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Investment Decision Making, Time Value of Money and Discounting in an Islamic Economy

M. Fahim Khan
Former Chief of Research Division, Islamic Research and Training Institute
Islamic Development Bank, now Independent Consultant and Writer

Zarqa (2017) claims to answer briefly the basic questions "*how* an Islamic zero-interest-rate economy allocates real and financial investments". Questions addressed include:

1) What is the meaning and scope of the zero-interest imperative?

2) Wouldn't zero-interest regime deprive an economy of the price signals essential for efficient market allocation of real and financial investment, hence require central planning to maintain efficiency?

Zarqa's paper starts with the phrase that "Our focus is on a zero-interest-rate economy (ZIRE)". It was more than 30 years ago that we used to talk about zero interest-rate economy instead of Islamic economy, just in the interest to make our argument scientific and appealing to economists. But it was soon realized that zero interest economy is a fiction and not a real economy and it is definitely not an Islamic economy and that analysis under the assumption of zero-interest-rate cannot be considered to yield results that could be applied to an Islamic economy.

Zero interest rate in the economy implicitly implies that time value of resources in general and of money in particular is zero. This may theoretically be possible on ex-post basis at any particular point of time in any economy. But that we assume an economy where time value of resources (capital or money) is suppressed to be zero cannot be an actual economy, particularly if the economy is assumed to be a market economy. Human beings have positive time preference. It is a natural instinct and any one claiming to have zero or negative time preference would not be considered a normal rational human being and will not be a part of the study of economics. The term 'Islamic zero interest rate economy' is, therefore, a term that I would not like to use to describe an Islamic economy, whether in theory or in practice. Islam abhors interest. And so do Muslims. Muslims hate to even refer to LIBOR in their investment decisions. How can they swallow a term 'Islamic-zero-interest economy' which implicitly recognizes the existence of interest in the economy where Allah says in the Qur'ān: "Allah will deprive usury (interest) of all blessing" (Qur'ān, 2:276). Let me consider this paper as a paper on *Allocation of investment in an Islamic economy that does not recognize interest*.

With respect to the question "what is the meaning and scope of zero interest imperative", Zarqa at the outset, goes into the details about the existence of debt in Islamic economy by explaining the justification and rationality of credit sale with a markup. The central point of the paper did not require to go into this detail which is marred by controversy among Sharīʿah scholars. To make the central point, which is how investment will be allocated in Islamic economy, it was sufficient to explain with respect to lending and borrowing that *human beings, though, have positive time preference which requires them to expect a positive time value of money yet, this time value of money cannot be realized in a loan transaction. It can be realized only in an investment activity where time value will be an implicit part of the rate of return on capital that can be realized only on ex-post basis.* Time value can be estimated and expected ex-ante while making an investment but it cannot be actually realized on that basis. The time value will be an integral part of the profit that will actually be realized from investment. Zarqa unnecessarily raised the question "Should a credit sale, for a deferred price higher than the cash price be permitted in a ZIRE?" and answered it with non-economic logic. In fact, any one managing the so called ZIRE (if it can exit) of course, would say 'no' to this question. But when the question is rephrased "Should a credit sale, for a deferred price higher than the cash price be permitted in an *Islamic Economy*"? The answer would be definitely 'yes'. *Fiqh al-buyūʿ* elaborately explains it in legal logic. It is also clear in the economic logic. The exchange in the commodity market determines the price. Nothing prohibits the real commodity markets to determine the price in a sale with deferred payment to be different from the sale with cash payment. The difference will be due to several factors that could be grouped into two categories: (a) the pure time factor and (b) the risk factor associated with the time lag. Market determines the compensation of both components in a single price quotation and Allah has permitted it. That is what may be implied in the Qur'ānic answer to the objection that said: "the trade is like *ribā*" (Qur'ān, 2:275). The Qur'ānic answer is: "Allah has permitted exchange and prohibited *ribā*" (Qur'ān, 2:275). Permission is for exchange in the real market (where real goods and services are sold and bought and the prohibition is for exchange in the money market (where money or credit is sold and bought).

The issue of time value of money in an Islamic economy arises only in the context of discounting cash flows while making an investment decision where 'discounting' serves as an important tool in investment decisions. The conventional practice of discounting using the rate of interest makes even the concept of discounting doubtful. Zarqa addressed the following questions to clarify the Islamic position on discounting.

1. "Shall we apply the method of discounting to arrive at the present value of resources utilized in the productive process?

2. Does not a price ceiling of zero interest rate on loans logically lead to zero discount rate, resulting in loss of efficiency in investment?

3. Is it coherent to reject interest on loans and keep using so-called "Compound Interest Tables" in decision making in finance, capital budgeting and project evaluation?"

The first question is straight forward. If someone tries to convince anyone to invest $1,000/- in his business now to expect hopefully to receive back $1,000 two years after, will anyone agree to this business proposal? Economic logic would say 'No' because $1,000 after two years is less in value than $1,000 in hand now. And this is discounting. It is surprising to note that Zarqa says desirability of this attitude from Sharīʿah point depends upon "whether it helps in the achievement of a *Sharīʿah objective*". How do Sharīʿah objectives come into the picture in comparing two values at two different points of time in the market? What Sharīʿah rules require us to look at objectives of Sharīʿah when making such inter temporal comparison? Sharīʿah objectives can be described in several directions. What Sharīʿah rules tell us, which Sharīʿah objective should be kept in mind when comparing $1,000 now to $ 1,000 later?

The only premise under which Zarqa's above position would become relevant if we recognize that in an Islamic economy, people take investment decisions for two reasons: (a) For economic reasons (focusing on worldly gains only) and, (b) For non-economic reasons (focusing on beyond worldly gains). In this case, the consideration of objectives becomes relevant. When people invest for worldly gains in the market, the objective is efficiency (as pointed by Zarqa himself) and it is reasonable to assume that it would not be in conflict with any objective of Sharīʿah. The discounting of future flows to make them comparable with present values becomes inevitable. But when investment is for reasons beyond worldly gains (e.g. *infāq fī sabīlillāh*) then the objective is beyond efficiency. Consideration of objectives of Sharīʿah in such cases (as *qarḍ ḥasan*, creating *awqāf* properties, investment in mosques, etc.) will be relevant and it may sometime require ignoring efficiency considerations. The discounting of future flows to make them comparable with present values, therefore, may not remain relevant. When people invest for beyond-worldly gains (seeking divine pleasure) then the discounting loses its meaning as the future values are indeterminable because the time of receiving the divine reward too is undeterminable. Since the title of the paper and the subject matter of the paper suggests that Zarqa is talking about allocation of investment for economic reasons (i.e. for worldly gains) and hence, the answer to the question "shall we discount future values?" is definitely yes and no Sharīʿah concerns arise in this respect.

Every economy has a market segment and a non-market segment. The non-market segment, in an Islamic economy, is in substantial proportion because of the religious imperatives of spending for divine causes, which is referred to as *ṣadaqāt* or *infāq fi sabīlillāh*. For this segment of an Islamic economy, discounting will not be needed and instead may even be sinful. For example, if my expected *zakāh* liability at end of the year is $10,000 and I pay it in the beginning of the year after discounting it at the rate of my time preference (as efficiency consideration would require), then this discounting I believe may not be permissible. Similarly, if a lender extends a loan to a borrower as *qarḍ ḥasan*, discounting will not be allowed to equate the payback in future to the present value of the loan. *Qarḍ* (lending and borrowing) to meet the needs of needy in an Islamic economy is a non-market economic transaction[(1)]. The lender who lent $1,000/- will be happy to receive back the same amount at an agreed upon future date. Accepting an amount of less than $1,000 is desirable in case the borrower is in distress and cannot return the full amount. It is non-factual to say that Islam requires zero interest rate on loans. The *ãyah* that tells us: "and give up what remains (due to you) from usury (interest) if you are (in truth) believers" (Qur'ān, 2:278) cannot be taken to mean zero interest rate. In the next *ãyah* when the instruction is: "and if the debtor is in a difficulty, then grant him time till it is easy for him to repay" (Qur'ān, 2:280) in fact implies a negative discount rate.

(1) Credit sale should not be confused with the term *qarḍ* (or lending/borrowing). Credit sale is only a trade transaction with payments deferred and its motivation is different from the motivation to lend money to a needy.

Conclusion

The conclusion that discounting is permissible when investment decision is taken in a market place and that discounting rate should be derived from the rate of return on capital in the alternative investment opportunities in the economy is a conclusion that neither the conventional economists nor Islamic economists dispute. This might be an issue 40 years ago but no more. Islamic economics needs to go beyond this point. Before we come to the question how investible funds will be allocated to alternative projects, we need to answer the question how it is decided what proportion of investible resources should be allocated to market economy to earn worldly gains and how much should be allocated to non-market economy to earn gains beyond worldly gains. The former will be allocated to alternative opportunities in the market on efficiency grounds and the tools of discounting will be applicable as applied in conventional economics using relevant indicators (not interest rate) as a measure of the time value of money.

As Zarqa himself noted, under the assumption of no uncertainty and perfect foresight, it does not matter whether we use the term interest rate or profit or rate of return or rent. Theoretical analysis of market segment of the economy will not be significantly different whether we do the analysis in Islamic perspective or secular perspective. In practice, there is no reason to believe that market segment of an Islamic economy will be short of signals that economic agents will need to make efficient economic decisions. The environment that Islam provides for markets to function perfectly is more comprehensive than what markets in any modern day secular economy enjoy. Islamic economics eliminates from market unnatural and artificially created indicators like interest rate and leaves in the market more rational indicators to be used in investment decisions. The legal and ethical system laid down for exchange in the market aims at minimizing information and transaction costs to ensure perfect competition in the market and discounting by an artificially determined interest rate violates the environment of competitive conditions in the market.

The points that need to be studied to distinguish Islamic economic thought from conventional economic thought with respect to allocation of investment are following:

1) How the legal and ethical system of Islam provides a solution to situations when markets fail to function efficiently. Solutions to market failures in secular context through various interventions in markets (referred as second best solutions) do not improve welfare in the society. The ethical and values system of Islam provides better solutions. If this is so, then the question 'how allocation of investment is decided' is a more important question that we need to study than how allocation of investment takes place in the absence of interest in the economy.

2) Households (or consumers) operate in two different segments of the economy; in market segment of the economy and in beyond market segment of the economy. So do firms. How the resources are allocated by economic agents between the two segments of the economy and how allocations within each of the two segments of the economy are prioritized are the questions that Islamic economists need to address instead of merely addressing the question how investment will be allocated in the absence of interest in the economy.

References

Zarqa, Muhammad Anas (2017), "Allocation of investment in an Islamic zero interest rate economy", *Journal of King Abdulaziz University: Islamic Economics* **30**(1): 63-72.

Muhammad Fahim Khan obtained his Ph.D. in Economics from Boston University, USA and with more than 40 years of experience in economic policy and planning, teaching and institutional capacity building, Dr. Fahim Khan has written extensively in the field of Islamic Economics and finance. He worked in the Ministry of Planning, *Government of Pakistan* in the area of Economic policy and planning. As one of the Directors of the International Institute of Islamic Economics of International Islamic University, Islamabad, he developed the School of Economics (later International Institute of Islamic Economics, IIIE). In *Islamic Development Bank*, Jeddah, he developed the research and training capacity of Islamic Research and Training Institute (IRTI) and as Chairman of Riphah Centre for Islamic Business at the *Riphah International University*, Islamabad, he established and developed the Center. He has also advised several national and international bodies on issues relating to economics, finance and Sharīʿah. As advisor to the Governor of central bank of Pakistan, he was member/secretary of a high level commission established on the instructions of the Supreme Court of Pakistan to transform the financial system of the country to conform with the Sharīʿah. The work of the commission is the basis of the Islamic financial system now in practice in Pakistan. He has been a visiting Research Professor at the Centre of Research in Islamic Economics (now Islamic Economics Institute) of King Abdulaziz University, Jeddah. He also served as Distinguished Faculty Member at National Defence University in Islamabad, Pakistan. He has published 12 books and several articles in international journals. His last publication is Islamic Banking and Finance in the European Union: A Challenge. As Chief Editor, he compiled the annual reports for Dubai Centre of Islamic Banking and Finance for 2014; one on Growth, Efficiency, and Stability in Islamic Banking and Finance and the other on Takaful: Global Challenges to Growth, Performance and Governance. He is currently consultant at large in Islamic economics and finance.

E-mail: mfahimkhan@gmail.com