PROJECT EVALUATION IN AN ISLAMIC PERSPECTIVE: SURVEY OF SELECTED LITERATURE*)

Masyhudi Muqorobin
Muchamad Imam Bintoro*)
Universitas Muhammadiyah Yogyakarta
masmuqorobin@umy.ac.id

Abstract

Controversy over some issues in Islamic economics of project evaluation centers basically around the role of interest as a determining-basis for discount rates, because of the interest prohibitionin Islam. Apart from the question of the discount rates, the issue of incorporating social costs and benefits into any scheme of evaluation becomes especially important in the Islamic perspective.

This paper reviews 30 books and selected papers on the relevant subject, and estableishes three main findings. First, unlike mainstream position that relies on Fisher's work, Islamic economics conceives time preference as not a mere consumption phenomenon, but rather of production. This finding perceives this mainstream concept as the "fallacy" of Fisherian approach

Related with goods and resources, they are endowed to all human being, therefore, all resources (and all goods) are perceived initially as public goods, and satisfy both the criteria of public goods (non-rivalry and non-exclusion) to human being. Private ownership is lawful under Islamically legitimate means so that public goods, externality, and other related concepts are perceived differently from those in conventional economics.

Finally, the basic difference between Islamic and conventional economics is that human behaviour in Islam is imbued by ethical values. This difference necessitates different methodological justification in project evaluation. As such part two attempts to provide some departures from the conventional approach.

Keywords: *interest, intertemporal consumption, production, project evaluation, rate of return, (social) cost-benefit analysis, time preference.*

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INTRODUCTION

In Islamic[1] perspective, discussion on project evaluation carries controversies arising primarily over discounting issue due to candid prohibition of interest (*riba*).[2] The problem remains unresolved or rather more complicated amid increasing attention to the subject. Along with the above issue, there are also issues demanding for further study: treatment of externality and public goods and those of methodological directions. The works on Islamic economics, so far, do not significantly account for the externality and its related issues leading to the exclusion of social costs from the relevant cost-benefit analysis (CBA).

This paper surveys some authoritative studies of the subject from an Islamic point of view. To achieve this purpose, given the constraints and limitations, it will be defined in a restricted scope of analysis, accommodating only 30 studies written within twenty years, 1976-1996. For inclusion in this survey, a study must cover at least two issues characterized under any of two components or subtopics established in this survey: discounting problem and social cost-benefit analysis (SCBA).

BASIC NOTION OF PROJECT EVALUATION

Project evaluation has drawn special attention in developing countries, as a prerequisite to attract investments for economic development. These countries need to carry out many projects, of which some are very large in size to fit their development plans. Being a part of economics, project evaluation is concerned with the problem of allocating scarce resources to various alternative uses so as to provide maximum benefits for all. It measures the benefits in terms of profitability, classified into two categories: *commercial profitability* and *national profitability*. The former had been developed earlier from the standpoint of the financiers and the investors, whereas the latter attempts to accommodate wider interests of the society, the national interests. The former also provides an analytical framework to help the latter further evolves as theoretical tool to investigating the nation-wide requirements.

Commercial profitability essentially centers on financial analyses. Neoclassical economists have developed standards of valuation that rely

[1] The term "Islamic" in "Islamic economics," vis-à-vis the mainstream or conventional economics, is used in this study instead of "Muslim". However, in relation to "economists" or "society", this paper will employ them interchangeably, unless otherwise noted.

[2] Interest is used in this survey as a translation for "riba", literally means increase, addition, expansion or growth. It appears in four groups of verses in al-Qur'an, in accordance with four different occasion related to their revelation, respectively al-Rum 30:39; al-Nisa 4:161; Ali 'Imran 3:130-132; and al-Baqarah 2:275-281. See for instance Chapra, 1985/1405, especially chapter 2 and Appendix 1.

on the concept of inter temporal choices in consumption, where Fisherian approach rests on interplay of indifference curves, production possibilities, and individuals' income levels as the basis. In this case, the rate of interest determines the above three components simultaneously (Fisher, 1930). Discount rate reflects people's preference for present consumption over that of the future. Fisherian consumption stream is then adjusted to the income stream as perceived in Keynesian theory, where time preference consumption reflects in the psychological propensity to consume. Keynesian insight that investments equal savings also contributes, to some extent, to the establishment of the decision rule.

Furthermore, social discount rates may also be determined to measure social costs and benefits of different project facets. On the other hand, internalization of externality is the way to approximating these costs and benefits. Incorporating social benefits and costs into project evaluation is a new dimension aimed at achieving national profitability. It is thought, CBA assimilates into the project evaluation both the theories of welfare and of development.

GENERAL OBSERVATIONS: SCOPE AND METHODOLOGY

To facilitate the discussion, we provide in Table 1 the classification of the studies under consideration, selected according to the criteria outlined in the survey. Many other writings are found insignificant for inclusion, however.

The table shows the objectives of an Islamic economy as emphasized by Muslim economists, both at the micro and macro levels. The emphasis usually determines the direction as also the framework for their analyses. Nearly all the studies surveyed deliberate time preference in consumption and discounting issues in association with the unequivocal injunctions of interest abolition, while a few are directly concerned with the SCBA.[3] Among such materials, more comprehensive approach is available in six monographic efforts by Choudhury (1986, 1992), Choudhury and Abdul Malik (1992), Khan (1995), and Naqvi (1981a, 1994), though some of the contents are frequently mentioned or stressed in other works. Issues concerning the objectives or value judgments occupy lengthy discussion in this category than in any other materials. However, since these attempts are not meant at specifically addressing the issues in project evaluation, their presentation is considered equal as other materials. There are five books by Awan (1995); Chapra (1979); Choudhury (1980); Naqvi (1981b); and Naqvi and Qadir (1981) consisting of less than seventy-five pages, to which equal consideration is also given. From the above

[3] Different observation may be found in Kazim Raza Awan (1995). In an analysis of about twenty studies of Islamic economics, he gives an impression on social cost and benefit aspects. Since they do not go into the depth, the methodology used in this survey treats some of his selected materials as of secondary relevance, for the reason that they accidentally mention the issues and.

Table 1
Categorization of Research Materials

RESEARCH MATERIALS UNDER SURVEY	Overall Objectives	Discounting Problem: Time Dimension & Discounting	Discounting Problem: Ruling out the Role of Interest	Discounting Problem: Criteria for Investment Decision	Discounting Problem: Investment Models	Cost-Benefit Analysis: Determination of Costs /Benefits	Cost-Benefit Analysis: Social Rate of Discount	Cost-Benefit Analysis: Distributional weights	Cost-Benefit Analysis: Shadow Price & Consumer Surplus	Methodology: On the Existing Methodology	Methodology: Islamic Alternative to Methodology
1. Akhtar, M.R. 1417/1996.	V					V		V			
2. Awan, K.R. 1995.	V	V		V		V		V	V	V	V
3. Rauf A. 1412/1992.		V	V	V	V						
4. Bashir "A.H.M. and Datrat Ali. 1992.					V			V			
5. Chapra, M.U., 1979.	V					V		V			
6. Choudhury, M.A. 1980.	V	V				V	V	V			V
7. Choudhury, M.A.1983.	V	V	V		V						
8. Choudhury, M.A.1986.	V	V	V		V	V	V	V	V		V
9. Choudhury, M.A.1992.	V	V	V		V	V	V	V	V		V
10. Choudhry, M.A. Uzir AM 1992.	V	V	V	V	V	V	V	V			
11. Hallaq, S. 1994. "	V		V		V			V			
12. Haque, N. and A. Mirakhor. 1987.	V	V	V	V	V						
13. Hanlie, A.R. and M. Rahoey. 1991.	V		V		V						
14. Kahf, Monzer. 1994. "		V	V	V	V						
15. Khan, M. F. 1991.		V	V	V	V						
16. Khan, M. Fahim. 1995.	V	V	V	V	V						
17. Mannan, M.A. 1992.				V		V		V	V		
18. Mirakhor, A., 1996.			V	V	V						
19. Naqvi, S.N.H. 1403/1981a.	V	V	V		V		V	V			
20. Naqvi, S.N.H. 1981b.		V	V		V	V	V				
21. Naqvi, S.N.H. 1403/1982.			V		V		V				
22. Naqvi, S.N.H. 1994.	V	V	V		V	V		V			V
23. Naqvi, S.N.H and Asghar Qadir. 1981.		V	V		V		V				
24. Sattar, Zaidi. 1991.	V	V	V	V	V						
25. Shafey, Irfan. 1986.	V			V	V	V		V			
26. Toutounchian, I. 1996.			V		V						
27. Zarqa', M.A. 1976.						V		V			
28. Zarqa', M.A. 1403/1982.		V	V	V					V		
29. Zarqa', M.A. 1983.		V	V	V	V		V		V		V
30. Zarqa', M.A. 1415/1994.					V	V		V			

table, Choudhury and Naqvi, are more careful in handling these issues. Zarqa' is also considered productive in presenting articles relating to the subject, though only one (Zarqa' 1983) provides a sufficient analysis.

The problem of time-related discounting encompasses four issues: 1) its existence in relation to time preference concept, 2) substitution of the role of interest rate by profit rate, 3) criteria selection for investment decision under the *Shari'ah*, and 4) efforts on investment model. Nonetheless, only the first two deserve further attention in this survey.

Many attempts on SCBA rest on elaboration of social welfare concept to which priority has been given over individual interest. Only for the purpose of methodological relevance the study selects a few of such endeavors by Akhtar (1996); Awan (1995); Choudhury (1980, 1986, and 1992); Choudhury and Malik (1992); Mannan (1992); Naqvi (1994); Shafey (1986); and Zarqa' (1976), to present the basic values of Islamic social welfare. The paper has also identified four related issues, as revealed in the table, though sufficient elaboration is given only to the first, determination of social costs and benefits.

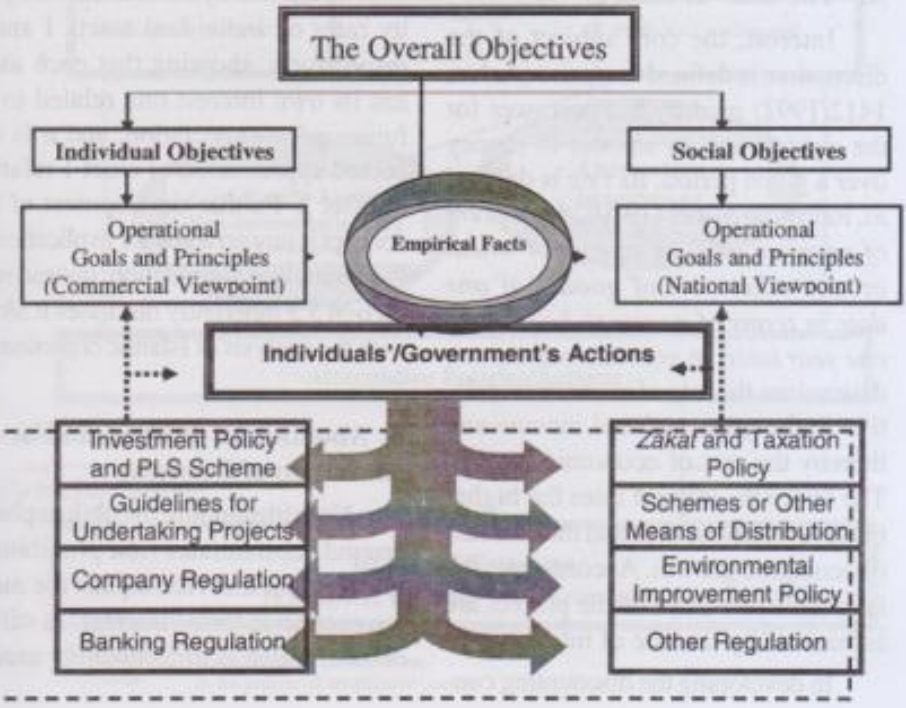
The methodology of project evaluation still lacks attention. There are not many significant contributions in Islamic economics literature on the subject. Introducing Islamic alternative as advanced in a more general approach by Choudhury and Naqvi is likely to have started enlightening scientific and academic inquiries in such an important area, where the present work seeks to make its humble contribution. Figure 1 depicts the sketch of methodology of the study in investigating the relevant Islamic economics literature on project evaluation.

OBJECTIVES OF ISLAMIC ECONOMY

Notwithstanding the agreement with objectives of the Islamic economy defined in line with the Islamic teaching, they are visualized differently in the literature including in project evaluation, due to different emphases. The overall objectives examined here constitute a set of Islamic notions derived from the fundamental sources of Islam.

Each notion entails multiple dimensions. Its vertical and horizontal dimensions make use of systemic interaction between man and his Creator and among human being, respectively. Those two are conceived an integral part of Islamic monotheism, so as to be defined not in isolation from each other. Separation of their actions is merely facets of an integrated theomorphic being (Naqvi 1981a). It is legitimate, therefore, to attend the ob-

Figure 1
Methodology for the Study of Project Evaluation



jectives from individual and social points of view. As we are dealing with economic or business entities, "individual" applies to both individual men and firms, in conjunction with the pursuit of their interest reflected in profitability maximization.

To make use of the objectives in designing policy prescriptions based on the empirical facts, it is necessary at large to derive those into operational goals and/or principles. In return, such policies are functional to provide feedback for the private individuals and government to take further actions in devising new policies and regulations, or else feedback for the set up of new operational goals or principles.

REPLACEMENT OF INTEREST BY PROFIT RATE

A. The Role of Interest

Interest, the core subject of the discussion, is defined as a price (Azhar, 1412/1992) paid by the borrower for the right to use an amount of money over a given period. Its rate is defined as, following Fisher (1970), *the per cent of premium paid on money (or wheat or any other sort of goods) at one date in terms of money to be in hand one year later*. In general, interest rate determines the rate of investment relative to the gross national income and thereby the rate of economic growth. The lower the interest rates the higher the level of investment and thus the rate of economic growth. Accordingly, the investible resources of the project are influenced by the rate of interest.

In developing the discounting concept, the role of interest is hardly separable from involvement of time dimension. Suppose "*the value of dinner about to be eaten involves no time of waiting and so no discount or interest*"(p. 326). This inversely means that the price of any good or service (or in a generalized sense, asset) that involves time for waiting should be discounted, or "interest should be accounted for." This is the very beginning of the process of determination of the *rate of interest*.

It begins with differentiating interests of two assets, matched by the expected change in their relative prices, to form an interest parity formula (Niehans, 1990):

$$\frac{1+j}{1+i} = 1 + a \qquad (1)$$

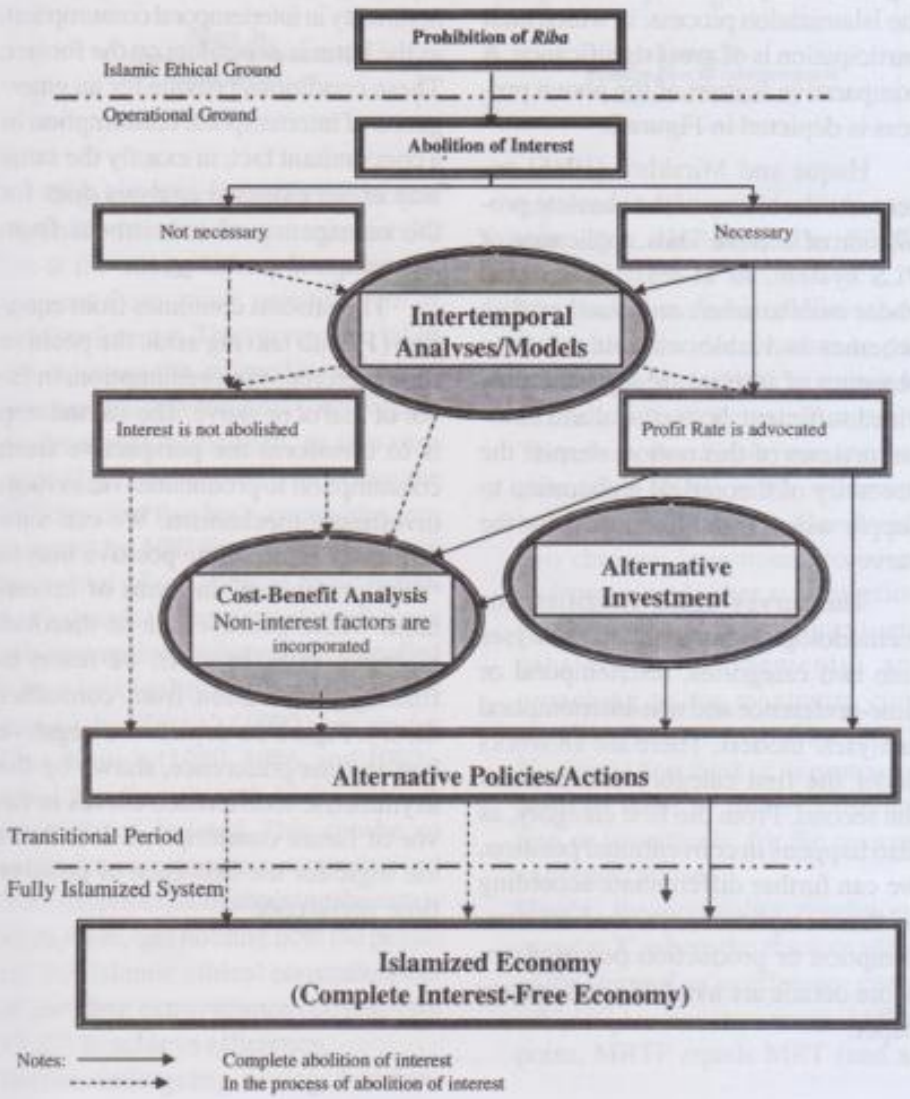
where i and j are the interest parity rates on individual assets 1 and 2 respectively, showing that each asset has its own interest rate related to its future price expectation, and a is expected appreciation of asset 1 relative to asset 2. Further development of the concept is unwarranted for explication in the survey due to limitation; instead subsection 5.3 inherently discusses it along with the analysis of Islamic objection.

B. Abolition of Interest and/or Islamization of Economy

Notwithstanding the philosophical ground substantiates *riba* prohibition, to the extent that *riba* equals the modern economic term "interest" is still in debate, which is unfortunately unable

for inclusion in this short survey, it comes across discussion at the level of policy prescription. In an Islamic economic reform, i.e. Islamization of the economy, Naqvi (1981a and 1994) and his group (Naqvi *et al*, 1989) advocate a gradual, dialogic, and a compromise process. The purpose is to let the existing conventional system gradually dissolves and provides a chance for the Islamic reforms to take place, with the minimum or even zero harmful effect to the society. However, they suggest, such a reform requires a policy pack-

Figure 2
Riba Prohibition Relating to Project Evaluation and Its Impact on the Process of Islamisation of Economy



age, in which a priority is given to the program for Islamizing the institution of private property, where Muslims live under oppressive feudalistic system. Therefore, the issue here is "not a mere prohibition of interest" but by and large "Islamization of Muslim economy."

By contrast, the majority of Muslim economists who advocate the interest abolition consider undertaking a segmental step of contribution towards the Islamization process, in which their participation is of great significance. A comparative feature of the above process is depicted in Figure 2.

Haque and Mirakhor (1986) accentuate the clarity of the absolute prohibition of interest. Thus, application of PLS system, as at least interpreted under *mudharabah* and *musharakah* schemes is viable without resort to charging of interest. Many have provided sufficient, both ethical and rational reviews of this notion, despite the necessity of theoretical elaboration to supply with a rigorous support for the survey.

The survey again classifies, for methodological purposes, the analyses into two categories, intertemporal or time-preference and non-intertemporal analyses/ models. There are 18 works under the first category and 8 under the second. From the first category, as also happens in conventional position, we can further differentiate according to their emphases, whether on consumption or production perspectives. More details are available on separate paper.

Developing an Intertemporal Analysis: New Consideration?

Holding the assumption of acceptance of philosophical basis and selecting time preference from the investment viewpoint, we can develop a theoretical construct of intertemporal analysis. The study, hence, underlines Azhar's (1992) explicit statement that optimality conditions primarily pertain to saving and thus investment, which leads to optimality in intertemporal consumption, as the latter is dependant on the former. These conditions provide for an emergence of intertemporal consumption as a concomitant fact, in exactly the same way as neoclassical analysis does for the emergence of investment from intertemporal consumption.

The process continues from equation (1) with leaving aside the positive time preference in consumption, in favor of that of negative. The second step is to transform the perspective from consumption to production, *via* saving-investment mechanism. We can subsequently reformulate positive bias in "time preference" in terms of investment where positive rate of discount may still exist. In short, we resort to finding justification from consumer theory. Figure 3a depicts the negative bias in time preference, shown by the asymmetric indifference curves in favor of future consumption. It follows the logic for the existence of positive time preference

Figure 3
Time Preference Bias

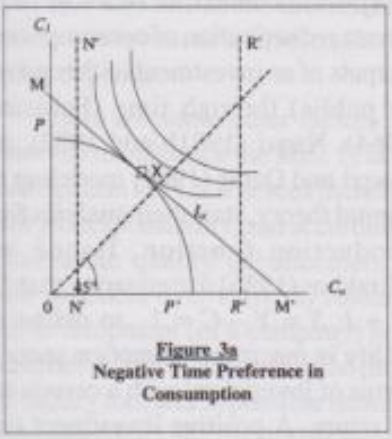


Figure 3a
Negative Time Preference in Consumption

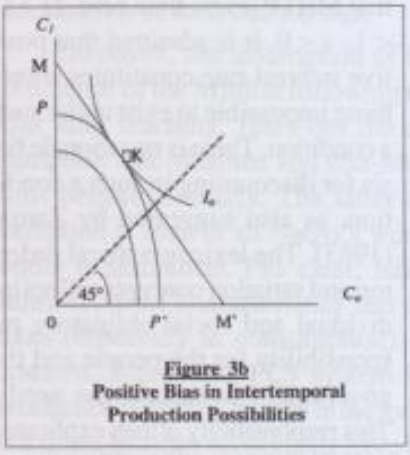


Figure 3b
Positive Bias in Intertemporal Production Possibilities

Supposing a symmetric production possibility frontier, the optimal point (X) lies at the above 45° ray from the origin, and there exists negative rate of time preference. The survey also takes into account the rationality axiom of lexicographic preferences (ordering) in conventional framework, as also suggested by Zaman (1992), reflecting the fulfillment of five basic necessities represented by NN' line. It also borrows his axiom of satiation of basic needs, and expands to accommodate all types of consumption in general, to be applied within prodigality frontier, RR' as discussed by Zarqa' (1992), or under Choudhury's (1980, 1986, and 1992), and Choudhury's and Abdul Malik's principle of *la-israf*. This can be so under time preference concept derived from the principle of attaining the maximum *falah*, and holding both the physical and Islamic ethical constraints i.e. of avoiding extravagance (Q.S. al-Isra 17:27) to achieve efficiency.

Before undergoing saving decision, anyone will obviously decide to consume first. However, after fulfillment of basic necessities, a Muslim's income is sufficient to make him decides whether to put aside a fraction of it for saving or to entirely spend for consumption. Therefore, the *dharuriyyat* (necessities) line (NN') is the minimum level after which he is faced with two choices: investment decision, and pursuing further consumption for *hajjiyyat* (conveniences) and *tahsiniyyat* (refinements) approaching to the maximum consumption level, the *israf* line (RR'). He should *first* think of its postponement in favor of future consumption or investment, for the reasons explained above.

Hence, the optimality conditions occur at X, where the absolute value of the slope of an indifference curve (dC/dC_o) is less than unity. At that point, MRTP equals MRT (and as

claimed in conventional analysis, equals interest rate, OM/OM'). So that MRTP is less than zero. $(1 + i) < 1$, $i < 0$. It is admitted that positive interest rate constitutes something impossible to exist under such a condition. There is no rationale basis for discounting in such a condition, as also suggested by Zarqa' (1983). The lexicographical ordering and satiation concepts reflect individual and social obligatory responsibility for the people and the government to sustain the needy. This responsibility is then explicated through the formation of future consumption, defined in terms of saving.

Whenever saving surpasses the level of *nisab* (minimum level to allowable deduction), then it is subject to yearly 2.5% *zakah* rate, which individually purifies his saving, and increases his spiritual uplift and achievement of *falah* in the Hereafter. Hence, this saving will be gradually diminishing to a certain level every year. Alternatively, to prevent it from diminishing, he can take the latter choice for investment to enjoy with the returns. Social dimensions of this choice stem from the PLS schemes in particular where participation of workers is considered. See for instance discussion by Hasan (1986).

Advocacy of using investment viewpoint necessitated in time preference analysis does not necessarily mean that those emphasizing on consumption lose their relevance, as both are inseparable. Consideration to time preference consumption function will serve a clear view in analyzing the society-wide context, in order to incorporate redistribution of consumption of outputs of an investment (either private or public) through time (Feldstein, 1964). Naqvi (1981b and 1982), and Naqvi and Qadir (1981) modeling the capital theory, start their analysis from production function. Haque and Mirakhor (1986) use equation that $Y = C + I$; $S = Y - C = I$ to define the utility in macro-consumption space in terms of investment with a certain rate of return. A positive investment time preference, or in our term MRT (r) equating to positive rate of return, is possible to exist, resulting from positive bias in future production for the available future consumption.

However, since the significance of consumption time preference is merely considered as a concomitant fact, its optimal point (X) always coincides with optimality condition yielded from an investment decision (K) as depicted in Figure 3b. Consequently, there is no lending-borrowing mechanism as happens in conventional analysis. It is unanimously agreed that Islam does not allow such a mechanism. The figure depicts the "only possible" cause of the existence of positive rate of return stemming from positive bias in production possibilities, from which profit rate comes to the existence. This positive bias in future production is reasonable due to factors: *first*, subjective preference affected from tastes and expectation of the consumers, being consistent hence, defined as such that future consumption will serve higher quality

as associated with the second. *Secondly*, technological change, on which, as Haque and Mirakhor theoretically prove, entrepreneur's investment decision depends.

There are some other factors are observed to influence the bias: 1) labor participation in PLS schemes increases their job responsibility, and accordingly ensures the quality enhancement of their products over time; 2) research and development (of a company) is an important factor in improving the product quality too; and 3) possible increase in demand that calls for further expansion of the product, given the fact of high increase in population particularly in Muslim countries.

THE "FALLACY" OF FISHER'S APPROACH

The finding, therefore, rectifies the "fallacy" (from Islamic viewpoint) of the Fisherian approach, which can be looked at from two features. *First*, Fisher's first stage (approximation) says that the income stream of an individual is subject to modification through lending-borrowing mechanism. In Islam, it is completely lawful (but not encouraged)[4] provided no interest bearing entails in the mechanism, as he otherwise necessitates as a consequence of the "fallacy" of his *human impatience*. Fisher is true that mankind by nature, as the Qur'an says, is hasty (Q.S. al-Isra: 17: 11, impatient, and sometimes combined with fretful and niggardly (Q.S. al-Ma'arij 70: 19-210). These characteristics in general belong to all mankind. However, Islam comes into the world to make use of human Free Will to get them emancipated from domination of such bad natures.

Therefore, the assumption of the obedience of the Muslim following the Qur'anic teaching, rules out the assumption that Muslims and non-Muslims behave similarly. The latter assumption is used in all Naqvi's works under examination. Fro clear, Islam rules out these characteristics and the likes (especially in consumption). In contrast, it provides PLS system for production purposes, though in the modern times Muslim economists have invariably considered several modes of financing that combine both (interest-free) lending-borrowing and PLS mechanisms, with the use of some Islamized conventional modes of financing.

Second, in the second approximation, Fisher suggests that income stream is adjustable by ("buying and selling" income to) investment, with interest rate as a "price". He equalizes the "intermediate rate of interest," and the "rate of return over cost" as a result of investment, as explained in Table 2 (partially quoted from his Table 7, p.156).

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[4] The Prophet (pbuh) is reported to have said: "O Allah; I seek refuge in Thee from sin and from being in debt." Someone asked him: "How often does thou, O Messenger of Allah; seek refuge from being in debt?" He said: "When a man is in debt he speaks and tells lies and he promises and breaks the promise." (narrated by al-Bukhari). Quoted from M. A. Mannan, *Understanding Islamic finance*, p. 27.

Table 2
Farming and Forestry Use Compared in Terms of Rate of Return over Cost

	Net Value of Farming Use	Net Value of Forestry Use	Net Difference in Favor of Forestry Use
1st year	$ 100	$ 0	-$ 100
2nd year	100	210	+ 110
3rd year	100	100	0
Each Subsequent Year	100	100	0

For more convenience, the process may continue by reformulating the interest parity formula (1), to get:

$$a = \frac{1+j}{1+i} - 1 = \frac{(1+j) - (1+i)}{1+i} = j \quad (2)$$

where $(1 + i)$ and $(1 + j)$ representing an asset in two different points of time, say now and one year later. If the values of i and j are respectively 0 and 10%, therefore, we can find that a is 10% representing an "intermediate rate of interest". He immediately shifts to the concept of "rate of return over cost." The Table shows that there are two options (or investment opportunities) the farmer faces, say by the farming use; to produce Q_i, and second, forestry use; to produce Q_j. At the initial period (first year), he thinks of taking the second option with the cost of losing his opportunity to get the first option ($Q_i - Q_0 = \$100$). Q_0 represents the dollar amount to be reduced at the initial period, when he undertakes the investment project (equals zero). Fisher calculates the rate of return over cost, say p, as:

$$p = \frac{Q_j - Q_i}{Q_i - Q_0} = \frac{210 - 100}{100} = 10\% \quad (3)$$

Equations 2 and 3 are completely different. The former talks about interest rate, while the latter is profit rate. It is seen that rate of return over cost at that particular time is appropriately considered as profit rate rather than interest rate, though all values may be similar.

SOCIAL CONSIDERATIONS: DETERMINING COSTS AND BENEFITS

Benefits and costs in Islam may be defined, as seen in Choudhury (1980:13), as *maslahah* (pl.: *masalih*) and *mafsadah* (pl.:*mafasid*), which can also refer to as Zarqa's (1976:13) utility and disutility respectively. These terms have been mainly explored in the works of earlier scholars like al-Ghazali and al-Shatibi. The survey uses these terms interchangeably so as to carry the same meaning, even though terms such as "benefit" and "cost" as common terminology will frequent. Determination (including measurement) of costs and benefits is of crucial (and perhaps also crucible) points of discussion in Islamic project evaluation after the one on interest elimination.

One of the logical implications of the initial ownership discussed above, that resources constitute provisions for the benefits of all human being, is that all socially-related problems of individual economic behavior – i.e. public goods, externality and free-rider phenomena, are conceived differently from those of conventional viewpoint. It is however unfortunate that this paper finds it sufficiently significant only in a small number of the studies under consideration, like the ones by Awan, Akhtar, Choudhury (1980, 1986, and 1992), Choudhury and Abdul Malik (1992). The first two provide a separate section dealing with externality; while Choudhury (and Abdul Malik), who primarily deliberates *zakah*-related social goods, spread the discussion of externality over various sections. However, Mannan (1992) briefly mentions that externality must be included in calculation of resource allocation.

All goods are initially "public goods" and satisfy both the criteria of public goods (*non-rivalry* and *non-exclusion*). Divergence from it, i.e. distribution of these goods for privately owned purposes, is permissible under Islamically legitimate means. This is one of two principles Mannan (1992) holds, Islamic permissibility and consistency, leading to an assumption that goods with which we are dealing are only *Halal* goods, both reflected in their nature and the way they are acquired. Individual initiative is entirely lawful, rather, through the principle of social responsibility (*al-fard*), constitutes an integral part of social interaction. In contrast, secular worldview, from which capitalism and socialism have stemmed, disintegrates individual and social interests as two opposite (and even conflicting) desires. The spirit of capitalism relies upon individualism under which private interest (and thus private ownership) obtains an overemphasis at the expense of social one. In contrast, socialism that diverges from capitalism deprives individual interests.

Since all goods are initially public goods, being God-given, their existence is necessary. On the other hand, the "existence"[5] of private goods falls under "a possible consequence of", and "dependent upon" the existence of public goods, by any lawful means, one of which is production (either private or public). Consequently, all Muslims hold that there is no absolute (private) possession of such goods. Some types of possession particularly immovable properties and natural resources are, rather, subject to re-conversion (or reformation) including confiscation by the government.[6]

It is clear that resources in general should *not* be kept idle. If such resources are economically counter-productive, the ruler is therefore legitimate to wisely confiscate them for re-distribution purposes, from the owners (through, for instance, a land-reform policy, socio-economic reformation, *etc.*) as seen in the above and many other quotations concerning the policy by 'Umar ibn al-Khattab. This policy was applied only to the unmanaged (idle) land given as a fief (not the land owned by other means, i.e. buying, *etc.*). Therefore, confiscation of one's

property should consider at least two conditions: the implies consideration to the rights of the owners to the properties that had been obtained by means of buying. This is open to controversy, however.

The study concludes, any means for obtaining the properties should be treated equally. The Prophet (pbuh) gave the land as a fief to whosoever had provided themselves for the martyrs of Islam; it was not given freely, even to Bilal. Equal treatment to this is "just", as it can avoid the exclusion of the land-lords, both in feudalistic and capitalistic systems, who own a relatively huge amount of lands by means of buying. Naqvi (1981a and 1994) seems to hold the same position.

This may not be the case in conventional position, which certifies an absolute individual ownership, even when an article to which the ownership is referred may be idle. The discussion of public good associated with redistribution aspect is irrelevant without positing it as to be weighted into costs and benefits calculation. In this respect, conventional CBA considers redistribution of income as a public good, and thus what Islam has introduced since the beginning of its dissemination obtains theoretical reinforcement in CBA (Brent, 1996). Discussion under this category should include an issue of *waqf*.. On the other hand, there also is an inextricable link between public good or externality problem and its corresponding free-rider phenomenon, and environment as perceived in a new development of CBA as well as in economics in general. all merit for further separate exploration.

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[5] Quotation mark is used to show that individuals' ownership is held as amanah. An individual, being the relative owner of goods, is a trustee of the True Owner (Allah).

[6] This requires separate discussion. However, there are some historical evidence from the Prophet (pbuh) and policies of the Caliph 'Umar ibn al-Khattab (though the latter is disputable. Among others are:

Bilal b. al-Harith al-Mazani came to the Prophet asking for a long and wide tract of land and the Prophet gave it to him as a fief. When 'Umar became Khalifa, he said to Bilal: O Bilal! You asked the Prophet for a long and wide tract of land, and he gave it to you, because the Prophet could not refuse any request. Now you cannot manage what you have. He said: Right! Said 'Umar: Find out how much of it you can control and keep it; but what you cannot control or manage return to us, so that we may divide it among the Muslims. Said he: By God, I am not going to do anything. The Prophet gave it to me. Said 'Umar: By God! You will do it! And 'Umar took away from Bilal what Bilal failed to cultivate, and divide it among the Muslims. Quoted from Ben Shemesh, A. 1967. Taxation in Islam. Vol 1. (Kitab al-kharaj by Yahaya bin Adam al-Qurashi), Leiden: E.J. Brill: 69.

THE NEED FOR AN ALTERNATIVE TO SHORTCOMING METHODOLOGY

Methodology of project evaluation or in particular SCBA – chiefly attributable to the UNIDO *Guidelines,* and Little-Mirrlees and Squire Van der Tak approaches – to some extent has been the direct result of distorted market prices. As Awan (1995) has observed, there is a conflict in the existing methodology between an increase in shadow prices use and competitive market paradigm that are accorded lowest status. The presence of externality and government interference is usually accused of the originating cause of the conflict. Irvin (1978) is of the opinion that the methodology has created further conflicts between commercial and national profitability. The evidence is rarely scientifically inferred, but realized in developing countries where large enterprises have obtained the greater benefits at the costs of the rest of the community. The survey enumerates two significant reasons that have been presented in the recent economic literature.

1. The dichotomy between commercial and social points of view has forced those involve in undertaking projects to jump up from the investment decision field that is purely technical, to more complicated theoretical aspects of investment analysis under CBA formula, perceived differently by different people. From different perspective, it is also conceived as a jump-up from neoclassical tradition of investment theory to its application in a more socialist characteristic of developing countries. This leads to the second.
2. Difficulties in application. Empirical proofs by Pohl and Mihaljek (1992) suggesting similarly, the decline in the use of methodology. In response, Little and Mirrlees (1991) examine and enumerate factors affecting such a decline during 1980s, of which four significant factors are as follows: 1) Less room for analysis due to decline in World Bank lending on projects; 2) Institutional reasons (stemming from the World Bank itself) so as to decline project promotion; 3) Emphasis shift from poverty in 1970s to women development and then to environment; and 4) The methodology itself may be unsound (defect), too complex and self-defeating.

Two distinguished comments by Squire (1991) and Fountain (1991) emphasize the last reason. There is a defect in methodology, so that changes are thought very urgent to the one "in which certain procedures have to be followed more or less automatically." It is time for Islamic economists to develop their own methodology, too, in response to both such shortcomings of the existing methodology, as well as the need for evaluating projects in Muslim countries, where development has been enormously increasing.

IN SEARCH FOR AN ISLAMIC METHODOLOGY: SUMMARY AND PROPOSAL

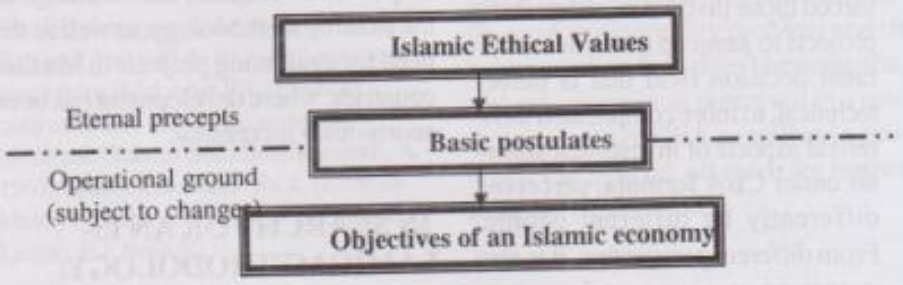
Though five studies are found searching for alternative methodology

of project evaluation, neither gives a clear-cut definition of methodology for project evaluation nor for cost-benefit analysis, except the study of Choudhury's (1980). He provides a useful but "partial" methodology with concentration on social welfare function. The lack of methodological inference gives reason for a need for the methodology in the light of the *Shari'ah*.

The methodology of which we discuss in very brief the principles should satisfy the criteria that include at least three points like: a) Islamic ethical values in economics as unanimously agreed, b) axioms, principles, postulates, or objectives, c) empirical facts. Naqvi (1994) suggests *deductive* reasoning to derive the basic propositions relevant to Islamic economy, as currently Muslim society is not "representative" of the "true" Islamic society. This may be true in the sense that it is to serve a fundamental basis for incorporating *inductive* procedure in the attainment of combined *inductive-deductive* procedure, or in the words of Choudhury (1992) *shuratic*-based *inductivist-deductivist* synthesis.

Following the stages depicted in Figure 4 we can set up the objectives of Islamic economy derived from Islamic ethical values, for individual or entrepreneur and social or national points of view as well. For clear, Figure 1 designs a procedure for deriving objectives, incorporating economic behavior of the society, both individually and collectively. It should be borne in mind that in this stage the policy objectives and policy instruments of their attainment are altogether developed to be systematically deduced in the overall stages. Developing theory of Islamic consumer behavior with an emphasis on the utility function is likely to be imperative for twin purposes. *First*, to further evolve investment-consumption time preference concept, and *secondly*, to elaborate Islamic social welfare function (SWF).

Figure 4
Deriving Islamic Economy Objectives

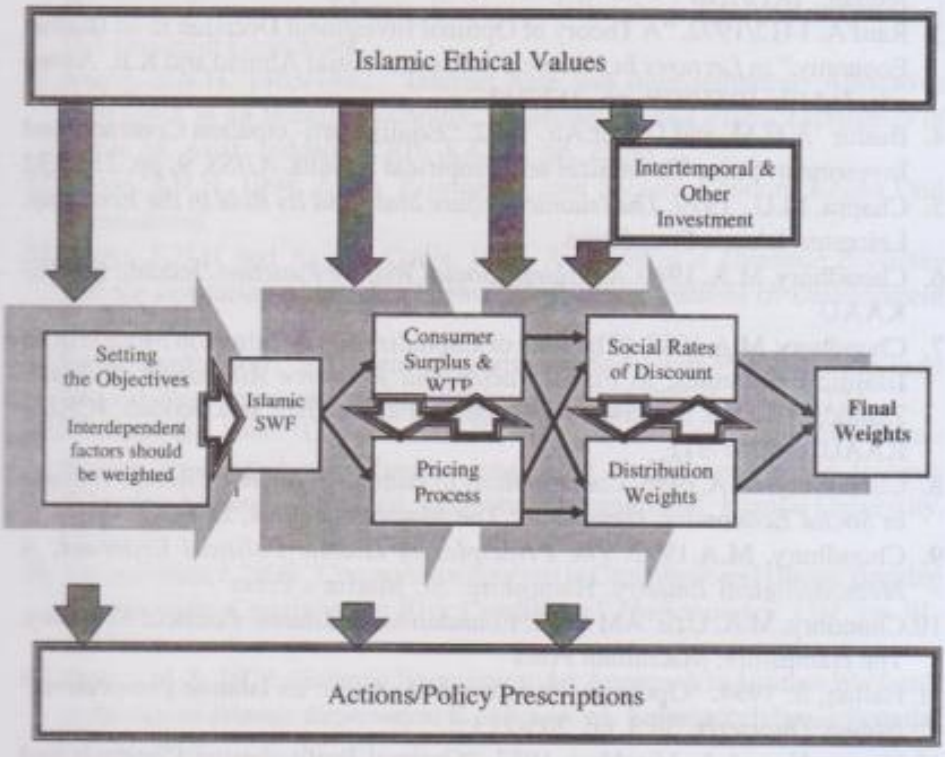


To have a complete feature of the methodology is to take a look at Figure 5, at which intertemporal component of the analysis provides reasonably sufficient elaboration in attaining the choice of the criteria for investment decision.

The weighting process comprises of three steps: determination of costs and benefits, measurement process and final weighting step. First, we establish social aspects to derive the Islamic social welfare function (SWF). Comparison to conventional position is advanced in particular in this section to observe the difference between Islam and conventional viewpoint, in which Arrow impossibility theorem dominates. It is obvious that comparison may not be emphasized in this stage, but may be spread over the whole components.

The second step, measurement step is to develop consumer surplus and WTP theories, those theories are useful in conjunction with the determination of either adjusted market prices or shadow (accounting) prices, irrespective of the process of determining market prices as their first approximation.

Figure 5
Weighting Process of Social Costs and Benefits
in Islamic Project Evaluation



The third step is to assign the final weights through considerations of distribution among and between generations. Assignments to these weights are undergone from three cornerstones: a) intertemporal analysis generating private rate of discount and criteria for investment decision, b) consumer surplus and WTP theories on which pricing process relied, and from which the possible weights can be initially equitably determined, and c) the adjustment of the market prices to obtain the socially-desired prices or shadow prices. In this stage, the appropriate social rates of discount reflecting consideration to the future generations; and distributional weights representing social requirements of the people within generation can be determined. The final weights are thus obtained to represents both of the considerations. *Wallahu a'lam bissawab.*

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