the former being the discounting factor."**

I reproduce all these arguments in some detail because despite reading and re-reading, I do not see how they justify discounting. Simple examples might illuminate my difficulties. I have one hundred dollars with which I propose to buy a machine. Now let us consider two hypothetical regimes. Under the first, the machine gives me a three-year stream of certain benefits of $ (75, 60, 40). Under the second regime, it gives me an uncertain stream with the above figures being expected values of the probability distribution of the returns in each year. Now the question is whether, under either regime, I should discount or not to determine whether I should buy the machine. As I understand the author, under the first regime we should not discount but that under the second regime we should. I agree that uncertainty is of the essence but from my own ongoing and at present superficial study, it seems to me that it is precisely because of the uncertanity, that discounting should not be used.

For a substantiation of this statement, let us assume that I borrowed one hundred dollars to begin with. This gives the classical situation of a *mudarabah*, *Qirad* or *Muqarada* studied in detail by A. L. Udovitch.*** In such a contract, it is precisely the uncertainty that is responsible for the institution of a profit-sharing scheme agreed to by all the parties in advance. I quote Udovitch in some detail (pages 190-192).

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* In the revised version of Dr. Zarqa's paper, the quotation does not exist. However, the same idea has been given in Section IV.2. (Editors)

† The quotation as such does not appear in the revised version of Dr. Zarqa's paper. The idea is, however, intact in Section III. (Editors)

** This quotation, in a slightly changed form, is in Section IV.5. (Editors)

*** Abraham L., Udovitch, Partnership and Profit in Medieval Islam, Princeton University Press, 1970.

> *Any proportional division of profit agreed upon between an investor and an agent is acceptable in a* commenda *contract. The only requirement, and one which is a* sine qua non *of a valid* commenda *contract, is that division of profit between the parties be strictly proportional. Most of the cases discussed in the legal texts are introduced by the formulaic phrase: "If a man handed over to another money in the form of a* commenda *on the basis of half the profit.*
>
> *"Any violation of the proportional division rule renders the* commenda *in valid. One violation frequently discussed in the sources is when one of the parties stipulates a specific sum of money from the profit instead of, or in addition to, his proportional share of the profits. Such an arrangement could conceivably lead to an inequitable situation in which one party would get all the profit and the other none, and is therefore invalid. In certain circumstances it would also come perilously close to a usurious transaction.*

Finally, goods are inadmissible as investment. To quote from Udovitch again (pages 180-181).

> *"There are two general considerations underlying the rejection. of goods and commodities for investment in a* commenda. *The first is the opposition to risk and injustified enrichment which permeates the entire Islamic law of obligations; and the second, its corollory, is the strict requirement in Islamic law that the object of any contract be determined* (ma'lum) *i.e. clearly known and defined."*

In explaining the ineligibility of commodities for the formation of a *commenda*, Kasani says:

> *"The* commenda *in goods leads to uncertainty concerning the amount of the profit at the time of division. This is so because the value of the goods is known only by estimation, chance, and conjecture, and will differ with the difference of those who do the estimating. And uncertainty in turn leads to dispute, and dispute leads to discord."*

In this connection one may also quote from Schachtt† (pages 14647).

> *Starting from the Koranic prohibition of a certain game of hazard* (Maysir)*, Islamic Law insists that there must be no doubt concerning the obligations by the parties to a contract. The object of the contract, in particular, must be determined (*ma'lum*, 'known'; opposite* majhul*, 'unknown 1. This requirement is particularly strict as regards objects which can be measured or weighed, which are subject to the prohibition of* riba*; no undetermined quantity* (juzaf) *is permissible here.*

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† Joseph Schacht, An Introduction to Islamic Low, Oxford University Press, 1932.

Schacht draws attention to the prohibitions on exchange of animal for meat, of wheat for flour; of dried dates for fresh dates on the tree (the so called *muzabana*), a similar contract concerning corn (the so called *muhakala*).

Udovitch establishes that identical principles apply to partnerships. We shall not go into these here but refer the reader to relevant chapters in his book on the: (1) Hanafi *Mufawada* partnership, (2) Hanafi Limited investment partnership (*Inan*), and (3) Maliki partnership.

In the light of all these passages and in the light of author's own insistence on the importance of uncertainty in investment, the question which occurs to me is what justification is the(e for the usage of any positive discount rate? To put the matter in another way, what justification is there to agree to compounding at any given rate or to regard the rate of profit to be any given number (say the rate of return on equity assuming it were known). It is precisely because of this uncertainty of the rate of return, that profit-sharing (at a rate determined between the parties) is advocated.

However, in all the passages quoted above there is an implicit assumption that only two time periods are involved. The investor gives the money to an agent for a specified time period and the latter then returns the principal to this investor along with his share of the profit (or loss). However, in project evaluation we are typically concerned with a stream of returns as in Formula. The question which occurs is whether shares of profit, not necessarily all equal, can be agreed upon for each year. The following passage from Sarakhsi *Mabsut* (22: 1 05) and Shaybani *Mudaraba* (112a-112b) shed some light on this.

> *A man gives to another one thousand dirhams as a* commenda *on a half-profit basis, and the agent makes a profit of an additional thousand. The two then divide the profit between themselves, with each taking five hundred dirhams while the capital of the* commenda *remains as it is in the possession of the agent. If the capital is then immediately destroyed, or if the agent trades with it unsuccessfully, or if it is lost after he trades with it, their division is void; the five hundred that the investor took is to be considered as part of his capital, and the agent owes him the five hundred which he took for himself, which is also to go to the investor as part of his capital. The money which was lost is from the profit; because the profit does not emerge until the capital is delivered to the investor.*

Udovitch, in commenting on this passage writes (page 247):

> *After the investment is restored and the remaining profit divided, the investor is perfectly free to immediately reinvest the original sum with the original agent according to the provisions of their previous agreement. This, however, is viewed as a completely independent and new contract,' and, In spite of the Identical* mise-en-scene, *any subsequent financial reverses would not in any way affect or undermine the finality of the earlier division of profits.*

In concluding my discussion of question 1, I would like to make two remarks which will serve as counterpoints to some implicit assumptions in the author's discussion. Firstly, there are influential economists in the West, who argue against a positive rate of time preference especially in projects undertaken by a public authority. Secondly, interest is not indispensable for the functioning of a private ownership economy.

To substantiate my first remark, I shall quote from Ramsey and Harrod. In his seminal and influential study on optimal growth, Ramsey* writes:

> *. . . it is assumed that we do not discount later enjoyments in comparison with earlier ones, a practice which is ethically Indefensible and arises merely from the weakness of the imagination.*

Ramsey is discussing the preferences of an authority planning over time for the whole economy. Harrod** goes even further by arguing against time preference on the individual level.

> *Time preference in this sense is a human infirmity, probably stronger in primitive than in civilized man. On the assumption – that a government is capable of planning what is best for its subject, it will pay no attention to pure time preference, a polite expression for rapacity and the conquest of reason by passion.*

Koopmans† puts the issue succinctly by emphasizing that a positive rate of time preference is essentially a problem of values.

> *Scratch an economist and you find a moralist underneath. What is at issue is clearly an intertemporal distribution problem: that of balancing the consumption levels of successive generations, and of successive stages in the life cycle of a given cohort of contemporaries.*

It is important to underscore how influential Ramsey's arguments have been in the modern theory of growth. There has been a seminal contribution by von Weizsacker*** to cope with the technical difficulties raised by the Ramsey-

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* Ramsey, F. P. (1928), "A Mathematical Theory of Saving", *Economic Journal*, 539-559.

** Harrod, R. F. (1948), Towards a Dynamic Economics, MacMillan, pp. 37 and 40.

† Koopmans, T. C. (1969), "Intertemporal Distribution and 'Optimal' Aggregate Economic Growth," in Fellner *et al*., *Ten Economic Studies in the Tradition of Irving Fisher*, John Wiley and Sons.

*** Weizsacker, C. C. von (1965), "Existence of Optimal Programmes of Accumulation for an infinite Time Horizon", *Review of Economic Studies*, 85-104.

Harrod prescription. To get a passing appreciation of Ramsey's paper on the modern theory of optimal growth, the reader is referred to, for example, Shell.*

It is important to be clear about what these authors are saying and what they are not saying. There is no implication in these statements as to whether the rate of interest in a market economy is positive or not. Instead the authors address themselves to whether a planning authority should discount its stream of benefits at a positive rate or not.

For a substantiation of my second remark, I refer the author to my paper† prepared for the conference which purports to show the irrelevance of the rate of interest, assuming it exists, for an 'optimum' allocation of resources in an idealized model of a private ownership economy.

I now turn to a brief consideration of the author's arguments in support of the conclusion that a rate of return on equity should be used. But what is this rate? In an economy with many commodities and even with complete certainty, there are as many such rates as the number of commodities that can be chosen as *numeraire*. Again, one of these rates is optimal only if the economy satisfies several idealized conditions. But for all of this, the author is again referred to see my paper quoted earlier. In conclusion, I cannot help pointing out that Western economists' emphasis on a setting with complete certainty is not because they do not consider settings with uncertainty unimportant but because they do not know how to handle them. In any case, it is currently a topic of active research. As such, I find the author's discussion on this issue very confusing. .

I have little to say on Section IV of the author's paper other than that I have great sympathy for general objectives as say spelt out under the phrase *al-Adl wal Ehsan* as brought out in "An Agenda for Islamic Reform." An attempt to be more specific leads us to problematic statements such as:

> *Thus rural sanitary water supply has much higher Islamic priority than rural electrification.*

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* Shell, K. ed., (1965), Essays In Optimal Economic Growth, M.I.T. Press.

† M. Ali Khan (1979), "General Equilibrium and the Non-Interest Pricing of Capital in an Islamic Economy" (included in the proceedings).

Discussion

Dr. Munawar Iqbal

Though Dr. Ali Khan is right in saying that the assumptions made by Dr. Zarqa may not really be valid, I think, the assumptions are not important and crucial and it would not make any difference to Dr. Zarqa's model whether or not these assumptions are valid. I, however, disagree with Dr. Ali Khan's view; that since we do not have a certain rate of discount available we should not discount. I go along with Dr. Zarqa's view in this respect.

Dr. Muhammad Tahir

I would like to have your answer to a question. Suppose a bank rents an equipment where the rent is decided in advance. Can we treat this rent equal to the discount rate? If not, what are the alternatives in this situation?

Dr. M. M. Metwally

There is no doubt that we must discount, because that is how we will have savings.

The use of the rate of return on equity is absolutely an Islamic principle and we can use it.

Dr. Zarqa's model, however, will be valid only at micro level and not at macro level.

I would also like to mention that he did not discuss in detail the other part of the paper relating to the welfare function of an Islamic economy which deserved much more attention.

Dr. Syed Aftab Ali

My first question is that when the author says that we may use rate of profit as discount rate; does he simply mean private rate of return or does he mean overall social profitability? My second question is whether Dr. Zarqa has thought of indexing the rate of return with the inflation rate before making it a discount rate?

Dr. Ahmet Klicbay

While discussing the ranking of projects, Dr. Zarqa mentioned that the first priority should be given to the projects providing the necessities and the secon~ priority to the projects providing conveniences. The projects providing luxuries should be taken up last. I think Dr. Zarqa is ignoring the concept of diminishing marginal utility. Due to the diminishing marginal utility it is possible that a project providing necessities of life at a stage, may be having utility lesser than the project providing conveniences. What we should do, in fact, is that we should rank the basket of projects, containing a combination of projects, providing the same utility.

Dr. Mahfooz Ali

Dr. Zarqa could make real contribution if he had pointed out how the problems arising out of the varying degrees of capital intensities and varying life of projects will be dealt with; how the changes in the external environments and character shall be treated and how the problem of capital budgeting will be solved in a situation where there are possibilities of negative rate of return arising on a future date.

Also there exists a certain amount of confusion with regard to the distinction made between the rate of interest and the rate of discount. To my mind the rate of interest does not happen to be the basic concept while discussing the discount rate.

I do not agree with Dr. Ali Khan that we cannot maintain that there shall be a positive time preference. As a matter of fact the question of a time preference arises simply because there is uncertainty in the external environment. What Dr. Ali Khan could say was that because of the presence of uncertainty in the external environment, we cannot be sure of one definite rate at which the stream of future income should be discounted.

Dr. Ishaq Nadri

I think much time has been spent on the controversies of various kinds of opinion. These issues are worthwhile but I think the discussion should really centre on what kind of economic model or economic arrangement would arise if we adopt a suggested scheme. For example, whether the suggested model would require an organised capital market or would it assume that the investors are somewhat risk-lovers; are the implications of no-debt in the investment.

The other point is that an assumption usually made in literature, and also made in Dr. Zarqa's paper, is that the rate of return between different projects are independent. That may not be so and it should be taken into account, i.e. what would happen, if the costs and benefits from one project spill over to the other project.

Dr. Monzer Kahf

There are two kinds of uncertainties. One is implied in the rate of return itself, and the second is implied in the distribution of that return between *Muqarid* and the entrepreneur. Dr. Zarqa should make a reference to this.

It seems to me that Dr. Zarqa has assigned collective objectives to the private investors or entrepreneurs. I think there is too much mixing between collective and individual welfare functions. I may say that the private decision-maker should be required not to harm the collective objective but I cannot say that private entrepreneur should pursue the collective objective.

Dr. Umer Chapra

It would have been proper if Dr. Zarqa had in some place, at least, specified that there is a substantial difference between the return on equity or profit that he is talking about and the counterpart of this term in capitalism. It very often creates a misunderstanding in the minds that switching from interest rate to profit does not imply a substantial change in the project evaluation in Islamic perspective. In the Islamic system when we talk about profit we talk of the residual after all costs have been met excluding interest. In other words, in Islamic system the profit or return will be equal to what it is in capitalism in the form of profit plus interest. The rate of return in Islamic system is completely different concept from the profit rate in capitalism. Such distinction between the rate of profit in Islamic system and Western system is crucial in explaining project evaluation in Islamic perspective. Unless this distinction is made, the confusion will prevail in our mind why you are trying to get away from interest rate and concentrating on profit rate.

Dr. Mohamed Ariff

Whether discounting is permissible in Islam or not, I cannot make any comment because I am not competent to do it. But assuming that discounting is desirable and permissible in Islam, I am not sure why Dr. Zarqa wants to replace interest rate with profit rate. Dr. Zarqa asserts that profit rate is a market indicator and, therefore, is valid for discounting. But interest rate is also a market indicator. Then how can one be Islamic and the other un-Islamic?

Dr. Sultan Abu Ali

I will confine myself to some practical points of view. It is believed that discount rate is used to determine the profitability of a project. I think the discounting should be applied with respect to project evaluation, only to rank the project so that viable projects could be determined and priorities could be assigned.

Dr. Zarqa is disregarding the concept of time preference. I disagree with him. The time preference does exist even in a Muslim community. The interest is abolished to eliminate exploitation but this does not mean that time preference does not exist and that we cannot rationalize discounting on the basis of efficiency.

Some confusion also arises when it is said that the presence of uncertainty justifies discounting. Suppose there is a hypothetical case that the benefits of certain projects or the cash flow which is achieved, in future is certain. In this project too, you need discounting because uncertainty is a different matter. Uncertainty is dealt with separately in the literature on project evaluation. It is on this ground that I do not agree also to the suggestion that the rate of return is probabilistic and, therefore, can be accepted as discount rate. One should not shrink away from facing the exact matters.

Dr. Omar Zubair

We have to understand the author's motive in totality. The pure time preference does not exist in Islam because if we admit its presence then we accept the concept of *Riba*. Time as pure time, therefore, cannot be rewarded. Time as a factor in the productivity of capital can, however, be accepted. The return on capital, therefore, is the only justification for discounting and the rate of return is a justified discounting rate. Once we have decided this we can then add risk element to this formulation. In the last step we can take into account the role of social values of Islam in selecting a project. These three things present complete picture of the project evaluation in Islamic perspective.

Dr. Ziauddin Ahmed

Dr. Zarqa's paper is an unusual exception with which I express 100 per cent agreement. I, however, want to comment on two objections raised by the discussants.

One is the objection on the positive time preference. Islam is *Deen-Alfitrat* and we being human being can have positive time preference. There is nothing wrong about having a belief in positive time preference.

The other objection that has been raised is that we can use Dr. Zarqa's formula only at micro level but not at macro level. My answer is that we can use this formula at macro level also. The only thing is that we need to find out some representative profit rate at macro level.

Dr. Masudul Alam Chaudhry

The rate of return on equity which may be called Internal Rate of Return has certain problems. When there are projects of different uncertainty, we will have a multiplicity of rates. How to select a rate of return in this situation? Now suppose we have lesser uncertain projects and we are almost certain about the rate of return, the discounting in that case will have no relevance.

Now suppose we have an absolute uncertainty in the economy. No discount rate possibly can be calculated in this situation. What rate will we use in this case?

Prof. Hussain Mullick

My feeling is that by using project evaluation techniques and cost-benefit analysis we are, in fact, over shadowing our development because the projects which will qualify on profitability ground will not be the development inducing project. I think the exercise of calculating discount rate need to be seen in the context of development exercises.

Mrs. Rehana Islam

What exact difference will it make if we use rate of interest or if we use rate of return on equity, particularly when Dr. Ziauddin says that we should use representative rate of return? Also it is important to find if the concept of positive time preference is acceptable in *Shari'ah* because this is the concept present behind the theory of interest.

Dr. Sharafat Hashmi

As I understand the discounting process is closely and inseparably linked with the concept of time preference. But the rate of profit includes the reward for risk-bearing also. Now compounding or discounting on the basis of time may be justified but on what grounds the discounting on the basis of risk will be justified.

Winding up by Dr. Zarqa

I clarify the objections in two groups:

One is the further elaborations required on the topic. If I could do all the possible elaborations required I would certainly be entitled to receive Noble prize. In this paper I have simply addressed myself to the fundamental measures that the economists face about the project evaluation and the basis of discounting in an

Islamic economy. I do not claim that I have answered all the questions in this respect. There are many questions unanswered. These questions I have left for the future writers on the subject.

The other type of objection basically raised by Dr. M. Fahim Khan relates to the proper or the best discount rate. If you want to defeat any author's argument you just ask him the question what do you do in disequilibrium. Of course, in disequilibrium, you do not have prices equal to market prices. The answer to the question of a discount rate in the capital markets of developing countries is not simple. If Dr. Fahim Khan has the answer, he may present it.

Dr. Ali Khan's comments were generally due to lack of communication. I never claimed that the time preference could not be positive. The only thing I wanted to point out is that the human beings consistently do not have a positive time preference. In this case if you want to base your discount rate on the basis of time preference then this would mean that sometimes you will discount and sometimes you will not. I have elaborated this in my paper. My point is that time preference is not a stable basis for the discounting neither for Muslims nor for non-Muslims. I would not feel easy on the idea of an intrinsic value of time. I do not think this is realistic. What is realistic is the consistency of the positive marginal productivity of capital.

Dr. Ariff and brother Akram Khan asked me about the substantial difference in the concept of discounting by replacing interest by the rate of profit. The difference is that one is legitimate and the other is illegitimate. We should not jump to the conclusions that two things which are physically same are same in nature also. What I am saying is that in Islamic economy, interest will be abolished but we will still have a market indicator to be used as the discount factor. Another objection is that I give the impression that discounting will be done only under uncertainty. This is obviously not true. We will discount even. when we have perfect certainty. My point is that when there is perfect certainty, interest and profit are one and the same thing and it does not make any difference, as to what concept you use? They are identical. But in the uncertain work the two concepts diverge and as Muslims we are not allowed to use interest rate. $0 the only legitimate discount rate is the profit rate.

I agree with my brother from Turkey about using the idea of Diminishing Marginal Utility in my deliberations. The concept is acceptable in Islam and I should include this concept when I revise my paper.

Winding up by

Professor Syed Nawab Haider Naqvi (Chairman)

Dr. Nadri made a very lucid comment and I agree that the author wasted much time in explaining things which are not strictly relevant. For example, his discussion of the concept of time preference is entirely irrelevant. I think, on this, there is a consensus and one should not waste time on the question whether or not time preference is positive.

The second point raised by Dr. Zarqa which is again not strategically very right is that he has spent a lot of time on proving that any model that talks about perfect foresight is silly and hence he proves that it is only uncertainty that counts. I do not think that Western economists committed some mistake or conspiracy when they have adopted models of perfect certainty or perfect foresight. The problem is purely of mathematics. The mathematics of uncertainty is so complicated that you cannot explain the matters in that context. Secondly, for dynamic systems we have a theorem which says that the expected values have tendency to converge to a path of certainty even if they are fluctuating around it. I will advise Dr. Zarqa against being sentimental about certainty and uncertainty.

On the whole, I, however, agree with the following:

(a) All the accounting practices are not invariant with respect to the value systems of the society. Actually he should have started his argument with this concept rather dealing it at the end.

(b) In the project evaluation, it is not the question of efficiency of investment but it is a question of ordering projects in order of priority. In this respect I would say, he had rightly pointed out that we should exclude all Harom projects. He is perfectly correct on this and this is what distinguishes the Islamic project evaluation from non-Islamic project evaluation. However, I think he ought to make another restriction on the choice set which is that if we have people below poverty line then the projects for these people should get precedence over everything else. So instead of talking about the welfare function, we should think in terms of lexicographic ordering. So there was no need of the discussion of social welfare function that he has made.

Risk-Bearing and Profit-Sharing in an Islamic Framework: Some Allocational Considerations

Dr. Syed Aftab Ali *

I

INTRODUCTION

Broad-based economic well-being, social and economic justice, and equitable distribution of income and wealth are some of the major socio-economic goals emphasized in Islamic teachings. It is considered essential that these goals form the cornerstone for the emergence of an Islamic economic system. It is widely believed by many Muslim economists, among others, that the replacement of interest by a system of profit-sharing provides a viable alternative for achieving this objective. This belief is based on the notion that while Islam prohibits *riba*, it permits *mudaraboh* transactions. Does this imply: capitalism minus *riba* equals an Islamic economic system? An affirmative answer could be given if one assumes that the goals of capitalism and Islam are the same. Islam prohibits *riba* in all its recognizable forms. In capitalism, however, *riba* is the cornerstone of the entire economic system and appears to be just when the investors' decisions are based on 'limited knowledge'. The latter should entail a limited liability to risk; and it is *riba* that symbolizes the basic principle of limited liability. Thus, in a capitalistic framework, riba characterizes justice (01- 'Ad/). This is, however, contradictory in the context of Islam as al-'Adl is a basic ingredient of the Islamic system and not of capitalism. Thus, Islamic prohibition of riba implies rejection of the entire capitalistic system.

The analysis of economy-wide replacement of interest by profit-sharing schemes that would obtain in a fully established Islamic economic system is, indeed, a complex task which, at the present time, obviates definitive and comprehensive treatment. The role of profits as an allocator of resources, profit-sharing in relation to productive efficiency of the workers, profit-sharing as a means to achieving equal distribution of income, are some of the important issues that deserve substantial research endeavours by Muslim economists. It is our contention, however, that, in the interim, certain fundamental principles may,

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nevertheless, be presented and pertinent questions raised. This paper does not, in any way, provide a comprehensive framework of analysis wherein profit-sharing replaces or duplicates the functions at present performed by interest. It deals with the problems of risk-bearing related specifically to workers' participation in the profit of enterprises in which they work. One notices that the discussions on redistribution problems and the debate on profit-sharing create the impression that the only items for redistribution are income and wealth *but not the risks*.

Such a simplistic assertion of a rather complicated issue calls for a detached and careful analysis. An economic system without risks is unimaginable. Nor is it possible to transform the uncertain outcome of an economy into a certain one merely by redistribution. In this paper we make use of Capital theory and relate the elements of risk-bearing to that of profit-sharing. Certain rules for apportioning profits among workers of the enterprises in which they work are derived. Within the perspective of the goals of an Islamic economy the relevance of the subject matter discussed in this paper arises from the fact that: (i) it refers to the alterations needed in the existing social institutions when risk-bearing function is shared by employees; (ii) it raises the issue of participation of workers in the income risks of the enterprises in which the workers are employed; and (iii) it examines the issue of productive efficiency under various schemes of risk-allocation. In sum, it focusses on the fundamental issues the attainment of which happens to be the major objective in a fully established Islamic economic system.

Without any claim to originality, therefore, the most modest aim of this paper is to synthesize the essential principles of some seminal works by Dreze (1976), Sievert and Tomann (1977), and Franke (1977a, 1977b). This approach, we maintain, will assist us in addressing the key issues concerning the potential role for profit-sharing in an anticipated restructuring of the economic system based on Islamic principles. It draws heavily from the experience of Western industrialized countries such as USA, Canada, and especially West Germany[1] where various types of profit-sharing schemes co-exist with highly developed financial institutions based on interest.

The main theme of the paper is that profits have a legitimate economic function and although uncertain (ex-ante) they do constitute a form of remuneration - the reward for willingness to undertake the -risk of investment. What is quintessential, however, but a reasonable assumption in practice is that

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1. Profit-sharing schemes are operational in West Germany for quite some time. Approximately 2 million workers participate in profits in roughly 2000 companies. This performance is remarkable in the sense that the participation did not take place as a result of negotiations between trade unions and companies, but came about as an independent initiative of the companies. In an Islamic Economic System one would expect the employers to be more forthcoming still.

employees will perceive that profit-sharing involves *pari passu* the bearing (or sharing) of risk: that is, participation in a profit-sharing scheme does not unequivocally guarantee positive returns. The plan of presentation is as follows. Section II shows that within the framework of Capital theory the existing social institutions would require alterations when the risk-bearing function is shared by employees. The question, then, arises as to how participation of workers in the income risks of the firm should be institutionalized. This is explored in Section III. The related issue of risk allocation and productive efficiency under different wage systems is then set out in Section IV. Finally some general conclusions resulting from the presentation are offered in Section V. Before we proceed with the presentation a couple of caveats for the reader are in order: firstly, we envisage a transition period prior to the establishment of a total Islamic Economic Order. The analytical framework of this paper could provide an experimental design for the transition period. Secondly, we have opted for a micro-economic approach as, at this level, the suggested interpretation of profit-sharing would allow the derivation of rules for purposes of achieving some operational (or optimal) concept of profit-sharing.

II

RISK ASSUMPTION BY EMPLOYEES

Capital theory provides an adequate framework within which the effects of a shift in risk-taking on to employees as a consequence of profit-sharing can be analyzed. In dealing with the role of human capital, this theoretical approach suggests that future income flows from human capital should be treated analogously to the income flows from non-human capital, and therefore, may also be applied in the field of income distribution. Profit-sharing is seen as the use of human labour in exchange for a claim to uncertain income. From the workers' point of view, bargaining about profit-sharing can be interpreted as an act of choice between the wage, which is guaranteed income for a specific period, and a claim to an uncertain future income, the expected value of which is higher than the wage due to risk factors. The other party to the contract, i.e. the shareholders of an enterprise, now find that the risk is shared, but as a consequence their return on risk-taking is lower.

In the Western industrialized countries, readiness to undertake risk is a function which, over a long period of time, has been transferred from the company owners to joint-stock corporations with limited liability, namely the shareholders of corporations. This separation of management and liability has resulted in the enormous expansion of the capitalistic system. In principle, such a functional division facilitates the efficient allocation of resources to their most productive use. However, as long as the option between secure and risky income is confined only to the owners of capital, opportunities of improving the allocation and utilization of productive resources are not fully exploited since the distribution of non-human wealth is very unequal. The owners of only human wealth are restricted in their choice of risk-taking as far as their income is concerned. Thus, in the possibility of obtaining additional income, they can only invest their human wealth on labour on the basis of "fixed income and the risk of redundancy". In the present institutional framework of human capital the rank and file of the workers are underprivileged in two ways:

(a) all capital assets are more favourably placed to exploit any advantage by the means of risk-diversification; and

(b) but it is not so easy to raise funds on the strength of human capital as security for the simple reason that potential creditors are restricted in enforcing their claims.

The potential scope of optimal risk allocation could, therefore, be extended if access to risk income would be more easily available to those who only possess human capital. Mobilization of resources of any scarce factor, such as the readiness to undertake risk, obviously is an advantage. This ultimately explains why distributional effects are expected from workers' profit-sharing. There are additional reasons for urging the mobilization of such reserves if the aim is to build a just Islamic Order:

(i) As a consequence of increased investment in education human capital can gain increased significance in a society. In a given institutional framework this may lead to an increase in labour's share of income.

(ii) A change in social behaviour and attitude coupled with progress in the area of social legislation, e.g. the protection against redundancy, would increasingly transform the factor labour into a *social overhead capital*.

(iii) As economic development continues the workers' demand for participation in economic decision-making becomes more and more socially and politically important. In the introduction of workers' co-determination with' management it would be necessary to reward their risk-taking by combining co-determination with profit-sharing.

The traditional concept of direct profit-sharing was developed from political ideas and systems. Starting from the question as to who is entitled to own a jointly produced good, this concept essentially includes the demand for a new industrial constitution which is a step in the direction of workers' self-management (von-Weizsacker, 1972). The basic idea is to take measures which enable workers to borrow against their human capital for investment purposes. In this way workers would have the option of choosing between secure and uncertain income.

Borrowing against human capital enables the workers to choose according to their individual risk preference between secure and uncertain claims to income. However, the concept of workers' direct profit-sharing treats them collectively. This is so whether profit-sharing is granted on a patriarchal basis by the individual firm or according to schemes instituted through some legislation.

The basic obstacle in borrowing against human capital on a large scale probably lies in the incompatibility of interests, the desire of workers for a specific limitation of liability and the interest of the banks to obtaining the safeguard of possible unlimited liability. It is imperative that the possibility of achieving income advantages by undertaking income risks is tied for good reasons to the ownership of capital. The question, then, arises whether the introduction of profit-sharing schemes has the potential of extending the limit of borrowing against human capital. Specifically, are the firms willing to reward workers' participation on more favourable terms than the existing banks could provide?

III

WORKERS' PARTICIPATION IN THE INCOME RISKS OF THE FIRM

The fundamental basis of profit-sharing implies workers' foregoing part of their wages in the sense that, from a relatively secure income, they are acquiring a claim to a share in the uncertain future profits of the firm. In doing so, workers only undertake an additional risk if the participation is arranged for a future time-period for which reliable estimates of the firm's profitability are still unavailable. Only in this case of *ex-ante* participation (under uncertainty). can one expect that ex-post income advantage results on the average in the form of a remuneration for the risk undertaken.

If profit-sharing is linked to the contract of employment it would imply for the firms that, in the case of risk occurring, workers also accept direct liability. Since part of the remuneration of workers in profit-sharing represents a contingent claim the worker must forego some of his labour income if the firm does not yield any profits. Given that human capital is directly used as a source of residual income it certainly follows that from the outset the workers' liability is limited to a portion of their current income. In contrast to the case where human capital is used as a collateral for obtaining credit the abolition of this limitation on liability would require specific institutional regulations, such as agreements on obligat6ry additional payments by workers or permission to carry forward losses. The obligation to make additional payments would again tie the shift in risk-taking to capital assets, whereas the carrying forward of losses would spread the direct liability of human capital over several time periods.

The likelihood of risk-diversification, however, seems small if profit-sharing is linked to the employment of workers. The limits of worker risk-taking would possibly soon be reached if the workers were to share in the risk of a single firm, the expected profitability of which would determine the workers' employment prospects. The fact that firms pursue extensive policies to spread risk does not basically resolve the contradiction. The workers themselves could introduce a non-market system of risk allocation by establishing a common investment fund whereby profit-sharing in different firms are pooled - *collective profit-sharing*. In principle, they can achieve a similar degree of risk-mixture as capital owners by diversifying their individual portfolios. In view of the extent of risk-transfer and the resulting impact on workers' income it would be important to practice a collective type of profit-sharing. Only in this way can any substantial improvement in risk-allocation be expected.

Is profit-sharing more advantageous than raising credit on human capital? If profit-sharing is built in the contract of employment the workers' profit-sharing as well as risk-participation cease when employment is terminated. A worker when made redundant, need no longer feel liable for the income risks of the firm. If he terminates the work contract himself he cannot continue participating in the firm's profit. It is essential from the workers' point of view that this constitutes an additional and limiting effect on liability. The inclusion of profit-sharing in the workers' contract is similar to a risk-participation contract having an escape clause. Corresponding risk participation on the basis of credit raised against human capital would have to grant workers the right to free themselves at any time from further liability. This type of contract, not subject to long term notice would be unthinkable on the capital market where the sellers of risky assets always have to absorb possible losses. Besides, banks have to fear that workers would be tempted to participate in projects which are too risky.

The situation is different when workers share income risks with the firms in which they are employed. Workers' profit-sharing is, in principle, not individually tailored. Similar to a collective wage agreement profit-sharing, not based on individual decisions, represents for the individual worker a collective agreement. Although the worker may terminate his work contract individually he has no opportunity, in anticipating his decision to leave the firm, to influence the design of a profit-sharing scheme which is subject to a collective agreement.

The workers' option of leaving the firm may not jeopardize liability in a profit-sharing scheme as seriously as it appears at first sight. If profit expectations deteriorate, then workers may become more interested in seeking alternative employment while at the same time the firm might also have a growing interest in creating redundancies in order to save fixed labour costs. But in a direct risk-participation scheme both parties would be pursuing the same interests of either trying to avoid liability or rescinding the contract. A clash of interest occurs only when the workers' reaction to a reduction in profitability exceeds the mutual interest of the firm in creating redundancies. This response is unlikely to be excessive since the worker will compare the costs of searching for new employment to the minimum fixed wage which he can get by remaining in his old firm. Thus, the liability of the workers is still assured. A fairly balanced ratio between the fixed wage and the share in profits could ensure that less mobile workers do not have to carry too much liability.

Problems would not, of course, arise when favourable profits are expected. In this situation workers' mobility has no limited effect on liability. Then the workers' termination of their contract of employment and thus of their commitment to future liability does not usually lead to a contraction in the overall level of liability for the firm because departing workers can be replaced on the same conditions. One can also conceive that the problems of, mobility would diminish in importance if profit-sharing is linked to a fund into which dividends flow. This would redirect the interest of the worker away from the single firm's profit to the profit performance of the group comprising the fund.

It would be apparent from the foregoing that on the whole direct profit-sharing of workers permits a higher degree of risk-transfer than do schemes for raising credit on human capital which are feasible on the capital markets. Looking at it slightly differently, profit-sharing facilitates the transferring of risk on better conditions than can be offered by banks. Any advantage accruing to the workers is essentially a consequence of their readiness to take on additional income risks. It does not arise through redistribution which ignores market forces. It can also manifest itself in the reduction of unemployment risk which is a serious threat and burden to the workers as it has more than economic implications.

IV

RISK ALLOCATION AND PRODUCTIVE EFFICIENCY

The importance of risk allocation and productive efficiency for a society's welfare should be obvious. Risk allocation has not only a direct effect on individuals' welfare but also indirectly influences the investors' willingness to supply capital for risky investments and thereby the growth of the economy. Simultaneously the workers' working performance may depend on their risk, which partially depends on the employment risk. The latter, in turn, may strongly influence the income accruing to the economy. Hence, the wage system can be assumed to influence strongly a society's welfare.

In an excellent critique of the fixed-wage system, Gunter Franke (1977 a), has worked out a theoretical model of risk allocation and productive efficiency. This section relies heavily on his work. He offers the following criticism of the Fixed-Wage System:

(i) Under a fixed-wage system (without employment guaranteed) the worker faces on a1lerage higher probability of being laid off than under an adjustable-wage system. As a higher probability of being laid off may well increase the worker's income risk, his income risk may be higher under a fixed than under a adjustable-wage system;

(ii) A fixed-wage cannot reflect a worker's marginal productivity in different states of nature; (Franke, 1977 b) and (Dreze, 1977); and

(iii) If wages serve as financial incentives for the workers to work more or less for the employer, then the economy will not be productively efficient under a fixed-wage system: there is no incentive for the worker to work more in those states with high marginal productivity as opposed to states with low marginal productivity.

His analysis does not examine those markets where the wage system does not matter; for such markets are so unrealistic that application-oriented conclusions cannot be drawn.[2] The theoretical basis of his contribution is thus derived from "less perfect markets". Four different types of wage systems are studied for their risk allocation and productive efficiency. These are: (a) the pure profit-sharing system; (b) the profit incentive system; (c) the market value change incentive system; and (d) the portfolio incentive system.

1. The Pure Profit-Sharing System (PPS)[3]

In PPS the wage base of a worker is the fraction of his fixed wage to fixed wages paid by the firm in state's', the reward being a part of the firm's profit. Hence, all workers together receive $a_n P_{ns}$ stochastic wages. Under this system the conventions by which profits are measured playa crucial role. By varying depreciation figures, for example, there is great degree of freedom to manipulate profits. Existing practices usually prescribe that expected future losses have to be anticipated whereas expected future profits must not. be anticipated. Hence profit figures usually appear distorted as compared to income figures which are derived from capitalizing expected earnings or expected net cash flows.

Efficient risk allocation requires that wages depend on the market value of all risky securities. If investors regard profit figures as distorted, there is little hope, if any, for a stable relation between the firm's market value and its profit figures. Hence, if all firms followed PPS with a being the same for all firms, the sum of all wages would n correlate with the sum of all profits, but perhaps show no stable relation with the market value of all risky securities.

PSS does not provide an efficient risk allocation either from the investor's point of view or from the viewpoint of a worker. The risk of all investors, taken together, depends on the changes in the market value of all risky securities. These changes would be reduced effectively if the sum of all wages varied with the market value of all risky securities. Hence, the investors would prefer such a wage system to PPS. A worker's risk depends on the profit of his firm only; hence there is no diversification from which he benefits. The system also does not allow for an adjustment of wages to the worker's risk-aversion and expectations. Hence, a

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2. The works of Mayers (1974), Brito (1975) and Bailey (1974) are cited in support of this assertion.

3. The explanation of various symbols used in this and following sections appears in the Appendix attached to this paper.

worker with relatively high risk aversion has to bear a risk which would be borne better by other persons.

As the wage depends on the profit of the firm, one might assume that PPS provides performance incentives for the worker. But if the worker raises his performance so that the profit increases by (d P_{ns}), the worker receives only the very small fraction $\left(a_n \overline{w}_i / \sum_{j \in I_n} w_j \right)$ of d P_{ns} . As has been argued often there is practically no performance ns incentive under PPS.[4]

2. Profit Incentive System (PIS)

PIS is defined by Equation (2) - as shown in the Appendix. In this system one could measure the marginal gross contribution of a worker by the associated change in the market value of his firm. Hence wages would depend on profits and market values. Such a wage system appears rather complicated and oversteps the framework of profit-sharing. Thus, in PIS, marginal productivity is measured by profit changes ($\partial P_{ns}/\partial q_{iz}$). The constants b_{iz} and b_{iz} must be chosen such that the ratio of b_{iz} and b_{jz} equals the ratio of worker i's and worker j's expected values of marginal profits.[5]

Compared to PSS, the economy in PIS is productively less inefficient, as a worker's wage base depends on his performance and the expected value of profits produced by a marginal performance increases. With respect to risk allocation PIS is as good as PPS. It does not, however, consider the following two important aspects: (i) risk allocation, viewed from the investor's .point of view, would be less inefficient if wages depended on market values rather than on profits; and (ii) productive efficiency suffers from the conventions of profit measurement: possibly the work of a given period increases primarily the profits of later periods so that the benefits which accrue to a worker as a result of marginal performance increase are clearly lower than his marginal gross contribution. This strengthens productive efficiency.[6]

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4. One could counter this by saying that every worker benefits from every profit increase, regardless of which worker produces this. All workers form a coalition and measure the benefits of a performance increase by the sum of wage increase over all members of the coalition: a_n P_{ns}.
5. For a rigorous development of these results see Franke (1977 a, p. 117).
6. Productive efficiency has been defined by Franke (1977 a) as follows:

$$\sum_{s \in S_Z} \pi_s \partial P_{ns} / \partial q_{iz} = \sum_{s \in S_Z} \pi sd\, w_{is} / \partial q_{iz}$$

   This equation (his 2') states that worker i raises his performance in state z so far that his marginal disutility of labour equals the expected value of profits produced in states $s \in S_z$ by a marginal performance increase.

3. Market Value Change Incentive System (MIS)

The two problems mentioned at the end of the last section can possibly be resolved by replacing the reward "part of the firm's profit" by "part of the change in the market value of the firm (before payments between the firm and the investors)" in the time between states sand z. If the change in the market value of the firm n can be ascertained, then Equation (3) – in the Appendix - would define a Market Value Change Incentive System (MIS). Using this equation, in conjunction with other conditions, Franke (1977 a) has clearly demonstrated that under MIS the wage system is based on market values. Conventions of profit measurement are irrelevant and therefore the problem in question mentioned at the end of the previous section is solved by MIS.

The tractibility of MIS, of course, depends crucially on one's ability to obtain reliable estimates of the performance indicators (b_{iz} and q_{iz}). In fact in a complex organization it is extremely difficult to measure the increase in the firm's market value generated by marginal performance increase. Hence some simplifying measurement rules have to be adopted. I n order to make the performance measures of different workers comparable, a worker's actual performance should be divided by a standard or budgeted performance level which has been set before for the worker's job. Such a measurement seems possible because w_i is known from labour contracts and the measure of q_{iz} resembles closely, the output measures of accounting systems.

Risk allocation from the investors' viewpoint fares better under MIS than under PIS, as wages depend on market values and thereby reduce the variations in market value. Risk allocation from the workers' point of view is about as good under MIS as under PIS since the problems (i) and (ii) raised in Section IV.2 still remain unresolved, with profits being replaced by market value changes. Employment risk is about the same as under PIS. Since neither MIS nor PIS solves the problems in question a Portfolio Incentive System is suggested.

4. A Portfolio Incentive System (FIS)

Since workers have different risk aversions and different expectations, a wage system that takes this into account should allow for some individual wage specification. Instead of forcing the worker to take the firm's market value, V_{nz} as his "portfolio", let him freely choose a portfolio in state z (when he is hired) which at that time has the same market value V_{iz} as "his" firm. Then his reward is the change in the market value of this portfolio in the time between state s and z ($s \in S_z$) multiplied by a_n. Having defined the change in the market value of the portfolio chosen by worker i in state s sand z Equation (3) has to be replaced by

Equation (4) as has been shown in the Appendix. This equation then describes the "Portfolio Incentive System" (FIS).[7]

There are two main advantages of FIS with respect to risk allocation: (i) the worker avoids paying the transaction cost to the bank and there is no diversification problem created by the indivisibility of share; (ii) a risk-averse worker can choose a risk-free portfolio; a less risk-averse worker a risky portfolio. Moreover, every worker can choose according to his expectations. If a worker faces a high probability of being laid off, and expects a decrease in the market value of "his" firm, he may choose shares in other firms or a negative number of shares of "his" firm. Then his wage is higher, the more the market value of "his" firm decreases. By buying a negative number of shares the worker can avoid, or at least reduce, the financial risk produced by PPS, PIS, and MIS.

A possible advantage of FIS with respect to risk allocation is that a firm may have to pay high wages though its own profit and liquidity may be poor. Hence, the firm incurs additional risks which have to be borne primarily by its shareholders. The firm can, however, hedge against his risk. If it knew in state z the end-of-period wage base of every worker, then it would aggregate all portfolios chosen by its workers, weighted by the wage' bases, and immediately buy this portfolio on the stock exchange. This would give a perfect hedge. In fact the firm does not know state z whereas the wage base depends on the sign of (V_{is} - V_{iz}). Hence, it does not know in state z exactly the fraction of (V_{is} - V_{iz}) which the worker will receive.

The hedge, therefore, remains imperfect. FIS implies a similar hiring and firing policy as MIS insofar as it relates to employment risk. With respect to productive efficiency we have demonstrated above that FIS, theoretically requires that b_i/b_j equals the ratio of the marginal gross contribution of worker i and j. Assume that the worker's portfolio contains negative shares of "his" firm whereby his V_{is} is higher as the market value of the firm in state s is lower. Does this create a "negative" performance incentive from the viewpoint of the firm or even a "sabotage behaviour" and hence productive inefficiency.

The answer would depend on the efficiency of the capital market. If it is efficient such that V_{nz} reflects correctly all monetary performance effects, then a worker receives about "his" marginal gross contribution for a marginal performance increase. The worker cannot benefit from a sabotage behaviour as the market would anticipate that. The converse would obtain, however, if the capital market functions in an inefficient manner (Franke, 1977 a).

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7. 1t should be noted that constants b_{iz} and b_{jz} have been replaced by b_i (b_j) in Equation (4). They represent state-contingent measurement of marginal gross contribution and these do not appear operationally.

V

CONCLUDING REMARKS

The discussion in the paper demonstrates that the existing institutional framework, based as it is on capitalistic principles, restricts the choice of risk-taking only to the owners of capital. Viewed thus, this framework is quite deficient insofar as efficient allocation of resources is concerned.[8] It is our contention that any restructuring of the existing system (based on Islamic principles) must address itself to the provision of universal accessibility to risk income. It is then that an efficient and egalitarian system of risk allocation would emerge. Mobilization of resources of any scarce factor, such as the readiness to undertake risks, obviously is an advantage. This ultimately explains why distributional effects are expected from profit-sharing.

The equity claims of the suggested participatory system may seem to put premium on skill as part of human capital. It may even create an impression that a majority of the unskilled workers will suffer from deprivation. We take the position that the principle of improved and easy accessibility of resources for persons to earn risk income is universal in character in that it allows equality of opportunities. Differences in personal endowments are, of course, recognized. We do not envisage that the anticipated Islamic economic system would deny anybody the avenues of upgrading one's skills. We foresee that increased investment in education would result in human capital acquiring increased significance. A change in social behaviour as a result of progress in the area of social legislation would, we hope, transform the factor 'labour' into 'social overhead capital' in its true sense.

We have discussed the issue that, within the framework of an enterprise, a system of risk-bearing and profit-sharing by workers can be devised. We indicate that the fundamental basis of profit-sharing implies workers' foregoing part of their wages. One could argue that, according to an interpretation, uncertainty with respect to wages is not permitted in Islam. In our presentation the workers are shown to forego port of their wages in the sense that, from relatively secure income, they are acquiring a claim to share in the uncertain future profits of the firm. In so doing, they only undertake an additional risk if the participation is arranged for a future time period. Only in this case of *ex-ante* participation (under uncertainty) can they expect the *ex-post* income advantages. Should they decide to abstain from such an arrangement no uncertainty with respect to wages arises.

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8. Chapra (1978) has also shown that the capitalistic banking system, through its use of inverted pyramid of equity-loan financing, is a basic source of flagrant inequalities of income and concentration of wealth.

We tend to show that on the whole direct profit-sharing with workers permits a higher degree of risk-transfer than do schemes for raising credit on human capital which are feasible but not obtainable in the existing capital markets. Taking a slightly different view, profit-sharing facilitates the transferring of risk on better conditions than can be offered by the (existing) banks. Any advantage accruing to the workers is essentially a consequence of their readiness to take on additional risks. It does not arise through re-distribution which ignores market forces. It is worth-mentioning here that as economic development continues the workers' demand for participation in economic decision-making becomes more and more politically important. In order to foster workers' co-determination with management it would be essential to reward their risk-taking by combining co-determination with profit-sharing – a step in the direction of industrial democracy.

Finally, we have emphasized the importance of risk allocation and productive efficiency. We demonstrate that risk allocation has not only a direct effect on individual's behaviour but also that it indirectly impacts upon the investor's willingness to supply capital for risky investment and thereby the growth of the economy. Following Franke (1977 a) we suggest a variable (adjustable) wage system in which workers participate in sharing part of the firm's profits. This raises the issue whether labour would prefer variable wages to any existing system of fixed wages (plus efficiency bonus). A fixed wage or salary, mostly received by workers today, is an income which does not depend on the output or success of the firm in which they are employed. Usually, it is only the top managers who get a certain percentage of the firm's profit besides a fixed salary in order to motivate them to work harder for the firm. If all workers of a firm receive fixed wages, the investors (capital owners) bear the risk of changes in output or success. But, if output or success declines to some critical level, some of the workers will be laid off and thus alleviate the investors' losses. Being laid-off usually implies a significant income reduction for the workers. Fixed wages can only eliminate the income risk of a worker only if he cannot be laid off. In a variable (adjustable) wage system in which a firm can adjust its wages to output or success, under certain conditions, continuing employment in times of low output or success is less detrimental to the firm than under fixed-wage system. We show that profit-dependent wages tend to produce a less inefficient risk allocation than fixed wages. But, in order to approach some optimum the workers should earn risky wages, which depend on their working performance and on individually chosen securities portfolios. These portfolios provide some insurance against varying employment situations.

APPENDIX

Mathematical Representation of Various Profit-Sharing Schemes

Pure Profit-Sharing System (PPS)

$$W_{is} = \overline{W}_i + \frac{\overline{W}_i}{\Sigma \overline{W}_i} . a_n . P_{ns} \qquad (1)$$

Profit-Incentive System (PIS)

$$W_{is} = \overline{W}_i + \frac{b_{iz}\ q_{iz}}{\sum_{J \in i_{nz}} b_{jz}\ q_{jz}} \qquad (2)$$

Market Value Change Incentive System (MIS)

$$W_{is} = \overline{W}_i + \frac{b_{iz}\ q_{iz}}{\sum_{J \in i_{nz}} b_{jz}\ q_{jz}} . a_n (V_{ns} - V_{nz}) \qquad (3)$$

$$\text{iff } (V_{ns} - V_{nz}) \geq 0$$

Portfolio Incentive System (FIS)

$$W_{is} = \overline{W}_i + \frac{b_i\ q_{iz}}{\sum_{J \in i_{nz}} b_j\ q_{jz}} . a_n (V_{is} - V_{iz}) \qquad (4)$$

$$\text{iff } (V_{is} - V_{iz}) \geq 0$$

Notation:

W_{is}	–	wage of worker i paid by the firm n in state s.
$\overline{W}_i$	–	fixed wage of worker i ($i \in l$)
P_{ns}	–	profit of the firm n in state s before deducution of stochastic wages
a_n	–	a constant ($0 \leq a \geq 1$): a fraction of the firm's profits which all workers together receive as stochastic wages ($n \in N$)
b_{iz}, b_{jz}	–	constants

q_{iz}, q_{jz}	–	workers' performance index in state
$(V_{ns} – V_{nz})$	–	change in the market value of firm n (before payments between the firm and investors in the time between state s sand z)
$(V_{is} - V_{iz})$	–	change in the market value of the portfolio chosen by worker i in states sand z ($s \in S_z$).

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Comments

Dr. A. R. Kemal

Interest rate plays a crucial role in a capitalist economy. It influences resource allocation to various activities and inter-temporal distribution of income in consumption and savings. Interest rate changes are effective means of pursuing monetary policy, which may have a significant impact on general economic activity. On the other hand, Islamic economy does not allow interest and as such there has to be an alternative system to guide the managers and the consumers in making the right decisions regarding investment and savings. The question of what would replace interest rates in an Islamic economy has been of considerable interest to those working on Islamic economics. However, unfortunately the search for an alternative mechanism has always been in the context of a capitalistic economy as if without interest the capitalistic system will become very Islamic. It may be noted that interest is the cornerstone of the capitalistic system and the system will not work without interest. Moreover, while interest is not unjust in a capitalistic economy, there are a number of sources of exploitation in the system. On the other hand, Islamic system does not allow interest because it is considered a source of exploitation. Therefore, in view of these considerations, the author reaches the right conclusion that abolition of *riba* necessarily implies a rejection of the capitalistic system as a whole. Many other authors, notably Naqvi, have also reached the same conclusion. It is obvious then that instead of Islamising the capitalistic system by amending the capitalistic system here and there to suit the needs of an Islamic economy, we should try to evolve the Islamic system as a whole.

A number of authors, such as Siddiqi, assert that profit-sharing is a better, even perfect, substitute for the rate' of interest, but they never substantiate their argument. Moreover, how the system of profit-sharing will work is left out of discussion. Also left unanswered are a number of questions, such as the role of profits as an allocator of resources, efficiency of the production factors under a system of profit-sharing, and as a means of achieving equal distribution of income. While this paper raises these questions unfortunately it does not contain a satisfactory discussion to answer them. Instead, the author has concentrated on various systems of flexible wage rates currently being operated in some of the developed capitalist economies.

The author has argued that the basic purpose of the Islamic economic system is social justice. He further argues that the major factor giving rise to income inequalities is the inability of labourers to take part in risky business, which in turn is due to the fact that labourers are unable to get credit against human capital. He suggests that since the labourers are unable to get credit, they should be made partners in the firms where they have been employed. He goes on to suggest that flexible wage systems imply that capitalists are sharing their profits with labourer because the employees have decided to share the risk. And it is here that the author has confused the whole issue. In the flexible wage systems the employees are paid in addition to the fixed wages, not because labourers participate in the risky business, but because it leads to an increase in productivity. Consequently, both , capitalists and labourers are better off, and precisely because it increases the GNP, the flexible wage system is given preference to the fixed-wage system. Obviously, then, the arguments for flexible wages are not arguments for improvement in income distribution via participation in risks which the author believes to follow with the adoption of flexible wage system.

We may consider the suggestion of flexible-wage system made in the paper from two points of views. Firstly, if the flexible-wage system is better than the fixed-wage system, we should make the switch-over whether or not we adopt the Islamic system. Secondly, we have to analyse the author's argument that flexible-wage system be treated as workers' participation in risk.

If flexible wages are preferable to fixed wages, and if while moving towards an Islamic system, we decide to adopt flexible-wage system, then it is a straight-forward matter. However, such a preference is not due to the Islamic system as such, and a country should adopt the flexible-wage system irrespective of any switch-over to Islamic economy.

If we interpret the flexible-wage system as workers' participation in risk, we have to consider the following three issues:

(a) the alteration needed in the existing social institutions when the risk-bearing function is shared by employees,

(b) the issue of participation of workers in the income risk of the enterprise in which the workers are employed, and

(c) the issue of productive efficiency under various schemes of risk allocation.

However, before we start altering our institutions, let us analyse what an employee's risk-bearing under flexible-wage system implies. Flexible wages interpreted in this way imply that the employees gamble with a part of their income. If the expected value of the gamble is positive, then the 'dice is loaded' and it is not clear why capitalists should accept the game. On the other hand, if it is a 'fair' game, i.e. the expected value of a gamble is zero, it is again not clear why the labourers who are generally risk-averters, should gamble a part of their wages. The author has suggested that with the emphasis on equitable distribution of wealth and income in the Islamic economic system, there will be more chances of capitalists willing to share their profits with the workers. Of course, this assumes that capitalists in an Islamic economy will be more humane, which is not a plausible assumption to make especially if one keeps in mind that instinct of the capitalists*.

Defining profits as return only to risk and not to the invested capital implies a knowledge of the exact amount of rental to capital prior to profit distribution between capitalist and workers. However, in the absence of interest in an Islamic economy, we shall be unable to compute rental to capital and, therefore, the return to risk.

As said earlier, the main issue which needs very careful analysis and thorough research is profit-sharing and risk-bearing in the Islamic economy. Naturally, when interest is forbidden, and profit-sharing is the only alternative, every household which saves and wants to invest will have to necessarily take some risk. Similarly, every entrepreneur will have to share with his financier productivity gains. This introduces an element of risk throughout the economic system and could possibly distort incentives for the entrepreneurs. In an Islamic system, would an option be available to a household to protect its savings against inflation without bearing any risk? Would a producer or a group of workers be able to raise capital without sharing the gains made through a more intensive utilization of the resources? These questions have been only partly answered in the literature and they need further research and discussion. Indexing of money in banks with the rate of inflation is one way of protecting the savings of a household. Should the blue-print of an Islamic economy not include this option?

As regards investment, Professor Naqvi has suggested that capital goods should be auctioned. This is a suggestion worth considering, because that way, the scarcity price of capital will be reflected in the producer's decision. Another proposal could be to pattern the Islamic economy upon the Yugoslavian economy wherein capital is owned by the state and workers' union can rent capital from the state. The profits are then distributed amongst the workers. However, rental to state will be similar to interest rate, but then the recipient will be the state not the individual. Whether *Shari'ah* would allow such an economic system or not will have to be assessed very carefully.

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* Supposing that somehow the capitalists decide against their instinct to play a game in which they are always the losers, the question arises: Does Islam allow the workers to gamble for improving their standard of living? I n Islam, a labourer has a fixed remuneration and he does not bear the risk of capital loss obviously because he does not have the capital. Therefore, the issue raised should be thoroughly analysed before considering such a profit-sharing scheme.

Dr. Nevzat Yalcintas

A sound and true Islamic economic system, by definition, has to be based on the principles of Islam, as *Deen*. Islam, the last *Deen* of the Creator, brings principles which cover all aspects of man's universe. And hence the complexity and almost impossibility of the task of the rule-definers in the new fields of socio-economic life. An Islamic economic system will be the expression and in several domains the materialization of divine principles of Islam in the daily economic life. Muslim economists have a gigantic task not only to avoid contradictions but to structure the Islamic economic framework according to and in complete harmony with these principles.

Islam, being a divine system, independent and different from others, cannot be reached and realised simply by correcting other systems, capitalism, socialism etc. This is why the question put forward by S. Aftab Ali, whether "capitalism minus *riba* equals an Islamic economic system?" cannot get an affirmative answer. Certainly both systems are man-implemented and aim at human societies. But Islamic principles are Divinely defined and the aims are entirely different. From this point of view the problem of comparison between Islam and capitalism becomes irrelevant. One basic aim, in capitalism, is profit maximisation. This can even be considered the essential characteristic of that system. Capitalism is essentially an economic system based not solely on the institution of riba but on the conception of absolute "maximisation of profit" at all costs (a tout prix). This conception is alien to Islam- and even contradictory to it. In Islam "profit" has to be legitimate and must be obtained according to the rules of *Shari'ah*. Whereas in capitalism, profit searching legitimates all actions and in its original form the system is "ethical free".

But in the framework of "social policy", and especially since the second half of 19th century, some anti-social aspects of capitalism began to be corrected. This happened under the pressures of the efforts of religious movements, trade unions, socialist parties, benevolent societies and writers. In order to realise social justice the State has to take action to ensure social equality and more recently a welfare society. Measures to reduce poverty, hazards of work, uncertainty, social disturbances, radical movements and political revolutions require a considerable reduction in the number of working hours per person per week, the recognition of the right to coalition for workers, the protection of women and children against some practices of work, the fixation of minimum wages, prohibition of arbitrary dismissal, extension of social security system and acceptance of free collective bargaining for the definition of working conditions. At the same time, these practices are aimed at the "humanization" and the "democratization" of the capitalistic system. The standard of living of citizens in capitalistic countries has advanced remarkably since the last century. This progress is partly due to economic development and higher real incomes for the population as a whole and partly due to the social policies, some important aspects of which have already been mentioned above.

In the capitalistic countries now a number of new measures have been implemented and new institutions set up aimed at humanization and democratization of capitalism. Workers participation in decision making in a firm as well as several mechanics of co-determination and profit-sharing schemes are also recent practices adopted for the same purpose. As it has been rightly pointed out by Syed Aftab AIi, these are "a step in the direction of industrial democracy". These new measures, particularly that of risk-bearing and profit-sharing by workers, aiming at the welfare of the labour and the democratization of industrial relations, although mainly considered positive elements brought into a new social policy, failed to change the very basic nature of the capitalistic system which is based on its own institutions and conceptions, such as profit-maximization, *riba*, the principle of free competition-market economy, private ownership of goods of productions, class relations, money and credits mechanism, banking and financial systems etc.

Risk-bearing and profit-sharing schemes can be welcomed in the field of industrial relations. If we look at the matter from Islamic economic point of view, it can bring material advantages to the workers, strengthen democracy and increase productive efficiency of the firms. But certainly introducing and developing a profit-sharing mechanism in the capitalistic system, is not going to change the nature of this system into an Islamic one. Islamic economic system is independent of others and is not a corrected form of some systems. It has its own principles and framework, derived from the Divine text and tradition of the Prophet (peace be upon him).

In the light of this basic observation one can discuss several aspects of the profit-sharing scheme. The risk is divided by the shareholders of joint-stock corporations and measurement of their liability is at the level of their invested capital. This invested capital and the profit it brings are measurable in money unit circulating in the market. To transform the factor labour into a "social over-head" poses the problem of measurement from the very beginning in this framework of profit-sharing. This problem seems also, unsolvable in four profit-sharing schemes which have been analysed in S. Aftab Ali's valuable paper. An answer to this problem, though, can be provided in a purely theoretical framework but theoretization may lead to unrealistic models specially in the domain of social, economic and financial policies. Some well-established schemes of profit-sharing and co-determination, different type of workers' participation, such as "mitbestimmung" in Federal Germany, implemented in the Western industrialised countries can be examined closely in order to conceive more operational proposals specially for Islamic countries which are almost entirely developing economies. In these Islamic countries, the sources for investment in education, including technical and vocational education, are limited and as a consequence of its human capital cannot gain increased significance in the economy in a short span of time.

In a profit-sharing system, these participating workers are having the status similar to the shareholders of a joint-stock company except that they are employed in the firm. In the presentation of S. A. Ali, the workers are shown to forego part of their wages. Against their labour employed in the firm, workers can and must get a secure income for their living. The only source of income for the workers is, by definition, the wages of their labour, and this has to be guaranteed. If the workers are not wage-earners, the profit-sharing system conceived until now changes radically and they become pure shareholders working in the firms.

A more pure living example of workers having the shares of the firm and being joint owner of the enterprise, regardless whether they are working in it or not, is best given by Turkish Workers' Companies (T.W.Cs). These Companies are founded by Turkish workers' working in Western European countries. And have developed from the experimental stage to a real factor of industrialization and of job creation in the under-developed regions of Turkey. At present these Companies have completed about 100 industrial projects in Turkey and are involved in some 60 more. These projects have opened up employment opportunities for 20,000 people. The number of T.W.Cs are nearing 150 and of the workers who are members (shareholders) of these companies are nearing 155,000.

T. W.Cs are based on the self-help initiatives of Turkish workers who live abroad, mostly in Federal Germany, and who invest their savings in the form of shares in order to establish a company in Turkey. As a rule, T.W.Cs are formed by small numbers of founder-members abroad in the form of a Turkish stock company and are registered in Turkey. In the original stage, they are strongly dependent on individuals, i.e. they are linked to the existence and motivation of local leaders. Several of these local leaders are Imams and other religious men. T.W.Cs exclude, in their statutes majorisation by large-scale investors (banks, government etc). As a rule, legal entities or individuals must not hold more than 10 per cent of the original capital. The shares are issued in the name of the holder and are transferable only after a certain time period. The majority of the T.W.Cs favour shareholders in the distribution of jobs.

T.W.Cs are encouraged by the government through a series of special rules and regulations. Turkish State Industry and Labour Investment Bank has given the objective of supporting workers investment and help them to use their savings efficiently. The example of workers' savings going directly to investment project instead of depositing it, against *riba*, in the banks is given by T.W.C. Here the workers are bearing the risk and sharing the profit. Certainly in that model they are not wage-earners, provided they are not working in the firm. If they do they have both status at the same time: wage-earners and shareholders. This example given by a Muslim country, can be studied closely by others.

One lesson is clear from T. W.C. as long as a worker buys the share of his own company and becomes a real shareholder the system is workable. The system can also work if the credits received by the workers are used in buying the share of the company. But the idea of borrowing against human capital seems very abstract. Muslims, whether workers or not, can be attracted by ethical considerations and can prefer to invest their savings into investment projects, bearing the risk and sharing the profit, rather than to deposit the same into banks against the *riba*. The motivation of a Muslim is different from home economics of capitalistic systems.

The thoughtful and valuable paper of Dr. S. Aftab Ali raises other important issues for economists, Muslims and non-Muslims alike.

Dr. M. A. Mannan

General Comments. The three general comments are:

(1) In general, the paper is a good summary of works by Dreze, Franke and others on the theory of Labour-Management pertaining to allocation of risks and productive efficiency under different wage systems. But unfortunately the paper's contribution in furthering our understanding of Islamic economics is very little or marginal in the sense that the paper has not examined any of its objectives or hypothesis in the light of Islamic economic values as reflected in *Shari'ah*. This is evidently clear not only from a few passing remarks about Islam but also from the references used. Excepting only one article on "Money and Banking in an Islamic Framework" which is not really relevant for the purpose of the article, no books on Islam, not to speak of Islamic economics, are consulted as mentioned in the references. The fact is that in a scientific research in Islam what is needed is to put forward a hypothesis or hypotheses which can be confirmed or rejected or replaced. Consequently, we can adopt or adapt or reject some of the existing socio-economic institutions regardless of any economic system. Considered from this viewpoint the paper has not advanced our knowledge base in Islamic economics.

(2) It follows then that the title of the paper is somewhat misleading. In my view the appropriate title of the paper should be Risk-bearing and Profit-sharing in Market Economy. In the paper there is hardly any discussion of analytical nature with reference to principles of Islamic economic behaviour governing the whole range of labour-capital relationship, wages etc.

(3) Lastly, in the paper we find several instances of a shift of assumption and or contradictory assertions or assumptions. For instance, while the author maintains that Islamic prohibition of *riba* implies rejection of the entire capitalist system he comes out rather strongly that the various types of profit-sharing schemes can co-exist with the highly developed financial institutions named on interest as found in the USA, Canada, UK and especially, West Germany. Does this imply that the profit-sharing schemes under an Islamic framework can also work within the existing capitalistic system? Does it imply that Islamic economic system can adopt or adapt some of the socioeconomic institutions and practices of

the capitalistic system, for that matter, socialistic system? These are questions which need clear answers.

Let us now turn to specific comments on the paper.

Specific Comments. The eight specific comments are as follows:

(1) While the potential scope of optimal risk allocation should be extended, resulting from investment in human capital, it may not lead to an automatic increase in labourer's share of income as maintained by the author. Investment in human capital may not necessarily lead to increase in incomes unless it is accompanied by necessary social and institutional reform. This is documented on the basis of income differential between the black and white graduates in the USA. The stress on institutional all reform is all the more important where societies are stratified.

(2) The paper discusses the obstacles in borrowing against human capital on a large scale from the existing commercial banking operation based on interest, as the paper uses the "incompatibility of interest" of workers, banks and firms. The desire of the worker for limited liability comes into conflict with "the interest" of the bank to obtaining the safeguard of possible "unlimited liability". The paper is completely silent as to how to turn this "incompatibility of interest" into "compatibility of interest" under Islamic framework? The question arises as to how to institutionalise the workers' participation in the income risks in an Islamic state? The paper ha~ not touched this issue from the Islamic angle.

(3) The author has further maintained that the existing commercial banks have not used the human capital of workers as a basis for their credit worthiness in a significant way and that without resorting to legal means, bank cannot secure reimbursement from the defaulting debtors. It is not, however, clear what makes the author to assume that the existing commercial banks may not have to resort to the same level means against the defaulting workers when loans against human capital are used to buy their shares facing the prospects of loss or actual loss. The paper has not spelled out or indicated 'the type of institutional reform needed to achieve the Islamic goal of "integration" where the interest of the workers, banks and firms can reconcile.

(4) The author's contention that any profit-sharing scheme implies worker's foregoing a part of their wages has a doubtful validity in the light of *Shari'ah*. If uncertainty with regard to a part of wages is accepted as a strategy for worker's participation, an institutional arrangement, free of exploitation by capital owners need to be evolved.

(5) The author's suggestion of "collective profit-sharing" lacks analytical rigour in the sense that the danger of possible growth of worker's monopoly power with its attendant evils needs to be examined closely. The paper is silent as to how this monopoly of human capital cannot emerge under an Islamic framework.

(6) It is implicit ill the analysis that under profit-sharing schemes the firm is expected to pursue profit-maximising goal. It is not, however, clear from the paper whether this objective will remain valid in Islamic scheme of affairs.

(7) The paper came out very clearly in favour of adjustable wage system. The analysis based on the assumption of a Pareto Optimum criterion which can hardly be accepted in Islamic framework. By far the greatest deterrent to using the Pareto criterion lies in tackling the problem of income distribution. If giving a means taking from B, then a narrow interpretation of Pareto criterion rules out such a transfer. As such the Pareto criterion for judging efficiency can not be widened into the yardstick of welfare and happiness of workers unless the prevailing distribution of income (land and wealth) is acceptable to the community. The author's proposed risk allocation and diversification cannot ignore the existing level of income distribution a point which seems to have been ignored in the paper. The equitable risk allocation calls for a framework of equitable income distribution.

(8) Lastly, the author's recommendation for "pure incentive system as the most preferable wage system" appears to have a relative validity only in the case of firms producing "private goods" where it is easy to put a "price tag". What about the sectors or industries dealing with production of 'social goods'? What is the remedy when labour shortage takes place in the case of firms or industries showing the prospects of lesser profits. These questions need to be tackled in the paper. In conclusion, it should be pointed out that if the paper will make a contribution to Islamic Economics then it should be revised in the light of the above comments. As it stands, the paper is essentially a good summary of the most recent works on labour-management in the context of market economy as the author himself acknowledged this without any claim to originality. The paper has, however, raised a number of issues and questions which can be related to Islamic economic values, thereby serving as a basis for an in-depth study.

Discussion

Dr. Muhammad Tahir

I am surprised to know the point of view of the paper regarding the ability of the labourers to share the profit in any company to be established in the Islamic world and to carry the risk and responsibilities following this sharing of profit. My comment is that since the labour usually cannot be made responsible for management and because of the specification of work distributed among the whole group, working in a company, I believe that with the present distribution of work between labour and the management the company will go more smoothly than by involving the labour force in the management affairs where they do not have the ability to judge and differentiate between the good and bad from the managerial point of view in the modern world. Now more types of incentives are created to give the workers the needed push to produce better and as much as the establishment could produce. We should keep the labour out of the management as much as we can and give an opportunity to specialists in the management to apply the best modern theories and conclusions they had drawn in their fields of experience. Only then there will be better productivity as well as more satisfaction. By distributing the work according to specializations combined by fairness in payments in volume and time, roles will be clear and conflicts could be avoided.

In short I am not against sharing profits by the labourers but it should not be the main principle in applying *Shari'ah* on investment. Special shares could be used as rewards to the labourers for better realizations.

Prof. Hussain Mullick

We should be very careful in using these terminologies and the concepts which have grown out of overdevelopment in other countries whereas we have not yet even started the development. German and English economies have already suffered from such models of income distribution suggested by Dr. S. Aftab AIL English economy is almost ruined and the German economy also has not done as well as other economies (like Japan) have done. We would be making a blunder if we accept these ideas.

Dr. F. R. Faridi

There is a confusion in whole of the article. The introduction of the paper gives an impression that the author is going to talk about *mudarabah* and *Sharakah* - the two concepts that Islam has given for investment but the paper does not deal with the investment problems and rather deals with the problems of risk-bearing or profit-sharing between the employee and the capitalist (or management). The concepts of *mudarabah* and *Sharakah* relate to the problems of developing proper tenets and mechanism by which an investment will take place in an interest-free economy. These concepts do not relate to the problems that the author has discussed.

Secondly, the author, by mistake or deliberately, repeatedly mentioned that profit-sharing replaces interest or duplicates the function of interest. It is not clear what the author means by this phrase.

Dr. Omar Zubair

A point has been raised about the similarity and dissimilarity of Islamic system with that of capitalism and socialism after making necessary corrections in these two systems. The point is that any attempt to correct the two systems will not really bring them nearer to the true Islamic system. There are distinct features of Islamic system that distinguish it with the other system. To discover these distinct features of Islamic system, the following verses from the *Surah Al-Baqara* need to be consulted:

> *And the parable of those who spend their possessions out of a longing to please God, and out of their own inner certainty, is that of a garden on high, fertile ground: a rainstorm smites it, and thereupon it brings forth its fruit twofold; and if no rainstorm smites it, soft rain [falls upon it]. And God sees all that you do.*
>
> *Would any of you like to have a garden of date-palms and vines, through which running waters flow, and have all manner of fruit therein - and then be overtaken by old age, with only weak children to [look after] him – and then [see] it smitten by a fiery whir/wind and utterly scorched?*
>
> *In this way God makes clear His messages unto you, so that you might take thought.*

[2:(265 - 266)]

The kind of spending is different in the Islamic system. Not only the kind of expenditure but also the motives are different.

> *O you who have attained to faith! Spend on others out of the good things which you may have acquired, and out of that which We bring forth for you from the earth; and choose not for your spending the bad things which you yourselves would not accept without averting your eyes in disdain. And know that God is self sufficient, ever to be praised.*

Satan threatens you with the prospect of poverty and bids you to be niggardly, whereas God promises you His forgiveness and bounty; and God is infinite, all-knowing.

[2: (267-268)]

The main point is that the human knowledge is different from *Hikma* which we are searching here. The true knowledge is different from the knowledge that the other systems are based on. It continues till it says,

If you do deeds of charity openly, it is well; but if you bestow it upon the needy in secret, it will be even better for you, and it will atone for some of your bad deeds. And God is aware of all that you do.

It is not for thee [O Prophet] to make people follow the right path, since it is God /alone] Who guides whom He wills.

And whatever good you may spend on others is for your own good, provided that you spend only out of a longing for God's countenance: for, whatever good you may spend will be repaid unto you in full, and you shall not be wronged.

[2:(271-272)]

Thus we are trying to improve the living conditions of such people by providing them their needs. And this is not considered as charity but an objective.

Even the behaviour of these people is different from the behaviour of such people in other systems.

Those who spend their possessions [for the sake of God] by night and by day, secretly and openly, shall have their reward with their Sustainer; and no fear need they have, and neither shall they grieve.

[2:(274)]

This is voluntary spending by all the people in the community for the benefit of whole community. It is not the responsibility of the government or the state but it is the responsibility of the whole *Ummah*. The whole *Ummah* is collectively responsible for this spending. Then it comes to the evil in the other system.

Those who gorge themselves on usury behave but as he might behave whom Satan has confounded with his touch; for they say, "Buying and selling is but a kind of usury" - the while God has made buying and selling lawful and usury unlawful. Hence, whoever becomes aware of his Sustainer's admonition, and thereupon desists /from usury], may keep his past gains, and it will be for God to judge him; but as for those who return to it - they are destined for the fire, therein to abide!

[2:(275)]

The two systems cannot really meet. They are different and thus no other system, in essence can be reconciled with the Islamic system.

Dr. Nejatullah Siddiqi

Profit-sharing implies that we are providing for a sharing of the uncettainty or risk-bearing (of which the profit is the reward). The question that how far, along the line, we shall provide for sharing of the risk-bearing, needs to be attended to. In this context Dr. Aftab Ali was required to pay more detailed attention to the case of a simple *mudarabah* in which a person without capital but with some idea of making capital usefully employed comes forward and gets funds from a capitalist and then he works and shares the profit. What is involved here simply, should have been the focus of attention of Dr. Aftab Ali's paper. Also we have a provision for *Shirkatul Abdan* in which two persons without any capital arrive at an agreement to work together and share the proceeds. Herein also we can get some new insight into what Dr. Aftab Ali is looking for.

Dr. Faridi's criticism of Dr. Aftab's approach in this connection is not understandable (as it deals with the problem of risk between employees and capitalists and does not deal with mudarabah. Suppose I have some capital and an idea to establish a firm for producing certain types of ready-made garments. I am willing to invest a million rupees in providing for the purchase of sewing machinery and material for renting building etc. I want to employ a tailor but I do not want to pay wages. I declare a formula of profit-sharing. There will, of course, be a number of enterprizing tailors who have enough funds to subsist for a couple of weeks or months and can prefer to share the profits of the firm. Here, I assume that the tailors (the workers) do not have capital but they do have some funds for subsistence. The system as such can co-exist with a system of fixed wages. Here is a whole new area that deserves to be explored rather than dismissal altogether.

Dr. Monzer Kahf

There seems to be an unnecessary debate over the view that elimination of interest is not the whole story. Nobody thinks that it is so. The profit maximizing motive of the capitalist society has been played up too much by the paper and specially by the comments of Dr. Kemal to de-emphasize the importance of eliminating interest. To conclude, that we should not eliminate interest unless other things are also changed, is not correct. I think still there is quite a bit of reason and validity for eliminating interest from our society without changing other things. Even America will benefit much if they only eliminate interest from their society.

Profit maximization motive of capitalism has been blown up too much and it has been said that the profit and interest are two pillars of the economy. I doubt that they are the only two pillars. Even in capitalist society today, you can easily see the multistructure in all kinds of decision-making. It is very difficult to say that it is profit that makes the system a capitalist system. And we should not forget that we have profit in Islam also. Playing too much with profit and playing too little with interest in my view is a mischief in thinking.

Even to present interest under the umbrella of relativism to say that interest could be good at some places or under certain circumstances is quite misleading. If that is true then I wonder why Allah *Subhanahu Ta'ala* prohibited it. It seems to me if interest is unjust then it is unjust everywhere even in the capitalist system and even in America. We should take a different approach in adopting a critique of capitalist and socialist systems. We should clearly be aware of where should we start from and what kind of ideology we stem from. I do not think we can follow any kind of relativism.

Prof. Syed Nawab Haider Naqvi

Dr. Aftab Ali deserves compliments for drawing the attention of the house to this aspect of profit-sharing which has not been discussed before. It should, however, be pointed out that to work for an uncertain wage is un-Islamic. It would lead to a lot of exploitation. The alternative is that we opt for a system of sharing profit where we have a fixed wage plus a share in profit. Though the author seems to favour this view, he has not expncitly revealed his preference whether he is for a fixed wage plus profit-sharing or he is for pure profit-sharing.

Dr. Anas Zarqa

Dr. Aftab Ali has pointed out an economic tool being used in other countries. We have to see how we can apply this in an Islamic framework. We have to see the motivation behind the use of these tools. The same tool can be used with a different motivation as we can use scars and knives for different motives. So there is no need to be very dogmatic about the proposal put forward by Dr. Aftab Ali. We should look at it as a tool.

Secondly, I am getting worried about the undue discussion on the idea that elimination of *riba* is not the whole thing. If the repeated discussion of this topic implies that unless you can jump to Islam in one go you should let *riba* continue, I think this is just ridiculous. It is not sensible to say that just because elimination of *riba* is not the whole of Islam, we should wait until we are able to practice all aspects of Islam in one jump. This is just the opposite of both logic and reasoning as well as the opposite of the logic history. Can anyone of us give me an example where we jumped from one state to another state in one go. This is simply an overplaying of the concept which has become rather a dangerous game. I would rather take strong exception to this. I would admit that by eliminating interest we will not become perfect Muslims but this we must do. This is a big pillar in Islam. After eliminating interest we can then go for adopting other aspects of Islam also. This is how all the systems of the world have developed. The logic of all or nothing is not acceptable and I would rather not repeat and I would not like my other brothers to repeat that elimination of interest is not the whole thing or that we should wait till we can do everything in one jump.

Winding up by Dr. Aftab Ali

Dr. Naqvi's impression that I seem to subscribe to just profit-sharing has, perhaps, been gathered from earlier version of my paper which was later on revised. I recognise that uncertainty about wages in Islam is not permissible and in my presentation, I have made it abundantly clear that there will be a fixed wage and over and above that there will be a sharing of profit. Even there will be an option. If some of the workers choose not to participate in the risk and rather have some more income they can decide to do so. The idea of pure profit-sharing does not make sense. Also I may clarify that I am not looking for a global economy wide solution. That will be too much to ask for in one shot. The framework suggested by me should be evaluated properly and, if found practical, should be adopted on experimental basis on a small scale in only those sectors where we have ample knowledge. For example, we have the case of textile industry in Pakistan. We have almost perfect knowledge of what had happened between the labour and management relationship. We can experiment profit-sharing in this sector and see what happens to productivity. I am aware of the scheme of cash bonuses but that would not do. Labour should be allowed to participate in the management decisions.

The
Rate of Capitalisation
in Valuation Models
in an Islamic Economy

Dr. Masudul Alam Choudhry *

Introduction

The capitalization or discount rate in Islamic project evaluation is well-known in the literature to be a profit rate. However, what has not been analyzed so far in regard to this rate is its structure, particularly in the presence of risky returns in Islamic valuation models. It is also not shown in the existing literature in Islamic economics how this capitalization rate is determined through the Islamic profit-sharing system known as *mudarabah*.

There is just one singular treatment in the Islamic economic literature; where the discount rate is treated as a function of the cost of capital, the marginal rate of time preference and the marginal diminishjng value of savings over time. However, in as far as the entire concept of time preference is highly questionable from an Islamic economic veiwpoint, the study referred to gives a limited insight into the structural issue of-the rate of capitalization in valuation models in an Islamic economy.

It is, therefore, felt that this important parameter, the capitalization rate, must be structurally analyzed and quantitatively determined in an acceptable Islamic economic framework. Without this, no meaningful capital valuation can be performed, no project evaluation undertaken and no capital theory envisaged in Islamic economics.

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* The author is Assistant Professor of Economics,' Department of Socio-Technical Studies, King Abdul Aziz University, Jeddah. The author expresses his thanks to the discussant, Dr. Asghar Qadir, Department of Mathematics, Quaid-eAzam University, Islamabad, to Professor S. N. H. Naqvi, Director, Pakistan Institute of Development Economics, Islamabad, Professor O. Zubair, Department of Economics, King Abdul Aziz University, Jehhah, Professor M. M. Metwally, Department of Economics, The University of Queensland, and members of the Review Committee for the International Seminar on Monetary and Fiscal Economics of Islam (Islamabad, June 6-11, 1981), for their valuable comments and suggestions to an earlier version of this paper.

Objective

The main objective of this paper is to develop a quantitative methodology for determining the capitalization rate and to define its structure in Islamic valuation models. We shall investigate in this paper how the rate of capitalization is functionally related to: (i) the risk of future investment returns, and (ii) the marginal efficiency of investment, derived from an intertemporal allocation of savings into real investment. The postulate of risk-bearing in an Islamic enterprise will be formulated; an optimal condition of risk-allocation between the *mudarabah* partners will be established; and the relation between the riskless required rate of return and the optimal locus of investment menu in an Islamic economy will be determined.

Main Assumptions

The main results of this paper will hinge on the following two assumptions:

(i) *Intertemporally, savings will be weighted more towards the production of capital goods rather than to consumption goods.* The basis of this assumption is the following constraint on consumption-investment behaviour in Islamic economics:

   (a) An Islamic society must first give consumption priorities to the necessaries and comforts of life, in this order. The production and consumption of luxuries holds the last priority, and are altogether forbidden if they cause Israf, i.e. wasteful consumption.
   (b) Excessive production and consumption of any of the above type of goods are strictly forbidden in Islam, for they create wastage of factors of production and of produced goods.
   (c) Savings in the form of real investment to produce the necessaries and comforts of life and more capital goods that further increase the productive capacities in the following periods of time, are highly recommended.

(ii) *The total return from an Islamic investment or what we also refer to in this paper as an Islamic return is the sum of a pure economic component and a pure 'non-economic' component.* The pure economic return is that which arises out of mere allocative efficiency considerations. The pure 'non-economic' return is associated with non-market forces, which in the next round of secondary and spill-over external benefits augments the pure economic return. An example of 'non-economic' return in an Islamic economy' are the spiritual returns to the *Zakah* (Islamic wealth tax) payer, and the consequent economic benefits to the *Zakah* receiver.

We can now move on to the main content of this paper. The main results will be appended at the end of each section.

Postulate of Risk-Bearing in Islamic Economics

Risk-aversion is part of human nature and is, therefore, as real a factor in an Islamic investment decision as in any other economic system. However, in Islamic economics it is necessary to establish the postulate of risk-bearing separately with regard to the pure economic component and the pure 'non-economic' component of returns and then generalize it to the Islamic total return as defined earlier.

In regards the pure 'non-economic' return the Quran clearly asserts the need for risk-assertion by the Islamic entrepreneur, be it an individual, a firm or the state. As an example, take the case of an Islamic entrepreneur faced with the decision to invest in oil-drilling today or wait till ten years from now when the profit from the venture, signalled by expected future oil prices, would be higher. The entrepreneur makes a 'non-economic' decision and assumes risk, in this case equal to a certain function of the profits foregone, if he ignores the expectation of future profits and undertakes an investment in oil-drilling today for the sake of present welfare derived through employment, higher present earnings for a community and a reasonable return to the entrepreneur himself.

In an Islamic economy therefore, the modern limited notion of risk-aversion as a rational investment criterion, is replaced by an encouragement to assume risk with respect to the pure 'non-economic' returns, provided such returns are found to further an Islamic cause. The Islamic entrepreneur assumes risk even when the economic venture shows low expected economic returns but those economic returns must be augmented by 'non-economic' components of Islamic return. Next, let us examine what could be a relation between risk and return in Islamic economics with respect to pure economic returns. In an Islamic economy the price for risk-bearing can be jointly shared between the investor and a public corporation on the basis of *mudarabah*. *Mudarabah* is the Islamic profit-and-loss-sharing institution, whereby the public corporation advances real or money capital for investment in real assets, on the agreement that the profit after a given period of time will be shared between the borrower and the public corporation in accordance with mutually agreed upon sharing. rules. In the case of economic loss by the enterprise, the repatriation of the loan can be extended to a longer period of time on the same sharing agreement, or in the case of multiple sharing firms, the pooled profits of these several firms take care of the losses occurring in the group.

The principle of *mudarabah*, therefore, establishes a cooperative system in an Islamic economy. This principle can be extended to multiple firms.

The public corporation herein referred to may be a central bank, a commercial bank, an investment corporation, or some other financial intermediary and in the historical sense, the *Baitul-Mal* (public treasury primarily responsible for the collection and disbursement of various expenditure items of the Islamic public finance). A public corporation can diversify the risk not only of the joint entrepreneurs but also its own risk in capital investment. It can do so because as a highly centralised form of public institution it has better information about future risk and returns from an uncertain project. Also, by involving as many private entrepreneurs as possible in joint investment ventures, the public authority can pass on a substantial part of the total risk through the private sector to the tax payers, of which a particular case are the *Zakah*-payers. This is the process of risk diversification.

Risk diversification through *Zakah* needs a closer look. The *Zakah* fund collected by the *Baitul-Mal* can be spent in ameliorating those in debt or struck with heavy losses. Now, as the number of *Zakah*-payers increases indefinitely, risk tends to zero and an ideal state of risk diversification by public authority can be achieved. These arguments incidentally, establish Arrow and Lind's result on risk and the public investment: the public sector is essentially risk-neutral, because it can easily and effectively diversify the risk involved in public investment.

We can now summarize the main postulates of risk-bearing in an Islamic economy:

(a) The Islamic entrepreneur is risk-averse only up to the point that the total Islamic returns from an investment are expected to be less in proportion to the degree of risk involved.

(b) The Islamic entrepreneur may be risk-neutral or a risk-asserter with respect to pure economic returns. Risk-neutrality is found to explain the investment attitude on the part of the public corporation or a risk diversified investor in the presence of *mudarabah*.

(c) The principle of public-private sector cooperation based on *mudarabah* reduces the share of risk for the private investor. The private sector entrepreneur thereby, becomes only marginally risk-averse even with respect to pure uncertain economic returns. Therefore, his propensity to undertake higher levels of investment in real capital increases.

(d) The public sector for all practical purposes is risk-neutral because of effective risk diversification through cooperation and *Zakah*.

Note, therefore, that the conventional theoretical concept of risk-aversion based on pure economic return is unacceptable in the Islamic economic framework. However, it does apply in the case of total Islamic return, which is the sum total of the Islamic entrepreneur's pure economic and non-economic returns, the latter of which are obtained from Islamic values, belief and social welfare.

In the presence of *mudarabah* the partners would like to achieve a risk-return sharing formula that will allocate the risk among them in a mutually desired way. A formula for determining the percentage sharing of risk would reflect market forces associated with allocative efficiency of the joint venture. Such a formula is established below.

Allocation of Risk Through *Mudarabah*

In this section we wish to establish the first order condition for determining an optimal risk allocation or risk pricing between the *mudarabah* partners. In order to establish this first order condition the following four assumptions are made:

(i) *For each contractual joint venture under mudarabah an optimal level of total profit, set at the normal profit level, is given.* The *mudarabah* partners undertake to share this total profit in a given desired way, depending upon the postulate of risk-return criterion formulated in the foregoing section and formalised below.

(ii) *For a given level of total profit through* mudarabah*, the corresponding level of risk is also determinate and given.* Like profit-sharing, the total risk is also jointly shared under *mudarabah* in due percentage shares.

(iii) *When the total profit and risk are optimally allocated among the* mudarabah *partners, there would not be any more external benefits through allocative efficiency.* The *mudarabah* partners have given their best to each other before arriving at the optimal risk-sharing situation.

(iv) *Externality associated with X-efficiency would exist in an optimal risk allocation situation.* This X-efficiency arises due to non-market forces generated through the altruistic concern for mutual welfare.

Now let,

$U_1 = U_1(\pi_1, \pi_2, \sigma^2_1, \sigma^2_2)$ denote a general form of a utility function for the firm,

$U_2 = U_2(\pi_1, \pi_2, \sigma^2_1, \sigma^2_2)$ denote a general form of a utility function for the public corporation,

where, π_1 denotes expected profit for the firm,

π_2 denotes expected profit for the public corporation,

σ^2_1 denotes the risk for the firm and by standard practice, it is the variance of stochastic returns from an uncertain investment by the firm,

σ^2_2 denotes the risk for the firm and by standard practice, it is the variance of stochastic returns from the same uncertain investment by the public corporation.

Let,

σ^2 denotes the total risk in a joint investment venture, i.e.

$\sigma^2 = \sigma^2_1 + \sigma^2_2 + 2r\sigma_1 \sigma_2$ r being the correlation coefficient between risky returns accruing to the two partners,*

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* Equation revised to incorporate the comments from Dr. Asghar Qadir (Editors).

π denotes the total profit from a joint investment, i.e. $\pi = \pi_1 + \pi_2$.

In order to establish an optimal trade-off in risk-bearing by the partners, we formulate the optimization problem,

$$\text{Max } U^* = U_1 (\pi_1, \pi_2, \sigma^2{}_1, \sigma^2{}_2) + \lambda[U_2 (\pi_1, \pi_2, \sigma^2{}_1, \sigma^2{}_2) - U^*{}_2]$$

given, $\pi = \pi_1 + \pi_2$

$$\sigma^2 = \sigma^2{}_1 + \sigma^2{}_2 + 2r\sigma_1 \sigma_2*$$

and where, λ is the Lagrangian multiplier.

Note that in the form that the utility functions are expressed they appear as interdependent utility functions. This is in accordance with assumption (iv) given above.

Assumption (iii) implies that,

$$\partial U_2/\partial \pi_1 = 0$$

$$\partial U_2/\partial \sigma^2{}_1 = 0$$

$$\partial U_1/\partial \pi_2 = 0$$

$$\partial U_1/\partial \sigma^2{}_2 = 0$$

It can then be shown as proved in the Technical Appendix at the end of this paper that,†

$$\frac{\partial U_1 / \partial \pi_1}{\partial U_2 / \partial \pi_2} = \frac{\partial U_1 / \partial \sigma_1^2}{A.\partial U_2 / \partial \sigma_2^2}$$

where, A is a linear function of the regression coefficient of the risky returns of the firm on the risky returns for the corporation.

Further, let,

$$- \partial U_1/\partial \sigma^2{}_1 = P\sigma_1$$

$$- \partial U_2/\partial \sigma^2{}_2 = P\sigma_2$$

$P\sigma_1$, $P\sigma_2$ can be interpreted as the profit-sharing rates, and in the optimal risk-bearing situation, they also represent the price for risk-bearing by the firm and the corporation, respectively, rewarded exactly by the return of profit-sharing rates.

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† This was revised in the light of the comments of Dr. Asghar Qadir (Editors).

The first order risk-bearing optimality condition under mudarabah now reduces to,

$$\frac{\partial U_1 / \partial \pi_1}{P\sigma_1} = \frac{\partial U_1 / \partial \pi_2}{A.P\sigma_2}$$

meaning, that the marginal utilities of a return to the firm and to the corporation are proportional to their profit-sharing rates, respectively.

Now, by assumption (iv) as mentioned above, X-efficiency generated by *mudarabah* creates higher efficiency for the cooperating firm, higher profits through increase in inter-plant and intra-plant motivational efficiency, and thereby, higher confidence on the firm by the public corporation. This increases $\partial U_2/\partial \pi_2$ as indicated by the first order condition. Thus, the interdependence of U_1 and U_2 again.

$$- \partial U_1/\partial \sigma^2{}_1 = P\sigma_1$$

In general, $P\sigma_1 \gtrless P\sigma_2$, depending upon the magnitude of risk-sharing by the firm and the corporation. Let,

$$P\sigma_1 = (1 + P)\, P\sigma_2$$

where, P denotes a suitable percentage. Then,

$$\frac{\partial U_1 / \partial \pi_1}{\partial U_2 / \partial \pi_2} = \frac{1+P}{A}$$

The percentage, P, clearly denotes a percentage share of profit rate by the firm in the above formulation. In the optimal risk pricing situation this percentage share of the profit rate would equally demand a percentage share of risk. Hence, P gives a source for the risk component of the capitalization rate. However, it is only a part of P, say αP that enters the capitalization rate to account for the risk-sharing in a *mudarabah* partnership. $0 < \alpha < 1$, is possibly a percentage cost of investment.

In this section we have shown that in risky capital projects the risk component of the capitalization rate is determined by the percentage share of risk by the firm in a *mudarabah* partnership. This percentage share of risk is that which is determined by an optimal risk allocation condition in a *mudarabah* partnership.

The other component of the capitalization rate for valuation models in an Islamic economy is a required rate of return. That is, it is a rate which must necessarily exist for discounting both uncertain as well as riskless projects. We now turn to an analysis of this component.

The Required Rate of Return in an Islamic Economy

An implication of the main assumption (i) mentioned earlier is that the Islamic idea of intertemporal consumption-investment decision is opposed to the very basis of intertemporal allocation of income to consumption as given by the consumption theory of interest. The new approach in Islamic economics would be to allocate income intertemporally among savings in real investment.

Therefore, in an Islamic economy the choice to the investor is not between today's and tomorrow's consumption, but rather between today's investment returns and tomorrow's investment returns. This is the same thing as lagged investment intertemporally considered. Private and social rates of time preference as explained by the consumption theory of interest, are therefore, untenable in the Islamic economy. They are instead replaced by the marginal efficiencies of capital, privately owned or socially owned, as the case may be.

We have shown in the Technical Appendix at the end of this paper that in the Islamic framework of investment-consumption decision, the marginal efficiency of investment, 'r', is given by the result,

$$\frac{\Delta Y_{t+1}}{\Delta Y_t} = (1 + r).$$

– (1+r) denotes the slope of the income line at the point of tangency of this line with the investment possibility curve. Since r is directly related to real investment, so it is in fact the marginal efficiency of investment.

Because r is inversely related to the investment level, therefore, as investment increases due to transfer of funds from potential consumption to investment, it is made more and more attractive by a declining r. Figure 1 shows that under such conditions the returns-line indicated by T'P' shifts upwards but tilts downwards. Consequently, the optimal locus of points of tangency of the capital budgetline with the investment possibility curve shifts upwards as indicated by RR'.

In Figure 1, Y_1 and Y_2 denote the incomes available in time periods 1 and 2, respectively, for investment. The income allocation line is initially given by TP, with optimal investment allocation at R on the investment possibility curve, VF. Now the slope of TP is –(1+r). As r declines, TP shifts to T'P' in a downward tilting fashion, and R moves up to R'.

Initially an investment of AF today would give a return of HR tomorrow. After the change in income, an investment of FP > AF resulting from the declining r, gives a net increase in return of R'G' > RH. Thus, the locus RR' moves upwards as shown.

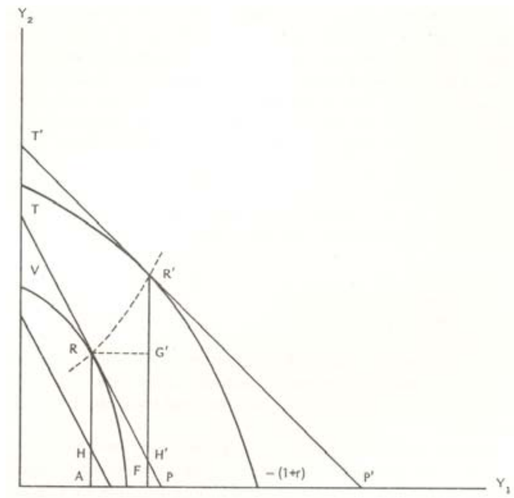

Figure 1: Consumption-Investment Trade off and the Optimal Locus of Investment Menus in an Islamic Economy

So much for the private rate of return. Let us now turn to the social rate of return in an Islamic economy. In an Islamic economy individual preferences that make up the social preferences are essentially altruistic in nature, and are formed under given codes of the *Shari'ah* that establish the relation of the individual with the state.

We claim, therefore, that the marginal efficiency of social investment is a weighted average of the marginal efficiency of private investments. This result can be established simply by taking an example. Consider an Islamic government tenders contracts to private firms for the construction of a railway line. This is a social project, and in the private sector it would involve such agents as steel manufactures to fabricate the railway tracks, the mining sector to pass railway tracks through mountainous tunnels, civil engineering firms to design the layout and build bridges, the training and educational sector to provide the manpower need and others. Now, if a given proportion of the total investment in these sectors goes to meet the needs of the railway construction project, then it would readily follow that the social rate of return on this project would be a weighted average of the sectoral (private) rates of return, with finer breakdowns as applicable.

In a diagram similar to Figure 1 it could be shown that the social rate of return is to be determined by the slope of the tangent at the common point of the social indifference curve and the socially desirable investment possibility curve. This is also the point where the marginal social productivity of investment would be a well-defined function of the marginal social productivity of private investment. The notion of the social time preference rate of the modern economy is, therefore, again replaced by the marginal efficiency of social investment.

We can now summarize the results of this section for an Islamic economy:

(i) In both the cases, of private and social investment, the in tertemporal choice of investment is based on the marginal efficiency of investment.
(ii) The social marginal efficiency of investment is a weighted average of the private marginal efficiencies of capital.

The main areas of analysis of the rate of capitalization in valuation models in an Islamic economy, that we intended to undertake, have been covered. In the next section we simply bring together the quantitative results to establish the Islamic capitalization rate in its quantitative structural form.

The Capitalization Rate for Islamic Valuation Models

The capitalization rate for capital valuation models in an Islamic economy, denoted by p, is now given by,

$$\rho = r + \alpha P$$

where,

- r denotes the required rate of return identified as the marginal efficiency of investment, private or social, as the case may be;
- P denotes the percentage share in risk-bearing by the *mudarabah* firm;
- α denotes a suitable percentage, possibly representing the relative cost of production or investment for the *mudarabah* firm.

Conclusion

This paper was about the nature of the capitalization rate in valuation models in an Islamic economy. It has been shown in this paper that this all important parameter is the sum of two components: (1) the required rate of return, and (2) the risk premium.

The required rate of return was shown to be essentially the marginal efficiency of real investment, private or social, as the case may be. This rate was determined by the Islamic social choice model, whereby the investor is faced not with the problem of allocating his income among consumption intertemporally, but rather with the problem of allocating his income into real investment intertemporally.

On the question of risk-premium it was shown that the returns in an Islamic investment are inextricably a putty-clay of the pure economic and pure non-economic returns. In the light of such a return it was shown that an Islamic entrepreneur need not be strictly risk averse with regard to pure economic return.

However, with respect to the total Islamic return, the usual analytical assumptions of risk aversion may be used. Finally, the paper has been focussed on the real economy. However, the issues and applications of the rate-of-return analysis are clearly to be found in project evaluation problems of both the real and money economies.

TECHNICAL APPENDIX

1. Mathematical Formulation of Risk Allocation Through *Mudarabah**

In the text of this paper we have set up the following optimization problem to determine the first order optimality condition for risksharing between the *mudarabah* partners (all variables previously defined):

$$\text{Max } U^* = U_1(\pi_1, \pi_2, \sigma^2{}_1, \sigma^2{}_2) + \lambda[U_2(\pi_1, \pi_2, \sigma^2{}_1, \sigma^2{}_2) - U^*]$$

meaning, that we are maximizing the utility function of the firm given the utility level of the corporation as U^*_2.

Also, $\pi = \pi_1 + \pi_2$

$$\sigma^2 = \sigma^2{}_1 + \sigma^2{}_2 + 2r\sigma_1\sigma_2$$

The first order conditions of maximizing U^* with respect to $\sigma^2{}_1$ and π_1 are given by,

$$\frac{dU^*}{d\sigma_1^2} = \frac{\partial U_1}{\partial \sigma_1^2} + \frac{\partial U_1}{\partial \sigma_2^2} \cdot \frac{d\sigma_2^2}{d\sigma_1^2} + \lambda\left(\frac{\partial U_2}{\partial \sigma_1^2} + \frac{\partial U_2}{\partial \sigma_2^2} \cdot \frac{d\sigma_2^2}{d\sigma_1^2}\right) = 0$$

$$\frac{dU^*}{d\pi_1} = \frac{\partial U_1}{\partial \pi_1} - \frac{\partial U_1}{\partial \pi_2} + \lambda\left(\frac{\partial U_2}{\partial \pi_1} - \frac{\partial U_2}{\partial \pi_2}\right) = 0$$

From the relation,

$$\sigma^2 = \sigma^2{}_1 + \sigma^2{}_2 + 2r\sigma_1\sigma_2,$$

by differentiating totally for a given σ^2, we obtain,

$$d\sigma_1^2\left(1 + \frac{r\sigma_2}{\sigma_1}\right) + d\sigma_2^2\left(1 + \frac{r\sigma_1}{\sigma_2}\right) = 0$$

Assuming now that stochastic returns of the *mudarabah* partners are linearly related through a regression equation, it follows readily that $(r\sigma_1/\ r\sigma_2)$ is a function of the corresponding regression coefficient. Therefore, by putting

$$1 + \frac{r\sigma_2}{\sigma_1} = a, \quad 1 + \frac{r\sigma_1}{\sigma_2} = b$$

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* The Mathematics shown here is different from the one shown originally. The revision mainly reflects comments particularly from Syed Nawab Haider Naqvi and Dr. M. M. Metwally.

we obtain,

$$a\, d\, \sigma^2{}_1 + b\, d\, \sigma^2{}_2 = 0.$$

On eliminating A from the two first order maximizing equations and using the conditions for the non-existence of externalities associated with allocative efficiency, as given in the text of the paper, we obtain,

$$\frac{\partial U_1 / \partial \pi_1}{\partial U_2 / \partial \pi_2} = \frac{\partial U_1 / \partial \sigma_1^2}{A.\partial U_2 / \partial \sigma_2^2}$$

This is the first order condition of risk allocation between the *mudarabah* partners. The rest of the result is contained in the text of the paper.

2. Optimal Locus of Investment Menu in an Islamic Economy

Let,

Y_t denotes investment return at time t,

1_{t-1} denotes investment made at time t-1,

a, b denote constants.

For a one-period lagged investment-return relation we write,

$$Y_t = a1_{t-1} + b$$

Now, absolute difference in Y_t and 1_{t-1} are related by,

$$\Delta Y_t = a\, \Delta 1_{t-1}$$

Likewise, $\Delta Y_{t+1} = a\, \Delta 1_t$

Therefore,

$$\frac{\Delta Y_{t+1}}{\Delta Y_t} = \frac{\Delta 1_t}{\Delta 1_{t-1}}$$

Clearly, money available today for investment is more valuable than money available tomorrow for investment. Therefore,

$$\frac{\Delta Y_{t+1}}{\Delta Y_t} = -(1+r)$$

where, -(1+r) is the slope of the income line at the point of tangency of this line with the investment possibility curve. Since, r is directly related to real investment, so it is in fact the marginal efficiency of investment.

Comments

Asghar Qadir

In this paper the author tries to analyse the rate of capitalization in Islamic economies. He contends that it is not a profit/ loss-sharing rate, but is the sum of two quantities - the marginal efficiency of investment on inter-temporal allocation of income and the price for riskbearing. It appears from the author's discussion that he believes risktaking is to be encouraged by Islam. Some errors of mathematics and logic in this analysis, are pointed out. Rather than considering how the analysis should be corrected, I have discussed the question of "risk" in Islamic economics. On the basis of this discussion some suggestions regarding Islamic economics are made. These suggestions do not only have relevance to the question of "interest" but also to *Zakah*.

It is difficult to discuss matters relating to definitions. If a term defined in one context is extended beyond that context it becomes very difficult to decide which extension should be accepted. To remove confusion in terminology one would generally tend to accept the first extension and avoid any other extensions to avoid confusion in the terminology. For this reason I fail to see the advantage of taking the author's definition in place of that of other Islamic economists. As such the main motivation for the paper under discussion seems very weak to me. However, that is not a very good reason for not discussing the paper further. Before going onto that discussion, I would like to state what I believe to a very important, if somewhat obvious, principle, "Economic realities are not altered by the terminology used to discuss them". Thus the terminology should be chosen for the convenience of discussions and can not be imposed on us by any other considerations.

The first point in the paper on which I would like to comment is an economic one. The author assumes that in a working Islamic economy, the usual, capitalistic "exchange basis of value" will no longer be applicable, but people will consider "Islamic benefits". As I understand it, the author says that the basis of value for the *individual* would be some sort of a "social benefit value". If such a situation could be brought about, there would hardly be any need of laws to regulate social and economic behaviour of individuals. Certainly, in such a Utopian world most of the normal problems of economics would no longer be relevant. Economics is mainly concerned with a conflict of interests. There are no conflicts appearing in the case considered by the author as everyone is trying to maximize the same objective function. Clearly, the questions raised in this "economics" are entirely different from those arising in normal economic theory. Thus, these new questions need new concepts and can not be discussed in terms of the earlier concepts. The whole idea of "capital" and "the rate of capitalization" etc. need to be reassessed for this new "economics". To appreciate the tremendous shift of viewpoint acquired here it is only necessary to see what a difference was made by Marx's change from the capitalistic basis of value to a "labour basis of value". Even though the fundamental point of dealing with conflicting interests was preserved, and only the means of measuring value was altered, a complete change of the basic concepts was involved. Here, when we remove the very basis of all economic discussion, it is no longer clear that we are still discussing economics. It seems to me that the use of the previous methods and terminology is entirely unjustified with this basic assumption. For further discussion, therefore, we shall disregard this assumption. This approach appears to be consistent with Islam, which assumes that humans are selfishly motivated, and provides a code to regulate their selfish behaviour. Thus the individual Muslim is not to be regarded as trying to maximize "social benefit" but rather to maximize his individual utility function subject to the constraints imposed by the Islamic state in which he is living – a situation which can be dealt with in usual economic terms.

The above-mentioned point leads the author to disagree with the other workers in Islamic economics. The difference essentially boils down to a definition of "Islamic economics". The earlier definitions, though still not quite precise, are very clearly recognisable as economics. The author's "definition", also vague, would be better termed on "Utopian Islamic economics", where all ideals have already been achieved. One would expect such a perfect system to be static and hence there should be no rates appearing in it. One would expect, therefore, that the rates appearing in the work, result from some error of analysis which needs to be pinpointed. This argument is certainly not rigorous, nor is it meant to be. It is merely, expressed to indicate that an error was expected by me. The need for rigour comes in the analysis of the author's argument, which follows.

*We are informed that the "profit function", π, is given by

$$\pi = R - C + u \tag{1}$$

R being the annual revenue, C the annual cost and u a stochastic (or random) variable satisfying the requirement

$$E(u) = 0, \; E(u^2) = \sigma^2 \tag{2}$$

where E(u) represents the expectation value of the stochastic variable u. What this implies is that the variable u is already known throughout the range and its average is zero. From Equations (1) and (2) it becomes obvious that

$$\sigma^2 = E(\pi^2) - [E(\pi)]^2 \tag{3}$$

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* The comments from here to the next page remain no more valid as the author excluded the relevant portion from his revised paper on the basis of these comments. (Editors)

where $E(\pi)$ is just the expectation value of the profits, being R−C, i.e. the difference between the revenue and the costs. The author confuses this expectation value of profits, i.e. the average profits, with the *expected profits*. The expected profit is the guessed amount of profit that the entrepreneur is expecting to get, and not the expectation value of the random variable "profit". In fact "u" is not an observable variable and only "π" can be actually measured. Thus σ^2 is defined only in terms of π, i.e. by Equation (3). This equation only applies with complete knowledge of profits before hand and does not refer to the guesses of the entrepreneur. Not assuming any foreknowledge all that can be reasonably said is that the investor's utility function is defined by

$$U = U(\pi, \sigma), \quad \frac{\partial U}{\partial \pi} > 0 \; \frac{\partial U}{\partial \sigma} > 0 \tag{4}$$

where π is the expected (guessed) profit and a the expected risk. The earlier Equations (1)-(3), can not be meaningfully used.

The author talks about an undefined constant 'a'. It is claimed that it has been "shown" to be some quantity, but there is no reference as to where it has been shown. This lack of definiteness is typical of the whole analysis. Here it is particularly distressing as it is basic to the author's "definition" of the rate of capitalization, which becomes meaningless as it is expressed in terms of an undefined constant by the equation

$$\rho = a + w\,\sigma^2 \tag{5}$$

w being some other, unspecified, constant. Equation (5) does not have any economic content beyond saying that the rate of capitalization is linearly related to σ^2, which would be defined by Equation (5) if that equation were meaningful. Even accepting a more meaningful definition by Equation (3) with σ^2 being the measure of the entrepreneur's expected risk, we would be left with the task of trying to understand the significance of a and w. Supposing that this had been done to our satisfaction, we would still have to understand the significance of ρ as a whole as that has not been expounded by the author. Later, the author returns to "the rate of capitalization" and provides his own "definition" of the quantity as the sum of two quantities: "the required rate of return" and "the investor's premium for risk-bearing". There is no attempt made to justify this definition, or to relate it to Equation (5). As the title seems to indicate that this concept is the main theme' of the paper, and there is confusion regarding it, one has to say that the subject has not been adequately dealt with†.

So far no basic errors have been committed in the mathematics. The errors dealt with have been of a deeper nature. The paper provides basic errors of

† The comments uptil here remain no more valid with respect to the revised paper of Dr. Masudul Alam Choudhry. (Editors)

mathematics and economics. The situation discussed is very odd in itself. There are supposed to be two entrepreneurs not dependent on anything else in the economy, one of whom is called "the Central Treasury" while the other is called "the investor". In spite of these names they are taken to behave as “entrepreneur 1” and "entrepreneur 2". There is nothing in the utility function, or its corresponding constraints, to distinguish the entrepreneur from the Central Treasury. This is the basic error of economics referred to. We now come to the basic mathematical error. A maximand is written down by the author

$$U^* = U_1 (\pi_1, \pi_2, \sigma^2{}_1, \sigma^2{}_2) + \lambda[U_2 (\pi_1, \pi_2, \sigma^2{}_1, \sigma^2{}_2) - U^*] \qquad (6)$$

where U_1 is supposed to be the utility function of "the investor", and U_2 of "the Central Treasury"; π_1, and π_2 are their respective expected profits, and $\sigma^2{}_1$ and $\sigma^2{}_2$ their respective risks; λ is an unspecified lagrange multiplier presumably to be fixed by optimization requirements; and $U^*{}_2$ is an undefinable utility function. There is no way that, within the framework used, U_1 should depend on π_2 or $\sigma^2{}_2$. Again, the way it is presented, $U^*{}_2$ could be defined, Equation (6) is devoid of content.

To continue with an analysis of the mathematical errors, the author writes down two further conditions,

$$\pi = \pi_1 + \pi_2; \ \sigma^2 = \sigma^2{}_1 + \sigma^2{}_2 \qquad (7)$$

where π is the total profit and σ^2 the total risk. Whereas the profits will add, the risks will not. To see this fact most simply consider a partnership in a pure gamble, i.e. $\sigma^2 = ½$ (in a probabilistic measure) clearly each partner also runs a risk of ½ in that case, and not a quarter. Somehow the author would like to consider σ^2 as "the amount of money involved in the risk" and not "the risk" itself. Without an exact definition of what σ^2 is actually supposed to be, [remember that it could not be defined by Equations (2) or (3)] there is no question of being able to accept Equation (7).

At this stage, the author performs some completely meaningless steps. He differentiates Equation (6), partially, relative to π_1 and $\sigma^2{}_1$, and on the right hand side relative to two independent variables together. Nothing here makes sense. Then he requires that these partial derivatives be zero, which is a very odd optimization constraint. The net result is that if the calculations are performed correctly otherwise, the author is committing the fallacy of dividing by zero. He then claims, that his (fallacious) steps easily give*

$$d\sigma^2{}_2/d\sigma^2{}_1 = -1 \qquad (8)$$

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* This error is no more in the revised paper. On the basis of this comment, Dr. Masudul Alam Choudhry corrected this error. (Editors)

which is also untrue. Had the claim even been true, Equation (8) would normally be considered meaningless as it appears to relate two unrelated (independent) variables. Whereas the two independent variables *could* be added, no restriction on their sum is valid, as they are then no longer independent variables. In fact what the author does to require that σ^2 in Equation (7) be constant. This requirement clearly yields Equation (8). Thus he is actually thinking of $\sigma^2{}_1$ and $\sigma^2{}_2$ as being parametrized by some parameter s, and σ^2 being constant for all values of a in our domain of interest. This assumption can not be economically justified at all.

The above-mentioned error is repeated for expected profits to yield

$$d\pi_2/d\pi = -1 \qquad (9)$$

by assuming that the expected profits π are constant. As the meaning of constancy is not for a *given* enterprise but for any enterprise this assumption is clearly false. In the case of $\sigma^2{}_1$, since the economic significance of the term was not clear, it was not possible to make such an emphatic statement. Apart from these errors there is an inconsistency in two of the assumptions made by the author. Since any intangible "Islamic returns" will *add* for the two partners and will *not cancel*, the profit could not remain constant anyhow, Hence this assumption (of constant profits) does not allow π to include "Islamic returns".

The errors committed have already become too numerous to be amenable to correction. Thus, for example, the author writes down the following:

$$\frac{\partial U_1 / \partial \pi_1}{\partial U_2 / \partial \pi_2} = \frac{(\partial U_1 / \partial \pi_2)(\partial U_2 / \partial \pi_1)}{(\partial U_2 / \partial \pi_2)} = \frac{\partial U_1}{\partial U_2} = \frac{P\sigma_1}{P\sigma_2} \qquad (10)$$

Here the first step is incorrect. Consider the case that U_1 is a function of π_1, only, then $\partial U_1/\partial \pi_2 = 0$. Thus, even purely mathematically, the first step is fallacious. Again, it is not meaningful to take the partial derivative of one utility relative to another, as utilities are functions of the independent variables and not themselves some basis of independent variables. Even had that error not been present, the derivative of one independent variable relative to another can never be partial, but *may* be definable as a total derivative. Even supposing that a total derivative is what was meant (or, disregarding other problems, the partial derivative could be regarded as correct) still

$$\frac{\partial U_1 / \partial \pi_1}{\partial U_2 / \partial \pi_2} \neq \frac{\partial U_1}{\partial U_2} \qquad (11)$$

in general. Of course, there is also the error of Equation (9) which is used in the second step of Equation (10). It is not possible to continue to discuss the errors meaningful. If one wanted to pursue this somewhat unpromising approach, the whole analysis would have to be reworked from scratch. A rough sketch of the attempt that can be made is outlined below.

Consider a situation of n entrepreneurs with expected profits π_i and expected risks σ_i and one Central Treasury with expected profits π_o and expected $\sigma^2{}_o$. The economically reasonable utility functions are

$$U_o \equiv U_o(\pi^o{}_o, \pi_1, \ldots.., \pi_n; \sigma^2{}_o, \sigma^2{}_1, \ldots.., \sigma^2{}_n)$$

$$U_i \equiv U_i(\pi_i; \sigma^2{}_i) \qquad (i = 1, \ldots, n) \tag{12}$$

with the requirements

$$\partial U_i/\partial \pi_i \geq 0, \ \partial U_i/\partial \sigma^2{}_i \leq 0 \tag{13}$$

The optimal value will be for maximum profits and minimum risks for the entrepreneurs. However, the Central Treasury has a much more complicated requirement since it maximizes other profits than its own and it minimizes other risks as well as its own. It would be the task of Islamic economists to state reasonable economic requirements for U within an Islamic framework. Thus, for example, we would probably require that

$$\partial U_i/\partial \pi_i \geq 0, \ \partial U_i/\partial \sigma^2{}_i \leq 0 \ (i = o, 1, 2, \ldots n) \tag{14}$$

particularly simple model may be

$$U_o = \sum_{i-1}^{n} W_i \, U_i + W_o \overline{U}_o \tag{15}$$

where W_i are some appropriate weighting factors and

$$\overline{U}_o \equiv \overline{U}_o \, (\pi_o, \sigma^2_o$$

satisfies Equation (13). Thus the utility function of the Central Treasury would be a suitably weighted average of the (n+1) entrepreneurs, with the clear requirement that $W_o < W_i$. The W_i would be fixed by conditions such as the national needs and allocative considerations, being time dependent in general [A geometric mean would also be,used in place of Equation (15)].

Let us not go into the details of model-building here, as better economists than I would be able to deal with it more easily, but rather let us consider the question of how desirable risk-taking should be in Islam. If the enterprise were to be decided by pure luck the risk (in probabilistic terms) would be ½. This would be a pure gamble. Clearly such an enterprise is forbidden in Islam by the injunction against gambling. Our risk must be less than this value. However, risk can not be eliminated from any enterprise. It is clear that risk minimization is what is required by Islam. Taking the utility to be monotonio in profit and risk it is clear from the Kuhn-Tucker theorem that the optimal value for the utility will be obtained on the boundary of the domain in the profit risk plane that is allowed by the constraints. Thus we will never have the equalities holding in Equation (13). What this means economically is that we should try to take the least risk for the greatest profit. Thus with appropriate weighting the mean of risk and profit should be maximum. The Islamic constraint is that the weighting factor for the risk should be greater than for the profit, e.g. taking geometric means the maximand (utility) should be,

$$U = (\pi/c)^{W_1} (\sigma^2)^{-W_2} \tag{16}$$

where σ^2 is just taken to be the probabilistic risk, C the cost, and W_1 and W_2 are just weighting factors, $W_1 < W_2$. Let me repeat that in Islam risk is accepted as being inevitable but it is also considered *undesirable*. To regard risk as desirable is to oppose Islam.

The only problem with accepting the above view is the supposition that the injunction against "interest" but not against "profit" makes risk desirable. This opposition comes from arguments about words and not the meanings of those words. However, the meanings of words change over long periods of time. It is by no means, clear how to understand the word "*Riba*" in modern terms 1500 years later, leave alone translating it into another language. It is not only necessary to have a command over both languages but mastery over the concerned subject is also essential. When translating concepts over long periods of time we have to evolve those concepts to deal with new objects. The denotation of the words used earlier in explaining a concept can not incorporate the new objects and must be changed. To understand the problem most clearly, let us ask the question whether LSD is allowed or forbidden in Islam. As there was no such thing at the time there *could be no* explicit injunction against it. The injunction against "*sharab*" (liquor) could be interpretted as applying to LSD as the reason for "*sharab*" being forbidden is that it makes people lose their senses. Similarly we note that monetary phenomena are only recent and no account is taken of them in Islam. Since "interest" is certainly not unrelated to the monetary aspect of the economy we must raise the question of what "interest" amounts to in the modern age. Only with an answer to this question will be in a position to say whether interest is allowed or forbidden in Islam. Let us first consider exactly what was forbidden in Islam and why it was forbidden then, before going on to consider the modern "interest" in Islam.

The "interest" forbidden at the time was easily understood as money was well defined over fairly long periods of time. The use of this "money" to obtain more "money" *at the expense of other people* was definitely forbidden in Islam, in fact, it could be argued that Islam disapproved of more "money" being obtained without any work done for the extra "money". The conjunction was to the exhorbitant "interest" charged by private money-lenders. Clearly that "interest" was the result of the very high risk taken by the money-lender. In no way can it be argued that this risky investment was encouraged in Islam while the comparatively safe investment of a shopkeeper in goods for sale was discouraged. The element of risk was a social evil and to be discouraged as such. However, as we know even in the physical sciences today, nothing is certain and so some element of risk is inevitable. We can only reduce the risk but it will never be possible to eliminate it.

Let us now turn to "interest" in present-day terms. "Money" is no longer a well-defined quantity in that its value changes over short periods of time. Its value decreases daily more than it changed in decades in the early Islamic times. Also, the "interest" given by banks is obviously not a means of exploiting the needy people. Even the "interest" taken by a bank bears only a superficial resemblance to the "interest" forbidden by Islam. The disallowed "interest" must be that of early Islamic times and not the modern banking "interest". It is certainly a perverted view of Islam which disallows safe investment and encourages the originally disallowed interest under another name. Remembering that one of the purposes of *Zakah* was as a disincentive to hoarding unutilized wealth, there should be a general disincentive for keeping "money" instead of investing it in a way that is beneficial for the economy. These points must be taken into account along with inflation when discussing the question of "interest" in an Islamic economy. Rather than getting bogged down with terminology on which there may be disagreement, I shall avoid terms like "profit" and "interest" and only talk of "returns" on an investment.

I would like to suggest that instead of trying to avoid inflation and its related problems it should be used to achieve certain goals of an Islamic economy. In particular it could be used as a means of collecting a wealth tax on unutilized "money" holdings, as their value will decrease in real terms. Ideally "money" should be invested in the Central Treasury to give returns greater than the inflationary loss. The Central Treasury would give loans on the basis of national needs at a rate of returns to the treasury in excess of the returns given by the bank. The purpose of these conditions is to keep a positive cost of capital so as to avoid overspending. In this way we have a minimum risk investment for everybody. The risk is taken by the whole economy. The investors gain collectively or lose collectively, in keeping with basic Islamic requirements.

To sum up, numerous errors of logic, economics and mathematics were found in the analysis of the paper under discussion. As the main aim of the paper is to analyse rather than to suggest policies, it does not seem as if much can be gained from it. In particular this paper, along with many others, assumes that Islam encourages risky ventures and discourages safe investments. In fact the opposite in true – Islam discourages gambling and private money-lending while encouraging investments which are safe, like shopkeeping. As such there should not be a question of "profit-sharing" against "interest", but of the "private money-lending" against "collective investment", i.e. an exploitative "interest" against a modern collective "interest". Replacing these emotive terms by the word "returns" we see that we require safe investment in a Central Treasury which gives returns at a higher rate than the rate of inflation. The treasury will loan money for investment at a higher rate than the rate of inflation. The treasury will loan money for investment at a higher rate than the rate it gives. The money would be used in ventures that fulfill national needs and not merely to maximize profits. This method enables us to collect *Zakah* on an utilised money holdings by setting aside as much money as would have been lost due to inflation by all the people who have not invested in the Central Treasury.

Discussion

Dr. Omar Zubair

Conclusions of the paper are not clear at all. Mathematics does not lead to any conclusion.

Prof. Syed Nawab Haider Naqvi

You are saying that the utility function of firm (U_1) is subject to or dependent upon the utility function (U_2) and you yourself admit that they are interdependent. Interdependence creates problem while differentiating the functions. You have to apply the function of a function rule and you cannot take simple partial derivatives to derive marginal utilities.*

To me the entire concept is doubtful because to say that state becomes the partner in the game of profit maximization as the private sector, I think it simply negates the role of the state whose primary task is to maximize social welfare. How will the two sectors cooperate? The utility functions of the state and of the private sectors cannot be considered to be the same, and thus the whole analysis becomes doubtful.

Dr. M. M. Metwally

I have three worries:

(a) I do not understand clearly what is the conclusion about the rate of capitalization.
(b) Assumptions about interrelationships of the utility functions is confusing because if there are interrelationships then we cannot do all the mathematics as shown in the paper.**
(c) The author disregards the concept of time preference particularly when he says that the consumption in Islam is different from the consumption in other societies. This is not clear to me.

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* In his revised version, the author accommodated these comments, while showing mathematical manipulation in the Appendix of his paper. (Editors)

** In his revised version, the author accommodated these comments, while showing mathematical manipulation in the Appendix of his paper. (Editors)

Winding up by Dr. Masudul Alam Choudhry

I summarize my paper. The main points of my paper are:

1. Islamic investor is risk averter only up to the point where the total Islamic return from the enterprise is expected to be less in proportion to the degree of risk. The degree of risk, here, is attached to the total return and not to the pure economic return. With respect to total return the postulate of risk aversion in Islamic economics remains same as is recognised in conventional economics.

2. Islamic investors may be risk neutral or risk asserter with respect to pure economic returns. This is in contravention of the concepts of conventional economics because it negates the idea of risk aversion behaviour of an investor as observed in conventional economics.

3. Although the total risk for the private sector investment may be high, the cooperation of public and private sector reduces the share of risk for the private investor. The private investor, therefore, becomes only marginally risk averse. His propensity to undertake real investment, thus, increases.

4. Public sector is risk neutral. This is primarily achieved through diversification of investment and through taxation and *Zakah*.

5. The required return which will always be existing in the Islamic economy has been shown to be the marginal efficiency of investment. Because of the emphasis on the investment in capital goods, the concept of the time preference has been replaced by the marginal efficiency of investment. 6. Marginal social efficiency has been shown to be the weighted average of all marginal efficiencies of all possible investment.

Finally the paper comes up with a quantitative form of capitalization rate as a sum which is determined by two parameters: (a) the risks that comes from *mudarabah*; and (b) the required rate of return.

In the end I may mention that even if we drop the assumption of the interdependence of utility functions, the conclusion will not be affected.

FISCAL POLICY AND RESOURCE ALLOCATION IN ISLAM

Part – III

THE SEMINAR AND ITS MESSAGE

<u>Digital Composition for Web by</u>:
Syed Anwer Mahmood
Islamic Economics Research Centre
Published on Net May 2008

EDITORIAL NOTE

The final section is devoted to the thought-provoking presentations at the inaugural session of the International Seminar on Monetary and Fiscal Economics of Islam, its programme, names and addresses of participants and the final communique of the Conference. The material presented in this section should not be treated as decorative; in fact, it forms an integral part of the proceedings of the Seminar and succinctly captures its spirit and message. These presentations are of a permanent value and represent landmarks for the international movement for the revival of Islamic Economics.

This Seminar was a follow-up to the first International Seminar held at Makkah in October 1978, whose proceedings have been produced by the International Centre for Research in Islamic Economics, King Abdul Aziz University, Jeddah, in the form of *Monetary and Fiscal Economics of Islam,* edited by Mohamed Ariff.

WELCOME ADDRESS

By

Ghulam Ishaq Khan*

Mr. President, Distinguished Guests, Ladies and Gentlemen,

Assolam-o-Alaikum

I have great pleasure in welcoming you to the inauguration of the International Seminar on Monetary and Fiscal Economics of Islam. I and my colleagues on the Organizing Committee of the Seminar feel honoured by your presence. We are specially grateful to the experts who have responded to our request for participation in this Seminar. Some of you have travelled long distances in order to contribute to the deliberations of this meeting. We can only assure you of our sincere effort to make your visit pleasant and fruitful.

2. This is not just one more Seminar in the interminable series of international meetings of intellectual groups held the year round. This must be viewed as an important land-mark in the struggle of the Muslim *Ummah* to re-shape its destiny in the light of Allah's Command. All those participating in this endeavour can legitimately take pride in their work, only moderated by a sense of humility in relation to the magnitude of the task.

3. The advent of the fifteenth century Hijra has coincided with a new phase in the renascence of Islam. In the latter half of the last century, Muslims all over the region stretching from Indonesia to the *Maghreb* were seeking independence from foreign rule in the limited context of national movements. With independence came a greater realization of the true sense of their identity and their heritage as a single *Ummah* transcending geographical boundaries. Re-discovery of Islam as a truly dynamic force in determining the way of life of individual Muslims and the shape of the Islamic society is today a major concern of all Muslim countries and has naturally brought us closer together once again. From the'vantage point of the opening year of the new century, Islamic resurgence can be seen as the tidal wave, destined to change all aspects of existing national and international relationships.

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* Federal Minister for Finance, Government of Pakistan.

4. Muslim Scholars all over the world are currently engaged in the task of transforming the institutions of modern developing societies to conform to the basic tenets of Islam. A number of countries are attempting to move ahead with practical measures in this direction. We in Pakistan are not only an integral part of this universal movement; we have a special responsibility to be in its vanguard. The creation of Pakistan on a clearly-defined ideology implied a solemn commitment that the life in the new State would be regulated by Islamic injunctions. This has placed an obligation upon us, the non-fulfillment of which will tend to undermine the very foundation of the nation.

5. It is indeed a sad and regrettable fact that during almost one-third of a century since the birth of Pakistan, our progress towards Islamization of the laws and institutions was slow to the point of being negligible. Finally, the forces in favour of an unqualified commitment to Islam triumphed over the elements supporting the *status quo,* and since then there has been a remarkable change in the pace of implementation of the Islamization measures. Today the national commitment to Islam is total and unqualified. We are determined to keep up the momentum. But we must build on sure and strong foundations. Debates on the interpretation of Islamic injunctions governing sociopolitical relations in a Muslim society are no longer confined to the realm of theory. Practical progress is only one stage behind the development of thought and ideas which are now clearly emerging. Intellectuals and experts, not only from Pakistan but from all over the world have a role in assisting us in this task, and we would sincerely welcome their contributions.

6. We have the immense task of fully grasping the "totality" of Islam as a complete, perfect and ideal way of life free from the restrictions of space and time. We have to work towards reformulating each single element of our entire societal framework in the light of this complete vision. It is, of course, unavoidable in practice that we should be discussing elements of the system separately, taking one of them at a time. But it is essential that at no stage we lose sight of the "totality" of the system and its fundamental objectives as enshrined in the Quran and *Sunnah.*

7. This is because Islam demands of the "believers" nothing less than a complete attitudinal transformation that comes only from a voluntary dedication to Allah's will:

قل إن صلاتي ونسكي ومحياي ومماتي لله رب العالمين

"Say: Lo! my worship and my sacrifice and my living and my dying are all for Allah. . . . . " (6; 163).

Emanating from this all-embracing Unity, life to a Muslim comes as a homogeneous whole, which admits of no breaks or discontinuities. The interaction between Man's material acquisitive instincts and his spiritual aspirations within this whole imbues him with a sense of the sacred and urges him to participate fully in life, which is a gift from Allah. The process of Islamization must, therefore, be 'total',

يا أيها الذين آمنوا ادخلوا في السلم كافة

"*O ye who believe come, all of you, into submission (unto Him)"*
(2; 208).

The "totality" covers life in this world and the Hereafter. Wordly goals of a true Muslim are inseparable from his spiritual aspirations. At the same time, the development of the individual and the progress of the society must blend harmoniously.

8. Two basic problems that arise as soon as we think of Islamization are: what are the dimensions of the 'totality', which characterise the Islamic system? And what guidance does this concept of totality provide in shaping all the components of a distinctive Islamic economic system? A clear answer to these questions is required to make any meaningful statements about particular policies being contrary to, or consistent with, the Islamic system.

9. We must keep in mind the distinction between the universally applicable and ever-lasting fundamental principles and objectives emanating from the immaculate Divine Vision, which govern life under the Islamic system and the changing forms their manifestations would take in the light of the evolution of human experience and the new challenges the society may face. There can be no compromise on the basic principles. They are inviolate. But let there be no freeze on man's thought, his search for knowledge, or the application of knowledge for social, political and technological advance. The fundamentals of Islam are not impediments to our quest for progress; rather they are the guiding light illuminating our path towards the attainment of *Falah* both in this world and in the Hereafter. The Holy Quran repeatedly urges every Muslim to apply *Fikr* to the manifestations of nature around him. God promised Adam that mankind would be continually provided Divine guidance. The long line of prophets sent by Allah ended with our Holy Prophet, Mohammad (peace be upon him). *Islam* became the last revealed religion from God. This is because, among all religions, Islam alone combines the comprehensiveness and flexibility to continue to guide mankind irrespective of the passage of time. Allah in His wisdom proclaimed Islam as the culmination and completion of religion for mankind by clearly laying down the principles and by inviting man to use his *Fikr* for evolving the dynamic application of these principles and fundamentals to the changing social and physical environment. This was a Divine tribute to the maturing of human intellect. Man is now regarded as fully capable of using his own *Fikr* for finding solutions, within the boundaries defind by the Holy Quran and *Sunnah* to whatever new challenges he may face, and as a corollary it is incumbent upon him to continue with the process of *Ijtehad.*

10. It would be unduly restrictive and, in fact, unjust to the true spirit of Islam to assume that the process of interpretation of Islamic principles stopped with the compilation of any particular set of laws in any given period. The early history of Islam is characterised by the emergence of successive schools of *Fiqh* representing sincere attempts on the part of renowned scholars to interpret Islam in practical terms in response to prevailing conditions. They formulated not only the laws guiding the conduct of individuals and the society but also laid down methods for responding to new problems as these arise. This is indeed the basis on which we have to build. *Fiqh* should be used as a science indicating the laws governing interpretation of the fundamental principles and their application to new problems. The coverage of *Fiqh* will also need to be extended to these new problems with the help of its own guiding principles and methodology. It would be a dynamic approach, not just a historical one. It must be an evolutionary process based on the firm foundations of the Holy Quran, *Sunnah* and the methods applied by earlier scholars to derive laws from these sources. This, of course, has to be attempted within the unitary, indivisible and integrated view of Islam governing the conduct of both the individual and the society.

11. What is this view? *It* is so wide and all-embracing a concept of life that it is almost impossible to grasp it in any terminology or words, except the terminology used by Allah Himself. The basic guiding ethical principles are described in the Holy Quran as *'Ad/* and *Ehsan.* The Holy Quran says:

إن الله يأمر بالعدل والإحسان

"Lo! Allah enjoineth al-'Adl-'wal-Ehsan" (16; 90).

This is a view of a Society in Balance, with justice and fairness *('Adl)* assured to all; at the same time inviting kindness *(Ehsan)* and compassion *(Rahma)* seeking to give more than the minimum enjoined. The Quranic conception of *'Adl* is much wider in scope than the word justice denotes. From the Islamic point of view, *'Adl* stands for the best configuration of social and economic relations. Similarly, *Ehsan* is not just kindness or doing good to others but signifies a specific attempt by an individual to excel himself by over-coming his basic instincts purely for seeking the pleasure of Allah. The Holy Prophet (peace be upon him) defined *Ehsan* in clear terms! "It is to pursue the system of obedience to Allah as if thou are seeing Him". This is the highest standard for regulating conduct. There is also a minimum. You guide your actions by the realization that "He is seeing thee". This leads to a continuous drive towards "creation of beauty in one's conduct, which is achieved through beauty in knowledge and beauty in action". The practice of *Ehsan* thus creates a special relationship in which Man as an individual stands before Allah and his fellow-beings, and together with *'Adl* requires of all men a special kind of social and economic behaviour that forges an indissoluble link between Man and the Universe.

12. The fact that *'Adl* and *Ehsan* together define the ethical base of a distinctive Islamic economic system should be clear when it is remembered that these Divine concepts relate directly to the basic social *structure,* which implies a definite scheme of distribution of economic benefits within the society - and of their *redistribution* in the prescribed manner if the 'initial' position does not conform to the Islamic ideal.

13. If one looks for the components of the basic social structure, its most important and 'dominant' element turns out to be the pattern of property holdings and their use in the society. For instance, in the capitalistic societies most property is privately held because in them the individual's right to property is considered to be absolute and inviolable. According to reliable estimates, about one-third of the GNP in the capitalistic countries is accounted for by income from private property. On the other hand, the communistic societies do not recognize this right at all. The originality of the Islamic point of view, indeed, its revolutionary character, rests on the fact that it replaced the concept of absolute "ownership" by that which is akin to "trusteeship". For only Allah is the absolute owner of everything in the Universe:

ولله ميراث السموات والأرض

"Allah's is the heritage of the heaven and the earth" (3; 780).

Since the State and the individual are both bound by the same absolute Divine rule:

وأنفقوا مما جعلكم مستخلفين فيه

And spend whereof He hath made you trustees" (57; 7), there is no place in Islam either for 'private' capitalism or for State capitalism. It follows that under the Islamic dispensation the exact dividing line between what the individuals own and that which the State can own should conform to the rules of trusteeship. Trusteeship gives rights to those who hold property but on condition of their fulfilling obligations placed upon them by Allah for the greater good of the society. . While these conditions can be re-defined in the light of the evolution of the society itself within the framework of *'Adl,* individuals are urged to go further than that by eschewing all forms of selfishness and avarice, and adopt *Ehsan:*

ومن يوق شح نفسه فأولئك هم المفلحون

"And who so is saved from his own avarice - such are . they, who are successful".

14. Once such a philosophy is accepted, several far-reaching consequences will follow: Firstly, in such an economy wealth will not be allowed to be concentrated in a few hands. With the Divine promise of a manifold reward both in this world and in the Hereafter, Man has been urged constantly by the Holy

Quran to keep the process of the redistribution of wealth going through voluntary spending:

مثل الذين ينفقون أموالهم في سبيل الله كمثل حبة أنبتت سبع سنابل في كل سنبلةٍ مائة حبةٍ والله يضاعف لمن يشاء.

"The likeness of those who spend their wealth in Allah's way is as the likeness of grain which growth seven ears, in every ear a hundred grains. Allah giveth increase manifold to whom He will. . . . . "(2; 261)

From the early days of Islam, there has been a distinguished and influential opinion among the Muslim scholars - among whom Hazrat Abu Zar Ghaffari's name stands out as the most prominent - who have insisted that the widest possible distribution of wealth should be effected to implement the Divine Commandment of *Infaq:* - -

ويسألونك ماذا ينفقون قل العفو

"And they ask thee what they ought to spend. Say: That which is in excess of your need" (2; 279).

Whatever the exact size of the resource transfer – "that which is in excess" – from the individual to meet the collective obligation of the society towards its under-privileged, it has to be large enough to eradicate all froms of abject poverty.

15. What is "in excess" can only be defined in the context of the stage of economic development of a society. The starting point is the recognition that eradication of poverty and ensuring a minimum standard of living not only for the Muslims but even for the non-Muslim citizens of a Muslim State is the collective responsibility of the society. A minimum contribution to fulfill this obligation by way of *Zakah* is specifically prescribed. Without *Zakah,* there is no legitimacy for private wealth. Even beyond that, all form of waste has to be avoided. Simple living is encouraged so that there is more of this "excess" for increasing the element of *Infaq.*

16. The spending behaviour of the consumers in an Islamic economy is also directly subjected to ethical constraints. The principle of consumer sovereignty cherished by a capitalist society has no sanctity in an Islamic economy. In it the individual is not entitled to all his wealth in an unqualified manner, even that earned through his labour. The manner in which he spends it is subject to the prescribed ethical norms of such a society.

17. Logically, the basic approach thus determined will affect and modify all aspects of economic organization. Corresponding to the changes in income distribution as well as changes in the behaviour of the consumers, production structure and trading pattern will also undergo a profound transformation.

18. One should be careful, however, not to draw too many such specific conclusions on *a priori* basis, because exactly what and how much shall be consumed, produced or distributed is an empirical question that can be decided only in the real world, keeping in view the prevalent standards of living in the Muslim societies. Even a simple question like what is a "luxury" or a 'necessity' which inevitably will arise when deciding the production or consumption pattern cannot be answered without reference to the stage of development that an economy has already achieved.

19. Certain lines of action can, nevertheless, be determined for translating the guiding principles of Islam into specific economic policies. We have already discussed the role of the State in preventing the undue concentration of wealth and in ensuring fair distribution. But this alone would not suffice. The State has to playa more positive role to promote the advancement of man as the viceregent of Allah on this planet. Islam rejects the ascetic approach to life and regards society "as the natural framework of activity for human fulfillment". An Islamic society has thus an obligation to create an environment in which each individual can develop and realise his full potential as a human being. Man is the highest and the most elevated creation of God. He has obligations and has to fulfill his trust. By the same virtue he is imbued with rights and dignity which it is the obligation of an Islamic society to preserve and uphold. There is a basic equality among individuals which determines their right to get equal access to opportunities. Beyond that, it is for each individual to strive and attain heights surpassing others. Each of them has a right to rewards according to this own talents and effort.

20. The economic and social system of Islam has to adopt a broad approach for meeting this obligation towards its citizens; equal access to opportunity would have to be ensured for all. This would imply a number of measures. To recount only a few, the programme of action will include: (i) an effective education and training system with universal coverage and full opportunity of advancement for the talented; (ii) widespread employment and business opportunities; and (iii) a comprehensive social security programme. A combination of these measures would enable individuals to participate in the economic system on equal footing. The social security programme will be directed to satisfying the needs of the destitute, the old and the sick and of those who cannot participate in productive activities even if they wanted to. Such persons are the collective responsibility of the entire society. However, equally important is to make sure that the process of economic growth does generate sufficient employment opportunities; since employment for the individual is not only a source of income, it also gives him dignity as a productive agent performing a creative role in the society.

21. The role of universal education in the Islamization process should particularly be noted. For Man has been advised constantly to pray:

رب زدني علماً

"My Lord! increase me in knowledge" (20; 774).

This is because in the Islamic perspectiwe there is a clear difference between those who have knowledge and those who do not have it:

قل هل يستوي الذين يعلمون والذين لا يعلمون إنما يتذكر أولوا الألباب

"Say (unto them 0 *Muhammad): Are those who know equal with those who know not? But only men* of *understanding will pay heed"* (39; 9).

However, to make socially acceptable the inequalities that are based on the superiority of knowledge, every citizen of an Islamic State will have to be given equal opportunities and access to knowledge. The education system would not only impart knowledge; but would prepare the individual to be a responsible and productive member of an Islamic Society, capable of pursuing on his own his goals of both material and spiritual advancement.

22. I have attempted to elaborate some of the broader aspects which must receive attention in the search for creating an integrated Islamic economic system. In devising such a system, the experts and policy makers will have to be innovative all along the line because the road to the Islamic ideal is not the familiar one – at least not to the modern mind. For instance, the institution of interest, which is the bed-rock of the capitalistic system, finds no place in an Islamic economic system. And yet it will be grossly naive to argue that the switch from the interest-based system to an interest-free system can be accomplished without a basic transformation of the entire society and intra-societal relationships. The abolition of interest as an economic institution is not an object by itself. It is one of the means to realise the goals of an Islamic economy, which should be free from exploitation. The institution of interest is no doubt exploitative, but to assume that this is the only source of exploitation will also amount to betraying complete ignorance of the anatomy of social injustice in a modern society. There are various other forms of exploitation. Unbridled market mechanism, for example, can in certain situations be highly exploitative. Similarly, profits can be, and in some situations are, even more exploitative.

23. I wish only to warn against the complacent notion which many entertain that a definitive and viable alternative either exists or has *already* been found to the present-day interest-based system. The essence of the Islamic reform is not merely to find out that which is legitimate from the Islamic point of view: what is expected of economists and experts is that they undertake the more difficult and complicated job of devising ways and means which, in addition to being legitimate, are also nearest to the ideals of the Islamic way of life.

24. I am saying this because to my mind an Islamic society has to go beyond the mere abolition of interest as an instrument of exploitation. It has an obligation to find and abolish various other manifestations of *riba* by whatever name called which may not be so obvious as interest. Profits as a reward for supplying capital, for rendering pro ductive services, and for efficiency have a due place in the economic system of Islam. Profits derived from speculation or cornering the market for an essential item of consumption would, however, have to be curbed

with the same determination with which we seek to cleanse our society of interest-based transactions. In particular, an industry or trade related to basic human needs would constitute the special concern of the State in order to ensure uninterrupted supply in adequate measure at reasonable prices.

25. At the same time, it has to be realised that in an interest-free Islamic system resources cannot be allowed to be directed with the sole objective of maximizing profits without regard to the overall Social Good. An Islamic society is essentially egalitarian in character. The social gospel of Islam requires of such a society that it should seek to ensure that support would be available for those also who cannot compete for available loanable funds by offering a promise of high profits. A student seeking to complete his education or a talented individual striving to set up his own business, for example, should not be denied financial assistance only because they cannot offer attractive profit-sharing opportunities. Thus, a more basic attempt has to be made to replace the entire concept of interest and its role in modern economic relations.

26. Interest, as we all know, is not only a payment for the use of borrowed funds by the borrower to the lender; it also has a highly important role in modern economics in determining the allocation of resources, in control of inflation, in selection of development projects and in suggesting relative priorities for various sectors in economic development. The alternatives that we seek will have to be comprehensive enough to replace this conceptual framework of modern economics built up on the cornerstone of interest and its allocative function. We still face the challenge of finding a new basis for regulating the allocative process in an interest-free society without too much of state interference.

27. In terms of monetary policy, as the pricing of credit by interest rate is removed, there would be a clear need to either ration the funds which are available or work on an alternative system for containing demand. How much credit can be replaced by equity? How much reliance should continue to be placed on profit-and-Ioss-sharing loans in business expansion? Would an economy, not based on interest, continue to be based on seeking an unlimited return on capital, even though theoretically sharing in loss as well. What measures would be required to encourage savings? These and many more such questions would arise as we move further along the road. We have to continuously face these issues and provide solutions.

28. The Government of Pakistan has taken a series of measures along the lines indicated above. The new Education Policy seeks to achieve universal education, at the primary level to begin with, with proper Islamic orientation. Training in skills is being strengthened at all levels. An ordinance providing for the compulsory collection of *Zakah* at the State level has been promulgated to give a practical shape to the responsibility of the "Haves";

في أموالهم حق معلوم للسائل والمحروم

"In whose wealth there is a right acknowledged for the beggar and the destitute" (70; 24-25) – towards the "have-nots". It is hoped that, with the passage of time

and with more experience, an ambitious and a viable social security programme will emerge, wholly financed through *Zakah.* Steps are also being taken to move away from the present interest-based financial system. Interest-free counters have been opened in all Pakistani commercial banks; and preparations are under way to float *mudarabah* companies. The small farmers and meritorious students are being granted interest-free loans. The National Investment Trust, the National Investment Corporation and some other financing institutions are offering interest-free alternatives to investors; and the House Building Finance Corporation has evolved an ownership-participation scheme, under which loans will not be given on interest.

29. However, while these steps are an unmistakable earnest of our firm determination to evolve an Islamic economic system, we are fully conscious that we have yet a long way to go. The present Seminar has been organised to promote the meeting of the best minds in the Muslim World so that some fresh thinking is done on these difficult problems. The abolition of interest and the introduction of *Zakah* are no doubt momentous steps in the right direction; but they by them-sieves do not add up to an Islamic economic system. We need your guidance for strengthening the measures we have already introduced, for correcting our mistakes if any, and for advancing further to give greater depth to the measures we have taken towards Islamization of the economic system and institutions.

30. We would look forward to the deliberations of your Seminar with a keen desire to learn more. We are conscious that it would be too optimistic to expect final judgement emerging from any meeting on such complex issues spreading over such a wide field. But we would be happy if our path is illuminated even for a few additional steps. The difficult process of analysis and its application should, of course, go on until a society based on the principles of Islam is fully established. Even oat that stage, the economic problems will not go away but we would have at least discovered the Islamic way of meeting them and would be better equipped to resist the siren calls of foreign ideologies luring us away from the straight path. (صراط مستقيم)

31. Man will have to traverse one cavern of darkness after an other in the search of the noon-day brightness of the world of ideals. In this wondrous Universe, new challenges keep on cropping up, asking for a creative response. The great paradox of our life on earth, indeed its beauty, is that we get only by renouncing what we desire most. True happiness lies not in receiving but in giving – in jettisoning the dead weight of our wanton desires. At least this is what Islam teaches us:

وما أدراك ما العقبة ، فك رقبة ، أو إطعام في يوم ذي مسغبة ، يتيماً ذا مقربة ، أو مسكيناً ذا متربة

"*Ah, what will convey unto thee what the Ascent is! (it is) to free a slave. And to feed in the day of hunger, An orphan near of kin or some poor wretch in misery….*" (90; 72-76).

Hence, all we can do is to keep on making our best efforts to translate the Islamic ideals into the scaffolding of our thought processes and institutions, with an unyielding faith in Allah's assurance:

إنا لا نضيع أجر المصلحين

"We squander not the wages of reformers" (7; 770).

INAUGURAL ADDRESS

Following is the English rendering of the inaugural address by the President of Pakistan, General Mohammad Zia-ul-Haq at the International Seminar on Monetary and Fiscal Economics of Islam in Islamabad on January 6, 1981.

بسم الله الرحمن الرحيم

الحمد لله رب العالمين والصلاة والسلام على خاتم النبيين

Federal Finance Minister and Deputy Chairman, Planning Commission,
Mr. Ghulam Ishaq Khan,

President, King Abdul Aziz University,
H.E. Dr. Abdullah Omar Naseef,

Respected delegates, and Respected audience,

Assalam-o-Alaikum

I regard it a great honour to inaugurate this International Seminar on Monetary and Fiscal Economics of Islam. I am particularly happy to note that great Muslim economists, bankers and experts in finance from the world over are participating in this Seminar. To address such a gathering is certainly a singular honour for which I am grateful to the organizers of the Seminar.

It is a matter of great satisfaction for me to review the last threeand-a-half years during which Pakistan had the honour of hosting several international gatherings which aimed at the promotion of unity among the Islamic world and for the enforcement of Islamic System. I regard this as a tribute to Pakistan from the Muslim World for the humble efforts which Pakistan is making toward the enforcement of Islam. I consider this grand Seminar to be one in the series and I would like to thank King Abdul Aziz University for its decision to hold this Seminar at Islamabad in collaboration with the Government of Pakistan.

You have already listened to two speeches before me. In the first speech Mr. Ghulam Ishaq Khan, an economic expert, threw light on important aspects of the subject and in the second speech Dr. Abdullah Omer Naseef enlightened the audience with his ideas. Both these experts occupy unique position in their fields of specialization, and their speeches were excellent examples of their professional maturity. I do not claim to be an expert of monetary or fiscal economics. I am a simple Muslim whose only asset is sincere commitment to Islam and heartful desire for the enforcement of Islam. In this context I would like to present before this gathering some thoughts. I hope that you would not only consider the problems raised by me but also look for solutions to them.

Since inception, man has lived with his wants and has managed to satisfy these somehow or the other. In the early stage of human history human efforts revolved around his material needs alone which he fulfilled without considering whether it was fair or foul. Fulfillment of personal desires was the greatest aim of his life and in order to achieve this aim he utilized his physical and mental capabilities in every possible manner.

When human efforts revolve around self-interest alone, the inevitable outcome is usurpation of the rights of the other people and gradually "might is right" becomes the guiding principle of the society, resulting in various complications of which we are all aware. Man has entered the present era of civilization after a long journey spread over centuries and he prides himself in being developed, enlightened and civilized. He believes he has replaced his savage values of the dark ages with good and civilized ones. I would invite intellectuals and experts to ponder over the affairs of the world at the beginning of the 15th century Hijra and the tail end of the 20th century A. D. and assess whether human civilization has really progressed or we are still clinging to the values of the dark ages in one form or another. Is it not true that even today man directs all his efforts at the development of his self or his country? Is it not true that every country and every nation is striving for its own economic progress irrespective of the rights of others and even if it hurts the rights of others? I think that even today the developed countries are clinging to those values which we attribute to the primordial age. If there is any truth in this approach, then we shall have to consider whether we shall continue to maintain this old tradition of cruelty and injustice or we want to lay the foundation of better future for mankind. If we decide in favour of better and brighter future for mankind then we shall have to change the present inter national economic and monetary system.

It is not possible to cover all the economic and monetary systems which have been tried in this world so far. Therefore, I want to invite your attention to the two economic systems which are practised in most countries of the world today. One is known as capitalism and the other as socialism. The point to ponder is whether mankind has been able 10 attain economic emancipation by adopting one or the other of these two systems or have these systems made the mankind more miserable. I personally feel that these systems have added to human miseries, instead of resolving them. For instance, capitalism provides for human freedom but it concentrates the resources of sustenance in a few hands. We have observed that those who control economic resources dominate in all walks of life. These privileged few utilize the capabilities and efforts of others but reap the rich harvest for themselves allowing only a tiny share for the workers.

On the one hand there is socialism which deprives man of his personal freedom under false pretext of meeting his basic needs. In this system the position of the working class is like an animal exhausting his whole life for the fulfillment of its material needs. In this system the needs of the working class are satisfied only to the extent that its body should have the strength to continue work the next day. I am not criticising any particular government but I am only commenting on the philosophy of life which in the beginning of this century had promised a new direction of economic emancipation. But, practically this new direction was not different from a new illusion.

A comparison of these two economic systems brings to light that while in one system there is freedom but no sustenance, while the other provides sustenance but no freedom. In my opinion mankind needs a system in which man is not deprived of freedom for the sake of sustenance and vice versa. It is my firm belief that such justice is guaranteed by Islam alone.

It is a matter of great pride for us that a period of Islamic renaissance has ushered in our lifetime and there is a new commitment for translating Islamic values into practice. This augurs well and we should sincerely endeavour not only to further strengthen this trend but also to benefit from it fully so that we can move forward collectively towards our destination.

Notwithstanding this favourable environment, we should not forget the bitter fact that Islam cannot be enforced merely by speeches and slogans. Islam cannot be popularized through mass media alone. Islam cannot be enforced from the pulpit or from the platforms of international seminars. Although these efforts are very useful and desirable, yet I firmly believe that unless you discover appropriate means of satisfying economic needs of mankind the enforcement of Islam cannot proceed satisfactorily. The fact is that in this age the thinking of man is dominated by his material needs. Under these circumstances, any system of life which ignores economic and material needs of man cannot deliver the goods. Therefore, I request this august gathering of experts in Islamic Economics and Finance that they should concentrate on utilizing this new wave of Islamic renaissance with a view to giving a practical shape to Islamic Economic System. I am afraid that our efforts in other directions would not succeed unless we find solution to this problem.

After elucidating on this basic issue, I would like to identify a few more aspects of the problem. I admit that man has made great strides in the field of economic development. The present-day world enjoys unprecedented abundance of resources and wealth. Industrial, technological and electronic revolution have reached their zenith. And now computer has left behind all the past record of progress and victories. It is the result of human innovation of which we can be rightly proud. But a moot point worth consideration is that despite all this material progress and prosperity, the world could not be relieved of poverty. Even today, according to the statistics provided by international bodies, 40 per cent of world's population is living below the poverty line. On the one hand, man has reached the moon but, on the other hand, he is deprived of clean drinking water. On the one hand, there are palaces and mansions but on the other, millions of men continue to be without shelter. On the one hand, grand hospitals, clinics and medical institutions have sprung up but on the other millions are deprived of basic treatment. Similarly, despite the presence of gigantic universities and education institutions, the low literacy levels persist.

These contradictions show that although man has made progress, the fruits of this progress have not been available to him. The real objective is not only to make progress but also to ensure equitable distribution of the fruits of development. In my opinion the basic requirement of a good economic system is that it should not only provide man to progress in accordance with its capabilities but also allow other human beings to benefit from this progress. This is not only my belief but also the essence of experience that such a just system can only be provided by Islam. The discrimination between man and man to which I have just referred also exists among nations. You know it better than I do that as the curve of economic progress rises, the economic gap between the developed and the developing countries continues to widen. Sometime back this gap was understandable since many countries were under the yoke of slavery resulting in the exploitation of their resources by imperial powers for their own progress and prosperity. Although most of the countries from amongst the developing countries have attained political freedom, yet the economic system of imperialistic era continues to be in force. In fact, in certain regions it is becoming more and more pronounced. I am sorry to say that developed countries only offer lip service for the underdeveloped nations but do not allow them equal opportunities for participating in the ruits of progress. It appears that those countries which were earlier suffering under the yoke of imperialism have now been tied in the chains of neo-economic imperialism. It is necessary to break loose these chains at the earliest. Otherwise, I am afraid, that the consequences of economic imperialism will be much more disastrous than political imperialism.

Ladies and Gentlemen: The shortcomings of the present economic systems to which I have referred to so far are primarily three, i.e.

a. There is a conflict between personal freedom and sources of sustenance as a result of which man has to sacrifice one for the other;
b. The fruits of human evolution and progress are not distributed equitably among mankind; and
c. The present world economic order provides protection to the privileged class and exploits the under-privileged.

While referring to these weaknesses I have repeatedly said that the solution to the problem lies in adopting the Islamic Economic and Financial System. The question is: What is Islamic Economic System and what are its basic characteristics? On this issue several scholars and economists have expressed their views. This morning Mr. Ghulam Ishaq Khan has also highlighted some aspects.

As far as I think, and you would agree with me, the basic characteristics of Islamic Economic System are three:

1. According to Islamic teachings, Allah Almighty is the sovereign of entire universe and man is the custodian rather than the owner of its resources. This concept of ownership distinguishes Islam from capitalism and socialism in which the resources belong to the individual or the state.
2. The second basic principle of Islam is that its Economic Order is based on *'Ad/* (Justice) and *Ehson* (Obligation).
3. Islam has established a structure of *Zakah, Khairat* and *Sadaqat* to discourage the concentration of wealth so that the surplus wealth of the rich may trickle down to the needy. You would recall the Quranic verses in which the Holy Prophet (peace be upon him) was asked to tell his followers that they should spend on the needy whatever is surplus. This means that Islam stresses to give away rather than to accumulate.

These basic principles should be kept in mind while designing the economic system in a Muslim country and it should be ensured that we do not digress from the spirit behind these principles while working out the details of such a system.

Here I want to raise the question that if the economic system proposed by Islam is so good, why has it not been implemented in its entirety in any part of the world. Is it because the Muslims were not able to pay any attention to this during their subjugation? I believe that we should not blame others for our shortcomings because but for a few hundred years of subjugation, Muslims have been free and in power for a very long time. Several years have passed since the independence of many Muslim States but in spite of that we do not find any practical demonstration of Islamic Economic System during the current times or the recent past which can be adopted as a model. Why is it so? I feel that we have the guiding principles of Islam. We fully believe in them. We know that by following these principles we can solve our economic problems but where we get stuck is the procedural aspect and the action plan for the implementation of these principles, and it is in this field that the services of economic and financial experts like you are needed. You can be the torch bearers in this field. Not only I but the entire world of Islam has great hopes in you. I do not want to build high hopes, but I do sincerely hope that if you really succeeded in establishing the economic order of Islam. Then the time is not far away when the non-Muslim nations will also follow us. It is my observation that man turns to where he finds his betterment. If he adopted capitalism or socialism in the past, he would certainly turn to a better alternative when it becomes available. If Islam can be made to actually demonstrate what we claim, then there is no reason why the Islamic Economic System should not become the most popular system in future.

"Respected participants, I would have liked to mention the efforts which are being made in Pakistan for the introduction of Islamic Economic System, but this subject has already been covered by Mr. Ghulam Ishaq Khan and I do not wish to take your time by repeating it. I would, however, like to express the deep awareness among the Pakistani people and the leaders, intellectuals, economists, businessmen and traders that our welfare lies only in adopting Islamic principles. In order to translate this collective will into practice, we are attempting to enforce Islamic values in all walks of life, including the systems of education and justice and the socio-economic structure. We are simultaneously proceeding on all fronts because we believe that the different sectors of the society are linked to each other and it is not possible to enforce Islam in one sector to the exclusion of others. We believe that the Islamic financial and fiscal systems can succeed only if Islamic values are enforced in other sectors as well.

Learned experts, I want to conclude my speech by posing a few questions. I want that we should create an environment conducive to practical advancement towards the resurgence of Islam and enforcement of Islam so that we can practise Islam in our individual and collective lives, and set a good example for other nations of the world instead of depending on them. The questions are:

1. Is it possible to get rid of the present exploitative world economic order?
2. Can two or more economic systems coexist without conflict?
3. Is it possible to have the same Islamic Economic System in all the Muslim countries?
4. Do we have an alternate system in Islam to replace the present economic and financial order? If not, how soon one can develop it?
5. Do we have all the details of an economic system based on *'Adl* and *Ehsan?* If not, how can they be evolved?
6. According to the Quranic injunctions, interest is forbidden. But is interest the only form of exploitation the elimination of which would solve all our problems?
7. In the new economic system how best can we banish poverty. What effective role can the system of *Zakah* play in this behalf?

I hope that the experts who have come from different parts of the world would search for answers to these questions in this Seminar and by the end of the Seminar would prepare an action plan which would help us in implementing the true Islamic Economic Order.

With these words I declare this Seminar open and pray to Allah for your complete success in this noble endeavour. May Allah give you the strength to fulfill the expectations which the Muslims of the world have in you in this new Hijra century.

Long live Pakistan.

Long live the unity of the Muslim World.

ADDRESS

Dr. Abdullah Naseef*

Mr. President, Your Excellencies, Distinguished Scholars, Brothers and Sisters,

Assalam -o-Alaikum wa-rahmatullah wa-barakathu,

It is indeed an honour for me to address such a select gathering of scholars and economists.

As you know, this is a follow-up Seminar to deal with the issues raised during the first Seminar on Monetary and Fiscal Economics of Islam, which was held in Makkah al-Mukarramah in October, 1978, under the auspices of the International Centre for Research in Islamic Economics of King Abdul Aziz University, Jeddah.

The Centre was established in 1977, on the recommendations of the first International Conference on Islamic Economics held in the Holy City of Makkah in 1976. One of the main objectives of this Centre is to conduct studies to find solutions to the economic problems confronting the Muslim communities today. These solutions must be inspired by and based on the teachings of Holy Quran and *Sunnah.*

Since its establishment the Centre has initiated a number of activities in line with its objectives. Due to the devoted efforts by the members of the Centre, it has been possible for the Centre to gain recognition at the national and international levels.

The Centre has since successfully organising the first international Seminar on Monetary and Fiscal Economics of Islam, held in Holy City of Makkah in October, 1978, commissioned over 40 research papers (of which a list is available) and monograph in various areas of Islamic economics throughout the Muslim World in 1979-80. Some research works have already been received and some are in the pipeline.

The future activities of the Centre will include: (a) the production, translation and distribution of teaching materials in the economics of *Ummah* Islamiah; (b) the publication of professional journals; (c) the exchange of scholars; and

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* President, King Abdul Aziz University, Jeddah, Saudi Arabia.

(d) awarding fellowship for doctoral and. post-doctoral studies for the young Muslim economists and so on.

Dear brothers and sisters, the need for the study of economics of *Ummah* Islamiah as a distinct discipline of knowledge is felt more acutely today than ever before.

The task before us is not merely to analyse the distinctiveness of Islamic economics, but to find viable solutions to the present problems of economics, banking and finance in the light of the teachings of the Holy Quran and the *Sunnah.* Seen in this light, the importance of this Seminar can hardly be over-emphasised.

Following the teachings of Quran, the revival of Islamic civilisation is of paramount importance to the *Ummah* Islamiah. This will make the *Ummah* a potent force in world affairs.

Our *Ummah* is endowed with riches of all sorts – Islamic ideology, natural resources and manpower. Despite this, Muslim individuals and communities still suffer from poverty, low standard of living and illiteracy. They are dependent upon non-Muslim communities for their vital needs for their survival.

Our task today is to find satisfactory answers and solutions to this unacceptable situation.

I express my deep personal thanks to the Government of Pakistan for its efforts to organise and host this Seminar as well as for the cordial reception and excellent hospitality extended to all the participants of this seminar.

May Allah fulfill our mission, *Ameen*

KEYNOTE ADDRESS

Professor Khurshid Ahmad

Mr. Finance Minister,
Dr. Mohammad Omar Zubair,
friends, colleagues, brothers and sisters,

Assalam-o-Alaikum Wa Rehmatullah
(May Peace and Allah's Blessings Shower on you)

I deem it a great honour to have been invited by the Organizing Committee to join you in this inaugural session and to give the keynote address. I know there are many colleagues more qualified and more competent than myself to shoulder this responsibility and I regard it simply a token of your affection that you have given me this opportunity. I pray to Allah to enable me to even partially fulfill the trust you have reposed in me.

To me, personally, it is a great occasion, because I look upon the last decade as a watershed, marking the end of an era of Islamic scholarship in the field of economics and the beginning of a new one in which the Muslim economists have begun to discuss a language of Islamic economics. Formerly, *Ulema,* jurists, Muslim thinkers and economists were trying to give an exposition of the economic teachings of Islam. I regard this decade as a watershed because during this period a transition has been made from what used to be an exposition of the economic teachings of Islam towards what could perhaps be described as the first phase of Islamic economics, where professionals and practitioners have begun to apply their mind more seriously and rigorously to some of the issues and problems that confront us and are now making humble yet valuable efforts to come up with new ideas, new insights, new models and policy-relevant suggestions.

When I look back to the history of evolution of economics, particularly the development of socialist economics, I find that perhaps we are passing through a phase similar to the one that the socialist economics had also passed. The founding fathers of that branch of economics produced basically a critique of capitalism and offered ideas about the laws of social evolution and the vision of society that they wanted to establish. When the revolution in Russia took place, there was nothing like economics of socialism. Nonetheless, we find that in the post-revolution phase, both in Russia as well as in the academic circles of the

West, economics of socialism emerged. I think the phase through which we are passing has some similarity to this development in the history of economic thought.

It was in 1973 that under the leadership of my dear brother and colleague Dr. Mohammad Omar Zubair, (who, I am happy to note, is here on the podium), a group of Muslim economists resolved that they must develop an international forum for initiating and promoting at a professional level, systematic reflection, dialogue, discussion and research on Islamic economics. This Seminar represents one more peak in our movement towards the revival of Islamic economics. It is important as an intellectual feat because we are meeting here basically as researchers and as academicians with the hope and with the commitment that we have to bring our economic expertise and our financial acumen to the service of Islam. That is how we want to put our shoulders to the harness of Islamic resurgence, the most significant development of our own times.

Secondly, during this decade the international scenario has *Alhamdulillah* changed and is changing. What is being done by the Muslim economists, is now no longer an exercise in ivory tower. The mood in the Muslim World is changing. There has been a revolution in the expectations of the people, making Islam the criterion for their worldly success. That is why whatever humble work is being done by the academics and the researchers, its relevance to policy, to the changing situation, has immensely increased. It adds to our responsibilities and also opens up new horizons and new opportunities before us. This prompts me to share with you in all humility but in all sincerity and frankness, some of my reflections on what can be described as the economic challenge of Islamic resurgence. The Islamic resurgence represents a historical reality as well as a hope and an aspiration. There are some important symptoms, which can also be looked upon as symbols of Islamic resurgence.

The numerical strength of Muslims is between 900 million to a billion, about 1/5th of the human race. When the 14th century Hijra began, almost whole of the Muslim World was under colonial rule. The horizon was dark and dismal. But now we find that 49 independent Muslim states are there on the political map of the world. They are also trying to organise themselves economically and politically. Organization of Islamic Conference, Islamic Development Bank, Islamic Chamber of Commerce and Industries are just a few instances. They may be just beginnings but nonetheless some kind of structural change is taking place.

This decade has also witnessed some shift in the balance of the economic power of the Muslim countries viz-a-viz the rest of the world. We may not have been fully responsible for bringing about the shift, nonetheless it represents a major change in our position, in our relative strength as also in our responsibilities. The important question, however, is whether we are making optimal use of this new economic power of ours, and to what extent we have either ourselves chosen to fritter away these God-given resources or have allowed others to recycle them to their benefit?

The emergence of Islamic movements during the last 50-60 years in different parts of the world, particularly the universal Islamic awakening in the youth are symptoms as well as symbols. They do reflect a reality but still a reality in the making. It would be naive to thin k that Muslims have come of age. The political and economic scenario in the context of which we have entered the 15th century is again symptomatic of our situation: Muslims fighting Muslims, Muslims not in the control of their own economic and political destiny, Muslim World dependent upon the non-Muslim world in essentials like food, technology, defence supplies, science and education. So when we are scanning the horizon we must not confine ourselves to the positive side only; we must also acknowledge the seamy side of the situation. Islamic resurgence is a reality, not in the sense that contemporary Islamic world has been able to achieve what it wanted to be, but only in the sense that the forces of reconstruction have emerged as silver lining to the otherwise dark and dismal horizon, that the silver lining is widening and represents the inauguration of a process. The present-day reality is grim, grave and challenging, yet the Muslims today have been awakened to a new situation. When we look around we find that we are confronted with a world in the making of which we have not made any significant contribution. This is a world, which has been made for us and not the one made by us. That brings me to the real challenge, the real issues involved in the Islamic resurgence.

To me the real issue is not the sufficiency or otherwise of the quantitative strength of the Muslims or their economic position or the new wealth they want to acquire. To me the real issue relates to the system of life in the Muslim World, different models which were introduced or imposed upon them during the colonial period in the name of liberalism and modernism, and then the reactions to them in the form of nationalism, socialism and even communism. We have passed through all of these but if we analyse the situation we find that these models of Westernization and secularisation, which I regard as models of West-domination, whether they are under the umbrella of political domination, intellectual domination, or economic domination, have failed. They have failed to take root in the society, they have failed to inspire the people, to capture their imagination. They have failed to give any new vision to the youth of the *Ummah.* They have also failed to produce an efficient and viable socia-economic system. All our flirtations with capitalism, all our efforts to follow the development strategy given to us by the West have failed to internalise the process of economic development. It has added to our frustrations, it has complicated our problems; the problem of unemployment, of poverty, of inflation and so on. It has been a failure even on the basis of whatever quantitative criteria to evaluate and assess economic development have been given to us. It has been a failure of three decades. Inequalities and inequities have increased, with the result that political and social tensions have increased in the Muslim societies. If we go still deeper, we find that in the name of economic development a new life style, a new matrix of wants, a new vision of man and society have some how crawled into our society, which is abhorrent to our traditions and repugnant to our values, nonetheless it is very much there amidst us with the result that it has become a decisive force in our society.

Similarly, some Muslim countries have tried to experiment with socialism. In our own country for a certain number of years we did try to take the same path but when I review the situation, I find that the socialistic experiment has been as dismal a failure as the capitalistic one. To me, there is a *la ilah* aspect, a negation aspect of Islamic resurgence and it is mounting disenchantment with the Western models, economic, political, educational, intellectual, which were imposed on Muslim lands. There is a positive aspect which consists in a new search for self-identity, an effort to fall back upon our own historical sources so that something which has roots in the society could come up and flourish. The Muslims want to reconstruct their social order in the image of the Madinah state established by the Prophet (peace be upon him). This represents the chief characteristic of the movement for Islamic resurgence. It spells out the ideological colour, which is the distinctive colour of contemporary Islam. It may not be, and to be honest is not, yet an accomplished reality. Nonetheless, this represents the ideal, the hope, the dream and the inspiration. Any effort to understand the movement for Islamic resurgence without appreciating this longing of the Muslim people is foredoomed to failure. It would be tantamount to playing Hamlet without the Prince of Denmark!

The Muslim situation, including all its promises and tensions, can be understood only by appreciating the ideological nature of the movement - an urge to rediscover their Islamic identity, to go back to Islam and to rise up. with Islam. The Muslims are fed up with all the models of imitation; they want to have something that is their own, something that is unique; something that represents their own historical and cultural flowering. That is why establishment of the Islamic social order, revival of the *Shari'ah* and unity and solidarity of the *Ummah* constitute the rallying points in all parts of the Muslim World. Without naming names, one can see that the countries which had moved farthest and fastest along the road to secularization and westernization are today the ones that are coming back to Islam most fervently, sometimes even aggressively, as if completing the cycle of aggressivity with which they were forced to drift away from Islam!* The very establishment of Pakistan as well as the 1977 popular movement for the establishment of the Islamic order in Pakistan; the Islamic revolution of Iran (1978-1979); the Islamic resistance in Afghanistan and beyond; the tenacity of Islam in India, Russia and Philippines, where it is faced with threats of extinction, the revivalist trends in Turkey, the Islamic movements in Egypt, Syria, Sudan and other parts of the Arab world; the reawakening of Muslim youth in Malaysia, Indonesia and all over the world – all these developments deserve to be studied and analysed carefully and sympathetically and not merely in a journalistic

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* This should not blind us to the fact that there are some latecomers in the Westernization movement as well and that the push and pull factors are simultaneously affecting the Muslims scene.

fashion or simply with an eye over their immediate political implications for the vested interests. If you look upon them with the eye of a philosopher of history or a historian of culture, you will find that they represent a new search, a search for identity; a new articulation, an articulation based on Islam. It represents a fresh and creative approach to Islam, not just as a settled tradition, not as a defender of the *status quo,* not as a mere set of rites and rituals, of a few do's and don'ts. As against these approaches the resurgent Muslims are seeking from Islam guidance for the remaking of their world. They look towards Islam as a complete code of life, as a new approach to life and all its problems, as a *Din,* as a force for social change, as a society and a state, as the ideology of the future.

The ideology of the Islamic resurgence is that Islam is unique; that Islam has its own values; its own concept of man and society; its own concept of State and revolution and it has its own vision of the processes of change. This is the ideology of the Islamic resurgence. In that context Islam becomes a point of reference to be a critique of the dominant civilizations and cultures of our times. We are not moving in isolation and the present confrontation between the Islamic world and the West has its political and economic dimensions; but to us what is more important are its ideological and cultural dimensions. We want to build the Muslim World on the basis of an alternate culture given by Islam. Also we have to resort to Islam as a critique of contemporary Muslim society. There can be no compromise on that and any effort towards Islamization without developing a critique of the contemporary Muslim society from an Islamic perspective is, to me, irrational. In the light of these critiques of the contemporary Western and Muslim societies we have to develop new policies, new strategies, and new plans and programmes to establish the Islamic social order.

Dear friends and colleagues, I want to share with you my deep conviction, that the two models of social change with which we are familiar in the contemporary world are not going to deliver the goods. The first model is that of spiritual and religious change, where we influence the individual, his ideas, his motives and then it is left to him, this modified and remotivated individual, to build the new society. This traditional religious-spiritual model has failed in history to meet the socio-political and institutional challenges with which people are confronted. The other model, the model which was developed in the West under the impact of Humanism and Enlightenment which focuses on changing the environment and assumes that by changing the institutions the world would change. What is needed is just a structural change and the rest would follow. Whether it be the philosophy of Humanism or of Socialism this fundamental thinking permeats their approach affirming that social change consists in simple institutional change. I would again humbly submit that this model has failed and has lodged us in the present predicament of mankind, where on the one hand we have economic development and technological innovation, where production has increased, where time and distance have been shortened but distances between human beings have increased, where justice and equity have not been established, the institution of family has disintegrated and human relations are at the lowest ebb. A situation about which a Western philosopher has rightly commented that "we have learned to fly in the air like birds, and we have learned to swim in the oceans like fish, but we have failed to live in the poor earth like human beings." This is the tragedy of both these models.

What is the Islamic strategy for change? The Islamic strategy is different. It is different from both of these models. The Islamic strategy starts with bel ief. Man can not be cut off from the universe and its Creator. We live and exist in the presence of our Creator, our *Rabb.* God is not like the constitutional monarch of Britain who might have played a role historically but is hardly relevant to the contemporary situation. God is *AI Hayee, AI-Qayyum.* The process of creation is a continuous one. He is *Rabb,* He is the Sustainer. The Holy Quran affirms that: "Allah does not change the condition of a people unless they change what is within themselves". This rules out the self-sufficiency of man. Change is not just a result of my effort. God is the source of change but the forces of divine power and providence come into operation in response to man's effort. Man is the Vicegerent of God on earth. Man is not just a cog in the state machinery, just an element of the society. No, he has soul, and enjoys free volition as individual. He is accountable to Allah as individual. Society is a grouping of these individuals. Social institutions have to playa very important part. But if we neglect the individual, his beliefs, his motives, his ideas, then we are not doing justice to him. We are not in line with the Islamic scheme for change. So the starting point is the individual. His relationship with Allah is sacred and is a continuous relationship which is unceasing and all the human efforts are dependent upon this relationship, the inspiration and the divine help. That is why prayer is an important element of this effort. So belief and commitment and the right motivation are essential. Without these motivated individuals, and without discovering this relationship between belief in Allah and social reality, change is not possible. I thin k the greatest contribution that the Prophets have made is that they have shown to mankind that belief in Allah is not just a metaphysical doctrine. It is the basis for our social existence. Look, for example, to the contributions made by various Prophets. *Hazarat* Shoaib (AS) shows how the belief in Allah and social and economic justice and equity are related to each other. *Hazarat* Loot (AS) shows how belief in Allah and social morality are related. *Hazarat* Musa (AS) shows how the belief in Allah and the political freedom and liberation of the people are related.

The Quran emphasises that faith in Allah and the Day of Judgement call man to act justly towards other human beings. Not feeding the needy and not taking care of the orphans have been described by Allah as denial of faith and of the Day of Judgement.* *Tawhid* and justice in human affairs are two sides of the same coin. The uniqueness of the Islamic approach lies in the integration of moral and material, spiritual and mundane, ethical and socia-physical aspects of life. This is the approach that Islam has given. We start with change in men's beliefs. Faith, commitment and motivation become the starting points and forces to refashion the

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* The Quran, 108:1–3

personality and the character of the individual. But the mission does not end here - these changed individuals are mobilised to establish a faith-based community and evolve a social order fulfilling the demands of justice and fair play. Change *within* the individual and change of the social order are integral to this approach. If you neglect the character of the individual you are not going to achieve your objectives. If you want to impose Islam on a people whose faith, whose morals, whose behaviour-patterns do not conform to Islam, you will be chasing a wild goose. Faith has to be followed by character building, and personality-transformation, to be followed by social mobilisation and movement for socio-economic change. As such, institutional change is integral to the Islamic scheme. Islam does not commit the folly that many other religious strategies have made by neglecting social institutions and laws. In fact Islam has integrated both these approaches. That is why we find that the *Hijra* was chosen as an event most symbolic of the Islamic ethos. Our calendar and our history begin with *Hijra* and what is *Hijra? Hijra means movement from a situation where Islam was not in a position to change the social reality to a new centre where Islam was able to establish whole* of *the society and state according to its own vision and according to its own ideals and values. Hijra* is not just an historical event which took place some 1400 years back. *Hijra* according to Prophet (peace be upon him) is a movement from what involves God's displeasure to what enjoys God's pleasure. It is something in which a Muslim has to be engaged every moment of his life because he has to leave what displeases Allah and move towards what pleases Him. So the integration of these approaches brings about simultaneously changes in individual behaviour and changes in the society and its institutions.

The second important aspect of the Islamic scheme is that Islam is a universal religion. Islam is eternal guidance and the guidance which Islam has given in the Quran and *Sunnah.* The Quran and *Sunnah* are not, I repeat, they are not products of human mind which are subject to the limitations of space and time. They come from Allah Who has His grip over past, present and future. To Him future is as clear as is present or past. So all the categories in which we classify knowledge, they are not relevant to Allah, the source of Islamic guidance. That is why universality and eternality of Islam are not dependent on any historic situation. Its inspiration comes from the Eternal. If we look into the Quran and the *Sunnah* of the Prophet (peace be upon him) we find that the Quran gives ideals, values and principles and not necessarily all the details about social regulations. Islam changes the individual from within his heart. He is transformed into a different being. Then a vast area is provided where he can experiment and where he can take care of the exigencies of his time.

Nonetheless certain key institutions and the border-lines have been identified properly. These institutions are not just expedients. They are integral to the system and even the border-lines are essential. There cannot be any playing with them. The *Halal* is clear and the *Haram* is clear and then there is the area of *Mubah* and this is the vast area where keeping in view the objectives of *Shari'ah* and keeping in view the guidelines which have been provided in the form of institutions and *Hudood,* the limits, we have to steer our way. *Ijtihad* does not provide the liberty to do whatever one wants to do to suit certain demands of the time. *Ijtihad* is a very carefully exercised process of reasoning for which there are clear principles given in the Quran, practiced by the Prophet (peace be upon him), and formulated by *Mujtahidoon* on the basis of the Quran and *Sunnah.* It is within this given framework that reasoning and experimentation have to be made and that is how a built-in machanism for change, to meet the demands of changing situations, has been created in the Islamic system. So this Islamic scheme wherein on the one hand the possibilities of learning from experience of others are always open yet the introduction of any anti-bodies into the Islamic system, which cannot go with this framework, is ruled out. It has to be done very carefully, very meticulously and very rigorously.

In the light of this assessment of the situation the challenge that besets the Muslim economists today invites us to start looking at our economic problems from an Islamic perspective. Our training so far has been in a profession whose conventional wisdom was that morality and ethics are not relevant to economic analysis and any efforts to bring them in will introduce a subjective element in an otherwise so-called objective system. We must realise that we have to shed that attitude off. A new beginning would have to be made. The unique characteristic of the Islamic system lies in the fact that it has brought economics under the suzerainty of values, of Islamic guidance and these values are eternal values. So we have to accept the sovereignty of these values. We would have to change our system. The new shape of the system would be spelled out by the value-framework given by Islam.

Of course, there would be quite a few technical relationships that would be common between Islamic and other economic systems, but nonetheless the total climate of Islam and the Islamic economics the framework, the matrix within which these technical operations take place, would change. And I submit in all humility that it will produce a new economics, and not merely a few marginal changes in the secular economics with which we are familiar. The change of matrix means a lot; in economics we have been talking about wants and any want is as good or as bad as any other want. It is a one dimensional plane. If a commodity can satisfy certain wants, good, bad or indifferent, it is providing utility and is good enough. In the value framework of Islamic system that emphasis would totally shift. I submit for consideration of *my* colleagues that perhaps our starting point would be, not wants, but needs. Now need is a very different concept. Needs have to be genuine and not spurious. There has to be a hierarchy of needs: physiological needs, material needs, social needs, moral needs, ideological needs. There would have to be an ordering of needs. It would no longer be a one dimensional plane. Our concept of opportunity cost would change in this framework. The question of distribution of wealth and income would become relevant because the society has to fulfill the needs of all its members and of the state and the economy as such. Then the priorities and preferences would be different. So I want to submit that the way we have been looking upon the economic problem, would have to be totally transformed and a new approach would be needed to the study of the economic problems of man and society. We would have to develop a fresh critique of contemporary secular economics, Western as well as Socialistic, and of the economies of the contemporary world, including the Third and the Muslim worlds. It would be in the light of this analysis that new policies, plans and programmes would be evolved to establish an Islamic economic order.

Here I think we have reached a point where we may stop for a moment and reflect upon another important issue. Although we are talking a lot about the Islamic economic system, but I would be failing in *my* duty if I do not submit that there is nothing like an Islamic economic system in isolation. Islamic economic system is part of the total Islamic system of life, *aI-Din,* which covers all aspects of life: faith and morality, character and personality, politics and economy, law and judiciary, family and society, nation and international community. Of course, Islamic economic system would be unique in the sense that it would be different from Socialism and Capitalism and other economic ideologies. It has its own objectives, its own flavour, its own ethos. But it is an integral part of the Islamic way of life and we cannot establish Islamic economic order without establishing the Islamic way of life. It has to come in its wholeness, in all its dimensions. I want to emphasise that unless an effort is made to Islamise the society, to adopt Islam in its totality, in our personal as well as social life, we cannot just bring about changes by introducing certain piecemeal economic reforms even if they are taken from the economic programme given by Islam.

Further I would submit that Islamic economic programme is an integrated whole. The *Ahkam,* the instructions that have been given about *Zakah,* about prohibition of *riba,* about business ethics, about distribution of wealth, about principles on which the economic organisations have to come into existence, the concept of *Sharakah, Mudarabah* etc., all these are extremely important in their own right. But they are elements of a system. They can be understood and can be functional only in the context of the overall Islamic scheme of life and the objectives which are to be served by them. If any effort is made to ignore those objectives or while leaving the whole thrust of the economy and the society in a different direction be content with introducing these elements, they, by themselves, would not bring about the revolution which we are aiming at. To me they are essential, they are indispensable, there cannot be any compromise on them, yet they are not sufficient. They are to be a part of a programme of total change. That is why I believe that while those who say that Islam can be established just in one go, in one simple stroke, are not fair to Islam or even to themselves, those who ignore the integrated nature of the entire scheme of Islamic way of life and are concentrating on isolated partial reforms are equally unjust to Islam.

We stand for Islam in its completeness. The change has to come. But that total change cannot come all of a sudden, in one stroke. It has to come through systematic but gradual reforms which are properly planned and so organised that each effort, each element fits into the other and produces a mosaic. This is how the Prophet (peace be upon him) changed the society during the twenty-three years of his prophetic career. So we have to take a leaf out of his strategy and this strategy is of gradual change, of evolutionary reform, but such gradual reform as continuously and effectively moves us in the desired direction. We must not simply juxtapose conflicting propositions. Definitely there would be certain incongruities in this phase and some of you are aware that I have been emphasising the concept of transition, that we have to pass through a period of transition before we can totally Islamise the economy and the society. But I have no reservation in saying that this transition should not become a kind of permanent buffer between Islamic order and non-Islamic order. This transition is not a permanent transition. It has to have a very clearly calculated time-span. We have to move in that direction. We cannot take a long leap but nonetheless every short step should be synchronised. It should bring us nearer to the society we want to create.

Similarly with great respect I would like to record my strong disagreement with those who suggest that Islamic economic system or Istamic state cannot be established unless we have a complete blue-print of the Islamic state or the Islamic economy. I am one of those who have been striving hard to try to develop certain policies, certain programmes, certain ideas, certain strategies for Islamisation but whatever little I know of history, I am not aware of any society where a complete blue-print was prepared first and then the society was cast into those moulds. What happens in human societies is that you have certain ideals, you have certain values and principles and you have committed people who are imbued with these ideas, who want to change the world in the shadow of these ideals and who are competent also to steer their way. Then a process is inaugurated through research, reflection, dialogue, discussion, dissent, and discovery - all of these are part of the game. But to prepare a blue-print before hand and then just enforce it, is not the way history has moved. Look to Islam, for example, how the Islamic state of Madinah was established? Not that a blue-print was given first and then the things were tailored accordingly. Look to the development of capitalism in Europe. It is not that any blue-print was given by Adam Smith, or his colleagues. The economists and social thinkers articulated a philosophy of individualism, a certain approach to the economic problem. It took 200 years to develop the sophisticated techniques for analysis. Look to the Communist revolution in Russia. In 1917 there was no blue-print of the socialistic society. Even the word "planning", which is now the cornerstone of a socialistic economy, does not occur in any of the writing of Marx, Engles or Lenin before the revolution. But the basic concept was there. An approach was there. And then a team was there, which, through efforts, evolved a process for the socialisation of the society and economy. New tools were developed, new plans were made and are still being made. The new reforms that are taking place in the socialist countries, whether that be Russia, or Eastern Europe or China, they are enough to suggest that Communism, even after over sixty years of the revolution, is not an accomplished fact; it is only a process which is unfolding.

In the same way I believe that we should be clear about our ideals and objectives, the distinctive characteristics of the Islamic system and some of the key instruments which are indispensable. But then it would be only through effort and experimentation, that we would be able to solve these problems, make mistakes and learn from them. I do not know of any Islamic text which ensures that Muslims in their effort to establish Islam would never make mistakes. What I know of is that they would always be self-critical and if they have committed a mistake they would rectify it.

So, my brothers and colleagues, I would invite you to reflect upon these, that while we should undertake research, while we should try to develop programmes, while we should give deep thought and reflection to the question of strategies we must not wait for blue-prints whether from skies or from research institutes. Research is a part of this process in the same way as the political effort, active efforts to establish this order, are an integral part of it.

The other point which I would like to emphasis at this stage is that while state must playa very active role in the lives of the people, particularly in inducting them in the processes of Islamisation, simple imposition of Islam by state fiat is not what I think to be a proper strategy for Islamisation. State power is necessary and Islam has assigned a very important and significant role to the state. So much so that the prayer that Allah taught to Prophet Muhammad (peace be upon him) before *Hijra* is very significant. It says:

"Oh my Lord! make my exist an exist with truth and my entry an entry with truth and make the state power my collaborator, my helper." So, that state power could be harnessed for this purpose. But nonetheless, there should be active participation and mobilisation of the people. It is through motivation, through their participation in decision-making, through striking a new chord in hearts and souls of the people that effort towards Islamisation would really bear fruit. That is why I regard peoples' participation and mobilisation, but not regimentation, as an integral part of any strategy of Islamization.

Now, I would submit that we should be very careful about a few pitfalls. One of them is that we make a model on the basis of certain abstractions, which we may have made sincerely, honestly and even painstakingly. Such abstractions are very necessary to develop Islamic economics and to develop policy relevant instruments. But I would submit that the Muslim economist should constantly remain in touch with the Quran and *Sunnah*. Nothing can totally make us free from them. It is a constant exercise and that is why each and every injunction, each and every value, as it has been expressed in the Quran and *Sunnah* is relevant and is equally important. The fact that 'X' has been mentioned two hundred times and 'Y' only twice does not make 'Y' un-important. So, I would submit that this constant touch with the real sources of inspiration is extremely essential for the work we want to do.

The second pitfall which I would like to warn against is, the folly of grafting Islamic propositions on un-Islamic institutions. I fully realise that the evolutionary path has to go through a number of incongruities. But any effort, however sincere and well meaning, to graft an Islamic element on an un-Islamic system is not going to succeed. This is illogical. History bears ample witness that such efforts at grafting can never really bear fruits and I am afraid it may not have that blessing from Allah which is necessary for any success towards Islamisation. So, while we have to introduce Islamic elements on to the existing reality, we have to see that the existing reality has to be changed and transformed or adapted in such a way that the real Islamic system becomes the dominant system. I know how difficult all this is, particularly when we have to adopt a gradual approach, but it is my duty to warn myself and my colleagues that the dangers and pitfalls in piecemeal reform must not be ignored.

Now, I would like to make a few submissions about two very important planks in the strategy of Islamisation, i.e. the introduction of *Zakah* and abolition of *riba* or interest. I believe that both of them have to act as catalyst for changing the system. The capitalistic system which is based upon the concept of unlimited private property, a system of rewards and incentives based entirely on pecuniary motives, and a class structure of society and economy, would not go with Islam. But we must also be careful that centralisation of the means of production, the model of collectivism, is as foreign to the Islamic system as is the capitalistic mode of production and property. We must not commit the mistake of assuming that as there is no capitalism in Islam so we can rush for those institutions or those instruments which have been developed under a collectivistic system. ! am open to learn from the experiences of both, but we must learn with great caution, go with great discretion, so as to see that the uniqueness of the Islamic system, which has been very aptly described as the concept of trusteeship, is established and maintained. But trusteeship and private ownership are not conflicting terms. There is no contradiction between the two. There can be private ownership and there can be state ownership and in certain areas there has to be state ownership. Nonetheless, in both, the mode of relationship has to be on the basis of trusteeship and not on the basis of capitalistic models of private property or the socialistic model of nationalisation and collectivist control.

The objective for which Islam has prohibited *riba* is, freeing society from *Zulm,* from exploitation and I agree that there are other forms of exploitation as well. Islam is equally enimical to all those forms of exploitation. But we must be careful that profit and profiteering the exploitative profit, are not the same thing. While we have to fight exploitative profit, just profit, just wage, and just price are the targets we have to seek for. And I would humbly submit that this area deserves to be examined in greater depth and with greater care. I for one had reservations, and had expressed them publicly, about introducing the *riba-free* counters in *riba-based* banks. But once this has been introduced I feel it my Islamic duty to try to see that the experiment is successful. My dissent, my differences were there and at the academic level remain there, but an effort which has been made in the name of

Islam deserves our support, provided the Government is prepared to sincerely cleanse this step of whatever elements, direct and indirect, of *riba* that continue to linger in it. I had preferred an alternate strategy, but I would not like this step to fail, despite my reservations. But the Government must move fast to remove all the doubts and objections that have been expressed and inspire confidence in the people that whatever little is being done, is really free from *riba* and is going to be a stepping stone towards total elimination of *riba.*

I would also like to emphasise that we should also be very careful that this process should not take too long. We must try and try hard to see how we can shorten the period of transforming this system so that the incongruity because of the introduction of one element on a *riba*-based system, is removed. I would suggest that total elimination of *riba* from domestic and commercial banking should be given top priority. Research scholars as well as action-oriented groups should sit together and work constantly so that within a reasonable period of time the idea of interest-free counters extends to all banking counters in the country. If this period of transition takes too long, then I am afraid, it may defeat the purpose for which this effort is being made.

I may be allowed to make a little digression at this stage. I think I am not far wrong when I suggest that by the grace of Allah there is now 'a consensus amongst the Muslim economists and religious scholars that the Islamic concept of *riba* includes interest and usury in all their forms. The distinctions, which were once the stock-in-trade of many an apologist, between interest and usury, between interest on consumption loans and on productive/commercial loans, between low and high and 'reasonable' and 'unreasonable' rates of interest with a view to limit *riba* to one category and exclude others there from, are now a thing of the past. We all agree that these distinctions have no relevance in the context of the concept of *riba,* which covers all fixed and predetermined increases on loan-money, whatever be the rate of that fixed return, and whatever be the end-use of the money so loaned. We must not waste any more of our valuable time on these controversies, whose right place are the pages of history. All our efforts should now be concentrated on replacing the *riba-based* system by a system based on the concept of variable return to all factors of production and to all participants in the system.

It would be unjust to deny that there are certain economists, bankers and administrators, competent and well-meaning, who still have reservations about the viability of an interest-free system, They feel that the traditional functions of interest in the economy, particularly as an incentive to saving, as the allocator of resources among different economic alternatives, and as a conceptual tool for valuation of capital are too important and too powerful to permit healthy transition towards an interest-free system. Although I do not share the views or reservations of these friends, I do not deny that there is some basis for their concern, particularly in view of the fact that our professional training has been in secular economics whose gospel has been authored among others by "St. Interest"! We have not been able to free ourselves from the hegemony of secular economics and cannot help thinking in its brow-beaten grooves. There is also the difficulty of consciously or unconsciously assuming that the economic structure and institutions inherited from colonial capitalism are going to provide the framework within which Islamic reforms are going to take shape. This assumption is totally unfounded. Islam stands for structural change and efforts towards the elimination of *riba* will finally succeed by changing the entire structural arrangement and the network of relationships, inter-institutional as well as inter-personal. Similarly, the view that the only alternative to the *riba-based* system is abolition of private property on means of production is ill-thought, both Islamically as well as economically. The Islamic alternative is basically different from the socialist alternative, which in itself could not succeed in evolving an interest-free system, despite Marx's tirade against interest. Islam brings about structural changes, not by abolishing private property, but by transforming it into a system of trusteeship, involving private as well as social control and regulation.

I have very strong reservations about the validity of the traditional arguments in defence of interest and its functions in a modern economy. That savings in a society are influenced by the rate of return on capital is understandable. But there is no reason to assume that this rate of return must be interest - a fixed rate. A variable rate of return 'over a period i.e. the profit, is as powerful, if not more, an incentive as any other. In fact, even in a secular economy, in the long run, it is the rate of profit which is more important than the short period rate of interest. To the best of my knowledge, no one has so far unequivocally demonstrated that a variable rate of return is not capable of performing the incentive function for savings and capital accumulation as against a fixed rate of return. Looking into whatever empirical evidence is available about the capitalistic economies over the last two centuries, it is very difficult to argue whether there is an incontrovertible positive correlation between the rate of interest and the volume of savings in the economy. In fact, the famous Keynesian thesis about savings as a function, not of interest, but of income level is rooted in a similar appreciation of the economic variable in a capitalistic economy. Similarly, the allocative function of interest is shrouded in controversy as well as mystery. Contemporary market economy is infested with so many rigidities, deformities, and incongruities that the textbook rate of interest can no longer be complimented for bringing about rational and efficient allocation of resources in an economy. The need for resorting to shadow rate of interest to overcome, to some extent, some of these distortions is proof enough that the market rate of interest is not, and in the context of the prevailing circumstances, cannot perform this function. To assume that the role of interest remains unaffected, despite these developments, would be a heroic assumption. Those who stick to this view may be complimented for their bold innocence, but not realism.

We have every reason to believe that once the economy has been freed from the exploitative institution of interest and the economy, operating on the principle of profit-sharing, discovers a new equation, there is every reason to believe that the equity-based system would be more efficient, more growth-oriented and more just.

Now I would like to say a few words about the second plank of this strategy, *Zakah,* the most important, but not the only instrument of equitable distribution of wealth and income in society. *Zakah* aims at sharing the wealth of the society, amongst its members in such a way that all persons are enabled to participate actively and effectively in the economic life of the society. It ensures basic needs of life to those who are unable to make a living, but it does not put able-bodied people on a system of permanent doles.

Zakah is a system for moral and social progress and for the mobilization of the people. Islam does not want a permanent class of the deprived! Islam wants to lift up all. I am reminded of an important incident when a person came to *Saiyyedena* Umar to get *Zakah* from him. He gave him three camels. One of his colleagues asked the caliph as to why he was giving three camels when one camel would have been sufficient. He answered "so that next year he does not come to get *Zakah* and may be enabled to pay it."

So the idea is to lift the society, to build a new social order based on active participation and equitable sharing. That, should be our effort. For that, our first concern should be to use all the instruments described in the Quran and *Sunnah.* Drawing inspiration from the Islamic injunctions we must strive hard to evolve a new growth strategy, a growth strategy based upon Islamic concepts of justice, of trusteeship, of human welfare. A growth strategy based upon the Islamic concept of self-sufficiency of the Muslim *Ummah.* I want to emphasise and emphasise with all the force at my command, that Muslim *Ummah* is Allah's vicegerent *(Khalifa)* on the earth. Muslims are *(Shuhada 'ala al-Nos)* witnesses of Islam to the whole of the world and they cannot act as witnesses of God if they are dependent on the non-Muslim world. To me, self-reliance and development of the *Ummah* in such a way that it is not dependent on the non-Islamic world is a *sine qua non* for the *Ummah's* role as God's vicegerent and deputy on earth. We need a new growth strategy, a new monetary policy, a new fiscal policy and a new incomes and wages policy enabling us to play this role in the world. We must re-examine our entire taxation system, which has been built up in a very arbitrary way. All these deserve to be changed and changed radically. Econol1\ic planning and policy-making have to assume a new shape and a new role. This is the economic challenge of Islamic resurgence. This new strategy should also have a regional policy. It is my humble submission that in the participatory model of an Islamic economy, balanced regional development and decentralized and broad based growth occupy an important position. The Islamic injunctions about *Zakah* distribution in a manner that the locality from which they originate has first claim on them lays the foundations of a regional policy. There are the areas we have to re-examine, so as to evolve a new strategy to establish the Islamic life of the people on the foundations of equity and justice.

PROGRAMME OF THE SEMINAR

Inaugural Session

- Welcome Address by Mr. Ghulam Ishaq Khan, Minister for Finance, Planning & Economic Affairs.
- Address by Dr. Abdullah Naseef, President, King Abdul Aziz University, Jeddah.
- Inaugural Address by Gen. Mohammad Zia-ul-Haq, President of Pakistan.
- Keynote Address by Prof. Khurshid Ahmad, Chairman, Institute of Policy Studies, Islamabad.

Session I

Subject: *Existing Islamic Banking Practices*

Chairman: Dr. Ahmad Mohammad Ali

"A Report on the Existing Islamic Banking Practices in the World" by Dr. M. Fahim Khan

Discussants

- Dr. Taufiq Al-Ammar
- Mr. Fouad Abdul Gadir Agabani

Session II

Subject: *Monetary Po/icy in an Islamic Economy*

Chairmen: (i) Dr. Ziauddin Ahmed

(ii) Dr. Mohammad Sakr

Paper: "Monetary Policy in an Islamic Economy" by Dr. M. Umer Chapra.

Discussants

- Dr. Munawar Iqbal
- Dr. Mohamed Ariff

Paper: "Theory of *Mudarabah* in Islamic Jurisprudence". by Dr. Ziaul Haq

Discussant

– Dr. Hasan-uz-Zaman

Session III

Subject: *Resource Allocation in an Islamic Economy*

Chairmen: (i) Prof. Dr. Syed Nawab Haider Naqvi

(ii) Dr. Ghazi Madni

Paper: "Economics of Project Evaluation in an Islamic Perspective" by Dr. Anas Zarqa

Discussants

– Dr. M. Ali Khan (Comments circulated)

– Dr. M. Fahim Khan

Paper: "Risk-Bearing and Profit-Sharing in an Islamic Framework: Some Allocational Considerations" by Dr. Syed Aftab Ali.

Discussants

– Dr. A. R. Kemal

– Dr. Nevzat Yalcintas

– Dr. Mohammad Abdul Mannan

Session IV

Chairmen: (i) Prof. Dr. Mohammad Omar Zubair

(ii) Prof. Dr. Rafiq Ahmed

Paper: "Fiscal Policy in an Islamic Economy" by Dr. M. M. Metwally

Discussants

– Dr. Asghar Qadir

– Dr. Sultan Abu Ali

– Dr. Rafiq Ahmed

Paper: "A Monetary and Financial System for an Interest-Free Economy" by Dr. Ma'bid Ali AI-Jarhi. (Paper introduced by discussant)

Discussant

– Dr. Ishaq Nadri

Session V

Subject: *Fiscal Po/icy in an Islamic Economy*

Chairmen: (i) Dr. Ishaq Nadri

(ii) Dr. Nevzat Yalcintas

Paper: "Fiscal Policy of an Islamic State" by Dr. Abidin Ahmed Salama

Discussants

- Dr. Sabahuddin Zaim
- Dr. Syed Waseen Ahmed

Paper: "A Theory of Fiscal Policy in an Islamic State" by Dr. F. R. Faridi

Discussants

- Dr. Anas Zarqa
- Dr. Muhammad Zubair
- Dr. Mohammad Sakr

Session VI

Panel discussion on:

"The Report of the Panel of Economists and Bankers and of the Council of Islamic Ideology on the Elimination of Interest from the Economy".

Chairman: Prof. Khurshid Ahmad

Presentation of Report by:

(i) Dr. Ziauddin Ahmed

(ii) Mr. Abdul Jabbar Khan

Discussants

- Dr. M. Umer Chapra
- Dr. Nejatullah Siddiqi

Session VII

Subject: *Fiscal Policy in Islam*

Chairman: Dr. Sultan Abu Ali

Paper: "Taxation Policy !n an Islamic Economy" by Dr. Monzer Kahf.

Discussants

- Dr. Anwar Siddiqui
- Dr. Abdel Hadi EI-Naggar

Session VIII

Subject: *Profit-Sharing*

Chairmen: (i) Dr. Mohammad Sakr

(ii) Dr. F. R. Faridi

Paper: "Economics of Profit-Sharing" by Dr. Nejatullah Siddiqi

Discussants

- Dr. Monzer Kahf
- Dr. Ziauddin Ahmed

Paper: "The Rate of Capitalization in Valuation Models in an Islamic Economy" by Dr. Masudul Alam Choudhry

Discussant

- Dr. Asghar Qadir

Concluding Session

Chairman: Dr. Mohammad Muslim AI-Raddadi

- A Review of the Seminar – Prof. Khurshid Ahmad
- Future Research and Seminar Communique.

COMMUNIQUE

In pursuance of the recommendation of the first Seminar on Monetary and Fiscal Economics of Islam held in Makkah-al-Mukarramah in Dhul Qa'dah, 1398 H (October 1978) a follow up Seminar on the same theme was held in Islamabad from Safar 28 to Rabi'al-Awwal 3, 1401 H (January 6-10, 1981) under the joint auspices of the Government of Pakistan and the King Abdul Aziz University, Jeddah. The Seminar was attended by eminent economists and bankers from the Muslim World. Twelve papers dealing with various aspects of the working of the monetary and fiscal system in the Islamic economy were presented and discussed at the Seminar. Apart from giving further thought to the issues raised during the first Seminar which required further considerations, participants at this Seminar also reviewed both the principles and practices of Islamic banking. The participants also discussed the Report submitted by the Council of Islamic Ideology to the Government of Pakistan on the elimination of interest and a paper dealing with the operating procedures and results of existing Islamic banks. The Seminar gave particular attention to the objectives and the working of monetary policy in an Islamic economy, the changes required in the banking and financial systems existing at present in Muslim countries to achieve the goals of an Islamic economy, the mechanics of interest-free banking, project evaluation in an Islamic perspective, economics of profit-sharing and the theory and practice of fiscal policy in Muslim countries. It was agreed that monetary and fiscal policies had an important part in contributing to the achievement of the goals stressed by Islam particularly those relating to equitable distribution of income and wealth and socio-economic justice.

The institution of *Zakah* was an essential components of fiscal policy in Islamic state and provided a built-in mechanism for promoting the social objectives of Islam. There was a consensus that other fiscal policy devices could supplement *Zakoh.* Monetary policy had a more limited role in this context but it could actually assist in reducing income inequalities by ensuring that bank resources were not monopolised by just a few and were made available to all sections of the society which could make productive and efficient use of bank finance to produce goods and services needed by a greater majority of the people. The Seminar noted that Islamic banks were now operating in a number of countries on interest-free basis and it was felt that their operating results give cause for satisfaction. It was, however, emphasised that the success of these banks should not be judged by the profits earned by them. The emphasis should rather be on the extent to which these banks contribute to the realization of the Islamic goal of social justice. It was recommended that central banks of respective countries should adopt policies which foster their growth on sound Islamic lines and satisfy their liquidity needs comRatible with *Shori'ah.*

A view was expressed that the government of an Islamic society would be better served if commercial banks were restrained. from creating credit and the liquidity requirements of the economy met by. a judicious creation of credit in a well regulated manner by the central bank which is in a better position to fulfil the demands of social welfare. It was agreed that this matter required further study and research.

The Seminar took note of the misgivings often expressed that in the absence of interest, an Islamic economy would have no basis for project evaluation. The subject was discussed at length and it was felt that this was not an insurmountable problem particularly with respect to the private sector projects where the market rate of equity could be used for discounting. The discounting of public sector projects was, however, a more complicated matter. Nonetheless, alternative techniques of projects evaluation could be developed for use in an Islamic economy which would enable undertaking of feasibility studies and ranking of various projects according to the private or social profitability.

The Seminar complimented the Government of Pakistan and the Council of Islamic Ideology for the intensive work done to find ways and means of eliminating *riba.* It regarded the Report of the Council of Islamic Ideology on the Elimination of Interest as a historic document and a pioneering effort which would be of great use to other Muslim countries in their effects to transform their banking system, in accordance with Islam. It was recommended that to ensure its widest possible readership it should be translated in Arabic and other languages.

The participants of the Seminar extended their thanks to the President of Pakistan who took personal interest in the Seminar.

In the end, it was decided to hold a conference on the theme of "Development & Distribution: Islamic Perspective" in March 1982.

In addition, working groups will be formed to study in depth the following issues:

a. Indexing: *Shari'ah* Aspect.

b. Credit Creation.

c. Profit-Sharing.

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