

Prioritizing Issues in Islamic Economics and Finance

Muhamad Abduh

IIUM Institute of Islamic Banking and Finance,
International Islamic University Malaysia, Kuala Lumpur, Malaysia

Abstract: The purpose of this study is to investigate the opinion of scholars of Islamic economics and finance upon which issues should be given higher priority based on its roles in achieving the ultimate goals of Islamic economics and finance. Library study is firstly used to determine research areas in Islamic economics and finance. Afterwards, the pairwise comparison matrix is developed and distributed among the Islamic economics and finance scholars in Malaysia. Analytic hierarchical process technique is used as the means to rank the importance of alternatives based on defined research areas and small sample size. The library study found that there are six major research areas in Islamic economic and finance i.e. Islamic banking, other Islamic financial institutions, zakat-waqaf and poverty alleviation, Islamic monetary system, philosophical issues and fiqh almuamalat al-maliyyah. Using Analytical Hierarchy Process, the result shows that area of zakat-waqaf and poverty alleviation is considered as the most important area followed by monetary system including Islamic currency. Despite the large number of studies done in Islamic banking, the respondents have considered that the area is not able to answer or give solution to the ultimate goal of the establishment of Islamic economic and finance.

Key words: Prioritization • Islamic economics • Islamic finance • Analytical Hierarchy Process

INTRODUCTION

Over the last four decades, economics and finance have received more attention from Muslim scholars and intellectuals than any other discipline. As a result, at least ten academic journals were established with specialization in Islamic economics and finance (IEF) issues. Furthermore, more than five international research centers devoted to Islamic economics and finance topics and subjects related to it now being taught in economics and finance department in numerous universities in the world.

Many scholars have given their effort to provide better definition of what is Islamic economics so that they can derive the ultimate goals of its establishment [1]. However, [2] has formulated those objectives by explaining that there is no strictly mundane sector of life according to Islam. Action in every field of human activity, including the economic, is spiritual provided it is in harmony with the goals and values of Islam. [2] emphasized that these goals and values that determine the nature of the economic system of Islam. Thus, a proper

understanding of these is therefore essential for a better perspective of the economic system of Islam. The Islamic economics goals and values are:

- Economic well-being within the framework of the moral norms of Islam;
- Universal brotherhood and justice;
- Equitable distribution of income; and
- Freedom of the individual within the context of social welfare.

Since Islamic finance is part of the Islamic economics cake, the goals of its establishment must reflect the goals of Islamic economics. In fact, current Muslim scholars have given their concern on the issue of *maqasid al-shariah*, whether or not Islamic finance today has achieved it or even neglect it.

[3] said that literature on Islamic economics and finance lists some 700 works in English, Arabic and Urdu while [4] confirmed double figure after two years from Siddiqui's report. Interestingly, Islamic banks article were mushrooming [5]. Not only on paper, it can be seen now

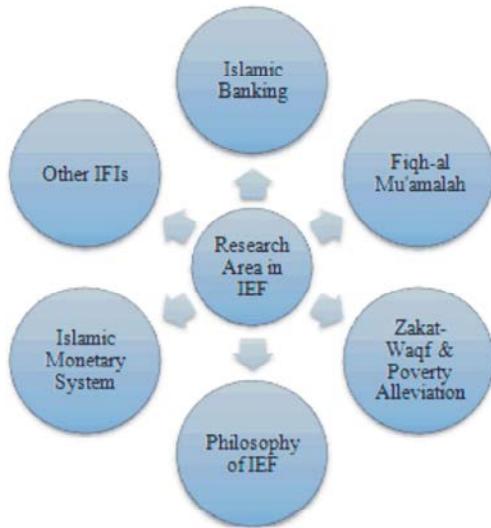


Fig. 1: Research Area in Islamic Economics and Finance

that Islamic banks also mushrooming in almost every Muslim state, from Sudan to Iran, Pakistan, Bangladesh, Egypt, Malaysia and Indonesia. In fact, many European countries also have Islamic banks. However, despite the rapid development of Islamic finance in the world, both the industry and literature, many Muslim scholars and intellectuals doubting its ability to achieve its goals by saying that it is converging to conventional finance.

This paper is first in its kinds to bring Muslim scholars and researchers to re-think about the research direction to achieve the goals of Islamic economics and finance. The objective of this paper is to put altogether the opinion from Professors teaching and doing research in Islamic economics, banking and finance area, upon what is the most important research area should be focused on, in order to keep them on the right track of achieving the objectives of Islamic economics and finance.

Based on library research conducted, this study classifies research area in IEF study into six broader categories: (i) Islamic banking, (ii) other Islamic financial institutions, (iii) zakat-waqaf and poverty alleviation, (iv) Islamic monetary system, (v) philosophical issues and (vi) *fiqh al-muamalat al-maliyyah* (Figure 1).

MATERIALS AND METHODS

Data Collection: Data used in this study is collected from interview with professors and lecturers teaching in various area of Islamic economics and finance in Malaysia. The pairwise comparison matrix used in this

| | Islamic Banking | Other IFIs | Zakat-Waqf & Poverty Alleviation | Islamic Monetary System | Philosophy | Fiqh Mu'amalah |
|----------------------------------|-----------------|------------|----------------------------------|-------------------------|------------|----------------|
| Islamic Banking | | | | | | |
| Other IFIs | | | | | | |
| Zakat-Waqf & Poverty Alleviation | | | | | | |
| Islamic Monetary System | | | | | | |
| Philosophy | | | | | | |
| Fiqh Mu'amalah | | | | | | |

Fig. 2: Pairwise Comparison Matrix

study is shown in below Fig. 2 and method of filling up the questionnaire is discussed in the next part of this paper.

Analytic Hierarchy Process: The Analytic Hierarchy Process (AHP) was selected for this study due to its suitability in evaluating multiple-criteria decision-making problems [6-8] suggest that the AHP is a simple means to rank the importance of alternatives based on some defined criteria and small sample size.

The AHP is a theory of measurement for dealing with quantifiable and/or intangible criteria. It is a multi-criteria decision-making approach that employs pairwise comparisons to arrive at a scale of preferences among a set of alternatives.

Using the AHP methodology in a decision problem involves four steps:

- Structuring the decision hierarchy by breaking down the decision problem into a hierarchy of interrelated decision elements (criteria),
- Collecting input data, depicted by matrices of pairwise comparisons, of decision elements,
- Using the eigenvalue method to estimate the relative weights of the decision elements,
- Aggregating the relative weights of decision elements to arrive at a set of ratings for the decision alternatives.

When employing the AHP methodology, the input data for the decision problem consists of matrices of pairwise comparisons of elements of one level that contribute to achieving the objectives of the immediate preceding level. Thus, the level 2 attributes are compared pairwise with one another, in relation to their importance

| | Islamic Banking | Other IFIs | Zakat-Waqf & Poverty Alleviation | Islamic Monetary System | Philosophy | Fiqh Mu'amalah |
|----------------------------------|-----------------|------------|----------------------------------|-------------------------|------------|----------------|
| Islamic Banking | 1 | a | ... | ... | ... | k |
| Other IFIs | 1/a | 1 | ... | ... | ... | p |
| Zakat-Waqf & Poverty Alleviation | ... | ... | 1 | ... | ... | ... |
| Islamic Monetary System | ... | ... | ... | 1 | ... | ... |
| Philosophy | ... | ... | ... | ... | 1 | ... |
| Fiqh Mu'amalah | 1/k | 1/p | ... | ... | ... | 1 |

Fig. 3: Input Matrix of the Respondents' Judgments

Table 1: Pairwise Comparison Scale for AHP Preferences

| Numerical rating | Verbal judgment of preferences |
|------------------|--|
| 1 | Equally preferred |
| 3 | Moderately preferred |
| 5 | Strongly preferred |
| 7 | Very strongly preferred |
| 9 | Extremely preferred |
| 2, 4, 6, 8 | Intermediate values between the two adjacent judgments |
| Reciprocals | When activity i compared to j is assigned one of the above numbers, then activity j compared to i is assigned to its reciprocal. |

to the level 1 objective. If there are n attributes in the level 2 of the hierarchy, a total of $n(n - 1)/2$ comparisons are required. This results in a $n \times n$ matrix.

For this study, the input matrix of the respondents' judgments would look like the following in Fig. 3:

The matrix shows that attribute 1 is a times more important than attribute 2 and is k times more important than attribute 6. The matrix has the property that its principal diagonal elements are all unity because when compared with itself, each element has equal importance. The lower triangle elements of the matrix are the reciprocal of upper triangle elements. Thus, pairwise comparisons are collected for only half of the matrix elements.

Using the scale mentioned in Table 1, the respondents' judgments were first obtained. For example, if a respondent compares two attributes, Islamic banking (A1) and Other Financial Institutions (A2) and indicates that A1 is strongly more important than A2, then a value of $a_{12} = 5$ is assigned to this pairwise comparison. By definition, comparison of an attribute with itself results in a relative importance value of 1. In addition, the value of reciprocal comparison is the reciprocal of the relative importance value. Thus, with respect to the decision of selecting important issues in Islamic economics and finance from previous example, the pairwise comparison A matrix has two rows and two columns and its elements are $a_{11} = 1$, $a_{12} = 5$, $a_{21} = 1/5$, $a_{22} = 1$.

When applied to this study, the above process requires all pairwise comparisons of the six attributes to be made. The result is a 6×6 pairwise comparison matrix for level 2. The pairwise comparison matrix for level 2 is then used to obtain the priorities of the six attributes. Let \hat{A} be the matrix of a respondent's relative preference and $W = (w_1, w_2, \dots, w_6)$ be the vector of priorities of level 2. An estimate of the vector of priorities, W is obtained from the equation $\hat{A} W = \hat{e}_{\max} W$, where \hat{e}_{\max} is the largest eigenvalue of \hat{A} .

To obtain the priorities of level 2 for the sample, the geometric means of the pairwise comparisons given by the individual respondents were computed. These geometric means were then used as inputs in the pairwise comparison matrix of level 2 and in the six pairwise comparison matrices of level 3.

Once the individual ratings for the criteria and the stations have been obtained, it is necessary to check if they are consistent. This is done by measuring the Consistency Ratio. According to [8], "the value of the consistency ratio should be 10 percent or less. If it is more than 10 percent, the judgments may be somewhat random and should perhaps be revised." As a rule of thumb, if the consistency ratio $CR = 0.1$, then the ratings will be accepted otherwise a re-voting for the comparison-matrix will be performed.

The re-voting is performed using Delphi method. The participants are informed about the group results and asked if they would like to revise their ratings. The new responses are then collected and analyzed to find the difference in the new responses received. If accordance is found among all the responses received, then our goal is achieved and we proceed to the next stage of computing overall weights. If disagreement is found, then the re-voting is continued till a general agreement on the responses is reached.

After verification of the consistency ratio, we will calculate the weights or the normalized scores for the different criteria. The normalized scores will be computed using geometric means because the geometric mean for a series (e.g. 1, 2, ..., N) is less affected by extreme values than the arithmetic mean. Besides, it is useful as a measure of central tendency for some positively skewed distributions. For a series containing n elements, the geometric mean is given by the n^{th} root of the product of n scores and the normalized criterion weight is given by the ratio of the geometric mean divided by the sum of the geometric means of all the elements of the series. For the

criteria C_p , $p = 1, 2, \dots, N$, the geometric mean (GM_{C_p}) is given by $\left(\prod_{j=1}^N r_{pj}\right)^{1/N}$ and the normalized score (NS_{C_p})

is given by $GM_{C_p} / \sum_{p=1}^N GM_{C_p}$.

RESULTS AND DISCUSSION

Descriptive Analysis: This study involves 5 males and 5 females as the respondents. Out of those ten respondents, 3 are full professors, 4 are associate professors and 3 are assistant professors. With regard to their teaching experiences in Islamic economics, banking and finance related subjects, six of them have ten years or more, two of them have five to ten years experiences and the remaining two respondents have less than five years. Lastly, there are two respondents in each research interest unless for the area of philosophical issues and *fiqh al-muamalat al-maliyat* (Table 2).

Analytic Hierarchy Process: Fig. 4 shows the calculated geometric mean of aggregate individual's priorities based on pairwise comparisons. The result were then analyzed and converted into priorities vector which will show the rank of priority for each criterion.

Based on the priority vector shown in Fig. 5, respondents are considering poverty alleviation issues together with its Islamic instruments (i.e. zakat-waqf) as the most important research area. Second place is the area of Islamic monetary system followed by the areas of *fiqh al muamalat* and Islamic banking. The area of philosophy is in the fifth rank of importance while the area of other Islamic financial institutions is in the last rank of importance.

Fig. 5 is the output from the Expert-Choice 2000 software which presents the priority vectors along with the inconsistency ratio. The inconsistency ratio is 0.03 and it is within the acceptance range (i.e. inconsistency ratio < 0.1), indicating reasonably consistent results.

The result is interesting since IEF scholars have not considered Islamic banking and other financial institutions (e.g. insurance, capital and money markets) as the most important research areas, regardless of the massive research conducted in those areas. The reason behind it is could be the fact that after four decades of the establishment of Islamic banking in many Muslim countries, it still not be able to solve the very fundamental problem in Islamic countries i.e. poverty and lower

| | Islamic Banking | Other IFIs | Zakat-Waqf & Poverty Alleviation | Islamic Monetary System | Philosophy | Fiqh Mu'amalah |
|----------------------------------|-----------------|------------|----------------------------------|-------------------------|------------|----------------|
| Islamic Banking | 1.728 | 3.0* | 1.5* | 1.888 | 1.0 | |
| Other IFIs | | 4.5* | 2.0* | 1.18 | 2.0* | |
| Zakat-Waqf & Poverty Alleviation | | | 2.146 | 3.648 | 3.785 | |
| Islamic Monetary System | | | | 2.379 | 1.4* | |
| Philosophy | | | | | 1.327 | |
| Fiqh Mu'amalah | | | | | | |

Fig. 4: Aggregate Individual's Priorities Matrix using Geometric Mean



Fig. 5: Priority Vector for Decision Hierarchy

Table 2: Demography of respondents

| Variable | Freq. | % |
|-------------------------------------|-------|----|
| Gender | | |
| •Male | 5 | 50 |
| •Female | 5 | 50 |
| Academic Position | | |
| •Professor | 3 | 33 |
| •Assoc. Prof. | 4 | 44 |
| •Asst. Prof. | 3 | 33 |
| Teaching Experience in IEF | | |
| •1 - 5 years | 2 | 20 |
| •5 - 10 years | 2 | 20 |
| •10 years and above | 6 | 60 |
| Research Interest | | |
| •Islamic Banking | 2 | 20 |
| •Other IF Institutions | 2 | 20 |
| •Zakat-Waqf and Poverty Alleviation | 2 | 20 |
| •Islamic Monetary System | 2 | 20 |
| •Philosophical Issues in IEF | 1 | 10 |
| •Fiqh-al Mu'amalat al-Maliyat | 1 | 10 |

educational level. It happens due to the direction in Islamic banking and other Islamic financial institutions research areas is focused more on their performance and profitability with less attention is given to their roles in shifting the Muslim from illiterate to well-educated community, from poverty to wealthier community.

CONCLUSION

The spirit of the establishment of Islamic economic and finance is to put justice in the economy and financial system, which later on leads to the fair distribution of wealth among the people. However, from the library study

conducted, most of issues discussed in this area are directed toward technical aspects of Islamic financial institutions and very few had discussed about various angles of just and fair economic and financial system. Therefore, this paper is aimed at investigating the opinion of scholars of Islamic economics and finance upon which issues should be given higher priority based on its roles in achieving the ultimate goals of Islamic economics and finance.

The library study found that there are six major issues in Islamic economic and finance i.e. Islamic banking, other Islamic financial institutions, zakat-waqaf and poverty alleviation, Islamic monetary system, philosophical issues and fiqh al-muamalat al-maliyyah. The respondents fill up the pair-wise comparison matrix provided and data collected are analyzed using Analytical Hierarchy Process. Using an aggregate individual judgment approach, the method allows us to use geometric mean to find the priority vectors before it is run using the Expert Choice 2000 software. The results show that issues on zakat-waqaf and poverty alleviation is considered as the most important issues in this area followed by the issues on monetary system including Islamic currency. Despite the large number of studies done in Islamic banking, the respondents have considered that the area is not able to answer or give solution to the ultimate goal of the establishment of Islamic economic and finance i.e. creating well-educated and wealthier Muslim community.

This study is not without limitations and one of the limitations is the respondents chosen are those who reside in Malaysia. Therefore, as to have more robust findings, it is suggested that future researches in the same area to use more respondents from other countries.

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