A STUDY ON THE EFFICIENCY OF ISLAMIC ECONOMIC INSTRUMENTS IN SELECTED ISLAMIC COUNTRIES

Thesis Submitted in Partial Fulfillment of the Requirements for the Award of the Degree of Doctor of Philosophy in Applied Economics

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I certify that the work entitled, **"A STUDY ON THE EFFICIENCY OF ISLAMIC ECONOMIC INSTRUMENTS IN SELECTED ISLAMIC COUNTRIES"** is a bonafide research work done by **Sri. A. B. ALIYAR** in partial fulfillment of the requirements for the award of the degree of **Doctor of Philosophy** in the **Department of Applied Economics, Cochin University of Science and Technology, Kochi-22** under my supervision and guidance. This thesis has not been the basis of the award of any degree, diploma, fellowship or other similar titles of recognition. The thesis is the outcome of personal research work done by the candidate under my overall supervision.

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INTRODUCTION

CHAPTER-I

INTRODUCTION

Unemployment, poverty, inequality and distributive injustice are the major economic problems faced by the countries of the world today. The root cause of these problems of the world is the poverty. Islamic economic methodology aims at cast a fresh look on the entire economic problems and come up with a fresh solution to the persisting problems. Further, it also aims at the development of economic sciences that should develop economic theories that conform to Islamic economic doctrines for the explorations and utilizations of the material resources of the universe for the true betterment of the humanity.

Evaluating the present day world economy it deserve to be noted that the socialist economic experiment has been miserably failed, while the capitalist economies strides, in the field of economic growth and technological transformation, are in ever depending crises. Modern economy has failed to ensure distributive justice, sustained growth and social harmony for a vast majority of mankind it is not faced with a prolonged recession, persistent unemployment, stagflation, unrestraint monetary expansion, increasing the gravity of poverty, widening the gap between the haves and the havenots.

In the present economic system the allocation of resources has been guided mostly by economic and financial criteria and not by human needs. In Islamic

Economic Methodology (IEM) the reward for capital-interest is forbidden. It is exploitation and is an impediment for rapid economic development. The vast spares of undeveloped earth and oceans and infinite potentialities of development which may be enough to enrich everyone on this earth can be utilised, if finance is available. Unfortunately finance is available at a cost, which is, at a certain rate of interest. At the international level the present outflow of resources from the poor to rich nations in the form of interest should be stopped. This 21st centaury can introduce a practical mechanism to make finance available at free of cost. In Islamic Economic Methodology money is a medium of exchange and store of value but not as a commodity. It becomes useful only when it is exchanged into a real asset or when it is used to buy a service. Hence it cannot be sold or bought in a credit in Islamic Economic Methodology, by prohibiting interest and implementing profit loss sharing, takes care of the problem of unemployment, inflations, foreign exchange and volatility of business cycles and excessive depletion of natural resources.

The Zakath (compulsory contribution) system whose two and half percentage of the income balance to be distributed among the eight groups of poor section in the society whose propensity to save is zero and propensity to consume is equal to +1. If income flows to them from those who's Marginal Propensity to Save (MPS) is less than +1, consumption would increase up to their entire income, leading to increased demand causing increase in production resulting the continuous dual flows of goods on the one hand and income on the other hand. Ultimately there is stability in saving and investment.

A comparative study of the present day economic system 'the socialism and capitalism' would definitely impart a new line of thought in the world economic approaches to find modifications to the economic models like the Neo-classical, Keynesians and Neo-Keynesians so that it would make the 21st century worth living and virtually it would transfer the entire world into a heaven.

Mohammed Akram Khan (1999) in his work on, "An Introduction to Islamic Economics" emphasizes the comprehensive character of IEM based on the universal moral values. According to him "Islamic Economics is a science aims at the study of human 'Falah' achieved by organizing the resources of the earth on the basis of co-operation and participation. The key concepts in the above definition are a) 'Falah' b) Resources c) Co-operation and Participation.

The term 'Falah' has been derived from Arabic root 'Falah'. Its verbal form 'aflah', 'yflihu', means to thrive, to become happy and to have a good luck or success, to be successful. For the life in this world it represents three things, 'baqa' (survival), 'ghana' (freedom from want) and 'izz' (power of owner). It is a multi dimensional concept. It has implications at micro and macro level.

Table No 1.1

Falah at Micro and Macro Level

		Micro-level	Macro-level
FALAH	Survival	Biological survival i.e. physical health, freedom from disease	Ecological balance, hygienic environment, and medical aid for all
		Economic survival i.e. having means of livelihood	Management of natural resources to generate work opportunities for the entire population
		Social survival i.e. brotherhood and harmonious interpersonal relationships	Inner social cohesion; absence of internecine conflicts among different groups
		Political survival i.e. freedom and participation in the affairs of the state	Independence and self-determination as an entity
	Freedom from want	Alleviating poverty	Provisioning for the entire population
		Self-reliance i.e. work rather than parasitic idleness	Generating resources for the coming generations
	Power and honour	Self – respect	Economic power and freedom from debt
		Civil liberties, protection of honour and life	Military power

Source: 'Methodology of Islamic Economics' (1989) Selangor Malaysia, Pelanduk Publication

1.1 Conditions of Falah

i) Spiritual

ii) Economic

iii) Cultural

iv) Political

1.1.1 Economic conditions of Falah

i) Ifraq: It refers to spending on others and on the social needs of the community.

ii) Prohibition of Interest

iii) Fulfilment of covenants and trust; meaning honouring personal commitments and promises and obligation to the society for avoiding social cost or compensating social cost and to maintain social piece towards Falah.

iv) Justice: Falah with observance of justice in all affairs.

v) Enterprise: Enterprise and effort to harness natural resources are an essential condition to achieve Falah.

1.1.2 Resources

The spirit of the system as per the definition regarding resources is that either one should use the resources one has come to posses or release them for others. The

apparent scarcity of the resources one may feel is either due to their improper use or imbalanced distribution. The survey conducted by United Nations Organisations (UNO) in the year 2006 shows that there are enough resources for 20,000 million people on earth, but the earth has only 6000 million people at present. The definition of Islamic economics by the eminent Islamic Economist Prof. Yousuf Ibrahim of Qatar University as "it is a science studying the guidance of human behaviour towards the use of human resources to satisfy the needs" is very relevant to note down here.

1.1.3 Co-operation and Participation

The Islamic Economic system emphasizes co-operation among the human beings, in order to mobilize resources into productive joint ventures so that one can replace interest transaction. Profit sharing under economic co-operations joint ventures and equity participation etc., helps for the mobilization of resources and increase investment, income and employment.

1.2 Islamic Economic Instruments (IEI)

Islamic economic system imparts several economic instruments which have immense influence on economic justice, prosperity and growth. They are

a) Abolition of Interest: The adverse effect of interest on employment and its role in causing business cycles are well known. Unlike the conventional belief of inverse

relationship between interest and inflation, the reason researchers have shown that interest and inflation are directly correlated. The origin of the financial crisis in the modern capitalist world can be traced to the monitor system based on usury. The experience of Mexico, Brazil, Russia and even the high-performing Asian nations is the most recent example of this system falling into chronic failure. The Islamic economic order by prohibiting interest takes care of the problem of unemployment, inflation, foreign exchange instability, business cycles and excessive depletion of natural resources

b) Joint Ventures: The Islamic economists treat profit sharing and equity participation in separate, but neither reason for non efficiency in doing so. since capital and labour are complimentary in the Islamic economy and equity participation in another cooperative mechanism among capitalists increasing numbers of enterprise and labour are realized and inter connected by a mix between profit sharing and equity participation, both taken up as participatory entrepreneurial

c) Profit Loss Sharing: While prohibiting interest Islamic Economic system proposes a concept of sharing profit as well as loss. Under this system capital and money is not treated as separate factor of production, but part of enterprise. Like other factors of production capitals also to bare risk. That is sharing is needed either in profit or loss. The frame work of interest free financing reflects equity participation in a triangular way. First with depositor and then the concern (bank) and then between the concern (bank) and the entrepreneur.

d) Waqf: This instrument signifies a foundation set up by keeping a property in perpetual existence and making its income available for specified beneficiaries. Almost all Muslim countries would have a ministry of awqaf dedicated for the society for supporting charitable and welfare activities. This institution has great potential and could be utilized to improve the education, research, health and defence capabilities of the people in the states.

e) Takaful (Insurance): The contemporary insurance business has been widely criticized for its non conformance with the Sharia principle a new system called Takaful has been developed saving investment instrument leading to social and economic development. It has been discussed in the Chapter VI.

f) Zakath: It is an obligatory financial levy on all surplus wealth and agricultural income. It is charged at varying rates and can be collected by the states. The objective is to provide financial support to specified categories of people such s the very poor, the poor, the needy etc. In Muslim countries it is the responsibility of the current ministry to make it sure that the amount collected is reached in the hands of the eight categories of poor. This works as a good transfer payment system which will lead to increase the consumption, investment and employment in the economy.

These instruments are implemented by various Islamic financial instruments. They are coming under two heads:

a) Instrument for Islamic Financing
b) Instrument for Islamic Investment

1.2.1 Instrument for Islamic Financing

a) Murabaha (Cost Plus)

b) Mudarabah (Profit Loss Sharing Agreement)

c) Musharaka (Equity Participation)

d) Ijara Muntahia Bittamleek (Leasing)

e) Salam and Istina and Parallel Salam (Deferred Delivery)

1.2.2 Instrument for Islamic Investment Fund

a) Equity Fund (Investment in Joint Stock Company etc.)

b) Ijara Fund (Fund for Leasing and Rentals as Source of Income)

c) Commodity Fund

d) Murabaha Fund

e) Bai-al-dain

f) Mixed Fund

g) Zakath and Donation

h) Qardhasan (Interest Free Loans for Unproductive Purposes like Medical Expense, Education Expense etc.)

1.3 Significance of the Study

A detailed study on the various economic problems and their solutions through Islamic economic methodology has not yet been conducted. The major

Islamic economic instruments like abolition of interest, joint ventures, profit loss sharing, Islamic banking, W*aqf* management and Zakath system would have immense influence on economic justice, prosperity and growth of economy if one found the easy method of implementing this system successfully. A detailed study on these matters has not yet been conducted so far.

1.4 Statement of the Problem

The present day economic system and economic models are aiming at economic development without considering the ethical value resulted in its failure to ensure distributive justice, sustained growth and social harmony and reduce the disparity between the haves and the havenots.

The practical incapability of the main stream economics (Conventional Economic Analysis) to solve the present day problems like unemployment combined with inflations, poverty in developing countries, misery in the midst of affluence, regional disparities, inequality in all respect including in income distribution, intellectual exploitation of the poor countries by the rich in terms of trade etc.

Anticipating that capitalism was more efficient and productive many countries of the world adopted it. During the colonial era the system destroyed the traditional societies. The remedial approach they could find in building the society

was Islamic economic system which could control inflation and depression and bring more employment opportunities.

An economy free from the imposition of interest is essential today to escape the nation from inflation. An economic order other than capitalist and social orders to caste a comprehensive look at the human economic problem is essential now days. Islamic Economic Methodology (IEM) provides a new approach towards the quantum of economic organization, role of money, consumer behaviour, the problem of poverty, physical management, justice in the income determination and distribution. IEM prescribes a free market based on supply and demand. At the same time it ensures that the economic power is not accumulated.

Table No.1.2

Capitalism and Islamic Economic System

Capitalism	Islamic Economic System
Human beings are selfish	Human beings are selfish as well as altruistic
Materialism is the supreme value	Materialism should be controlled
Absolute private ownership	Private ownership within a moral framework
Nation-state context	Global economy context
Economic power for the minority through: -Interest -Limited liability -Wage-labour -Primogeniture -Market imperfections	Economic power widely diffused through: -Equity participation -Worker ownership -Law of inheritance -Free market flows
Demand creation through advertisement	Demand creation through *infa,* equitable laws, and inheritance
Money as a commodity besides being medium of exchange and store of value	Money as a medium of exchange and store of value, but not a commodity
Consumerism a value	Simple living a value
Economic development based on physical and material growth	Economic development through human and spiritual growth
Urbanization	Rural-urban balance
Unplanned technology	Planned technology
State-run social security system through secular taxes	Social security through -Family -Community -State
Deficit financing – a way of life	Balance budget – a way of life
Mystification and protection of knowledge	Diffusion and sharing of knowledge

Source: 'Methodology of Islamic Economics' Selangor Malaysia, Pelanduk Publication (1989)

The main stream neo classical economics has narrow bases and has unrealistic assumption about human nature and behaviour. Islamic economic has the potential to answer the need to have a more realistic basis for economic analysis. The

dramatic change in Eastern Europe and the breakup of the USSR also paved the way to study the impact of Islamic economic order in various countries of the world.

1.5 Objectives of the Study:

The following are the major objectives of study,

1. To study the efficiency of interest free banking at the world level and country level and to find out the possibility of implementing such a system in the national level, so that the exploitation from the factor price of capital could be mitigated from the economy and easy economic development is possible.

2. To study the efficiency of Islamic micro financing methods for the eradication of poverty by selecting Bangladesh as a case.

3. To investigate the relationship exists between the macro economic variables and the demand for family Takaful (Islamic Life Insurance) by taking Malaysia as a case.

4. To examine whether the establishment of Takaful institutions fulfil the social objectives of eradicating poverty providing employment opportunities through increasing savings and investments.

1.6 Methodology

This study is mainly based on secondary data. Data were collected from Islamic Development Bank (IDB) Jeddah, UAE and it is descriptive in nature. The statistical tools used for measuring efficiency at different levels are stated below.

- Islamic Banking Efficiency: Stochastic (Parametric) Cost Frontier and Alternative Profit Efficiency approaches were used to study the cost efficiency and revenue efficiency of the Islamic Bank at world level, country level, Jordan, and Algeria. Data Envelope Analysis (DEA) was used to calculate overall technical, pure technical, allocative and scale efficiencies. Rank order, spearman correlation coefficient tools were used to examine the possible relationship among the x-efficiency and accounting measures of performance.

1.6.1 Parametric Cost Efficiency

Accordingly, Aigner (1977) and Meeusen and Broeck (1977) define a firm's cost function as follows:

$$C_b = C\ (y_i,\ p_k,\ \varepsilon_b), \qquad\qquad b = 1,\ ....,\ n \qquad\qquad (1)$$

Where, C_b stands for the bank's total operational costs, y_i represents the vector of quantities of the bank's variable outputs, p_k, is the vector of prices of the bank's variable inputs, and ε_b is a composite error term, through which the

cost function varies stochastically. The cost function provides an indirect representation of the feasible technology because it is mainly a specification for the minimum cost of producing the output vector, y, given the cost drivers, such as price vector, p, in the input market, managerial inefficiency, some exogenous economic factors, or just pure luck.

The term ε_b can be partitioned into two parts as follows:

$$\varepsilon_b = u_b + e_b \tag{2}$$

Where, u_b refers to endogenous factors and e_b refers to exogenous factors, which impact the cost of the bank production. Thus the term u_b denotes a rise in the cost of bank production due to the inefficiency factor that may result from the mistakes of the management, such as non-optimal employment of the quantity or mix of inputs given their prices. Whereas, e_b represents a temporary rise or fall in the bank's costs due to the random factor that may stem from a data / measurement error, or unexpected / uncontrollable factors such as whether, luck, labor strikes, war, etc., that are not under the influence of the management.

To facilitate the measurement, u_b and e_b are assumed to be multiplicatively separable from the rest of the cost function and both sides of the equation (1) are represented in natural logs:

$$InC_b = f(y_i, p_k) + \overbrace{Inu_b + Ine_b}^{\varepsilon_b} \tag{3}$$

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Where, f is a functional form and $\varepsilon_b = In\ u_b + e_b$ is the composite error term. Parametric and nonparametric efficiency techniques differ in how they disentangle the composed error term, ε_b. nonparametric techniques assume that there is no error and attribute any deviation from the best practice bank's cost as inefficiency. Whereas parametric techniques assume that the inefficiencies follow an asymmetric distribution, mostly the half-normal, and random errors follow a symmetric distribution mostly the standard normal. In other words, random factors, e_b, are assumed to be identically distributed as normal variates and the value of the error term in the cost function is equal to zero on the average. Thus, inefficiency scores are derived from a normal distribution, $N\ (0,\ \sigma^2_u)$, but truncated below zero. The underlying reason for the truncated normal distribution assumption is that inefficiencies cannot be negative.

According to Jondrow (1982), the relative efficiency of a firm can be estimated by means of the ratio, $\lambda\ \dfrac{\sigma}{\sigma}$ If the inefficiency factor, which is under the control of management, dominates the random factor, which is beyond the control of management, the λ attains large values. The u_b, inefficiency measure, of a firm can be formulated as follows:

$$u_b = [\sigma\lambda / (1 + \lambda^2)]\ [-\phi(\varepsilon_b\lambda /\sigma)\ /\ \Phi(\varepsilon_b\lambda /\sigma) + (\varepsilon_b\lambda /\sigma)\ ] \qquad (4)$$

Where, $\sigma = [\sigma_u + \sigma_e]^2$, ϕ is the standard normal density function, Φ is the cumulative normal density function, and the rest of the terms are as defined above.

One first needs to specify a relationship (function) between bank production and bank cost in order to estimate the inefficiency, u_b, and random, e_b, factors of the composite error term, ε_b. To that end, we specify banks as multi-product and multi-input firms and estimate the following translog cost function:

$$InC_b = \alpha_0 + \sum_i^4 \beta_i \, In \, y_i + \frac{1}{2} \sum_i^4 \sum_j^4 \beta_{ij} \, In \, y_i \, In \, y_j + \sum_k^3 \gamma_k \, In \, P_k$$

$$+ \frac{1}{2} \sum_l^3 \sum_m^3 \gamma_{lm} \, In \, p_l \, In \, p_m + \sum_i \sum_k p_{ik} \, In \, y_i \, In \, p_k + \varepsilon_b$$

Where, in is natural logarithm, C_b is the b'th bank's total (interest and noninterest) costs; y_i is the i'th output; p is the k'th input price, and ε_b is the composite error term. Cost and prices are written using p_2 (price of physical capital) as numeraire. Cost efficiency score attains values over (0, 1). A scope of 0.6 for a bank implies that it is 60 per cent cost efficient, or stated differently, it wastes 40 per cent of its costs relative to a bank on the frontier facing similar conditions. Therefore, 1 refers to the best practice while 0 refers to the worst practice observed in the sample.

1.6.2 Alternative (Non-Standard) Profit Efficiency

There are two ways to estimate the profit efficiency; standard profit function and alternative profit function. As indicated by Berger and Mester (1997, 1999), alternative profit efficiency is particularly closer to reality when some of the standard assumption of perfect markets do not hold.

In log form, alternative profit function can be written as follows:

$$\text{In } (\pi + a) = \text{In } C \ (Y, P, t, \beta) + u_\pi + v_\pi \tag{1}$$

Indeed, the alternative profit function employs the same independent variables as the cost function, as shown below:

$$\text{In } (\pi + a) = \alpha_0 + \sum_{i=1}^{4} \alpha_i \ \text{In } Y_{ist} + \sum_{i=1}^{3} \beta_i \ \text{In } P_{ist} + \frac{1}{2} \sum_{i=1}^{4} \sum_{i=1}^{4} \sigma \ ij \ \text{In } Y_{ist} \ \text{In } Y_{jst} +$$

$$\frac{1}{2} \sum_{k=1}^{3} \sum_{l=1}^{3} \delta_{kl} \ \text{In } P_{kst} \ \text{In } P_{lst} + \sum_{k=1}^{3} \sum_{i=1}^{4} \mu_{ki} \ \text{In } P_{kst} \ \text{In } Y_{ist} + v_{st} + u_{st} \tag{2}$$

Where, π represents net profits of the bank $b;$ a is a constant added to the profits of each bank so that natural log is taken of a positive number since minimum profits are typically negative; and all other variables are as explained previously in the equation (3). Profit efficiency measures how close a bank is generating maximum profits given its output levels. A 70 per cent profit efficiency score for a bank suggests that it would earn about 30 per cent more profits than what it is making now if it were operating on the efficient frontier.

1.6.3 Data Envelopment Analysis (DEA)

DEA is a linear programming technique that allows calculating relative efficiency of a business unit. DEA was developed by Charnes, Cooper and Rhodes (1978) in order to measure relative efficiency without knowing *(a priori)* what variables are more important, or what their relationship is.

Let's consider we want to evaluate n DMUs (decision making unit)[3], each one producing different outputs (y) and using different inputs (x). The efficiency of the DMU k (E_k) assuming constant return scale (CRS), is measured as follows:

$$\text{Max}_{u,v} \ (u'y_i \ / \ v'x_i) \tag{1}$$

Subject to

$$u'y_j \ / \ v'x_j \leq 1 \qquad j = 1, 2, \ ....., N$$

$$u, v > \square > 0$$

Where:

- x is a vector of DMU inputs.

- y is a vector of DMU outputs given the inputs.

- u is the weighted relative vector associated to output.

- v is the weighted relative vector associated to input.

- $\square$ is a small positive number. ($\square \rightarrow 0$)

The original mathematical formulation is not linear. To avoid it, one can impose the constrain v'x = 1, which provides:

$$\text{Max}_{u,v} \ (u'y_i) \tag{2}$$

st $\quad v'x_i = 1,$

$\quad u'y_j - v'x_j \leq 0, \ j = 1, \ldots.N$

$\quad u, v > 0$

The dual form of the above problem as more used in the literature is:

$$\text{Min}_{\square\square} \ \square \tag{3}$$

st $- y_i + Y \square \geq 0$

$\square xi - x\square \geq 0$

$\square \geq 0$

Where X is m * n input matrix, Y s * n output matrix, $\square$ is an n * 1 vector of constant and $\square$ is a scalar.

Imperfect competition, constrain in finance, etc. may cause a DMU to be not operating at optimal scale, in this case the CRS assumption is not appropriate because it assumes that DMUs are operating at optimal scale. If the CRS model is used when not all DMU's are operating at optimal level, the technical efficiency is confounded with scale efficiency. Banker, Charnes and Cooper (1984) suggested an extension of the above model to take into account the variable return to scale (VRS). They proposed to add the convexity constrain 1'$\square$ = 1 to the early model.

The technical efficiency obtained by CRS DEA model can e decomposed in two parts, one due to scale efficiency, and one due to pure technical efficiency. Pure technical efficiency refers to the firm's ability to avoid waste by producing as much output as input usage allows, or by using as little input as output production allows. Scale efficiency refers to the firm's ability to work at its optimal scale. It can be proved that:

$$TE_{CRS} = TE_{VRS} * SE$$

(4)

Where TE_{CRS} is the technical efficiency, TE_{VRS} is the pure technical efficiency, and SE is the scale efficiency.

- Islamic Micro Finance: Analytical and empirical methods by using percentage difference were used to know the level of increasing employment and other poverty eradication programs. Comparative study by using percentage difference helps us to know the efficiency of Islamic micro finances and secular micro financing.

- To find out the effect of Takaful (Islamic Insurance) on various macro economic variables like GDP, CPI, TBR, and KLCI for the period covering 1997-2006. Coefficient correlation and regression were used. Empirical analysis was done by using other aspects on the study that is employment rate, income tax, Zakath etc.

1.7 Limitations

This study is based on secondary data collected from Islamic Development Bank Jeddah, UAE. Secondary data are available only for Islamic countries. Though non Islamic countries are the beneficiaries of the Islamic system no data were available with respect to them. The period of study varies from country to country due to non availability of time series data.

1.8 Scheme of the Study

This study has been arranged into seven chapters.

Chapter I deals with the introduction, significance of the study, statement of the problem, objectives of the study, methodology, limitations of the study and scheme of the study.

Chapter II deals with literature review of the study

Chapter III deals with theoretical frame work of the study

Chapter IV deals with measurement of efficiency of Islamic Banking at global and country levels.

Chapter V deals with relevance of Islamic Micro Financing with respect to Bangladesh.

Chapter VI deals with the impact of Shariah-Compliant Family Insurance (Takaful) on social and economic development as a saving and investment instrument with respect to Malaysia.

Chapter VII deals with major findings, suggestions, and conclusions of the study.

CHAPTER - II

LITERATURE REVIEW

CHAPTER-II

LITERATURE REVIEW

The study of literature review on Islamic Economics can be made under two sections. Section I deals with Studies on the early thought in Islamic Economics and Section II deals with recent appraisal (Modern Development) in Islamic Economics

Section I

2.1 Studies on the Early Thought in Islamic Economics.

The Islamic Economics developed gradually through time since early times as an interdisciplinary subject in the writings of Qur'anic commentators, jurists, historians, and social, political and moral philosophers, a large member of scholars including Abu-Yusaf (H182, 798AD*), Al-Masudi (H346,957AD) AlMawavdi (H450,1058AD), Ibn-Hazan (H456,1064AD), Al-Sarkashi (H482,1090AD), Al-Tusi (H485,1093AD), Al Gazali (H505-1111AD), Al-Dimashqi (H570,1175AD), Ibn-Rushd (H595,1198AD), Ibn-Taymiyyah (H728,1328AD), Ibn-al-Ukhwah (H729,1329AD), Ibn-AlAayyini (H751,1350AD), Al-Shatibi (H790,1388AD), Ibn-Khaidusi (H808,1406AD), Al-Maqrizi (H845,442AD), Al-Dawwani (H906,501AD), and Shah Waliyulla (H1176,1762AD) have made valuable contributions through an

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*Hence forth first figure after H world men after Hijara 2nd figure for AD

evolutionary process extending over a number of countries. The process was perhaps slower than it would have been in modern times because of the reliance on the oral world and manuscripts for dissemination of knowledge over a substantial part of Muslim history. Several of the manuscripts have been lost due to the vicissitudes of time and wave of invasion, particularly by Mongols. These scholars were however not specialist in economics. The strict compartmentalization action of disciplines had not developed by them. They were accordingly masters of a number of different intellectual disciplines. Perhaps because they adopted an inter disciplines approach and did not focus their attention primarily an economic variables [M. Umer Chapra (2000)].

2.2 Phases of the Development of Economic Thought in Islam.

2.2.1 Revealed Knowledge: The Starting Point

The history of Islamic economics goes back to the Qur'ans and Sunnah. The Qur'an as the Word of God revealed to the prophet Muhammed [Peace Be Upon Him (PBUH)], and Sunnah as his practical demonstration and explanations, contain a number of economic teachings and principles applicable to various conditions. Muslim scholars accepted the economic teachings of the Qura'an and Sunnah as the basis and starting point. Then they used their own reason and applied the principles derived from the basis sources of Islam to solve the emerging problems in the changing historical and economical conditions. One can divide this process into three broad classifications:

1. First Phase, the formation period. This will cover the period just after cessation of the revelation to the end of the Companions* era. [11-100 A. H. /632-718 A.D]

2. Second Phase, the translation period, when foreign ideas were translated into Arabic and Muslim scholars got an opportunity to benefit from the intellectual and practical works of other nations [2nd-5th|8th-11th centaury]

3. Third Phase, the re-translation and transmission period, when Greco-Arab Islamic ideas reached Europe through translation and other contacts [6th-9th \$12th$-$15^{th}$ centaury]

2.2.2 First Phase: The Formation Period

Economic ideas in written form existed long before the advent of Islam. Especially the Greek ideas are considered as the fountain spring of conventional Western economics. However, Islamic economic though, in its early formation period, was not influenced by any outside elements. The very basic sources of Islam – the Qur'an and Sunnah-contained a number of economic principles and many detailed economic teachings. There was, therefore, no need to look for an alien source. The early Islamic economic thought was based on its internal sources.

The Qur'an mostly gave principles and stressed on use of mind and application of reasoning. This led to the appearance of a chain of scholars who derived rules to solve new problems and created juristic logic applicable to a wide variety of social panels. Their methodology was to refer first to the Qur'an and

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* The companions (Sahabah),the faithful who had seen the prophet

practices of the prophet (p.b.u.h) and precedents of his companions and immediate followers, who were trained by him. Notfinding anything there, they applied analogy and other inferred rules to deduce the Shariah injunctions for the new situation. Gradually, a number of schools of thought in Juristprudence emerged. They were named after their leading scholars and creative thinkers (imam or mujtahid mutlaq), most famous among them are Abu Hanifah[*], Malik[**], Shafi[***], Ahmad bin Han bal[****].

Writings on economic topics and collection of the prophet's traditions on financial mattes started by the end of this phase and in the early period of the next phase by the students of the leading jurists (imam) and their contemporaries. But due to nature of their works, they are apt to be considered part of this phase. For example, Abu Yusaf and Muhammad al Shaybani authored Kitab al Kharaj and Kitab al Kasb respectively. Yahya b. Adam al Qurashi compiled traditions of the Prophet related to taxes and other financial obligations, while Abu Ubayed al Qasim bin sallam and later his student, Ibn Zanjawayh auhored Kitab al Amwal. Ibn Abi al Dunya wrote Islah al- mal and Abu Bakr al Khallal on business and economic activities in general.

The importance of this period will be clear if we have just a look on the economic ideas that were touched by Muslim scholars in the foundation phase of Islamic economics. Following is an incomplete list of such ideas: Market and its regulation, supply and demand, price fixation, money, credit and

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[*] The founder of Hanafi school of jurisprudence 81-150 - AD 700-767
[**] The founder of Maliki school of jurisprudence 94-179 - AD 716-795
[***] The founder of Shafi school of jurisprudence 150-205 - AD 767-820
[****] The founder of Hambali school of jurisprudence 164-241 - AD 780-855

credit instruments, interest, and commodity exchange, taxation, public finance, fiscal policy, various forms of business organizations, agricultural relations, zakah, inheritance, property, poverty and riches.

2.2.3 Second Phase the Translation Period

Master pieces, especially those embodying Greek ideas, were translated into Arabic Muslim scholars came into learn them and benefit from them. The translation activity started in the first century Hijirah itself although it took two more centuries to make its influence felt among Muslim By translation period we mean the age when foreign classical works and scholars. The first incidence of translation is reported during the Caliphate of Umar[*].

By the $3^{rd}/9^{th}$ century, scholars were generally were of and conversant with the contents of the translation works and they started exposition, assessment, addition and commentary on those sciences and even production of similar works. The major areas of translation included medicine, philosophy, and economy.

2.2.4 Third Phase: The Retranslation and Transmission Period

The third phase Islamic economic thought marks the translation of Islamic sciences in general and Greco-Arab sciences' (Muslim scholars' additions and commentaries over Greek philosophy) in particular from Arabic to Latin and other European languages. We have reports regarding translation activities from Arabic to

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[*] Umar bin al Khathab, the second Khalifa 33-1644

Greek by the end of 4th century Hijirah in the Byzantine capital Constantinople Sezgin (1984).

Louis Beak (1994) has classified three periods of translation from Arabic. First from the early twelfth century to the beginning of the thirteenth century 'in which most important texts written by Arab Greek scholars were translated into Castilian Catalan and Langue d'Oc. In the second period 'from these vernacular languages, they were rendered into latin'. The third period starts from the middle of thirteenth century – 'returned to the double pass: Arabic – Langue d'Oc – Latin'.

2.3 The Islamic Tradition in Economic Thought.
2.3.1 Theory of Value, Market and Pricing

Muslim scholars benefited from the Greek translations, at the least the groups of mutakallium and hukama.But before they got these translations during third centaury Hijrah and subsequent period, they had already developed a host of economic ideas and policy concerns. The union of these two elements provided impetus to this branch of knowledge. They improved and developed Hellenic thought; they introduced new concepts as well.

2.3.2 Elements of Value Theory and Muslim Scholars

The subject of value received increasing importance ever since economics became a science. Adam Smith [1723-1790] forcefully presented labour theory of

value but "confused" with the cost of production theory of value [Roll, 1974, p.162]. Ricardo [1772-1823] tried to remove Smith's "inconsistency" but 'could not be free from confusion himself'(Ibid p.178) tried to take the Smithian and Ricardian labour theory of value to its logical conclusion by presenting the theory of exploitation to invite opposition from every corner.

2.3.3 Value Based on Marginal Utility

Muslim scholars perceived valuation based on marginal utility as early as $2^{nd}\backslash9^{th}$ century, of course without using the terminology. Ibn –Abd al Salam quotes Imam Shafi'I as saying "A poor man assigns to one dinar much greater value for himself, while a rich man may not consider hundreds of any big value due to his riches" Ibn Abd al Salam (1992). Similar opinion was also expressed by Al-Juwani (1400H.part2, p.920). Al-Shaybani (1986) recognized even the idea of 'disutility' as the says "……..a person eats for his own utility and there is no utility after being full stomach, rather there could be 'disutility'. Subjective nature of utility is best described by Ibn al Jawazi (1962) who says,"the extent of pleasure from food and drink will depend on how strong is the thirst or hunger. When a thirsty or hungry person reaches to his initial condition (of satiety), after that forcing him to take more food and drink will be highly painful (of great disutility)". Thus, it is clear that to these scholars value of an object is a subjective thing and depends on its diminishing marginal utility.

It is due to diminishing marginal utility that al-Dimashqi (1997) considers it irrational to spend 'too much money on satisfaction of one need and ignoring the other'.

2.3.4 Cost of Production Value

Ibn Taymiyyah (1963) thinks that value is an increment obtained from both labour and capital. So it should be divided among them as an increment resulting from two factors' From his another statement, it appears that he considers value creation due to all factors, land including water, air and raw material, labour and capital.(IbnTaymiyyah,p.120,vol29,p.103).It means, his was a cost of production theory of value.

2.3.5 Labour Theory of Value

Ibn Khaldun insists that 'profit is the value realized from labour (1967). At another occasion he says, 'It should be further known that the capital a person earns and acquires, if resulting from a craft, is the value realized from human labour '(ibid.,p.314).

Although Ibn Kaldum has not used the term exchange value, it is clear that his intention is the same. Implied in his statements in provision of 'use value' as well since labour was desired because of the value realized from it in the form of output which men and for the supply of which labour was entirely responsible' [Spengler

(1964)]. One may responsibly think that Ibn Khaldun took the theory of value to the point from where classical economists began their journey. Later Adam Smith borrowed much from Ibn Khaldun.

2.4 Market and Price

2.4.1 Demand, Supply and Prices

The question of administrative fixation of price arose during the lie of the Prophet (b.p.u.h) who refused to fix it [Ibn-Taymiyah, (1976)]. By prohibition of hoarding and forestalling and with his remarks"…let Allah provide them with living-some of them with other", he approved determination of price by free play of market forces –demand and supply. Muslim scholars were aware of this mechanism. We find a chain of scholars who visualized this. Perhaps the earliest explicit statement on the role of demand and supply in determination of the price came from the leading jurist Imam Shafi'i.Al-Kasani[*] quotes him to have said that "the value of a commodity changes each time there is change in the price, due to increase or decrease of people's willingness to acquire the commodity (demand) and depending whether it is available in small quantity or large quantity (supply)" (al-Kasani, n.d.Vol2, p.16)

But the earliest account of price movement as a result of good or bad harvest (read increase or decrease in the supply of agricultural product) is found in Ibn Al-

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[*] Ala al din Aboobacker b Masood-al Kassani 587-1189 Hijira Hanafi school of jurisprudence

Muqaffa[**].But his sole concern was to show its likely effect on fate of the farmers and revenue of the government collected as fixed land tax. (Essid, 1995, p. 101, the author rs o ibn al Muqaffa's work Risalah fi'l Sahabah,p. 76). A similar analysis as provided by Abu Yusuf (192H.p. 52) who was assigned by caliph Harun al Rashid (d.193/809) to give his opinion about replacing the land tax with proportional agricultural tax.

Another early expression of the role of demand and supply came from al-Jahiz[***] in his work 'al-Tabassur bi'l –Tijarah' [the Insight in Commerce]: "Everything becomes cheaper if its amount increases except knowledge as its value is enhansed if it increases" al-Jahiz (1966). He refers to it as an Indian wisdom [ibid]. Qadi Abd al-Jabbar[*](1965) enumerates some of the demand and supply functions and attributes them to the Almighty Creator as the final course, and invites to distinction between what changes we see as a result of market sources and what are seen due to manipulation of some people so that intervention may be resorted to prevent them.

However, we must mention here Ibn Khaldun who introduced many new determinants of supply and demand and their influence on prices. Among the determinants of demands he noted purchasing power of the community at various levels of civilization and development. It also depends on tastes. Accordingly, composition of goods demanded and willingness to buy changes in countryside and cities, in the beginning of a dynasty and at its advanced stage, Ibn Khaldun (1967).

[**] Abd Allah b. al Mubarak Ibn-al- Muqaffa 102-139H – 720-756 Arabic author of Persian origin
[***] Amir b. bahr al Kinani al Basari known as al-Jahiz
[*] Abd al Jabbar b. Ahmed-al hamadani -al- Asadani 325-415-936-1023 AD

Supply is effected by procurement costs such as cost of rent, wages, duties, taxes on profits, risks attached to storage [ibd.,pp.339-40,341], profit expectations [ibd.,pp.301-02,351-52,367],etc. According to Ibn Khaldum; "Moderate profits boost trade whereas very law profits discourage traders and artisans and very high profits decrease demand" [ibid, 340-01]' Implied in this statement is the role of prices in the market and their bearing upon the economic activities. In support of his ideas, Ibn Khaldum presents evidence from different countries and so he provides a blend of applied economics, though he avoids any quantitative analysis.

2.5 Imperfections in the Market and Price Control.

Muslim scholars did not discuss pricing mechanism and market functioning an intellectual exercise or academic discourse. They did it in quest of justice for the participants of market when price would be abnormally high – to formulate a policy and suggest preventive measures or recommend intervention to strike a balance between the interest of sellers and buyers. We have already noted that the question of price control arose during the Prophets time which he rejected. And because of his refusal, many scholars opposed any price control policy and it becomes a controversial issue in the literature of Islamic jurisprudence [Islahi (1988)]. We confine our review to a few representative scholars who presented economic reasoning in their analysis.

While opposing the administrative price fixation Al-Maqdisi (1972) analyses it from an economic perspective and points out the disadvantage of this form of price

control. Price fixing will bring about a result exactly the opposite of what it intends, because 'outside traders will not bring their good where they would be forced to sell at a price against their will and local traders who have the stock will also conceal them'. The net result will be further shortage and deterioration of the situation. 'The needy consumers will demand the goods and having their demand unsatisfied, will bid the price up. The price will thus increase and both parties will suffer'.

According to Ibn –Taymiyyah (1976) the prophet (p.b.u.h) did not fix the price because economic factors were against it. It was not a 'general ruling'. He showed that the prophet himself recommended 'just price' fixation at two other occasions.

Muslim scholars had the idea of price of the equivalent (qimat-al-mithl) or just price (qimat-al-adl).But their concept of just price was not borrowed from the Greek literature. It originate in Islamic tradition itself as the term was used by the prophet (ibid.) as well as by his two Caliphs, Umar (IbnHanbaln.dVol.5,p.327) andAli[**] (alRadin.dVol3, p.110,Vol5,p.342). Ibn Taymiyyah0s interpretation shows that the just price is one which is determined by the competitive market forces [Islahi, [1988)].

For administrative price fixation, al-Baji[***] quotes an earlier scholar Ibn Habib who proposes a committee idea for this purpose. According to him the Imam (authority in change) should call a meeting of market representatives. Others also

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[**] Ali-bin-Abithalib-Son in law of Prophet
[***] Abu-I- Walid Sulayman al Baji 403-474 AD 1012-1081 a maliki school of jurisprudence

should be admitted to the meeting so that they could verify their statement. After negotiation and investigation about their sale and purchase he should persuade them to a price that can support them as well as the common people. Thus they all might agree. Price cannot be fixed without consent and agreement. The logic behind this provision is to find out, in this way, the interests of sellers and buyers and fix a price that should bring advantage and satisfy the needs and that would involve no embarrassment for the people. If a price has been imposed without the consent of the sellers, leaving them no profit, such a price would be corrupt, foodstuffs would be concealed and people's goods would be destroyed (al-Baji, 1332 A.H., Vol5, p.19).

2.6 The Islamic Tradition in Economic Thought

2.6.1 Production

Inspired by the Qur' anic consideration that lawful, economic activities are as if seeking 'bounty of Allah' (cf. the Qur 'an 62:10 and 73:20) and inspired by the Prophet's (p.b.u.h) saying that planting a plant is also a good deed (cf. al- Qurashi, 1987 .pp. 115-16),Muslim scholars gave high value to engagement in production activities. Al-Shaybani (1986) classified productive activities in to four categories, services, agriculture, trade and industry. An 8th/ 14th century scholar Muhammad b. Abd al-Rahman al- Wasabi[*] (1982) divides basic sources of earning in to three categories agriculture, industry, and trade. Depending upon the basic needs of living entities,al-Ghazali (n.d. [a] Vol.3,p.225) classified them in to five categories: farming

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[*] Muhammad b. Abd al-Rahman al- Wasabi 712-782 AD1312-1380

(food for people), grazing (food for animals, hunting (including exploration of mineral and forest products, wearing (textiles for clothing) and building and construction (for dwelling).

One may not find in the writing of Muslim scholars description of efficiency-oriented different laws of production, but there are production related many important ideas that are necessary for continuation and optimization of production function such as linkages in production activities, division of labour and specialization and role of human capital.

His recognition of interdependence of economic activities is shown in his statement: "the blacksmith makes the tools for farmer's cultivations and the carpenter manufactures the tools needed by the blacksmith. The same goes for all those who engage in the production of tools and equipments, needed for production of foodstuffs (ibid). Such ideas we find with al-Dimashqi (1977) also: "Industries are interdependent on each other. The builder needs carpenter, the carpenter needs blacksmith. The iron workers need industry of mine workers who need builders."

2.6.2 Cooperation and Division of Labour

A natural result of linkages and interdependence of industries was need for cooperation and division of labour. Thus almost all thinkers on this aspect of economy argued for the two. (al-Shaybani (1986), pp. 75-76, al-Ghazali, n.d. [a] Vol. 4, pp. 118-119; al-Asfahani (1985), pp. 374-75 al- Dimashqi 1977, pp. 20-21, Ibn

Taymiyyah (1976), pp. 79, 116 Ibn Khaldun 1964, Vol. 2, pp. 235-238,271-272,286,329). It is decided to select al-Ghazali on division of labour and Ibn Khaldun on cooperation, as representative of the group, to show what insights they provide on the issue.

It is found that find several passages in Muqaddimah of Ibn Khaldun [(1964), Vol.1, pp. 89-91; Vol. II, pp. 271-274, 301-02, 336-41)] in which important of cooperation as well as advantage of division of labour has been discussed.

2.6.3 Economics of Distribution.

Distribution is one of the two main economic problems of human kind, the other being production. There have been differences of opinion among the economists about which one is most fundamental. Again, distribution is of two kinds: Functional that takes place as a result of production process; it may be called initial distribution, and personal distribution which means redistribution. In Islamic system, the letter is much emphasized and a detailed scheme is found in its basic sources. Muslim scholars have also discussed them elaborately. Elsewhere we have given an account of it [(Islahi (1995), pp. 19-35)]. In the mainstream economics, analysis of functional distribution has been given more importance. We shall therefore confine our discussion to Muslim scholar's perception of functional distribution.

2.6.4 Profit

It may be noted that Muslim scholars excluded interests (a rate charged on capital lent against the time given for use) from the list of rewards for factors. Capital has to come in terms with entrepreneur as equity participant and share in loss and profit of the enterprise. Thus, one will never find in Islamic tradition a discussion on interest determination.

As far rewards of other factors are concerned, they leave them to be determined by market forces and their discussions also come along with the price. However, they always emphasize observation on fair practices and due consideration for weak players. By doing this one must keep in mind that enormous amount of 'profit' one would gain in the 'market of the Hereafter' (al-Ghazali, n.d. [a], Vol 2, pp. 75,76,84), meaning by it ones salvation.

There seems to be awareness among Muslim scholars of 'abnormal profit' when it is said that "since profit represents an extra worth", it should be sought from that types of goods which are not necessary for people. (ibid., p. 73).According to al-Ghazali, 'given the sellers' benevolence as well as the norms of trading practices and market condition, the profit rate should be around 5 to 10 percent of the price of the goods:. One who is content with a small profit has many transactions and earns a lot of profit by large volume of sales and thus he is favored (ibid., p. 80).

2.6.5 Wages

In Islamic system labour has been considered as a service carrying a market price and therefore in normal condition it will be left to the free play of market forces to determine the wage. Although the question of paying just and fair wages has been frequently discussed in the Islamic thought, Ibn Thaymiyyah has rather detailed reflection on wages, so for our purpose it suffice to present his ideas. He uses terms like 'pricing in labour market' (tas 'ir fil-a 'mal), 'wage of the equivalant' (ujrat al-mithl) analogous to 'pricing in goods market' (tas ' ir fi'l-amwal) and' price of the equivalent' (thaman al-mithl ,) (Ibn thaymiyyah, 1976,p.34). To avoid any dispute wages like prices should be fully defined.

Ibn Khaldun has also something to say about wages. While giving the substance of his thought, Spengler says: "what increases the money cost of the worker's or merchant's standard of life is or may be reflected in his supply price". (Spengler (1964), p.298). At this he comments that 'Ibn Khaldun's' statements suggest, however, that it is usually demand rather than supply that fixes the price of the labour which, though it ought at least to furnish the 'necessities of life', often fails to do so in villages and hamlets where demand for labour is negligible.

2.6.6 Rent

Muslim scholars talked more about rental that rent and mostly of juridical nature. Their statement about economic rent is rare and is not clear. Ibn Khaldun

(1967) reached very near to Ricardo in his example how real estate forms an 'unearned income ' for his owner but could not strike it to point the element of rent, ' their value(i.e. real estate's 'and farms') increases, and they assume an importance they did not have before. This is the meaning of "fluctuation in (the real estate market)". The owner of (real estate) now turns out to be one of the wealthiest men in the city. That is not the result of his own effort and business activity,' (Ibn Khaldun (1967), Vol.2, p.284.)

2.7 Contribution of Muslim Scholars from Part of the Family-Tree of Economics.

Some textbooks give family tree of Economics and its development in diagrammatic form (Figure No.2.1). It will be interesting to study such family trees and trace the part occupied by the economic thought of Muslim scholars.

The below mentioned family tree of Islamic Economic thought depicts its rise from beginning up to its modern development. The present treatise provides an explanation up to 1500 A.D. Period after that largely remained unexplored. The modern development of Islamic economics came as a response to the challenge posed by the materialistic system of both Capitalism and Marxism

For the sake of convenience we choose the work Ingrid Rima (1991) and Blanch Field (1975) in his work in Evolution of economic thought-3rd edition p.p 94-95.

Contributions of Muslim scholars come after Greek in the family tree of economics. They were the main cause, not only, of the birth of scholastic economic ideas but for the rise of mercantilism. Scholastic ideas stand nowhere in quantity, quality and originality as compared to Islamic tradition in economic thought. About St.Thomas Aquinas who is considered the most outstanding scholastic scholar, Copleston, a historian of medieval philosophy observes: "The fact that Aquinas derived ideas and stimulus from a variety of sources tend to suggest both that he was an eclectic and that he was licking in originality. For when we consider this or that doctrine or theory, It is very often possible to make claims such as, 'this comes straight from Aristotle', 'that has already been said by Avicenna and al- gazali ' or that is obviously a development of an argument used by Maimonides'. In other words, the more we know about Aristotle and about Islamic and Jewish philosophy, as also of course about previous Christian thought, the more we may be inclined to wonder what, if anything is peculiar to Aquinas himself." (Copleston, 1972, p.181, quoted by Mirakhor (1987), p. 249)

2.7.1 Place of Muslim scholars in the family tree of mainstream economics

The fact that scholastic scholars could get Greek ideas through the medium of Muslim scholars and based their ideas on Greek philosophy and its commentary presented by Muslim philosophers, and the fact that mercantilism came as a result of Muslim influence, the contributions of Muslim scholars deserve a place in development of mainstreame economics. And they must be rehabilitated for the sake of doctrinal continuity and objectivity, academic honesty and justice. A correct family tree of economics will be s given in the figure no.2.2.

Fig No.2.1

Development Chart of Islamic Economics
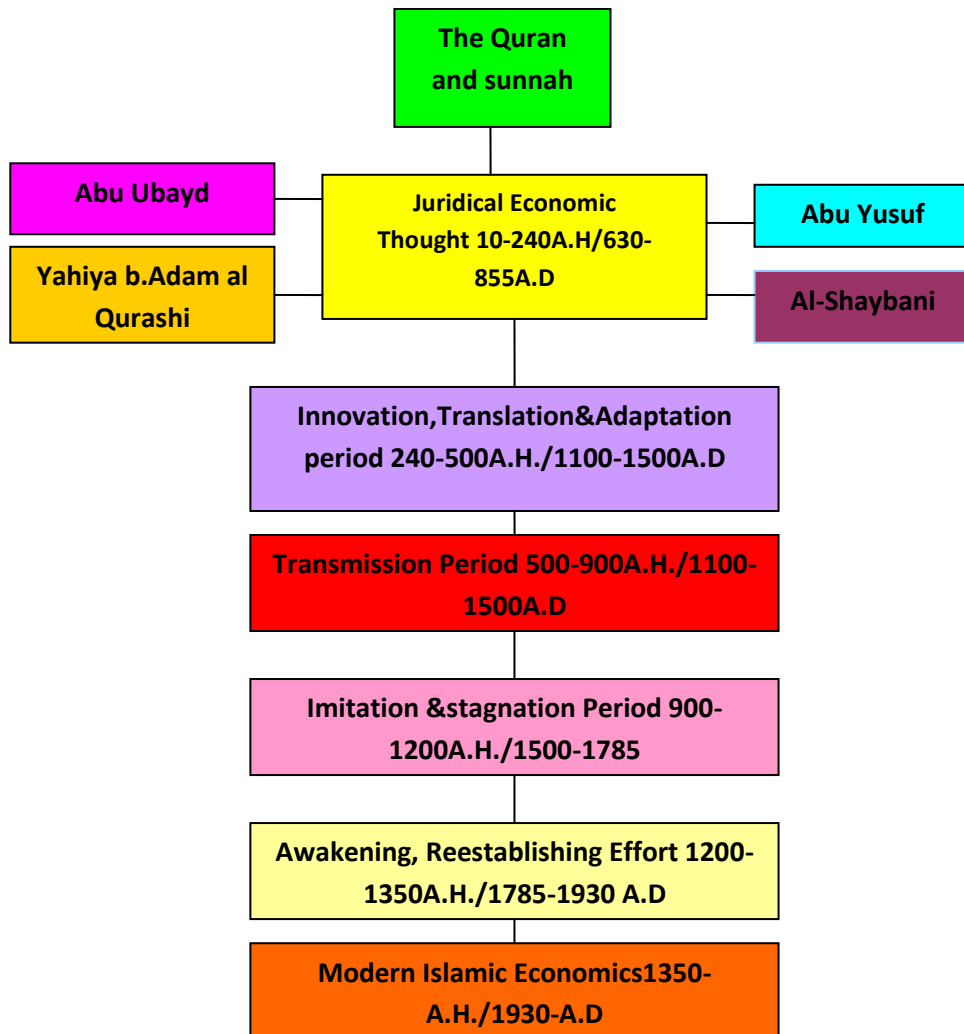
Source: Ingrid Rima (1991)"Development of Economic analysis

However the idea of family tree may not be acceptable to many readers because the word family denotes that there should be essential harmony and resemblance between successors and predecessors. In economics generally it has not been the case. There is least similarity between scholastic and mercantilism. Adam Smith attacked both mercantilism and physiocracy.

A better presentation will to be the development economics tracing various influences that worked behind it. This is especially important in case of Islamic economics because the other systems emerged with the new one or vanished altogether, but Islamic economic though, inspight of influencing the Medieval West, maintained its identity. It went in eclipse for a long period but never died. That is the reason it has re-emerged with full strength. Perhaps this is the right time for its re-emergence, as the conventional materialistic self seeking economics could not satisfy the aspirations and the urges of humanity. See the flow chart1:3 which show interaction and influence of Islamic economics from the beginning up to the modern period**.**

Figure No. 2.2

Place of Muslim Scholars in the Family Tree of Mainstream Economics
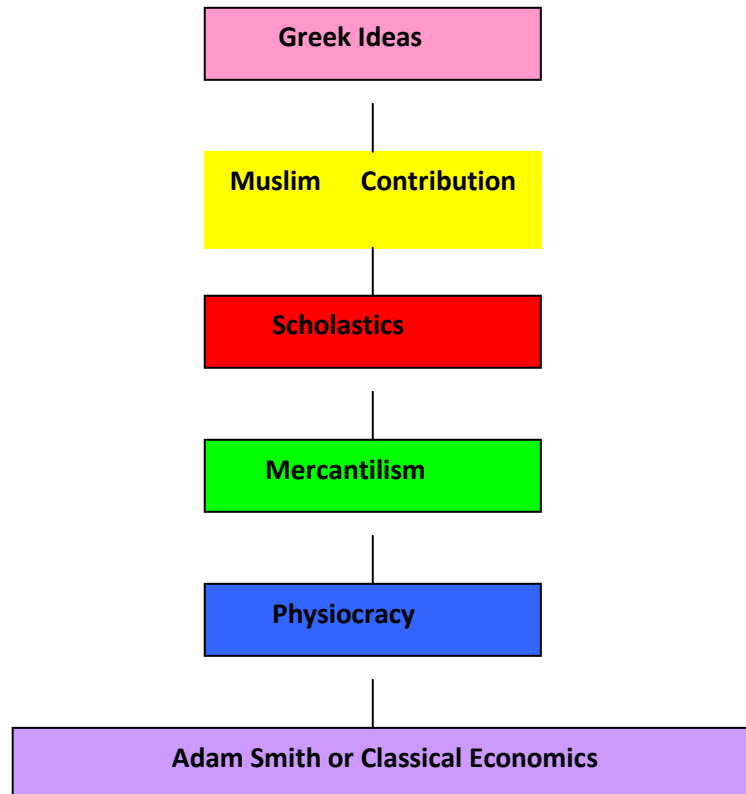
(Source: Grice Hutchinson (1978) Early Economic thought in Spain)

Fig No. 2.3

Interaction and Influence of Islamic Economics from Beginning up to the Modern Period
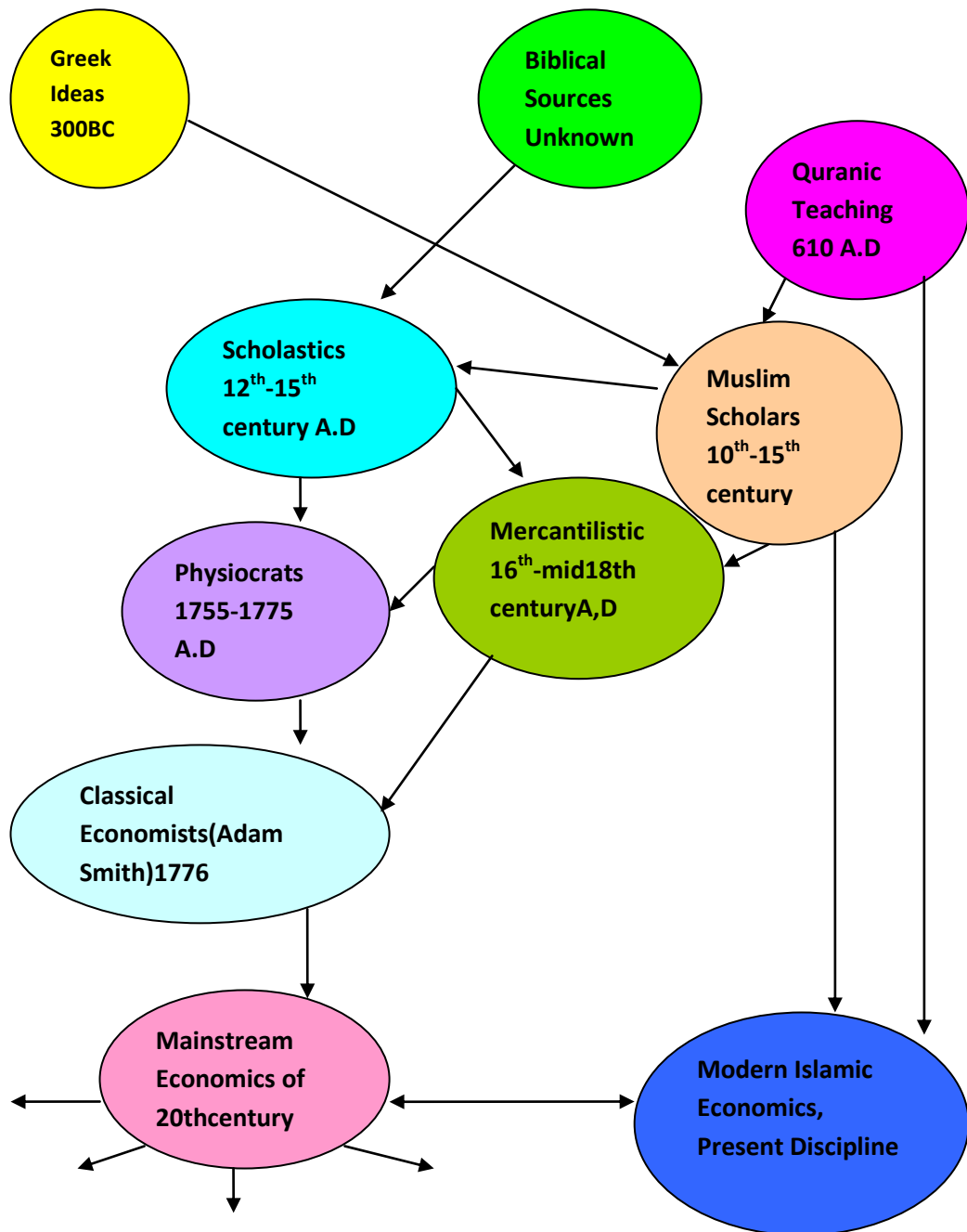
Source: Lowry (1987)"Pre Classical Economic Thought" Lowry (p.p 77-144)

Analysing the place of Muslim Economics Scholars in the Family Tree of Mainstream Economics Marakhar (1987), 'To say that the crusaders epitomized this negative attitude is an understatement '. Without naming the quotes a scholar who suggests that in denigrating Islam and Muslims, Medieval Europe found a way to form a new image to it. 'Because Europe was reacting against Islam, it belittled the influence of the Saracens and exaggerated its dependence on its Greek and Roman heritage' (ibid., pp. 262-63). In the fourteenth centaury a large number of European scholars studied translation of Arabic books and prepared their own volumes and summary in which they not only dropped the names of Muslim authors, but ascribed the whole thing to those Greek scholars who where occasionally referred in those works (Sezgin,p.127).

Section II

2.8 Recent Appraisal (Modern Development in Islamic Economics).

Modern development in Islamic Economics began during the second quarter of the 20th century. Writings on contribution of Muslim scholars of the past were part of this development .Perhaps the first article to introduce Economic Thought of Muslim Scholars was written by Salih (1933) in Arabic entitled 'Arabic Economic Thought in the Fifteenth Century' in which he discussed economic ideas of Ibn-Kaldun, al-Maqrisi, al-Dulaji. Next al-Hashimi (1937) published his paper on "Economic views of al-Biruni again in Arabic. The same year Rifat (1937) wrote Ibn

–Khaldun views on Economic in Urdu. In the first half of the 20th century most of works on economic thought in Islam were written in Urdu Arabic and English.

This survey covers three principle languages in which the bulk of the literature on our subject has appeared in the last half century-Arabic, Urdu and English. Some contributions were made in the Persian, Turkish, French and Indonesian languages. Multiplicity of languages coupled with deficient communications has also affected the growth of thinking on the subject. No efficient translation and abstraction services have been available.

This survey covers the book as well as the periodical literature. In the circumstances it is not possible to claim that one knows about each and every contribution to the subject. This is especially true of the papers contributed to the numerous popular journals in the three languages. Yet I do hope that I have not missed many of them, as a glance of the bibliography will show.

2.8.1 Economic Philosophy of Islam

The key to economic philosophy of Islam lies in man's relationship with god, his universe His people. With every human being sharing the same relationship with God and his universe, a definite relationship between man and man is also prescribed. This is a relationship of brotherhood and equality. "Tawhid is a coin with two faces: one implies that Allah is the creator and the other that men are equal partners or that each man brother to another man" (7:35).

While the writers on the subject agree on this basic philosophy, one finds variety of emphasis in their elaboration of the last-mentioned point: the relation between man and man in sharing the boundaries of Allah. It is just agreed that for the test life is to be conducted in fair circumstances and no one should go without an adequate share of resources that are needed for survival and a good life. Equality of opportunity and social care of the disabled is the minimum that this calls for. They differ, however, regarding the mode of equal or equitable sharing of these resources by individuals, and the degree of social control is necessary- a subject we take up later on.

It is also agreed that Islam rejects asceticism and a good life means, among other things, a materially well provisioned life. Basing his argument on two clear verses of the Qur'an another writer declares that sufficiency (Kifayah) and piece (amn) are two inalienable features of the good life envisaged by Allah (77,1:6-9),a point that finds the widest support in the literature on the subject (73:24).

2.8.2 Economic Enterprises

The above philosophy provides the proper perspective to man's economic activities. No inhibitions attach to economic enterprise. Men are encouraged to avail themselves of the vast opportunities of productive enterprise afforded by the almost limitless bounties of Allah: "And if ye would count the bounty of Allah ye cannot reckon it."

Every writer on the subject cities verses from the Qur'an and traditions from the Prophet to show that agriculture, trade, commerce and industry and the various forms of productive enterprise known in the early days of Islam have been explicitly mentioned in this context. What is curtailed, how-ever, is the motivation, the ends of economic activity.

Many writers discuss the proper ends of economic enterprise in detail. These ends may be individual or social. Legitimate individual ends include the fulfillment of personal needs and those of the family. Saving to provide for the future and the desire to leave an inheritance are also recognized as proper end of productive effort. The minimum necessary for survival is in fact a duty to earn. While no maxima are fixed in quantitative terms, moderation in fulfillment of these needs in emphasized.

Recent writings on economic enterprise attach great importance to the social ends, which are summed up by the phrase "striving in the cause of Allah (Oneness of God)". Eradication of hunger and poverty, diseases and literacy and mobilization of resources for strengthening the country and spreading the message of Allah are stated to be the laudable aims of individual economic activities.

2.8.3 Ownership

The nature and scope of ownership has been one of the most discussed subjects in the literature of Islamic Economics, works exclusively devoted to the subject being available in a number of languages.

Real ownership belongs to Allah, man holds property in trust for which he is accountable to Him, in accordance with rules clearly laid down in the Shari' ah and the economic philosophy underlined above. Acquisition of property as well as its uses and disposal are subject to limits set and should be guided by norms laid down by Allah. Absolute ownership of man is a concept alien to Islam, as it belongs to Allah alone. There are definite obligation towards others attending upon the individual rights of owner-ship. Besides private property, public ownership is a central concept in Islam. The respective scopes of the two are not rigidly defined but left to be determined in the light of certain principles, depending on the needs and circumstances [Ali Abd al Rasul (1976)] Quran (3:8; 62: 111-119, 160-162; 70:80; 134; 158: 41-90; 171 : 150).

Abdul Hamid Abu Sulaiman (1960) recognizes the individual's right to own the fruits of his labour, but so far as the natural resources, natural powers and general circumstances of the society are concerned every individual has an equal share in them.

The rationale of allowing in-equality in the private ownership of means of production is stated by him in these words:

"A strict equality in the ownership of natural resources would require very frequent redistribution of those resources among members of society. This would be disruptive to economic activity and social relations. A reasonable alternative is, first,

to avoid frequent re-distribution and permit private ownership of resources, thus achieving stability; and second, to redistribute equality among members of society that part of income which is due to natural resources, thus achieving equality and justice". Equal sharing of the "income from natural resources" is basic to Abu Sulaiman's understanding of riba and his views on land rent, share cropping and profit-sharing.

Baqir alSadir (1968) is also critical of the view that in Islam individual owner-ship is the rule and public ownership the exception. He regards individual ownership, state ownership and communal ownership as three forms existing parallel to one another in Islamic Law (171:257).

The early writings of Mawdudi (1969) lean heavily towards assigning the central place to individual ownership (51:32). His later views are nearer to the middle position that admits social control whenever social interest calls for it. But he would still like to keep state intervention at the minimum (51: 116). Far from the position taken by Abu Sulaiman, his views on specific issues like land reforms are shaped by this approach, for which he finds support in the fiqh literature. A similar position is taken by the martyr Sayyid Qutb (1967) who declares the right of individual ownership basic to the Islamic system.

Notwithstanding individual's stances, some of the powerful collective movement for Islamic reorientation of modern life have tended towards the approach closer to the "economic philosophy of Islam".

2.8.4 Relations of Production: Co-operation

Economic relations, especially those in production and exchange of wealth, should be co-operative in nature. "Rivalry and cut-throat competition make no sense in this context" (73:27). Co-operation is seen as the basic value in Islam's economic philosophy al-Tahavi Ibrahim (1974). Ali Abd al- Rasul calls, in this context, for "constructive competition" aiming at what is best for the society and high quality production, while avoiding all activities injuries to other producers and the consumers.

Mohammed Najathullah Siddiqi (1972) pointed out that the Islamic view of co-operation does not rule out free and fair competition in the market, provided all economic agents adhere to Islamic morality. Competition is emphasized in contrast to monopoly whose elimination is regarded as a prerequisite to ensuring justice and growth

2.8.5 Development and Growth

According to Malik Ibn Nabi (1972) Islam's economic philosophy does not stop at teaching men to co-operate after having encouraged them in productive enterprise. It creates a powerful drive for development. A true Muslim looks upon developmental efforts as striving in the cause of Allah (jihad fi sabil Allah) (595:128: 447:36: 484).

According to Najjah Ahamad (1972) economic development has become a necessary condition to be fulfilled to enable the Muslim peoples to perform their mission with the humanity what the Qur'an declares to be their raison d' entre. This mission is related to the well being of all human beings. It cannot be performed while Muslim countries continue to be politically and economically subservient to the powers which stand for alien cultures.

According to Muzzafa Hussain (1974) as to the Islamic strategy for economic development its chief distinguishing feature is that social justice and growth go together (177: 593). This is ensured by the motivation that Islam provides for economic development (56:45). Individual profit motive is not the chief propelling force in Islam. Development efforts are mainly social and the individuals willingly co-operate in this venture (475: 43, 96- 113).

2.9 Economic System of Islam

While economic philosophy states the overall approach, the economic system comprises ways and means of securing human welfare in general and economic welfare in particular. Economic literature on the subject discusses "alternative methods of determining the bill of goods to be produced, the allocation of resources to produce it, and the distribution of the resulting income".
Emphasis in Islamic literature on the subject has been somewhat different. The ends of economic system are discussed, followed by a discussion of those behaviour

patterns on the part of economic agents which are expected to go a long way in securing these ends.

2.9.1 Comparative Study

In comparative studies we see that Islamic Economic methodology uses a frame work derived from divine texts. No individual or group of individuals can make it irrelevant. This approach is quite distinct from that of the mainstream economics were the fundamental paradigm is subject to criticism and can undergo change (AJISS Herndon VA (2:1)-THE Islamic economics the beginning of scientific revolution 1985). Secondly Islamic Economics primarily follows the indicative method. In the mainstream economics the deductive method is more common as the acceptations of the economists need not always be realistic. Generally, a combination of inductive and deductive method with emphasize on the former is used in Islamic Economics. Thirdly Islamic Economics builds ethical values such as justice benevolence moderation, sacrifice etc., into analysis as behavioural parameters. In the mainstream economics certain value judgments is a lengthy one (Mohammed Akram Khan 1999 an introduction to Islamic Economics Page 70.).

2.9.2 Goals of the System

Economic well-being is one of the goals emphasized from economic systems by every writer in Islamic economics, though each one of them proceeds to mention

a number of other, non-economic, goals too. We shall first consider the contents of this goal, according to various writers; before we pass on to examine their views on non-economic goals.

When one referred to Tahawi, twin goals of sufficiency and peace which can come about by eradicating hunger and fear from society and ensuring the fulfillment of the basic needs of each and every human being. His list of basic needs includes food, clothing and shelter ; medical aid for the sick and from domestic services for the invalid, education for those who need it, marriage in some cases and "all that is regarded necessary according to the custom of the society " (77, 1: 394). This is a point that finds universal support in the literature and the list of the basic needs given by Mawdudi (ibid), Sayyid Qutb (ibid), and Siddiqi (ibid) does not differ materially from the above.

Baqir al Sadr (ibid) emphasizes provision of ease and convenience in life, consequent upon growth and development and maximum utilization of natural resources (171: 595). Kahf (1973) makes "maximization of the rate of utilization of the resources "the first goal of economic policy in Islam (612:93).

Chapra's (1970) list gives priority to "economic well being "followed by universal brotherhood and justice, equitable distribution of income and freedom of the individual within the context of social welfare. Siddiqi discusses the rationale of including these non-economic goals in the ends of economic system and points out

the impact their inclusion has on the ways and means adopted for achievement of the ends of economic system in Islam (73:28).

2.9.3 The Owner

Behavioral norms for the owner have been discussed by a number of writers including Hifzur Rahman (1942) (20:68-77, 299- 302), Mawdudi (51:81-96), Sayyid Qutb (62:111-112), Siddiqi (221, 1: 205- 288), Manna' Qattan (1976) and A. Mannan (1976) (132:77-85). The owner has no right to destroy useful property. Wasteful use and extravagance is prohibited. He has to avoid using it in a manner injurious to others or detrimental to public interest. Other individuals and the society have a claim on the owner's property. This includes the obligation to support dependence in the nuclear family and other members of the extended family when they are in need. Ibrahim, Ahmad Ibrahm (1971) (336; 221, 1:252-259).

Besides obligatory Zakat the owner owes help to those in dire need, and should not refuse a loan in cash or kind when a request comes from one who is in real need. Several writers stress the significance of the provision that the presence of a pressing need obliges those with a surplus to surrender such part of their surplus as will fulfill that need (77, 11:214; 221, 1:272-280).

Abu Sulaiman (ibid) explains the illegitimacy of interest charged by the owner, and the relevance of profit-loss-sharing system while using capital. He further argues that money rent for land and building is legitimate but should be according to

its quality or productivity. He cited the examples from prophets (B.P.U.H) traditions both allowing and prohibiting money rent on land.

Abu Sulaiman allows profit sharing but "the share of the capital owner is only to compensate him for probable loss (8:59). He is not entitled to a net pure profit. Other writers on the subject endorse the unanimous verdict of all the four principle schools of Islamic law that the two parties to the mudarbah contract are free to agree on any formula of sharing the profits provided these shares are fixed percentage-wise and not in the form of given amounts (176:30). Abu Sulaiman's opinion is derived from his basic stand relating to the equal sharing of gifts of God (other than the fruits of personal ingenuity and labour). But he fails to counter the obvious argument than an entrepreneurial decision is involved in selecting the right party in mudarbah (221,1: 167-171). He does not support his view by any precedents from the sunnah and gives no argument against the unanimous verdict of fiqh. Contemporary writers on Islamic banking, who make mudarbah the basics of its operations, do not stipulate any ceilings on the percentage share of capital in profits.

Nasir A. Sheikh (1967) (154:181) and A.Mannan (ibid) oppose both land rent and share cropping. S.M Yusuf (1957) discerns "in early Islam a definite tendency to ordain the future development of agriculture in such a way that there is no charge for the use of what Ricardo in his own definition of rent called original and indestructible powers of land" .Quoting Iqbal's Bal e Jibril he ascribes the same view to him (242:34) (1957).

2.9.4 The Consumer

The list of articles whose consumption in Islam is well known and non-controversial. There is no limit to what one might consume to lead a good life, so increasing efficiency and playing the role Islam envisages for a true Muslim in the service of society.

Baqir al Sadr suggests that resources should not be allowed to be diverted to the production of luxuries until the production of necessaries is ensured in sufficient quantities (ibid). The consumer must abstain from extravagance defined as expenditure in excess of what is necessary to fulfill a need. Extravagance is related to the average standards of consumption obtaining in a society, the idea being that big departures from these standards should not be permissible. Several writers have discussed the concept of extravagance, including Naiem Siddiqi (1960).

2.9.5 The Entrepreneur: Producer and Trader

The code of conduct for an entrepreneur under Islamic Ecosystem has been by Mawdudi (51:83-89) Siddiqi (619:35-64), Chapra (115:27-33) Ali Abdur Rasul and Kahf (1969) (612:15-20), among others. Dishonesty, fraud and deception, coercive practices, and gamble some or usurious dealing are prohibited. He should not do anything injuries to others. These rules out hoarding, speculation and collusion among producers and traders against the interests of the consumers.

Monopoly is also regarded as injurious to the interests of society. He is charged with justice and truthfulness in all his dealings. On the positive side he should serve the interests of the society. Social good should guide him in his decisions, besides his own profit.

In Islamic economics the allocation of resources is optimum if it is first in conformity with the norms of Islam and then in accordance with consumers' preferences. In a truly Islamic society there is no likelihood of any divergence between the two (ibid). The meaning of the second sentence is not entirely clear. Does it mean that if all economic agents behave in accordance with the Islamic code of conduct and the distribution of income and wealth is according to the Islamic ideals, the functioning of the market system would result in optimum allocation of resource, in the Islamic sense? An affirmative answers raises questions relating to knowledge, wisdom, power and organization which have not been discussed so far. Kahfs discussion on the market structure (612: 29-45) focuses its attention on co-operation and emphasizes the role of the government in the market.

Baqir al-Sadr regards work to be the chief basics of distribution. But this result in one class of people earning more than they need and another class earning less than they need. This solution has to be modified by transferring some income from the former class to the latter .Property, which is based in Islam primarily on work, becomes a secondary basis for distribution next to work and need. Thahawi also endorses the same theory. Commenting on distribution, Abu Sulaiman puts great reliance on properly functioning markets.

2.9.6 Role of the State

Baqir al Sadr has discussed the role of the state in Islam's economic system at some length. Besides enforcing the relevant laws the state guarantees social security, ensuring fulfillment of needs to each individual, and maintain a balance in the standards of living in the society. The states direct responsibility as regards social security is based on the general claim of the entire society on natural resources, and on the fact that those individuals of the society who do not have the capacity to work also have this claim.

In this decision on the role of the state in the economy Muhammad al Mubarak (1972) declares the state to be one of the three pillars of the Islamic economic system, along with faith and commitment to moral values and certain principles of organization. Its function is to establish justice and ensure fulfillment of needs by organizing the public utilities and the social security system.

In his doctrinal dissertation on the "Political Economy of the Islamic State", Awsaf Ali (1970) concludes that the social philosophy of Islam envisions an economic society based on a wide –ranging state directions of, and participation in, the economic, commercial and financial spheres.

Fazlur Rahman (27:5) says that "in the basic interest of socio economic justice, the state shall interfere with private wealth to the extent that socio-economic

justice demands". Chapra also regards an active economic role by the state to be an inalienable feature of the Islamic economic system (115:41-42); providing physical and social overhead capital and arranging social security are listed among the necessary functions of a modern Islamic state (115:40)

Among close associates of Mawdudi, Naiem Siddiqi (1958) has also spelled out many positive actions by the state which are called for in the circumstances prevailing in some of the Muslim countries. A very active role for the state is envisaged in the report of the economic committee of Jama at –i- Islami Pakistan, written by Khurshid Ahmad and Naiem Siddiq (1970).

2.10 Economic Systems of Islam: Some Specific Aspects

2.10.1 Public Finance

A vast variety literature is available on public finance in Islam in view of the explicit provisions in the Shari ah in this regard and the historical material available on the subject. Besides Aghnides Mohammed Theories of Finance a number of specialized works are available, though mostly historical and descriptive in nature.

This is also true of the chapters on public finance in almost every work on the economic system of Islam. Our interest lies in the way the operation of Islamic institutions like Zakat and the application of general principles of policy derived from public finance in early Islamic history are visualized in modern circumstances.

The center piece of Islamic public Finance being zakat, its coverage, rates, beneficiaries and administration have been discussed in detail. The most comprehensive work in Qardawi Fiqh al Zakat (1949) (313). In English "The Law and Philosophy of Zakat "is less original yet comprehensive on points of law (319). Among economists A. Mannans book (132) has a good chapter on Public Finance and Fiscal Policy, and some of the younger economists have offered analytical pieces on the subject (623:624:615).

(a) Coverage

It is generally agreed that the coverage of Zakat has to be extended to forms of wealth not known in the early days of Islam. Shares and securities, savings in the form of insurance premia and provident funds, rented buildings and vehicles on hire machinery and other capital goods. Qardawi (313,I: 139, 466-486, 581-573), Abu Zahra (1965) (300:181-186) and Mawdudi (51:339-342, 351-363) discuss the application of Zakat to these assets and the rates applicable to them.

Many issues continue to be controversial, one of them being the Zakat on machinery and capital goods. Mawdudi regards only the marketable producer of industrial units to be subject to 2.5 per cent annual tax, like all other merchandise (51:339) exempting capital goods and machinery installed in these units from Zakat.

According to Khan Mohammed Atran (1971) the arguments in favour of valuation of the nasab, i.e the exemption limits prescribed by the Shari ah are, however, more formidable.

(b) Disbursement of Zakat Revenue

Among other issues on which there is a difference of opinion is the way Zakat benefits should flow to the various groups of the beneficiaries listed in the Qu'an. Some ulema insist on direct transfer payments to the beneficiaries. As a transfer payment Zakat has direct impact on Marginal Propensity to Consume (M.P.C) leading to increase in investment and capital formation.

2.10.2 Inheritances

The Islamic laws of inheritance are invariably mentioned by various writers along with Zakat in view of their redistributive function, and their role in removing concentrations of wealth is highlighted by almost every writer. Whereas Zakat redistribution wealth in the present generation, the Islamic laws of inheritance do so between the outgoing generation and the present one, so that the wealth accumulated at one point, despite Zakat, is further dispersed.

2.10.3 Social Security and Insurance

Social security is generally discussed in the context of Zakat. Historical material on how the early Islamic State arranged social security is presented by almost every writer on the subject. It is affirmed that new institutional arrangements can always be devised and the various institutions in modern welfare states are referred to approvingly. The principles involved have been discussed, among others, by Baqir al Sadr (171:615-623). The subject has also been discussed at the International Islamic Conference at Cario, Kuala Lumpur and other places and practical suggestions mooted (1965) (300:405)

2.11 Insurance

Insurance continue to be one of the most controversial subjects in the literature. Opinion is sharply divided both on the principle of incurance and the forms of its organization.

Several writers see nothing wrong in insurance, in so far as the basic principles underlying insurance are concerned. It is present practice, and the ignorance (jahl) and uncertainly (gharar) involved are not of a degree large enough to call for its prohibition. These writers incude Zarqa (1976) (380), Yousuf Moosa (1954) (256:101,181), Ali Khafeef (1965) (361), Mohammad al Bahy (351), Sanous (373), Roohani (372), Tahawi (77, I.441-470), Taqi Amini (556: 231-232), Sheik

Mahmud Ahmad (168:201-203), A. Mannan (132:353-360), Siddiqi (374), Shaheedi and Awad.

Some writers agree with this view so far as general insurance is concerned, but they find life insurance unacceptable as it involves gambling and uncertainty and militates against the Islamic conception of taqdir. Abu Zuhra (376; 365), Ahmad Ibrahim (1971) (357) take this stand.

The most important issue in the controversy is whether insurance involves gambling. Those who insist that it does quote the relevant definitions given by early jurists. But several writers including Zarqa (380), Ali al Khafeef (361), have pointed out the difference between insurance and gambling. Siddiqi has shown the difference between the risk taken by the gambler, which he creates for himself, and those involved in the ordinary business of life that the insurers try to meet, utilizing the law of large numbers, at a cost (374)

Most writers make a plea for a comprehensive system comprising Zakat-based social security and insurance administered by the state. Mutual insurance should be allowed in matters not covered by the state system. As regards commercial insurance it may be allowed to function in certain areas where great importance is attached to innovation and initiative (374)

As ably argued by Fanjari (1976) in a recent paper, there are separate roles for Zakat based social security and insurance organized on the basics of contributions

made by the on dividuals involved (pp. 7-8). This point is increasingly being appreciated and one tends to agree with Fanjari that the area of consensus is widening and that of controversy shrinking in respect of commercial insurance also.

2.12 Money and Banking

Baqir al Sadr (1968) has paid special attention to money and its role. Baqir and Saud conclude that the use of money as a store of value is a source of many troubles. While Baqir regards Zakat, which frustrates the desire to earn guaranteed profits by using such money, as a sufficient remedies for the troubles in the Islamic System.

Of special interest in the context of money in an Islamic economy is the contribution of Mabid al Jarhi (1976) who pleads for the creation of a "fiat means of exchange" by the state and their supply free of cost (i.e. interest) to the public. This method, adopted along with abolition of interest will raise real income.

Akram has discussed money in the international context. An "Islamic solution" to the present international monetary crisis lies in prohibiting interest, speculation, hoarding of gold and suspension of the foreign exchange market, the central banks becoming the only dealers of foreign exchange.

2.13 Banking

The Islamic evaluation of modern banking centered around the evils of the institution of interest. Very soon it developed into an exploration which bears great promise of giving modern man a new and just institution, of banking without interest.

2.13.1 Banking without Interest

The earliest references to the reorganization of banking on the basis of profit sharing rather than interest are found in Qureshi (1958), Naiem Siddiqi (419) and Mahmud Ahmad (168) in the late forties Though a small booklet of 21 pages, Muhammad Uzair's (1955) "An Outline of interest less Banking" has the distinction of being the first published work exclusively devoted to the subject by a professional economist (422). It contains the core of all the future proposals on the subject basing depositor-banker and banker-businessmen relations on mudarabah, which is defined correctly.

Ahmad Irshad's work (400) is also devoted exclusively to the subject and contains useful suggestions on the creation of reserve funds to absorb losses. It discusses Industrial Development banks, Building Corporation and consumption loans.

Abdul Hadi Ghanameh's (1968) paper on the subject (392) takes a line different from the one along which further thinking on the subject has developed. He

relies on issue of common stock for long –term financing and the use of mutual funds for short term financing.

A mature and comprehensive model of interest-free banking has resulted from works appearing in the late sixties by the late Dr. Abdullah al Araby (1967) (384), Siddiqi (417), Baqil al Sadr(387) and Najjar(411).Followed by the Egyptian study in 1972 and the deliberation at the Karachi Conference of the Finance Ministers of the Islamic Countries in 1970, they lead to the adoption of the charter of the Islamic Development Bank in 1974, which is the first major institution of its kind in history. In between we have the "Kuwaiti Investment House" project (405) and some periodical literature contributed by Shalbi51 (415), Mannan (407), Muhammad Uzair (420; 421) and Ibrahim Dasuqi Abaza (1972) (381).

More contribution s have been made during the early seventies, including fairly comprehensive studies by Gharib al Gammal (1972) (391) and Mustafa Abdullah al Hamshari (1955) (396) besides the papers presented at the Makka Conference on Islamic Economics.

Siddiqi is mainly concerned with the economics of the juristic issues in a separate work (249). He has full length discussion on the creation and control of credit, consumer finance and finance for the government and, provision of short-term interest-free loans to business. He introduces certain financial papers to replace bonds and securities. His main contribution lies in a number of novel suggestions relating to central banking.

Siddiqi suggests the use of "shares" issued by the government for financing public sector enterprises as a means of open market operations by the central banks (417:123-129). Loan Certificates of various denominations and different maturites, to be issued by the government, are suggested as a means of providing short term finance for it.

The Egyptian study on the Establishment of the Islamic Banking System envisages a Zakat Fund and a "local and public Islamic fund"' besides organizing the normal banking functions on the basis of mudarabah of. Uzair thinks the annual rate of return in an enterprise can be applied for calculating the returns on advances made for a period of one to three months. Alternatively we can try to determine the specific rate of return on the funds advanced. But it may not be possible to do so in many cases for short time loans for less than a month, Uzair suggests "service charges" on a per transaction basis. The problem of bad debts is solved by means of Co-operative Insurance to which "borrowers contribute a certain sum of money to cover the possible risk.

Local banks may carry out direct investments besides advancing capital on basis of mudarbah. The Egyptian study also spells out the salient features of central banking and international banking.

2.13.2 The Islamic Development Bank

The purpose of the bank which was established in Jiddah is

1. To foster economic development and social progress of member countries and Muslim Communities individually as well as jointly in accordance with the principles of the Shari'ah (389: Article 1).

2. It will participate in equity capital of productive projects and enterprises in member countries

3. Invest in economic and social infrastructure in member countries.

4. Make loans to the private and public sectors for the financing of productive projects.

5. Establish and operate special fund for specific purposes including a fund for assistance to Muslim communities in non member countries (article 2, i-vii).

6. It will also operate Trust Funds accept deposits and raise funds in any other manner

7. It will provide technical assistance to member countries and assist in promotion of foreign trade, especially in capital goods, among member countries.

Studies in Islamic Economics (1976) it intends to co-operate with all bodies, institutions and organizations having similar purposes, in pursuance of international economic co-operation. The function of the bank shall be "to undertake research for enabling the economic. Financial and banking activities in Muslim countries to conform to Shari'ah (Article 2, xii).

The authorized capital stock of the Bank will be two thousand million Islamic Dinars…" (Article 4, 6), one Islamic Dinar having the value of one special Drawing Right of the IMF. The establishment of the IDB has been followed by a few more Islamic Banks at Dubai (386), Cairo and Khartoum. The Dubai Islamic Bank established in 1975 has successfully completed the first year of its operation. It has mostly gone into real estate business and construction projects. No reports are available on the one established at Cairo in 1976 and its counterpart at Khartoum. The Philippines Amanah Bank has also been working without interest as a subsidiary of the Central Bank of the Philippines which, as the custodian of its reserves, earmarks the interest for a special fund for Muslim welfare.

2.14 Industrial Relations, Labour and Population Policy

The who have paid special attention to labor and industrial relations emphasis dignity of labour in Islam, the religious significance of good, honest work, and the labour's right to a decent wage commensurate with the average standards of living in the society. There is great emphasis on co-operation between labour and enterprise and on mutual consultation as a mode of decision making. Yusuddin(1950) (165:365-388), Gamaluddin (1967) (425:426) are some of the writers sharing this emphasis.

Qureshi adopted the Marxian approach Shafi Malik too regard Qureshi to be vague and confused (435:90). Examining the notion of "Just wages" Mohammed

Akram finds economic rationale dubious and suggests another model in which the wage rate is linked with the profits of the firm.

2.14.1 Population Policy.

Population control through family planning has been one of the most controversial subjects in the literature. The permission or otherwise of birth control by individuals in certain circumstances, in the light of the Qur'an and the sunnah, though relevant for this controversy, is not the matter that concerns us here. From the viewpoint of Islamic Economics we are interested mainly in two points. Does there exist an economic base for population control? And if it does, is family planning permitted by Islam, as a means to this end? It is only on these points that we will record the various opinions below.

According to Mawdudi the only solution Islam presents for the problem of increasing world population is "augmentation and full utilization of the resources of His bounty that God has created and a perpetual effort at discovering hidden resources".

The discussion on population control emerges from the scarcity Lionel Robinson's definition of Economics. According to Robinson economics is a science which studies human behaviour as a relationship between ends and scarce means which have alternative uses. The definition is based on two points which are scarcity of resources and the never ending needs. But in reality former is a myth. The survey

conducted by UNO in 2006 shows that there are enough resources for 20,000 million people on earth. We have only 6000 million people on earth residing now. The later point never ending needs is also incorrect as the desire and greed of the man is unlimited but the need is countable and controllable (source-Nabeed Kaltakkath (2007) India.).

The real solution lies in improving economic and cultural resources and increasing production (454:201). Similar views have been expressed by Sheik Abu Zuhra who opposed population control through family planning on religious grounds (448:449)

The International Planned Parenthood Federation organized a conference on this issue in December 1971 at Rabat, of which the complete proceedings are now available in two volumes covering 1000 pages (452). Most of the participants considered population control through family planning as lawful in Islam and many regarded it as having become a necessity under the present circumstances.

2.15 Growth and Development

That one of the main objectives of modern Islamic states will be to achieve rapid economic development (221, II: 123-141) is a point stressed by all recent writings on the subject. What, then, is the strategy of economic development in the Economic system of Islam? Some writers, including Akram (483) and Fanjari (477;

478) lay the main emphasis on the transformation of man, and the ethos of an Islamic society.

Abaza (473) like Fanjari (477) sees a great role for Islam in economic development as it regards developmental efforts to be jihad. Once that idea catches on we can except big results. Tahawi also thinks that invoking the Islamic injections in the context of development efforts will prove to be the most effective way of generating a powerful movement for economic development among the Muslim masses (77, II:32)

According to Abaza (473:1127) the Shari,ah calls for interaction and co-ordination between production and distribution in the framework of comprehensive economic planning. Priority be given to directing maximum efforts towards increasing production. Distribution can take priority when the fruits of these are available. It is not the distribution of a static quantity but that of a dynamic and growing one that is visualized by Islam.

Economic development is an Islamic society has to be a co-operative affair (475:96-113). He envisages significant role for planning in economic development in Islam.

Faridi refutes the view that Islamic values are inimical to economic progress and points out that "the present acquiescence in established institutions and practices has been borne of internal political organizations, colonialism and other vested

interests. Islam has little to do with it. Kalim Siddiqi (1974) Islamic development plan regards the "socialization of surplus value".

Economic development in an Islamic framework has recently attracted several writers including Khurshid and Siddiqi. Ahmad notes the "crisis and revolution" through which development Economics is presently passing. Siddiqi regards increasing in production, distributive justice, environmental balance and improvement in the quality of life in the cultural sense as the four necessary dimensions of development in an Islamic frame work.

2.16 Literature on Islamic critique of contemporary Economic theories and systems

Criticism and Capitalism of Communication dates back quite early in literature on Islamic Economics. It started during the twenties and the thirties and it was largely the challenge of these alien economic philosophies which provided the impetus for the first works on the subject that appeared during the fourth decade of this century.

Both laissez faire capitalism and Marxian socialism have been subjected to serve criticism. This criticism is generally based on the end product of these systems, in terms of injustice, human suffering and loss of individual freedom. But the philosophical and theoretical bases of the two systems have also been examined and refuted. The philosophy of Natural law, Individualism, Utilitarianism and the view

that pursuits of self-interest by individual's results in ensuring the social good have all been rejected as baseless. Similarly the Labour Theory of Value, the view that forces of production determine relations of production which determine "the superstructure of values" and the Marxian theory of state have also been criticized and rejected. The two systems have been characterized as two extreme and unbalanced approaches to solving man's economic problem and Islam has been projected as the Middle Way assimilating the good points in both the systems and free from the imbalances from which they suffer. The great poet of Islam Muhammad Iqbal (d.1938) had already popularized this approach long before scholars and journalists took up the subject.

2.16.1 Capitalism

Mawdudi (607:26-51) mentions private property, freedom of enterprise, profit motive as the sole incentive, competition, discrimination between the rights of the employees and those of the employer, reliance on natural forces or growth and the principles of non-intervention by the state as the basic tenets of modern capitalism. He reviews the reforms introduced in capitalistic countries allowing an active role for the state and a better deal for labour. Despite these changes, large-scale unemployment and the existence of unsatisfied needs when production resources lie unutilized, the occurrence of trade cycles and the domination of society by usurious financiers continue today (607:100-106)

Mahmud Ahmad (1972) rejects capitalism's claim of being a self-adjusting process leading to maximum satisfaction of human wants, by pointing out the chaos it has led to. Economic crises are sufficient to refute such a claim (168: 4-17). Quoting Halm, A. Mannan (132:37-38) criticizes capitalism due to its failure in maintaining full employment and ensuring free competition.

The main weakness of capitalism according to Baqir is its failure on the distribution front. Mabid (1974),Mahmud (624) and Chawdhiri (620) make the additional point that it is through equitable distribution of the social product that welfare and satisfaction can be ensured and the size of the cake is not always relevant in this context. Every increase in the size of the cake in the capitalist system decreases human welfare and satisfaction as it increases the gap between the rich and the poor.

A strong condemnation of capitalism comes from Syed qutb (500) who finds it to be thoroughly inhuman and un-Islamic.

2.16.2 Theories of Interest

While the main target of attack have been the absolute conception of individual ownership rights and the unrestrained nature of freedom of enterprise in capitalism and the cut-throat competition, the inevitable rise of monopoly capitalism, exploitation of labor and emergence of imperialism, the most criticized institution is interest which is regarded as the source of many evils in the system.

2.16.3 Speculation and Forward Transaction

Another institution of capitalist economy severely criticized by Islamic economist is speculation. Many writers have briefly referred to this institution and have noted that Islam does not permit it.

Maulana Muhammad Taqi Amini, in a detailed juridical discussion on speculation and stock exchange transaction, declared purchase and sale on the stock exchange to be illegal (556:118-155). Qureshi had also characterized speculation to be unlawful in Islam. He considers trade cycles to be the result of brisk activity of foreign transaction (526:101-102). Naseer A. Sheikh (154:128-135) regards speculation to be anti social. He examines the arguments given in defense of forward trading and finds them to be unconvincing. A great harm done by speculation is that "money that ought to have been invested in industry and commerce finds its way into the speculative market where it is feeding disguised and parasitical workers like brokers and shrewd operators" (154:132).A. Mannan (132:195-197) thinks that "in so far as speculation renders social service by helping production and controlling sudden fluctuation of prices it is in conformity with spirit of Islam".

Such speculative practices, as well as forward transaction, were condemned in Islamic Economics. Kahf notes (612: 75-76) that Islamic economists disapproval of speculation is based on two reasons. Firstly it is considered as a kind of gambling, and secondly, it involves a sale of what one does not own. Discussing speculation in the context of international monetary crises Akram notes that it is not generally

acknowledged "that until speculation is retired, stability for the world economy would remain as illusion".

2.16.4 Lottery

Another modern institution attacked by our scholars is the system of lotteries. While the ulema giving their opinion on the subject have unanimously declared it to be unlawful on account of gambling, and have indicated the economic and social evils consequent upon the adoption of this method.

2.16.5 Socialism and Communism

Exploitation of man by man cannot be eliminated by changing the hands that control the means of exploitation. The only way to achieve this end is a moral reorientation of the individuals which makes them servants of society and workers for the social good. This is what Islam does by relating man to God and making him live in accordance with restraint.

Masud Alam Nadvi (1949) regards the undue emphasis on distribution and the move to abolish private property to be mere reactions to the evils of capitalism. Man does not have to opt for such an extreme solution as the Middle Path shown by Islam is sufficient to ensure the elimination of these evils and secure the legitimate ends of socialism.

Siddiqi examines and rejects the arguments in favour of socialization of all means of production (221;1;93-118) and concludes that individual ownership is a necessary condition for democracy and spiritual and moral growth (221,1; 119-124). A balanced approach would accommodate individual ownership under social supervision as well as socialization whenever necessary.

Mirza Muhammed Hussain (1973) condemns socialistic doctrines as they ferment class war (580). Abdul Hameed Siddiqi (181) refuses the Marxian theories and finds that communism has created more than it has solved.

2.16.6 Other Systems

Besides Capitalism, Socialism, and Communism, Islamic writers have also criticized State Socialism, Fascism, and Nascism (1969) (607:84-95; 168:136-168; 132; 53-60). These systems were reactions to the other systems, and they achieved very little, at great cost to humanity.

2.17 Literature Review on Development of Economic Analysis in the Islamic Framework

As the number of trained economists taking up our subject increases analytical approach to the issues under discussion gains in strength. The generation represented by Dr. Anwar Iqbal Qureshi and Sheikh Mahmud Ahmad is followed by a number of younger economists like Khurshid Ahmad, Monzer Kahf, Abu sulaiman,

Muhammed Sakr, Anas Zarqa, Faridi, Chapra, Abdul, Mannan, Musaudul Alam Chawdhri, Uzair, Mohammad Akram and Siddiqi, who go further and deeper into the analysis of abolition of interest, Zakat and mudarabah and analyse the behaviour of economic units under the influence of Islamic teachings. Though most of these attempts are still rudimentary, they indicate uncharted explorations which might lead to new insights and better policy prescriptions. It is the promise and not the performance that persuades us to pay closer attention to the contributions relevant for this section. This we do under the following heads:

2.17.1 Consumption

According to Siddiqi the consumer "must, first of all, be satisfied that he is living up to the Islamic standards. To get this satisfaction he can forgo any satisfaction in the economic or utilitarian sense of the term" (619:89). Despite this modification which introduces non-temporal, on-individualistic elements in the objectives of the consumer, these writers still find the principle of rationality applicable. As Siddiqi puts it Islamic rationality implies "orientation of action towards maximal conformity with the Islamic norms" (619:90). 1973 proceeds to affirm, on the basis of this point, the validity of the maximization proposition in the context of consumer behaviour in Islam.

Kahf (1972) has sought to present a model of household decision assuming an Islamic system with Zakat, replacement of interest by profit sharing (qirad) and of competition by co-operation, where economic units maximize utility of profit(615).

He describes the behaviour of the consumer as maximization of utility subject to two constraints, the size of income and a desire to maintain wealth. Abolition of interest encourages current consumption at the expense of deferred consumption but Zakat urges a higher savings ratio. It also raises the aggregate consumption by redistributing wealth in favour of classes having a higher propensity to consume. The combined effect of Zakat and non-interest is called the "consumption effect" (615:22). A resolution of these conflicting "effects" takes place by the direct linkage between savings and earning (profits) through investment on the basis of Qirad(profit sharing) that the abolition of interest ensures in the system. This leads Kahf to the most important conclusion of his brilliant paper: "saving is positively related to investment opportunities and expectations. This relationship implies that at times of declining investment expectations saving will decline and consumption will rise, this in turn increases aggregate demand and raises business expectation"(615:26).

2.17.2 Production

Siddiqi (1971) summarises the main aspects of business motivation in Islamic Economics as under:

1. Full compliance with the Islamic idea of justice.

2. An urge to serve the society which makes the entrepreneur take the welfare of other into consideration, while he makes his entrepreneurial decisions.

3. Profit maximization within the limits set by the operation of the above principles.

The last point is seen to imply that:

1. Producers would not be maximizing their profit if, and when, they feel that by lowering their profit margins they can further the good of the society by satisfying unsatisfied needs.

2. No producer, in any circumstances, shall increase his profit at the cost of explicit injury to the consumers or to his competitors.

3. Producers will generally be content with satisfactory profits.

He tries to define "satisfactory profits" with reference to an upper limit permitted by the circumstances (without violating the legally-binding part of the Islamic code of conduct) and a lower limit affording the entrepreneur a decent living and a surplus to average out the losses.

2.17.3 Factors of Production

It is interesting to note that Islamic economists have given different answers to the question: what are the factors of production? Mawdudi endorses the traditional list: land, labour, capital and organisations and finds in justification in the Islamic law relating to profit sharing (mudarabah).

Abu Saud reduces the list to three: elements of nature, good work and capital (5:54-55), submitting labour and organisation under one category. He views capital as resulting from the operation of human labour on elements of nature. Baqir notes these three factors as they are so characterized by Political Economy but remarks that labour (including organization) is not material wealth subject to ownership but the

human element in production. Capital results from the operations of this factor. Hence nature is the chief source of production (171:396-397). A. Mannan also proceeds on the basis of this tripartite categorization f the factors of production.

Tahawi (77, 1:277) includes land and capital in "wealth" so that there remain only two factors of production "wealth" and labour, which includes enterprise.

Wealth granted as loan on borrowed does not become capital, says alavi (10:30-31) and Mahmud Ahmad clarifies that it is only risk capital that actually participates in production and can be characterized as productive. "Loan capital" does not do so (628).Stressing the "need to modify the conceptual framework of economics to suit the requirements of Islamic economics" Uzair says that a beginning will have to be made by redefining the factors of production. Capital as a separate factor of production does not exist but it is a part of another factor of production, namely enterprise".

2.17.4 Exchange and Determination of Prices and Profits

Baqir's analysis (171:326-328) lays the blame on the use of money as a store of value which makes exchange a means to the accumulation of wealth. This distorts the equilibrium between supply and demand. The Islamic Economics remedy lies in Zakat and the abolition of interest which will confine money to its basic role of mediating between production and consumption.

Freed of monopoly, hoarding, speculation and other un-Islamic practices the free working of the competitive forces is expected to result in prices which may be regarded as normal. This seems to be the assumption underlying the following definition of just profits given by Khurshid Ahmad and Naiem Siddiqi(126:33)

There is some disagreement among our economists regarding the nature of profit. According to Baqir, Islamic Economics does not consider "risk" to be a factor of production (171:58) and profit is not the reward of risk bearing. It devolves on present work or past labour congealed in the form of property. He disagrees with the view that the share of the supplier of capital in mudarabah contract can be regarded as a reward of uncertainty bearing (171:559). This is in sharp contrast to Siddiqi's point of view (221, 1,157-171_. Baqir explains rents also with reference to labour that originally resulted in ownership of property.

2.17.5 Profit Sharing

The rate of profit sharing is also being explored as a tool of analysis and possible instrument of fiscal policy (1972). Khaf defines Qirad (mudarabah) as "the act of transforming money assets into factors of production as a result of a joint action between the two parties". Two crucial differences between profit-share and interest are stated. Firstly, "the profit sharer has direct interest and real concern in the activity of the firm". Second "profit share is a long run phenomenon in which the preference for liquid assets is almost neglected, whereas interest is a dual phenomenon, short and long run, for which the economic thought could not provide

any serious theory to provide the term structure. …In profit share the short run changes do not interfere in the finance of investment unless through their effect on the rate of return expectations only, so that one source of long run fluctuation is eliminated ,namely variation in short run interest rest"612:62-63).

He proceeds to discuss the equilibrium rate of profit-share which should be equal to the return on partnership, i.e. on the share capital in joint stock companies (612:85-86). Traditional economic theory fails determine profits (612:82, fn.84) where as his own theory is able to do so. Turning then to the capital market he notes that "in the traditional theory this market determines the rate of interest but not but not the entrepreneurial profit, whereas by having prices are determined simultaneously" (612:85-86).

A recent contribution to the subject is a paper by Chowdhury (1974) (620) in which he shows that the only value which comes nearer to a suitable capitalization rate or acts as a reasonable substitute for the interest rate, is the rate of profit actually realized by the firm or the economy or the individual at any time during the period and process of capital formation.

2.17.6 The Role of Zakat

Zakat one of the main pillars of Islam's economic system, has attracted the attention of almost every writer on the subject, who emphasise its redistributive function as a splendid transfer system. According to Mabid Mhmud (1974) Zakat

transfers part of the wealth of the haves to the have-notes, lessening the inequality in the distribution of income and wealth, and counteracting any tendency towards concentration of wealth. As a result of this transfer there is an upward shift in the aggregate demand function because the marginal propensity to consume of those who receive the transfer payments is comparatively higher. Zakat's distributive role involves an allocative role, too, as the Zakat funds are mostly used on essential goods and services. Factors of production are thus diverted to the production of necessaries from that of luxuries on which the taxed persons might have spent these amounts. Zakat discourages hording and accumulation of idle wealth. It tries to put the waiting resources back into economic activity as increased capacity, through the investment of such wealth, or as increased demand for consumption.

2.18 Interest and Abolition

2.18.1 Rationale Prohibition

The main reason why Interest is abolished under Islamic Economic system that it is oppression (zulm) involving exploitation. The second reason is that it transfers wealth from the poor to the rich, increasing the inequality in the distribution of wealth. A third reason is that it creates an idle class of people who receive their income from accumulated wealth. The society is deprived of the labour and enterprise of these people. Such a way of life is also harmful for their personalities.

Mawdudi has pointed out that a basic imbalance is caused between production and consumption by the phenomenon of interest. This happens in two ways. Firstly, interest on consumption loans transfers part of the purchasing power from a group of people with high propensity to consume to a group with law propensity to consume. This latter group mostly reinvests its income from the interest which means that the decrease in consumption demand is accompanied by an increase in production. Secondly, interest on productive loans raises the cost of production, hence the prices of consumption goods. Once again the amount taxed away from the people, in the form of higher prices falls in the hands of a class with a lower than average propensity to consume.

This imbalance is seen as the source of many evils such as stagnation and depression, monopoly and ultimately imperialism (521:85-87).

2.18.2 Interest, Savings and Investment

This brings us to the impact of the abolition of interest on savings and investment and on the level of economic activity and allocation of resources in the economy. Many writers have dispelled the doubt that abolition of interest will decrease the propensity to save. Quoting Keynes they argue that savings are a function of income and earning interest is only a minor motive of savings. In the absence of interest the possibility of earnings profits on common stock or through mudarabah contract will serve the same purpose. Moreover, the bulk of the savings in a developed economy arise from institutional sources.

2.18.3 Abolition of Interest and Demand for Consumption Loans

Hasanuzzaman (1964) (629:147-164) examines the argument that abolition of interest will increase the demand for consumption loans, accelerating inflation and, in under-developed countries, worsening the balance of payments. He finds little functional relationship between demand for consumer credit and the rate of interest. It is "increase in income and not the rate of interest that governs the demand for loans" (629:160).

2.18.4 Interest and Trade Cycles

According to Mahmud Ahmad (1972) interest is seen as the root cause of the instability characterizing the modern economic system. Interest creates "liquidity preference" for speculative purposes and results in keeping a large part of the money supply in hoards waiting for the rate interest to rise. It encourages speculation which is the cause of instability in the system.

Analyzing in detail the role of interest in the various phases of the trade cycle, Mahmud Ahmad concludes that "the abolition of interest can abolish the crises".

2.18.5 Accounting Concept of Interest

Waqar Husaini (1971) (121:191) pleads for using an accounting concept of interest in economic planning and for project evaluation. Awsaf Ali (1970)

(114:199,264) also thinks that in an Islamic economy the accounting rate of interest must of necessity be used and it is only in the sense of abolition interest as a source of private income that the Islamic economy can function as an interest less economy. It is not entirely clear, however, why an estimated average rate of profit should not sufficient for his purpose.

2.19 Economic Thought in Islam

The advent of Islamic Economics directed the attention of scholars towards the Economic thinking of the Muslim thinkers in the past, of which the works on history of economics though had taken no notice at all,with the sole exception of a casual mention of Ibn Khaldun in Schumpeter's compendium.

Besides the economic thinking of the early Jurists and the great philosophers in the later Abbasid period, attention has been paid to such writers as Abu Yusuf, Abu Ubaid, Yahya Ibn Adam, Qudama bin Ja'far, Ibn al-Muqaffa, al-Jahiz, al-Mawardi, Ibn Hazm, Ibn Taimiyah, Ibn Qayyim, Shatibi , Dimashqi, Ibn Khaldun , Tusi, Ghazali, al-Hariri, Shah Waliallah al-Dehlavi.

2.19.1 Ibn Khaldun, Father of Economics

Ibn Khaldun (1332-14.6) as father of economics in his Prolegomena (The Muqaddimah) Abd al- Rahman lbn Muhammed Ibn Khaldun al- Hadrami of Tunis (A.D 1332-1406), commonly known as Ibn Khaldun, laid down the foundations of

different fields of knowledge. Ibn Khaldun has rightly been hailed as the greatest economists of Islam. His significant contributions to economics, however, should place him on the history of economic thought as a major forerunner if not the father, of economics, a little which has been given to Adam's Smith, whose great works were published some three hundred and seventy years after Ibn Khaldun's death. Not only did Ibn Khaldun plant the germinating seeds of classical economics, whether in production, supply, or cost, but he also pioneered in consumption, denand, and utility, the cornerstones of modern economic theory. Ezzat el-Alfit(1968). Production distribution and Exchange in Khaldun's writings PhD thesis. University Minnesote 1968. His work on Ibn Khaldun, The Muquddinal, An indroduch to history. V.I handon P.481 68.

Joseph A.Schumpeter discovered Ibn Khaldun's writing only a few months before his death, Joseph J.Spengler, (Economic thought of Islam; Ibn Khaldun-Vol-VI,64:268-306) and major western economists trace the theory of value to Adam Smith and David Ricardo for the paradox of value. It was Ibn Khaldun, a believer in the free market economy, who first introduces the labor theory of value without the extensions of Karl Marx 69.

According to Ibn Khaldun, labor is the source of value. He gave a detailed account of his labor theory of value, presenting it for the first time in history. 370 years before Adam Smith explained it (Rosenttle 1958). Khaldun's contribution was later picked up by David Hume in his Political Discourses, published in 1752. Adam Smith's major work published in AD 1776 declared that labor is the real measure of

the exchangeable value of all communities. If his punage is carefully analyzed, one can find it's seed in Ibn Khaldun's Prolegomena the Muqaddimal. According to him labor is the source of value. It is necessary for all earnings and capital accumulation (muqaddimah).

It was also Ibn Khaldun, long before Adam Smith, who made a strong case for a free economy and for freedom of choice (Nash at Mohammed Ali (1944) PhD thesis Cairo University, Malaba Dar-al Kutub al- Misiriyya) 70.

In addition to his original contribution to the economics of labor, Ibn Khaldun introduced and ingeniously analyzed the interplay of several tools of economic analysis; such is demand, supply, prices and profits. Al –Tahawi, Ibrahim Islamic Economics a school of thought and system- a corporative study (Arabic) al-Qahirah, Majma'al Buhuth –al Islamiyya2v 616,400,(A) 71.

Even if Adam Smith was not directly exposed to Ibn Khaldun's economic thoughts, the fact remains that they were the original seeds of classical economics and even modern economic theory.

Though his great sense and knowledge in Economic ideals Ibn Khaldun used an insightful empirical investigation to analyze and produce original economic thought. He left a wealth of contributions for the first time in history in the field of economics. His theory of capital accumulation and its relationship to the rise and fall of dynasties, dynamics of demand , supply, prices, and profits; his treatment of the

subjects of money and the role of governments; his remarkable theory of taxation, and other economic subjects. His unprecedented contributions to the overall field of economics should make him, Ibn Khaldun, the father of economics 72.

2.19.2 Ibn Taymiya (1262-1328)

Ibn Taymiya's economic views have been discussed by Muhammad al-Mubarak (1979), Sherwani (1980) Ilyas Ahmad (1969) Khahf (1970) and Siddiqi (1985).

Kahf discusses his notion of "price of the equivalent" and the complementery concept of "fair profit". Ibn Taimiya wanted to investigate what the price would be if there were no imperfections in the market. He held that the price of labor was determined in the same way as the other prices. Siddiqi has discussed Ibn Taimiya's view on price control at some length.

Sherwani (1965) focuses his attention of Ibn Taimiya's views on the concept of ownership in Islam, emphasizing the right of the state to abridge or abrogate this right in certain circumstances.

2.19.3 Abu Yusuf (731-7980

Abu Yusuf's main subject was taxation and the public finance and economic responsibilities of the state. His contribution lies in demonstrating the superiority of

proportional taxation over the system of fixed levy on land, both from the viewpoint of revenue and equity. In his discussion on he also refers to the other canons of taxation: capacity to pay, a consideration for the convenience of assesses in fixing the time of collection and its mode, and centralization of decision making in tax administration.

2.19.4 Nasirudin Tusi (1201-1274)

Tusi's contribution has been discussed by Rifa't (1980). Tusi discussed the revenue and expenditure of the house hold as well as those of the ruler. He emphasized saving and warned against extravagance and expenditure on unproductive assets such as jewellery and uncultivable land.

2.19.5 Shah Waliullah (1702-1763)

A resume of Shah Waliullah's broad sweep on the subject has been given by Tufail Ahmad Qureshi. He regarded economic well –being to be a prerequisite of a good life and proceeded to discuss needs, ownership, means of production, co-operation, distribution and consumption with remarkable insight.

CHAPTER – III

THEORETICAL FRAME WORK

CHAPTER-III

THEORETICAL FRAMEWORK

This chapter has been divided into four sections. Section one deals with Foundations of Islamic Economic Theory. Section two deals with Methodological Approach to Islamic Economics, Its Philosophy, Theoretical Construction and Applicability. Section three deals with Fiqh Foundations of the Theory of Islamic Economics, Section Four deals with analytical tools of Islamic Economics: A Modified Marginalist Approach, Section Five deals with portfolio choice and asset pricing in Islamic Economics.

Section I

3.1 Foundations of Islamic Economic Theory

The foundation of Islamic Economic Theory is derived from the basic source of knowledge on Qur'an, Sunnah (Al Hadees), Ijmah and Quiyas. The last two are commonly known as Ijithihad.

3.1.1Qur'an:- Qur'an contains general and broad guidelines for the conduct of human beings. On economic matters too, it provides a set of fundamental principles to guide human conduct. Waqar Hussains (1920) in 'Economics in the Qur'an' has

reported over 1400 verses on economics out of 6666 verses in the Qur'an. Consistent with these principles, and guide lines the superstructure of the economy has to be built in each age, according to the particular circumstances of each age. The injuctions of the Qur'an are immutable and applicable to all societies and are valid for all times to come. Qur'an is thus the primary source of Islamic Economics.

3.1.2 Sunnah of the Prophet Tradition (Peace be upon Him):- Sunnah is the speach, action and tacit approval of the prophet ((Peace be upon Him) as recorded in the books of traditions have analyzed classified and interpreted the whole matrial. It covers the entire orbit of life, including the economic aspect. Knowledge of the traditions containing injuctions about economic activities is an essential part of the training of Muslim economists.

Qur'an directs to follow the exemplary conduct of the prophet. The Qur'an says "And whatsoever the apostle give to you, take and whatsoever he forbade to you, refrair from."

3.1.3 Ijmah (The consensus of Opinion):- It refers to the Consensus either of the community or of the Muslim jurists. It is a principle of new legal content that emerge as a result of exercising reason and logic in the fact of rapidly expanding society and human activity such as the early Islamic one, begins with the companions and extended to subsequent generations. Then exist a vast literature developed by Muslim Journist over the last 14 centauries. It deals with the formalizations of the

injuctions of the Qur'an and the traditions of the prophet. The jurist have been elaborating and deriving inferences about economic questions as well.

The prophet is reported to say "My people shall never agree on the error". It means that those people who are men of understanding shall only agree on the right way and truth.

3.1.4 The Qiyas :- All the School of jurisprudence (Shafi, Hanafi, Hambali, Maliki) agreed that, in matters which have not been provided to by a Qur'an or sunnah text, not determined by a consensus of opinion the law may be deduced from what has been laid down by any of these three authorities by the use of Qiyas (Abdul Rahman, Mh. P. 138) It means measuring by comparing with or judging by comparing with a thing (Muhammed Ali, the religion of Islam page 104)

Knowledge on the fundamental sources of Islamic Economic Theory (Qur'an, Hadhis, Ijmah, Qiyas) is the nucleus of Islamic Economic methodology. The nucleus contains some knowledge relevant to every discipline. Knowledge in the nucleus pertaining to economic behavior of individuals, families communities and society can be collected to form an "economic corpus" A 'corpus' is a collection of extractions from Qur'an, Hadhis, Ijmah and Qiyas relevant for a particular field of enquiry, including politics, sociology, law, business and economics. Derivation of corpuses from the nucleus is shown in figure no. 3.1

Figure No.3.1

Derivation of Corpuses from the Nucleus
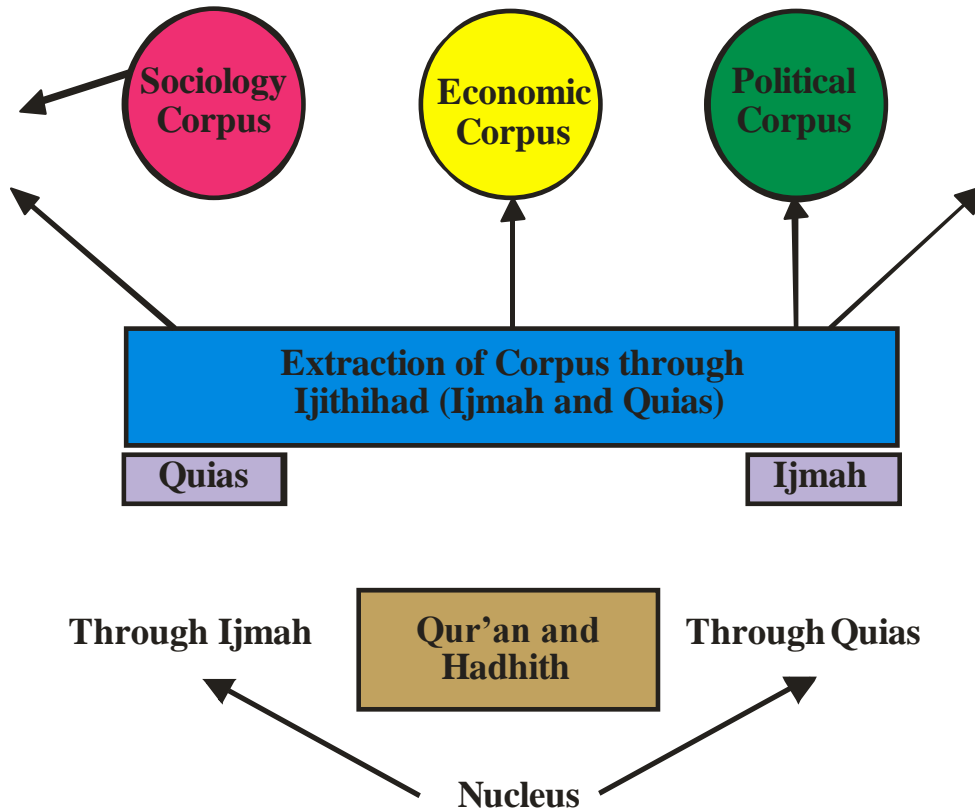
Source: Siddiqi, M.N. (1982) Recent Works on History of Economic Thought in Islam

The corpus containing Islamically valid assumption, institutions precepts and postulates related to the economic behavior of individuals and communities is extracted from nucleus. Islamic economists are required to use their intellectual, analytical and empirical skills to develop knowledge around the economic corpus without violating the conditions in the nucleus.

The economists may revive the highly sophisticated methodology of traditional scholars such as, Shatibi (R), Ibin - Kalden (R), Abu Hamid Al Gazali (R) ormay select promising western economic models and theories and use them within

an Islamic paradiagram. The characteristics of the components must be compared with the elements of the economic corpus and the nucleus. The components of the selected theory may be classified into three categories. Islamic, neutral and unislamic. The components conforming to the principles, hypothesis and assumption contained in the corpus are classified as Islamic.
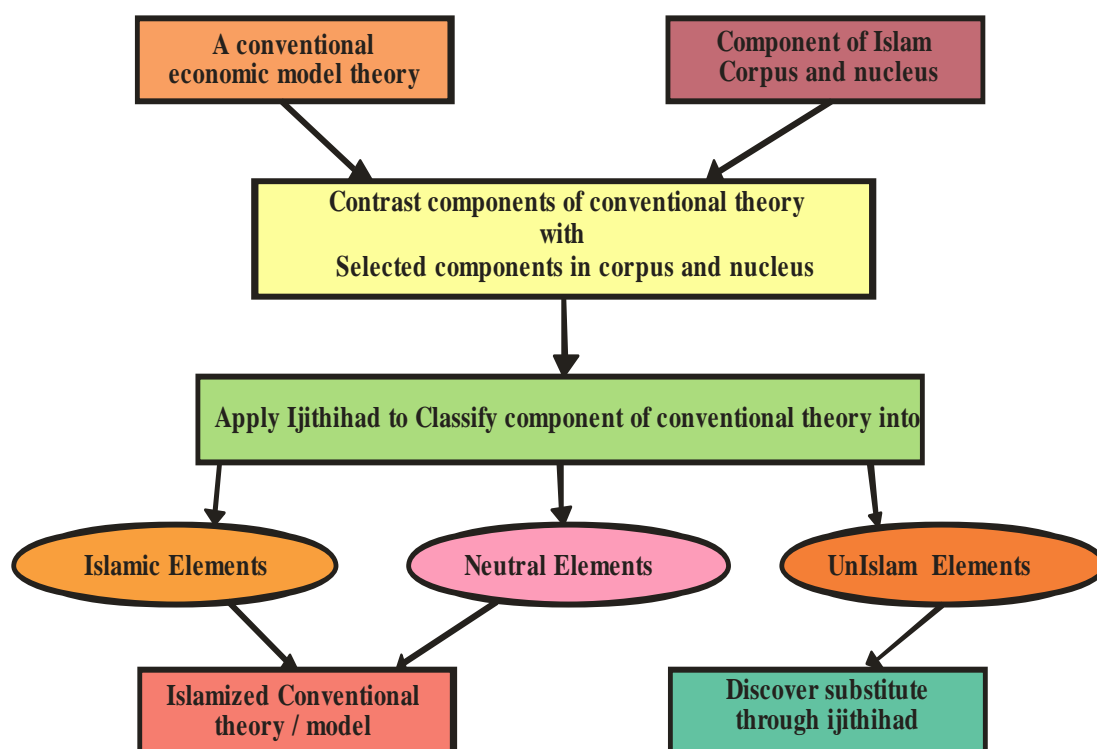
Those having universal application are considered as neutral vis a vis Islamic thought. The neutral components can be validated for inclusion in Islamic Economic Theory. Components which conflict with Islamic thought must be discarded because they are UN Islamic in character. The two parts Islamic and neutral must be put together into a complete model, filling the gaps due to unislamic theory by replacing with the new element on the basis of ijithihad. For eg:- If interest is discarded from a modern economic theory, a valid substitute such as profit- Share, can be plugged in as a substitute for interest to complete the model. This is renovated model may be implemented in an Islamic Economic System. This approach to the Islamization is illustrated in figure no. 3.2

In nutshell, Islamization represents a combination of

(1)   A nucleus including an appropriate corpus from the Qur'an and Alhadith for each discipline

(2)   The accommodation of functionally Islamic as well as neutral assumptions, postulates and principles from the existing non Islamic literature and

(3)   The addition of new thoughts consistent with the corpus developed on the basis of Ijithihad

Figure No.3.2

Approach to the Islamization

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┌─────────────────────┐              ┌─────────────────────┐
│   A conventional     │              │  Component of Islam  │
│ economic model theory│              │  Corpus and nucleus  │
└─────────────────────┘              └─────────────────────┘
            │                                    │
            └──────────────┐      ┌──────────────┘
                           ▼      ▼
        ┌──────────────────────────────────────────┐
        │  Contrast components of conventional theory │
        │                   with                      │
        │  Selected components in corpus and nucleus  │
        └──────────────────────────────────────────┘
                           │
                           ▼
   ┌────────────────────────────────────────────────────────┐
   │ Apply Ijithihad to Classify component of conventional theory into │
   └────────────────────────────────────────────────────────┘
       │                       │                        │
       ▼                       ▼                        ▼
 ╭──────────────╮      ╭──────────────╮        ╭──────────────────╮
 │Islamic Elements│     │Neutral Elements│       │ UnIslam  Elements│
 ╰──────────────╯      ╰──────────────╯        ╰──────────────────╯
        │                    │                          │
        ▼────────┐   ┌───────┘                          ▼
   ┌──────────────────────┐              ┌──────────────────────┐
   │ Islamized Conventional│              │  Discover substitute  │
   │     theory / model    │              │   through ijithihad   │
   └──────────────────────┘              └──────────────────────┘
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Source: Siddiqi, M.N. (1982) Recent Works on History of Economic Thought in Islam

Various aspects of the forgoing approach for the theoretical frame work of Islamic Economic can be studied from the explanations of Abdul Hamid Abu Sulaiman and Ali A Yousuf.

3.2 Secondary Sources

There are two secondary Sources in Islamic Economic

a) History of Muslim

b) Real Life Data

a) History of the Muslim: - It contains much scattered material about the economic life of the peoples. These parts of the history serve as useful precedents for the present day economy.

b) Real life data: - This is the main area of operation for a Muslim economist. He studies the real life conditions and behaviour of the people and uses the available data for analysis and formulation of policies. The real life data here refers to the objective conditions prevailing in an economy.

3.3 Foundations of Islamic Economic Theory under Holistic Economic Approach

The Islamic Economists developed their analysis by employing reason and real life data to the divinely ordained content of Islam. Islamic Economy cannot be conceived outside this basic frame work. Islamic Economic conceives human behaviour in its totality. It treats human life as a compact whole which is composed of multiple - mutually reinforcing subsystems. It affects the human behaviour only from the periphery. The hardcore of the system is composed of the basic believes in

the unity of God, in the apostle hood of Muhammad (Peace be upon Him) and man's accountability on the Day of Judgment. These beliefs are the foundation of each sub system (Xiauddin Sardar 1976 and Munawar Ahamed Anees 1975 Lahore)

The hard core radiates the fundamental principles of behavior and moulds human attitude in all the sub systems. Between themselves the subsystems are opened and interacted. But each sub system also has a composition of its own which aims at the achievement of 'falah'. The economic sub systems consist of legal foundations of justice (adl) and ethical foundation of moderation (iqtisad) and benevolence (Ihsan). The legal foundation ordains legal and contractual relationships. Although Islam has a mature and comprehensive legal system, yet the total area of human behaviour covered by the legal injections is rather small. A very wide area of human behaviour consists of voluntary acts. The voluntary acts are influence by consideration of moderation and benevolence. Moderation is the mother - norm and governs individual behaviour towards one's own self. Benevolence is a cluster of ethical precepts and influences inter personal relationships. Figure no. 3.3 below illustrates the holistic vision of human behaviour and the place of the economic sub - system in it.

Islamic Economic takes into account the economic behavior of man in all the context of his overall conduct. It does not restrict itself to the 'market' variables; instead, it integrates the findings of other social sciences into its subject matter.

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Figure No. 3.3

Holistic Vision of Human Behaviour
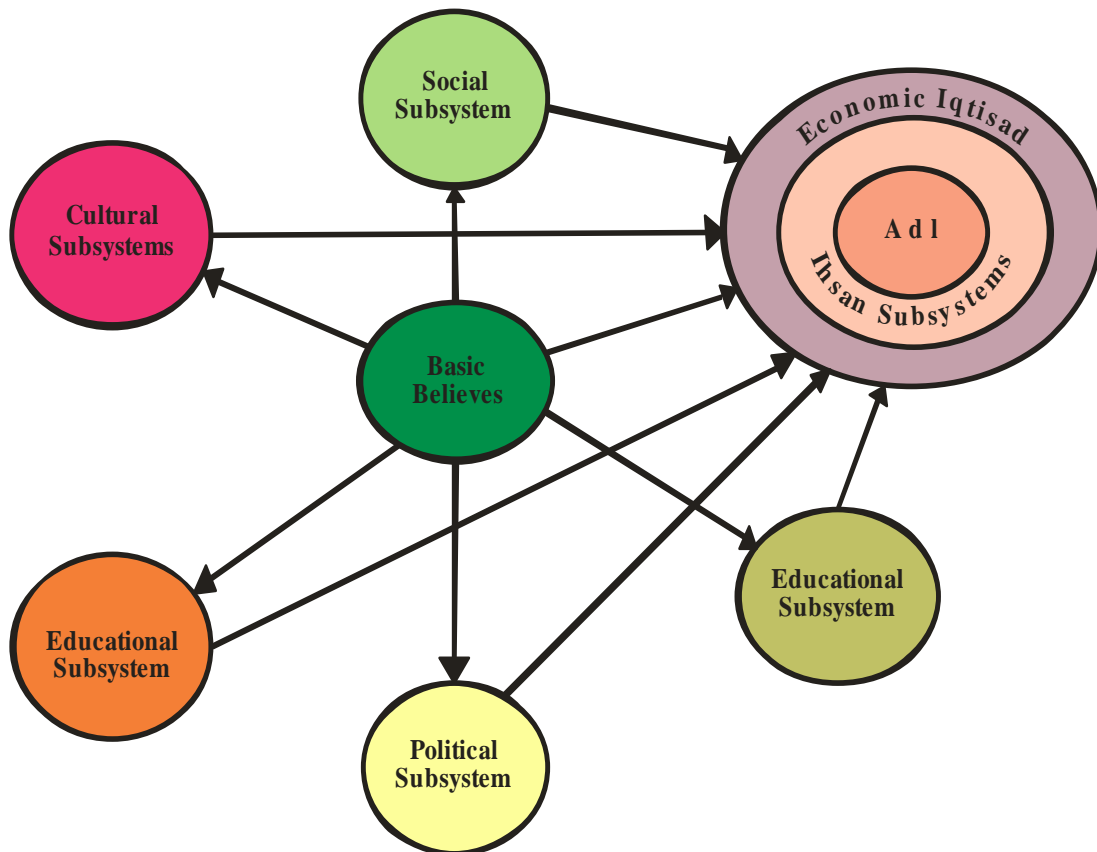
Source: Siddiqi, M.N. (1982) Recent Works on History of Economic Thought in Islam

Secondly a very high content of Islamic Economic is normative. The Islamic Economists have the obligation to discharge the Qur'anic duty of enjoying what is proper and forbidding what is improper.

Thirdly, despite being highly normative, Islamic economics has a vast positive content as well. It attempts to study the impact and reaction of various legal

injections and ethical values on the economic variables. For eg:- it may be of interest to study the effect of prohibition of interest on the level of savings, investment and employment.

Fourthly Islamic Economic can also make use of the tools of analysis developed by modern Economics, Math's, Statistics, Operation research etc.

3.4 General Theory of Islamic Economy

M. Ariff (1985) in his "Towards the Shariah Paradigm of Islamic Economics beginning of scientific revolution V. A. (2:1) PP 79.99 and Mohammed Akram Ghan. An introduction to Islamic Economic (1999) formulated a general Theory of Islamic Economics as a theory of transition to Islamic Economic. Figure No. 3.4 will illustrate the points.

Dr. Ariff is of the opinion that following the strict regulations of Shereeah, the analysis of existing public policies, and empowering the awareness of existing social realities can be framed for the formulation of new theoretical foundation in Islamic Economics by means of utilizing available social and Educational institutions. As a result we can frame new hypotheses to take the challenges of the changing scenario. This endeavor will help for the formation of Transition theories under shereath regulations which is suitable to support not only the Islamic society but the society as a whole.

Figure No. 3.4

General Theory of Islamic Economy
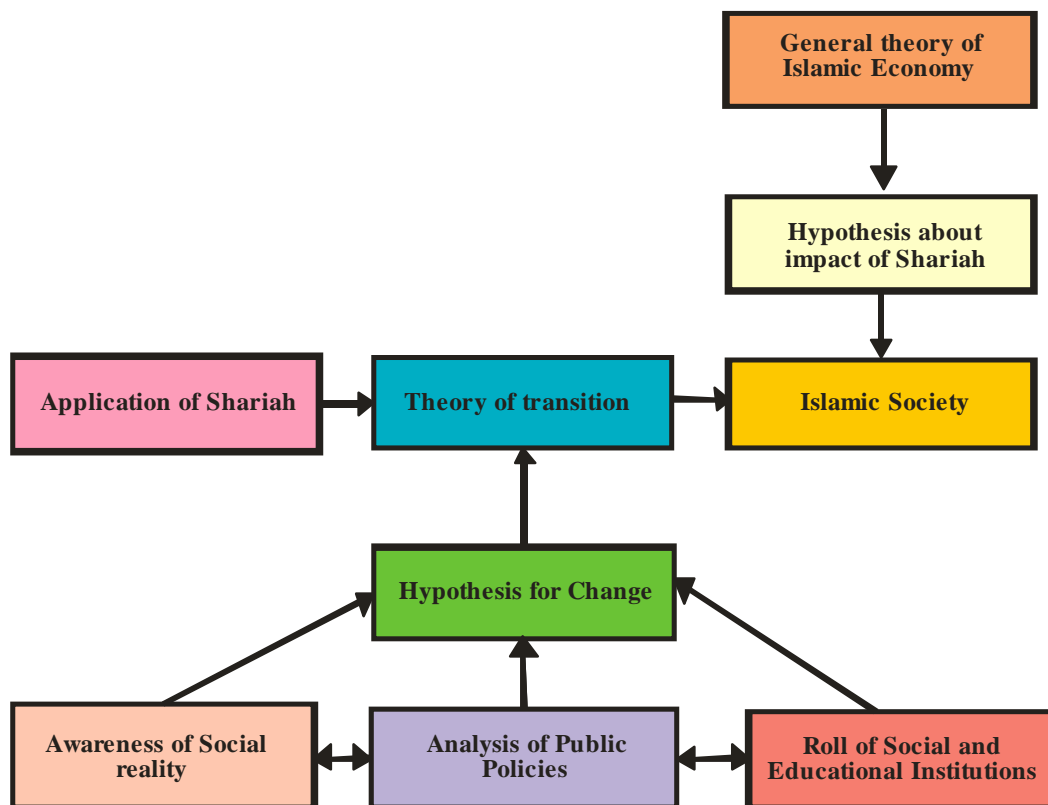
Source: Siddiqi, M.N. (1982) Recent Works on History of Economic Thought in Islam

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Section II

3.5 Methodological Approach to Islamic Economics- Its Philosophy and Applicability.

3.6 Scientific Theory Formation in Islamic Economics.

According to Ekelunt and R.B Herbert (1990), scientific theory in the field of economics (and in the other fields of science) is formed from three basic constituents:

(1) Definitions or Terminologies

(2) Postulates/Axioms/Assumptions

(3) The Hypothesis.

3.6.1 Definitions or Terminologies

It should be emphasized that the understanding of any theory, its consequences and usage will always depend on various definitions introduced by Economists having resulting characters.

a)   Mohammed Akram Ghan (1999) in his "An introduction to Islamic Economics" gives a definition which emphasize the comprehensive character of the subject based on the universal moral values of Islam. According to him "Islamic Economics is a

science aims at the study of human 'falah' achieved by organizing the resources of the earth on the basis of co-operation and participation"

The key concepts in the above definition are the following:

      a)   Falah

      b)   Resources ; and

      c)   Cooperation and Participation

a)   Falah

It is difficult to find a single equivalent for this term in the English language. The term falah has been derived from the Arabic root flh. Its verbal form aflah, yuflihu means: to thrive; to become happy; to have good luck or success; to be successful. According to Raghib at - isfahani, falah is a both-worldly concept. For the life in this world, it represents three things; baqa (survival), Ghana (freedom from want) and izz (power and honour). In the hereafter, it stands for: baqa' bila fana (eternal survival), Ghana, bila, faqr (eternal prosperity) izz, bila, dhull (everlasting glory) and ilm, bila, jahl (knowledge free of all ignorance). According to Qur'an the ultimate goal of human life should be the achievement of falah in the year after.

Although the ultimate object of Islamic economics is the achievement of falah in the life to come, but it would be reward for one's deeds during his stay in this world.

In the context of this worldly life, falah is a multi-dimensional concept. It has implications both for individual behavior (micro-level) as well as for collective behaviour (macro-level).

3.6.2 Conditions of Falah

The conditions of falah may be categorized as below:

1) Spiritual

2) Economic

3) Cultural, and

4) Political

3.6.2.1 Economic Conditions of Falah

Infaq: Infaq refers to spending on others and on the social needs of the community. This is something distinct from social alms or charity, which have been prevalent in all civilized societies. Islam has broadened the concept of charity in a number of ways. First, it has made obligatory a bare minimum of social spending (called zakath) on all those who have a surplus over and above their needs. To that extent, it is not voluntary. Second, in its broader meaning, infaq covers expenditure on one's own family as well which is not so in the case of charity. Third, Islam recognizes the right of the poor and the needy to receive a share from the wealth of the rich. The

poor do not owe any obligation, moral or social, towards those who spend something on them.

Fourth, infaq has to be purely for the sake of God who has promised reward in the hereafter. Charity in a secular society is usually done for winning social approbation rather than to seek God's pleasure. Infaq in the Islamic sense is a mechanism to nourish one's spirituality.

However in economic theory the importance of infaq is that it is a good form of transfer payment system that enables to the consumption demand of lower income group who's MPC is near to one. Consequently demand for Investment increases leading to easy capital formation and removal of depression. Zakah is part of the broader concept of infaq.

Prohibition of Interest: The Qur'an declares interest on loan capital (riba) as a hindrance to the achievement of falah. The wealthy exploited the poor and the needy. The Prophet (peace be upon him) declared all forms of interest as unlawful. He took various preventive measures as well so as to forestall the infiltration of interest into the economy in disguised forms.

The main point that has been emphasized is that interest is a potent means for perpetrating exploitation and inequity. The road to falah would remain blocked until interest is completely eliminated from the economy.

Fulfillment of Covenants and Trusts: Fulfillment of covenants and trusts is a necessary condition for falah. In its simple meaning it stands for honouring personal commitments and promises. But some scholars have placed a broader interpretation on the Qur'anic teaching of fulfilling covenants. According to them, it involves meeting all one's social and religious obligations.

One also has obligations towards the family, neighbours and the society. From this they argue that polluting the environment through industrial waste contravenes one's obligations towards the society and hence retards the social pace towards falah. Similarly, the government has the obligation to ensure welfare of the people. The society cannot achieve falah until its inhabitants fulfill these implicit covenants.

Justice: The Qur'an has pleaded for justice at a number of places. It has linked falah with the observance of justice in all affairs. The Qur'an uses the term zulm (inequity) as an antonym of justice. The Qur'an repeats that the zalim (one who perpetrates zulm) would not achieve falah. A society in which one's lawfully acquired wealth is appropriated by others without any compensation of consideration would suffer from wide inequalities. Islamic law has clearly defined the lawful means of acquiring wealth. Digression from these means would amount to zulm and would hinder the way to falah. Enterprise: God speaks of enterprise and struggle for livelihood as "seeking His bounty". Enterprise and effort to harness natural resources are an essential condition to achieve falah. The Qur'an says: "And when the prayer ends disperse freely on earth and seek to obtain (something) of God's bounty, but

remember God often, so that you might attain falah" (62:10). Thus the productive economic activity contributes to the falah of the society as well as of the individual.

In brief, falah is a multi-dimensional concept. It covers the whole life of an individual and all aspects of a society. Its different conditions reinforce and supplement each other. Establishing a socio-economic institutional framework facilitates its achievement and it is the main concept of theory formation in Islamic Economics.

3.7 Resources

The second key concept in the definition of Islamic economics is "resources" of the earth. God has created these resources for all human beings and has made man their trustee. God would like man to use these resources to achieve falah. Islamic economics studies human behaviour towards these resources and investigates those modes of their development and use which lead to falah. Since man is not the real owner of these resources he is not independent in deriving benefit from them. The resources of the earth are meant to provide livelihood to the creatures of God. Therefore, no one should block these resources, depriving his own self as well as others of their use. The overall spirit of Islam is that either one should use the resources one has comes to possess or release them for others.

The Qur'an informs us that God has created sufficient resources for His creatures. Therefore, the apparent scarcity of resources may be either due to their

improper use or imbalanced distribution. Islamic economics studies resources from the point of view of 'adequacy' rather than scarcity. Therefore, if some degree of 'scarcity' is being encountered, ways and means should be found to restore the natural state of adequacy. This could probably be achieved by broadening the productive base, improving technical know-how, re-distributing the resources or curtailing human wants. Scarcity of resources is a man-made situation and Islamic economics explores the ways and means to rectify it.

3.8 Cooperation and Participation

Islam emphasizes cooperation among human beings. Co-operation, from an Islamic viewpoint, appears more in line with the broader cosmic phenomenon of the entire universe. Nature makes a magnificent display of harmony and cooperation.

Human beings are conceived to be like the organs of a body, so that the whole body should sense pain if any organ suffers from discomfort.Islamic social norms prescribe a high level of personal sacrifice for others and cooperation among them in all economic needs.

It was this spirit of 'participation' that the Prophet (peace be upon him) tried to inculcate when he exhorted people to share their surplus food, housing, mount and land with others. He praised the tribe of Ash'ar because they used to pool their foodstuff and distribute them in times of food shortages. His decision to distribute

the funds of fay' and poll-tax among the people is also an indication of the Prophet's strong preference for 'participation' of the people in the resources.

According to Yousuf Ibrahim professor of Islamic Economic, Qatar University. Islamic Economics is science studying the guidance of human behaviour towards the use of resources for satisfy the needs of the people by means of logical production and distribution for consumption.

This definition helps the theoretical foundation of Islamic Economics in the following grounds

   a.   The resources are enough for satisfying the needs

   b.   The resources should be protected from waste

   c.   The human behaviour towards the resources should be controlled by divine injections

   d.   Only legal needs, needs that build life on earth should be satisfied

   e.   Illegal needs (desires), which destroy life on earth, should not be satisfied, they are never ending and never satisfied.

Islamic Economic system, a normative economic system, has been built up on certain fundamental Islamic philosophies. According to Qur-anic teachings real and absolute ownership of wealth belongs to the creator of the same, Almighty God Qur'an says "To Allah belongs to everything in the sky and on the earth" (2:284) Role of the man is considered as trustee who is to manage the trust i.e. wealth

according to the directions of the real owner, God Qur-an clearly states 'And spend of that where of hath made you trustees" (57:7) so man has been granted.

3.9 Postulates/Axioms/Assumptions

Postulates should reflect Sharia'h principles and values related to the economic problem. These postulates are then used as binding terms in the formation of hypotheses. Islamic economics embodies normative aspects and hence the postulates would be representing these. For example, an Islamic theory for the firm will include the following normative postulates: According to Abdel – Rahima Yousuf Ahammed of University of Alexandria Egypt in his study on Theoretical Approach to Islamic Economic (2002)

The firm must not follow any restrictive production policy or get involved in any implicit or explicit agreement with other producers in order to limit supply and influence market prices (monopoly and monopolistic practices are absolutely forbidden).

The firm must not follow any methods to affect the price indirectly by cheating on the quantity. Also, it should not lower the quality to achieve additional profits (prohibition of fraudulent behavior).

The firm shall guarantee the workers' rights according to rules prevailing in the labor market and shall not follow any monopolisist methods in purchasing its

production requirements (workers must be given their just wages rightly in time). Also concluding deals with sellers before reaching the main market is forbidden. (Sainudheen Mugdoom – Fathhul Muheen)

Now let us think of how to formulate postulates based on actual observations and empirical data. When an Islamic economic system is fully applied, actual observations should not contradict normative postulates derived from Sharia'h. This assertion, however, will only materialize in an exceptionally ideal circumstance. Especially during the period of prophet (PBUH) and the for caliphs who follow him).

At present, we ought to realize the gap between the normative aspects and the actual conditions in Islamic economics. This gap is large and if we depend on actual conditions in forming assumptions for our theory, most probably we shall find no difference between Islamic and conventional economics. Such gap may still however be justified on basis of [i]darrora\ i.e. Sharia'h necessity rule, which is presumably suitable for transition when moving from a condition where Sharia 'h is not applied, or only partially applied, to another when Sharia'h is completely in application. In this case of darrora, it is possible to reflect actual conditions as realistic assumptions along with postulates derived directly from the Islamic Sharia 'h principles and values. The theory which is based on this mixture will be only transitionally valid and has to be evolved whenever changes in economic aspects of the society take place towards "what ought to be".

3.10 Hypothesis

In the empirical method a hypothesis is formed through "enumerative induction" in which it is inferred that what is true for "a number of observed cases" that are related to a certain phenomenon is true of all such cases. A hypothesis would take into account the conditions that are surrounding the phenomenon in practice through the assumptions that are based on observations, and identify the principal factors affecting it in order to explain it. Thus a hypothesis would enable us to identify the factors that would cause certain event to happen and predict its outcome. This method can be used in formulating an Islamic economic theory only when there is an actual experience wherefrom data can be collected. For example, it is possible to collect data on Islamic banks at present and to formulate a hypothesis concerning their effect on investment in limited number of cases. Similarly, information on zakat can be collected to study its effect on income distribution or on low-income groups' consumption.

3.11 The Role of the Economic History in Research and Analysis

While theoretical analysis is an important tool of economic research, it is not the only one. There are other necessary and important tools. Ibn Khaldun in his brilliant work "The Introduction" used four major tools for analysis, with the logic of economic history topping the list. Economic history, whether recent or past, displays economic experiments whose results and dimensions become known facts. Economic

history can be used in the analytical process by reviewing the events and their sequence over the time to understand their causes and effects. Even though economic events do not repeat themselves, yet to learn their logic as to "why events happen" circumstances that accompanied them and their consequences can be very useful in explaining other events of similar nature and making some predictions on their possible effects. This is the essence of the logic of economic history.

The study of economic problems through history also reveals the relationship between these problems and the other phenomena. In this respect, Islamic economics, as a new paradigm, stands to benefit a lot from the Islamic historical experiences in the past.

Al-Maqreezi (1364-1441G) a prominent historian and a brilliant follower of Ibn-Khaldun had also given full consideration to the historical factor in analyzing the reasons of hyperinflation that he witnessed during his life in Egypt. Using historical evidences and explaining their logic he was able to discover that natural forces had caused cyclical fluctuations in agricultural crops and consequently in their prices over the long run. He then demonstrated how monopolists had always played a serious role at different times in accentuating the effects of food supply shortages by keeping high stocks in their stores and deliberately triggering further increases in prices.

A careful reading of Al-Maqreezi's contributions would show how the fact-finding process that he adopted depended immensely on detecting the historical events and explaining their logic [Yousri (2000), pp. 129-36].

3.12 Commitment to the Scientific Approach and Applicability of Islamic Economics

Successful implementation of the Islamic economic thought in practice depends on appropriate commitment to the scientific approach that we have gone through above. Economic analysis of any problem or phenomenon starts only after the basic postulates have been formed. Thinking that we can depend "directly" on Sharia'h to formulate successful economic policies is misleading and may not only lead to failure in resolving the economic problems but perhaps would further complicate them. A crisis would arise and handicap the development of Islamic economics if Islamic jurists without consulting the economists are taking diversions on the basis of Shavia'h. Scientific operation between Islamic Economics and jurists is very important in theory formation in Islamic Economics on the basis of Sharia'h regulations). The theory formation for the implementation various Islamic Economic Instruments like, interest free banking, profit − loss sharing, Zakkath system as a good redistribution system. Etc:- the jurists and Islamic Economists should come together and they have to interpret and reformulate the principles in accordance to the contemporary economic conditions and fiscal needs with in shariah frame work. A couple of examples are given below for clarification.

A distinctive feature of an Islamic bank is that it would finance projects on profit-loss sharing principle instead of interest-based loans. However, necessary research concerning different modes of equity finance, the most appropriate modes of them that suit the current economic, social, and ethical conditions as well as how

to face the competition from interest-based banking system has not been done. Consequently, different problems have been faced in using the profit-loss sharing modes of financing and most Islamic banks ended up using the short-term financing instrument of murabahah. Some quarters has criticized this financial instrument in its practical implementation (not on Sharia'h basis) as being close to interest-based financing. When Islamic bank managers face problems in applying the new financing techniques they try to solve them either by relying on their own experience (which is mainly gained in non-Islamic banking), or by seeking the advice of Islamic jurists who work in the Sharia 'h boards of these banks. This advice, however, would be given in form of juristic principles that need accurate economic interpretations in order to be operational in reality. At times, the Sharia 'h board solved some serious banking problems through new flqh devices, which could not gain consensus from Muslim jurists and have been frequently criticized by Islamic economists. Such problems would not have been confronted were all Islamic banking concepts and financing modes developed and elaborated theoretically on sound scientific bases.

3.13 Adaptability of Islamic Economics Methodology in Different Phases and Reflections on the Applicability of the New Paradigm

Siddiqi M. Nejathullah (1982) in his History of Economics through in Islam says that: Given the absence of a modern Islamic economic experience before 1970s, there was no room for the researchers to use induction. As a result, Islamic economists depended heavily on deduction. In this context, research in Islamic economics was generally normative.

It is important to appreciate that scientific development of Islamic economics in the early phase (after World War II) was in need of this deductive method. This methodology helped in exploring normative Islamic solutions to our economic problems and supported the call for an Islamic economics within a modern Islamic society.

The study of the Islamic economic experience using the inductive approach was also hampered by the lack of data on modern Islamic institutions. Available data declared in financial statements by Islamic banks is scant and sometimes difficult to get hold of. Similarly, non-governmental institutions that collect and distribute zakat in many of the Muslim countries keep their records confidential. These limitations, however, do not absolve researchers to conduct empirical work. They should conduct empirical studies based on whatever statistical data is available and rely objectively on approximate estimations for what is missing. For example some Islamic economic researchers have conducted empirical research to estimate expected zakat revenues in some localities as well as some Muslim countries. They used the inductive method but they resorted also to deduction to estimate in some of the missing facts.

It is quite important to have a long run Islamic strategy for reformation and gradual structural adjustment. This strategy should be undertaken for implementation by all concerned Muslims to push the wagon in the right direction. What concerns us is to highlight some necessary rules for research in Islamic economics that would be carried within the framework of the said strategy. Scientific commitment to these

rules would certainly help in making Islamic economic research applicable and fruitful to the Muslims.

The basic feature of the corrective strategy is its time dimension. Because it is expected to extend over a long period of time and works for gradual changes from non-Islamic to Islamic conditions the strategy need to be divided into time phases. Theoretically we can divide the time necessary to achieve the optimum conditions targeted by the strategy into various phases: Yousry, Abdul Rahiman (1999) discuss these phases under three heads 1) Darrora Phase 2) The intermediate phase 3) The structural change phase.

3.14 Darrora Phase

In Islamic flqh some very exceptional situations may arise that would compel the Muslims to deviate from normal Islamic behavior or commitments. These very exceptional situations will call for darrora, i.e. necessity, rules. The darrora traditional cases are well-defined in Islamic flqh.

The tasks of Islamic economic research in this phase are:

a)   To analyze the emergency cases which are claimed by people to be calling for the darrora rules. For this job Islamic economic researchers need to collect as many observations as possible for each case. Call for continuous consultations

with the Islamic jurists and scholars will be essential so that the conditions of darrora in economic matters can be classified within the Islamic legal framework until the phase is over.

> b) To guide the people engaged in economic activities in case of real darrora to the solutions that are "nearest" to the Islamic Sharia'h.

> c) Since darrora by Sharia 'h definition is a temporary period, and never

permanent, research must determine the "time length" of this first phase. It should be clear that darrora phase should be terminated as soon as some better situation (not necessarily the optimum condition) has been attained from the Sharia 'h standpoint.

3.15 The Intermediate Phase

The intermediate phase is a prerequisite for implementing the structural change which is needed in the final phase of reformation. The task of Islamic economic research in this stage consists of:

a. Collection of precise information and statistical data on the forces opposing the application of principles of the Islamic economy.

b. By targeting the weakest points of the opposing forces initially, methods and policies towards a gradual transformation of their economic activity from the secular patterns to the Islamic should be undertaken by researchers.

c. There is a need to seek medium term solutions for some of the economic problems from which Muslim society suffers under conventional economic systems. These intermediary or transitional solutions must be characterized by a clear account

and understanding of how a gradual transition will be carried from the behavior based on positive secular values and motives to one based on Islamic motives and values.

d. Devoting sufficient research to identify and analyze new activities that can be established on strict Islamic economic basis. These activities will be the pillars on which the structural change process will depend in the final stage. In this context, priorities should be assigned to different activities upon careful examination of their relative importance.

e. Principles of the Islamic economic system have to be publicized in the mass media and taught to students particularly at secondary and post- secondary educational institutions.

3.16 The Structural Change Phase.

This is the final phase and it begins only after successful completion of the 'intermediate phase' targets. This emphasizes the importance of Islamic economic research under non-optimum conditions. The fulfillment of complete structural change needs serious macroeconomic studies in the areas of optimum allocation of resources and fair distribution of income within the context of Sharia'h.

To conclude we can say the applicability of Islamic economics depends firstly upon adopting the right methodological procedures all the way in any theoretical contribution. Then in the next step on the researchers' efforts to minimize or eliminate the gap between theoretical work and the actual problems or needs of

their Muslim society. In this context we have to be aware of the fact that these problems and needs will be changing over the long period of time which is necessarily needed for transition from the present day's Muslim economies to Islamization. This transitional period can be divided, as suggested, into three distinctive phases. The successful application of Islamic economics will depend on exploring the particular problems of each phase and suggesting the right solutions to them from the Islamic perspective.

SECTION III

3.17 Fiqh Foundations of the Theory of Islamic Economics

According to Siddiqi (1989), the essentials of theory of Islamic economics are rooted in the Qur'an and Sunnah and the implications and implementation of these essentials are to be searched in other Islamic sources like Fiqh, Usool Fiqh and Islamic history. According to him, "a sincere commitment to Islamic beliefs and values changed everything in economics". Zarqa (1976) argues that distinct and meaningful economics is not only possible but also necessary. He not only elaborates on the positive economics statements from the Qur'an and Sunnah, but also argues that even conventional economics is not innocent of value judgements as we are often led to believe. According to him, if we replace non-Islamic values by Islamic ones, and add to the economists' stock of positive assertions, Islamic assertions, we will be able to work out a meaningful distinct science of Islamic economics.

Conventional economics, however, with its scientific approach and positive arguments has failed to solve the economic problems of humanity. As Sardar (1991) puts it, "This is because, first, neoclassical economics, being a positive discipline, does not play any active role in directing or controlling human behavior or economic events. It merely explains or rationalizes them. Second, some of its basic postulates such as inherent human selfishness, unregulated free enterprise, consumer sovereignty, the absolute freedom to earn, save, invest or waste, are instrumental in creating (various economic) problems. Solution to present-day economic problems requires a complete departure from contemporary conventional wisdom".

It is not merely the failure to solve the economic problems, but in fact the very foundations of the theory of economics that have lately become controversial. Neoclassical paradigm that was celebrated until the mid-seventies as the "economics" lost all its grandeur when the theory of rational expectations took away all the grounds underneath it. The economists are now said to be in search of a paradigm to replace the neoclassical synthesis. As a result, different schools of thought like New Classicals, New Keynesians, Post Keynesians, etc. have come up with different alternatives.

3.18 Objectives of Sharia'h (Islamic Law)

Objectives of Sharia'h form a logical starting point in the process of laying down the foundations of Islamic economics. The chapters in the book relating to objectives of Sharia'h have received special attention as it introduces new

dimensions. According to Shatibi, primary objective of Lawgiver is the maslahah of the people. Masud (1999) reproduces the following definition of maslahah from Shatibi: "(Maslahah) concerns the subsistence of human life, the completion of man's livelihood, and the acquisition of what his emotional and intellectual qualities require him in an absolute sense" in theoretical frame work of Islamic Economics and is treated as a vital part. Maslahah refers to preservation of the objectives of Sharia per cent which consists of preservation of following five aspects of human existence in the world:

i. Preservation of Life (Nafs).

ii. Preservation of Property (Ma 'at).

iii. Preservation of Religion (Deen).

iv. Preservation of Reason ('Aql).

v. Preservation of Descendents/Procreation (Nasl).

What assures and preserves these five conditions is considered to have maslahah and whatever fails to preserve any one of them is mafsadah. The removal of mafsadah also constitutes maslahah. There are three grades or levels of maslahah as follows:

i. Essential (Darori) Level

ii. Complementary (Haji) Level

iii. Amelioratory (Tahsini) Level

At essential level, maslahah would include all that protects the five elements (life, property, religion, reason and procreation) from destruction. Complementary

level refers to strengthening or expanding the preservation of the five elements. It also includes all such things that improve the quality of preservation of five elements or removes hardships in the preservation of five elements (beyond the essential level). Amelioratory level would include all that helps preserving the five elements in a beautiful or in a better way. It relates to aesthetic sense of human beings in achieving the five preservations mentioned above.

Economic agents operating in Islamic framework, will seek maslahah instead of seeking utility in the conventional sense. Maslahah and utility though may often coincide but the two are entirely different concepts. Whereas utility is a subjective concept emanating purely from individual instincts, maslahah is amenable to objective verification on the criteria mentioned above. In the Fiqh terminology, seeking the conventional concept of utility will be treated as pursuing instinctive desires and Islam disallows pursuit of instinctive desires (unless they have maslahah as defined above). This is because if the world is left to follow the peoples' instinctive desires, it will result into chaos and disorder in the world.

3.18.1 Wasting Resources or Keeping Them Idle Not Allowed

There are a couple of other issues that can be identified from the objectives of Sharia'h that influence economics but have not been recognized by conventional economics. Conventional economics, for example, assumes existence of economic man. Economic man takes decisions that are rational. Some issues, however, are not addressed in economics. For example, what would make a man to behave

economically? What can make people to work for improving their economic condition? How to deal with the people who prefer to remain in poverty rather than forego their leisure? How can people be forced not to waste resources and not to make their uneconomic use? Such topics may be the concern of what is called "Development Economics" which has yet to go a long way to understand and cure 'underdevelopment' or economic backwardness.

Islamic law shows clear concern to this and is reflected in various rules laid down for human behavior. Hassan's (1998) discussion on objectives of Sharia 'h for example highlights the following rules.

Rule: To work/produce is a religious duty. Not working is not an option available to those who are able to do so. Private property rights have been defined in a way to re-enforce this.

Rule: Since it is the objective of Shari'ah to save property, from destruction hence property cannot be entrusted to those who lack reason to use it rationally even though they have clear private property rights in it.

3.18.2 Principle of "No Risk, No Gain"

While economics assumes competitive conditions, Islamic Sharia'h gives specific rules to ensure that behavior of economic agents promote competitive conditions. There are, however, differences in the Islamic approach to markets particularly with respect to operations of factor markets. The principle of no-

liabilities (risk), no gain (no cost, no profit) does not allow malleable capital to earn a fixed rent unless it is converted into non-malleable capital. Furthermore, the conditions of renting which in fact are reflection of the principle of no liabilities no gain must also be fulfilled. This difference might not be significant when microeconomic analysis is done under certainty. However, when uncertainty is introduced in economic analysis or these assumptions are used as foundations for macroeconomic analysis, then there would be problems because return on financial or monetary capital is not similar in nature as rent on capital in the microeconomic framework.

3.19 Assumptions Relevant for Economic Analysis.

Al-Masri (1998) draws basic assumptions for the science of economics from the Fiqh literature. He identifies the Islamic counterpart of the following assumptions that, according to him, have been foundations of the development of western science of economics. These are the assumption of rushd as a counterpart of the concept of 'rationality' in economics, the assumption of 'scarcity', and the assumption of 'maximization'. Several fundamental aspects of Islamic economics emerge as we go into the details of some of these assumptions identified by Masri. This is done below.

3.19.1 The Assumptions of Rushd (Rationality)

Rushd can be interpreted as sound mindedness or ability to make sound judgments. The term rushd has been mentioned a few times in the Qur'an with

respect to the use of property rights on economic resources.   Property rights on economic resources in the light of Qur'anic teachings are to be exercised with sound mind.

Islam thus not only recognizes the human economic instincts but also teaches, through various legal provisions and ethical norms through Qur'anic verses like 27:100, 3:14. The human instinct of niggardliness, which Qur'an refers to as being "qatoora" (in 17:100) towards social interest, is ignored when the theory of economics is built up on the principle of pursuit of self-interest. Ignoring this economic aspect of human behavior is likely to have stripped economics of the ability to address several questions that could be useful not only for the science of economics but also for its application to the economy to solve the economic problems of the society.

3.19.2 The Scarcity Assumption: The Economic Problem and the Definition of Economics

Masri discusses in detail the question whether resources are scarce relative to needs. He discards the position taken by some that in the context of Islamic economics, there will be no scarcity of resources relative to needs. He argues that scarcity will remain and hence the economic problem of how to meet unlimited wants with limited resources will also remain in the context of Islamic economics. He makes reference to verses of the Qur'an as well as some renowned explanations

of the Qur'an to prove his point. Basically, he concludes that Islamic economics will take scarcity as well as the definition of economic problem of man in the same perspective as conventional economics takes.

There is no economic problem on grounds of scarcity. But there is economic problem in the sense of "rational" (in the meaning oirushd) utilizing resources to fulfill the needs. This is the type of economic problem which is visible in almost all societies in varying degrees. The scarcity axiom will not help identifying this problem. On the other hand, if maslahah and hence needs (as explained earlier) alone is the basis for economic decision making then the above mentioned man is obliged to fulfill all his needs and his needs would be endless, if meeting social needs is recognized as individual need.

Scarcity is not the only concern when economic problem is to be seen as a problem of meeting needs rather than satisfying wants. The primary concern is to make sure that the resources are being allocated to meet the needs and needs do not get ignored while meeting instinctive desires.

3.19.3 Assumption of Maximizing Behavior

Masri (1998) believes that maximizing behavior (on the part of economic agents) is a valid assumption for Islamic economic analysis. He devotes bulk of his paper to justify this position and prove that this assumption is as basic and essential as it is in conventional economic analyses. Masri starts his arguments by quoting the

following verses from the Qur'an: "And come not near to the orphan's property, except in a better way" (6:152 and 17:34); "...He (Moses) said, 'Will you exchange the better for the worse?'" (2:61).

From the discussion of Fiqh scholars on the responsibilities of custodians of the property of orphans, waqf and bait-al-mal, Masri generalizes the principles of selling goods at maximum price and making maximum profit when putting one's resources to commercial use. He quotes from traditions of Prophet (peace be upon him), Fiqh literature as well as from Ibn Khaldoon to conclude that to pursue the maximization of profit in exchange (in the market) is not only permissible but required. While there may not be disagreement on Masri's assertion that maximizing behavior can be adopted as a valid assumption for explaining Islamic economics, the grounds on which he draws this conclusion leaves more clarifications.

3.19.4 Prohibition of Gharar in Exchange

Gharar is prohibited in trading. It is difficult to define precisely the concept of gharar that makes a contract of exchange null and void. In layman's language it would generally mean leaving one or more substantive elements of the contract unclear, ambiguous, uncertain or doubtful, or concealed.

Al-Dhareer, a renowned contemporary Fiqh scholar, recognized particularly for his work on Gharar, explains in detail the concept in the context of contemporary transactions.[30] He identifies the concealment of following elements that creates

doubt, ambiguity, or uncertainty and can cause gharar in the object of contract and hence make it null and void.

    i)   Entity types and attributes of the object.

    ii)   Quality of the object.

    iii)   Time of payment in Deferred Sales.

Gharar may also enter a contract on account of:

    a)   inability to deliver the object;

    b)   contracting on a non-existent object; and

    c)   contracting without seeing the object.

In theory, the prohibition of gharar in contracting exchange of goods and services in the market may not affect economic analysis. Conventional analysis may still be valid. It is the contemporary practice in the market that would distinguish Islamic market from conventional market.

3.19.5 Social Needs

Two important Sharia 'h concepts provide a wide and flexible basis for public policy to meet social needs in an economy. These concepts are the doctrine of necessity and the concept of maslah mursalah. A contemporary discussion on both these concepts can be seen in Abu Sulayman (1993) and Hassan (1994) respectively. These discussions lead to the principles and criterion that can be helpful in making social choices. The social welfare function thus becomes not only definable but optimizable as well, because these principles give explicit guidelines to prioritize

public interests, resolve conflict between private and public interests, and make objective interpersonal maslahah comparison possible.

Kamali's (1997) discussion on istihsan provides another potential tool for seeking new dimensions relevant for public policy on Islamic framework. According to Kamali, Istihsan is generic in that it takes for its scope almost the entire range of the ahkam both in the areas of mu 'amalat (dealings) and ibadat (worship). Furthermore, it seeks to harmonize the detailed rule of Sharia 'h in line with the broader objectives of Sharia'h. He adds, "Istihsan is focussed on finding a better alternative to a ruling or evidence of Sharia'h when its application has frustrated one of the objectives of Sharia'h.

3.20 Transactions in conventional and Islamic Economics

Mabid Ali-Al-Jarhi (1998) the director of IRTI of IDB, Jeddha in his studies on Transaction in conventional and Islamic Economics:- A comparison concludes his analysis that under competitive conditions, purchase on credit costs less than borrowing to finance spot purchases. Some observed market behavior confirms that result. Suppliers of durable goods sometimes join banks to offer financing packages to their customers, which combine borrowing and spot purchase in one deal, mimicking credit purchase arrangements.

Islamic banks usually offer credit purchase deals to their customers. In most countries conventional banks are not allowed to use similar modes of finance, while

entry to the Islamic banking market is severely restricted. Some Islamic banks in such countries have the opportunity to take advantage of such monopolistic edge by charging markups, which would be higher than market rates of interest, presumably by the expected savings in transactions costs. We can therefore conclude that a policy that lifts entry barriers facing Islamic banks and allows conventional banks to combine commerce with banking activities contributes to social welfare.

A further complication relates to the pattern of behavior towards liquidity in economies with debt of limited marketability. In such economies, money defined broadly would contain a shorter list of quasi-monetary assets. In addition, credit purchase should have satisfied some "monetary needs" the resulting debt would satisfy some more, albeit within a limited scope. Analysis of the financial market in such economy would need to consider the full menu of financial assets to see to what extent people who wish to maintain a certain degree of liquidity can do so.

Finally, we have so far assumed that borrowing would be made exclusively for the purchase of commodities and real assets. It is possible though that people would borrow to finance the purchase of nominal assets. This would be mainly for speculative purposes. Here we need to know how such transactions would affect output on the one hand and whether it would have some bearing on economic stability.

SECTION IV

3.21 Analytical Tools of Islamic Economics: A Modified Marginalist Approach

If Islamic Economics had to develop as a discipline, it is important to clearly identify the analytical tools that can be used to discuss its theory. Analytical tools are used to analyze the fundamental issue of how choices are made and help study the micro-foundations of economic theory. We can argue that a modified neoclassical marginalist approach that integrates the Islamic values can be used to study Islamic economics.

Habib Ahamed discussed the importance of analytical tools in examining the micro-foundations of economic theory in Section 2. Given the lack of generally accepted analytical tools in Islamic economics, he explains the scope of using neoclassical (marginalist) analysis in the discipline. To do this he first identifies the principles of marginalist analysis in Section 3 and then examine their compatibility with Islamic values in this section. We can conclude that economic behavior of individuals based on Islamic principles can be modeled using modified marginalist analytical tools. In Section 5, we use these modified marginalist analytical tools to demonstrate two specific examples. First example shows a consumer's choice problem and the second one examines the behavior of a firm imbued with Islamic values. Though the neoclassical analytical tools are used in these optimization processes, consumption and production of goods (and as such resource allocation) in

an Islamic economy turn out to be different from a conventional one. Section 6 concludes his work.

3.22 Need for Analytical Tools.

The need for the analytical tools in economics relates to very basic issues. Tools are needed to analyze the micro-foundations of an economy on which the fundamental theories are based on. In the absence of analytical tools, study of an economic system becomes perplexing.

Similarly, analytical tools are needed to clarify the implications of certain claims made in the discipline. For example, some Islamic economists maintain that a firm's objective is not to maximize profit only. Instead, it is asserted that in the Islamic framework the objective of a firm has both profit and social considerations (Al-Habshi 1992, Mannan 1991, Siddiqi 1992). For example, a producer imbued with Islamic zeal may produce a good that is beneficial to the society in larger amounts even if it yields lower profit. Such an approach raises some important questions from an analytical point of view. First, given the Islamic ethics, how can the above-mentioned result be shown by studying a firm's production decision at the micro level. It is important to analyze the issue as the firm's behavior forms the foundations of the supply side of the market.

According to Prof: Habib Ahamed though the paradigm of an Islamic economic system is different from the neoclassical one, the basic principles of the

marginalist analytical tools do not contradict Islamic principles and can be used to study the underlying behavior of agents in an Islamic system.

3.23 Neoclassical Marginalist Tools of Analysis

The origins of marginalist analytical tools can be traced back to the founders of the neoclassical school (Jevons, Menger and Walras) in the early 1870s (Walsh and Gram (1980).

They addressed the fundamental issue of choices that individuals make as consumers and producers and the resulting allocation of scarce resources to alternative uses in the economy. This contribution was so significant that it is termed as the "marginal revolution" [Blaug (1996) and Walsh and Gram, (1980)].

Jevons saw economic problem as an "optimum resource allocation" problem [Walsh and Gram (1979)].

The main features of the choice process of the marginalist school that laid the foundations of the neoclassical economics are given below:

a) Use of Mathematics in Analysis: The fundamental principles of economics are given a mathematical form to make the subject more scientific (Walsh and Gram 1980, p. xi). Continuous functions were used so that calculus could be used. The maximization behavior, however, is equally applicable to discontinuous functions [Blaug, (1996)].

b) Scarcity and Feasible Allocations: The concept of scarcity is derived from the dual notions of limited resources and unlimited wants. The implication of scarcity is that not all allocations are feasible.

c) Optimization: Economic agents make their choices in order to optimize some maximum end, i.e., maximize some objective function. In conventional economics, a rational consumer is said to maximize his utility and a firm maximizes profit.

d) Diminishing Marginal Utility in Consumption and Diminishing Marginal Productivity in

Production: Whereas diminishing marginal utility is a behavioral assumption, diminishing marginal productivity is a technical proposition. According to the former, as a consumer consumes more of a good in a period of time, the satisfaction derived from each additional unit declines. Similarly, in production diminishing marginal productivity states that as more of a (variable) input is added to a fixed quantity of an input, the output produced by additional units of the variable input decline. Postulation of diminishing marginal utility in consumption and diminishing marginal productivity in production is necessary for optimum solutions.

e) Choices based on Marginal Analysis: Choices among the feasible allocations are made at the margin. Economic agent's choice decision for an additional unit results by comparing the marginal benefit and the marginal cost of the unit.

Efficiency: Efficient allocation implies that "each unit of the dividend is apportioned in such a way that the gain of transferring it to one use will just equal the loss involved in withdrawing it from another" [Blaug, (1996)].

Neoclassical economics has used equi-marginal principle in a wider context to explain different aspects of the market economy (Blaug 1996, p.280). In the next section, we discuss the above-mentioned marginalist principles in the light of Islamic values to determine if they can be used as analytical tools of an Islamic economy.

3.24 Marginalist Analytical Tools and Islamic Principles: Are they Compatible?

Given the main features of the neoclassical marginalist approach above, we examine if these can be used to study the choice process in an Islamic context, according to Nomanic and Rehnama (1995).

a. Use of Mathematics in Analysis: This issue does not directly fall in the realm of Islamic values as it deals with the approach of studying the subject. It must be noted that the objective of mathematical modeling is to simplify the complex real world and deal with the main issues by leaving out the minor details.

b. Scarcity and Feasible Allocations: Islamic economists have different views on scarcity of resources and the economic problem.[6]One view is similar to the conventional one where scarcity of resources and unlimited wants coexist. As mentioned above, the implication of this assumption is that not all allocations are feasible. The second view among the Islamic economists is that there is no relative or absolute scarcity. Rather, the problem is that of injustice and mal-distribution. The

third view takes the middle ground asserting that God has provided sufficient resources.

3.25 Applications of Marginalist Analytical Tools in Islamic Economics: Examples.

In this section, we discuss a couple of cases to show how Islamic values can be incorporated into economic analysis. First, we examine the demand side where a Muslim consumer allocates his budget to different uses. In the second case, we deal with the supply side where decisions of a firm imbued with Islamic values are discussed.

3.25.1 Case 1. Consumer's Optimization Problem from an Islamic Perspective.

Before examining the optimization problem of a Muslim consumer using marginalist analytical tools, we first discuss some of his features discussed in the literature. The goods in the consumption bundle under Islamic perspective should be only those permitted by Islam, i.e., a Muslim individual consumes halal goods only. In other words, a consumers following Islamic rule consumption set includes tayibat (select things) (Naqvi,(1981)). Once the forbidden (haram) goods and services are eliminated, allocation of resources for consumption should follow Shatibi's hierarchy order (Khan, (1992) and Zarqa, (1989). Accordingly, resources should first be allocated to the essentials (necessities). If resources are left after the need for

essentials of all in the society are met, they can be allotted to complementarities or conveniences (comforts) and then ameliorations or refinements (luxuries).

As mentioned above, the objective function of a consumer under Islamic principle is the attainment oifalah or masalih. This implies, as Khan (1984) postulates that the utility of a consumer depends on spending on worldly needs (consumption of goods and services) and spending for others to earn rewards in the Hereafter. His consumption allocation is different from that of a conventional one as his utility function embodies ethical features and his constraints include both income and religious considerations. Similarly, Kahf (1980) postulates that the utility function of a Muslim consumer is a function of the money spent on himself (goods consumed) and spending on others for the sake of Allah (SWT). The allocation between worldly spending and spending for others depends on the consumer's taqwa (God consciousness).

3.25.2 Case 2. Producers Optimization Problem from an Islamic Perspective.

As in Case 1, one first describes the nature of a producer under Islamic system as discussed in the literature to identify his main characteristics. Metawally (1984) suggests that an objective function of an Islamic producer should include profit and giving charity. Iqbal (1992), among others, questions this assumption in a profit sharing mode of production. He maintains that a partner does not have the right to distribute charity out of common profit.[14] One way the charity issue can be resolved is to separate the production decision from the consumption decision. The

firm makes optimal decisions in production with the resulting profit distributed among the owners. The owners then make a decision regarding allocation of income in different uses, including charity, as discussed in Case 1 above.

Though it is agreed upon that the objective function of a producer under Islamic system will not include charity, his production decision will be influenced by the profit motive and other social factors. According to Al-Habshi, (1992), the objective of an Islamic producer is to attain falah and will include profit and other goals. Siddiqi, (1988) maintains that the objective of an economic enterprise is to attain satisfactory profits. Satisfactory profits may be different from the profit attained by profit maximization in the neoclassical sense as social and ethical factors will affect the production decision. He asserts that a Muslim producer will not produce things that are forbidden, produce fewer luxuries and more necessities. He further asserts that more resources will be used to produce cultural goods and services (education, intellectual enlightenment, etc.) as they benefit the society.

Similar views are expressed by Mannan, (1991), who postulates that the objective function of a producer is economic welfare.

3.25.3 Case 3. The Nature of the Islamic Firm

Different forms of businesses based on Islamic principles of trade and finance have emerged in recent past, more significant being emergence of Islamic banks and some Islamic firms like mudarabah companies in Pakistan and some other countries. However, a theory of the Islamic firm is in its nascent form, primarily emphasizing

on the role of exchange in production relations and trade of resources within the firm. The emphasis on trade perhaps stems from the Qur'anic prohibition of interest and permissibility of trade and profit. This development coincides with the emergence of transaction cost economics and the new theory of the Islamic firm, which stress on trade and contracts in formation of the firm.

The theory of the firm has evolved from its 'production function' view that says nothing about the nature of relationships, dynamics of decision-making and internal organization of factor inputs, to transaction costs, institutional, and other approaches under the new theory of the firm.

The Islamic firm can be defined as a community of autonomous people (individuals) who are contractually bound to co-operate with each other to employ and account for factors of production to produce goods and services with an ultimate objective to sell and profit. This view is not different from the usual idea of an organization in which structure of authority is defined with respect to a group of people or a set of roles (Simon, (1957), Arrow, (1975), Mirrlees, (1976). Principle assets of the Islamic firm are not its physical resources and capital but entrepreneurial skills of the individuals who make up the Islamic firm. In contrast to Grossman and Hart (1986), Hart and Moore (1990) and Hart (1995) the Islamic firm is viewed as a set of individuals owning non-human assets to be used in production process.

Another distinguishing characteristic of the Islamic firm is that its capital structure is based on either of three sets of equity-based modes of financing, namely, Profit Loss Sharing (PLS), Profit Sharing (PS), and Output Sharing (OS). PS is based on principle of mudarabah, a contractual arrangement between two or more parties in which one party provides capital to another that contributes entrepreneurship in a business to share profits according to a pre-agreed ratio. The losses are borne by the capitalist with no financial liability on the entrepreneur. PLS is employed in partnerships, known as musharakah wherein two or more parties wishing to start a joint venture pool their resources to be residual claimant on the income stream of the business. While the profits in a musharakah may be distributed in any ratio, the loss should be borne by the parties involved according to their capital shares. Many consider such sharing arrangements to be inferior (Hart and Moore, (1990). However, many of these models assume symmetry of information between transacting parties. If informational asymmetry is considered, it can be shown that a PLS-based mudarabah contract may serve as an efficient revelation mechanism Presley and Sessions, (1994). The argument is similar to Reid (1973) who argues that sharecropping in agriculture. Uthman (1994) argues that a PLS contract may give rise to less opportunism as compared to debt finance. Referring to the use of junk bonds in corporate financing, he argues that debt financing provides a market mechanism that may invite and facilitate opportunistic tendencies.

Alchian and Demsetz (1972) explains a provision, there is a provision for sharikah al-mufawada (equal partnership) that necessitates equal partnership in capital, profit and loss, and liability. Moreover, there are a number of contractual

arrangements for small-scale business including, inter alia, partnership in artistic or professional intellectual skills, and business based on acquisition of resources from consumers by promises of future delivery (bai al-salam) for model explanation see Ken Baldwin's thesis on "Determining moral hazard and Adverse selective in the Islamic Firm 2000 AD.

SECTION V

3.26 Portfolio Choice and Asset Pricing in Islamic Economics

Zemir Iqbal (1991) in his Research paper on Portfolio Choice and Asset pricing in Islamic frame work finds that investor in Islamic economic system will be a risk averse utility maximizing mean-variance optimizer who will diversify portfolios based on mean and variance of expected returns. Investor's preference for 'asset-backed' (fixed-return) instruments over equity partnership will also be influenced by degree of market completeness and informational asymmetry. Capital Market Line (CML) in absence of a risk-free asset and unrestricted short-selling will be non-linear and its linearity will largely depend on Sharia'h acceptance or rejection of short-selling. A linear capital market like in Islamic economic system will be possible under conditions of complete markets with large number of assets.

Zemir Iqbal suggests a design for Islamic Floating Rate Notes (IFRNs) based on Sharia 'h compatible 'asset-back' (fixed income like) securities, which can be used in private and public sector to finance activities suitable for 'asset-back' Islamic

instruments. With the acceptance of IFRNs, firms may be able to lower weighted average cost of capital by combining IFRNs and equity capital. However, the weight of IFRNs in cost of capital will depend on the nature of business and how much of it can be financed by IFRNs.

Table No.3.1

Difference Between FRN and IFRN.

Factor	FRN	IFRN
Principal	Protected. Exposed only to insolvency of borrower.	Semi-exposed. Exposed only during the acquisition of asset. Once delivery is made to the entrepreneur, principal is exposed to insolvency of the borrower.
State Protection	Protected by bankruptcy law.	Protected to the extent of the value of goods being financed up to time of delivery.
Coupon Rate	Linked to interest rate.	Linked to profitability or demand and supply of goods being financed.
Exposure	Default risk	Exposure is minimized as IFRN is backed by a real asset, which can be liquidated in the market at current market prices, and proceeds can be used to recover funds.
Collateral	Firm's credit rating	Tangible asset

Source: Zamir Iqbal (2000), IRTI Jeddah, Senior Information Officer Treasury Operation Department of World Bank. Washington D.e. USA

It is also suggested that in a well developed market of IFRNs, an efficient index of IFRNs will be representative of activities in the real sector and therefore return on index will be close proxy for the return on real sector. Further research is required to understand how risk and assets can be priced in Islamic economy if return on IFRNs index is accepted as proxy for return in the real sector.

CHAPTER-IV

MEASUREMENT OF EFFICIENCY OF ISLAMIC BANKING

This chapter deals with Measurement Efficiency of Islamic Banking. It has five sections. Section one deals with Efficiency of Islamic Banking at Global Level, Section two deals with Efficiency of Islamic Banking at country level, Section three deals with Efficiency of Islamic Banking in Jordan, Section four deals with Efficiency of Islamic Banking in Algeria, and Section five deals with Relevance of Islamic Banking in India.

4.1 Islamic Banking

Islamic banking an alternate to interest-based banking is not banking in the traditional sense of the world. As the concept of Islamic banking is based on the Shariah principles, it was earlier confined to the muslim countries only. Owing to its interest-free nature, it is now expanding a world-wide market. The fundamental feature of Islamic banking (IB) is interest free banking. This idea has the belief that easy accessibility of credit encourages people to live beyond means bringing unnecessary circulation of money which in turn makes worse the problem of economic disequilibrium. With a view to bringing a bar on the easy availability of funds and their utilization, IB and finance strongly advocates for the profit loss share (PLS) mode of finance.

The interest free banking easy to carry out the two basic functions of banking such as accepting deposits and advancing loans without the element of interest. Just like conventional banks in IB also there are mainly three types of accounts- Current Account, Saving Account and Investment Account. The financing also are mainly of three types

a) Investment financing (Mudaraba and Musharaka)

b) Trade financing (Murabaha)

c) Lending (Kard-Hassan, Ijara and Benevolent Loans).

Current or demand deposits account and saving deposits account are virtually the same as in all conventional banks. Investment deposits are accepted for a fixed period with the investor's agreement to share the profit or loss in pre determined proportion with the bank.

Some banks also operate pigmy accounts. This account is operated for the purpose of mobilizing the savings of low income group through recurring deposit collections, which is exactly same as daily savings collection of conventional banks.

Investment financing is the most important mode of financing in which the main is to generate profit which is shared by the bank and the share holders in pre determined proportion. If there is any loss (very rarely it happens), it is also shared by the bank and the share holders. Thus the interest free banking is based on the concept of profit and loss sharing.

Trade financing is also different types a) the bank buys an item for the client and the client agrees to pay the bank the price plus a nominal service charge after a particular period of time b) the bank buys an item for a client and leases it to him on a fixed rent c) higher-purchase scheme in which the bank buys an item for the client and hires it to him for an agreed period charging a rent.

Main forms of lending are no cost loans which are advanced to small farmers, entrepreneurs, producers and needy consumers. The bank lends money to these groups without charging any interest but they cover their expenses by imposing a nominal service charge.

Modern as well as ancient economies opposed the interest as an economic exploitation. Plato and Aristotle had also opposed the concept of interest in the era before Christ. Interest was also prohibited in the preliminary teachings of Jews and Christians and is also prohibited in the first Testament of the holy bible. The holy Quran leads as in the direction in which Riba (interest) is condemned thoroughly as it is an economic exploitation. In the second surah itself it ordains prohibition of interest at least 5 times.

In the analytical frame work of interest free banking, the Islamic economists define the factors of production and treats 'capital and enterprise' not as two separate but one single factor of production. With the merger of capital and enterprise, the fixed rate of interest will turn into the variable rate of return as Profit Loss Share (PLS) system. This will eradicate entrepreneur's tendencies to borrow or to lend by

making any comparison between the expected rate of return and rate of interest. Thus the fluctuations of trade cycle will get diminished as far as this particular reason (that is disequilibrium ex-ante savings and ex-ante investment) is concerned. Besides, the relationship of interest and investment which is inversely correlated ultimately reduces the propensity to invest, thus negatively affecting the level of employment. Modern economist, Lord Keynes, in his book "the protocols of the learned elders of Zions" pointed out that "unless interest is abolished in some un-vexatious way, unemployment could not be eradicated from the world; rather he insisted that the world would not bear the long-run idleness which is connected with capitalism". He again said" for a developed economy, interest rate should be zero. The Onus of interest badly affects capacity of capital and vulnerability adversely affects the constructively, which give rise to unemployment". In the 20th century Karl Marx, who introduced the surplus theory in his book "Das Capital", and Mao Tse Tung, and other socialist scholars and economist had also dissented with interest termed as "Organ of Fiscal Exploitation".

Since interest-bearing loans have no specific relation with actual production and the financer, after securing strong collateral, normally has no concern how the funds are used by the borrower and the money supply effected through banks and financial institutions as no nexus with the goods and services actually produced on the ground. It creates a serious mismatch between the supply of money and the production of goods and services. This is obviously one of the basic factors that create feed inflation. Under IB system commercial banks have to take equity shares of companies seeking funds. It is virtually based on asset based transactions for the

purpose of income generation, and prohibits financing in all forms of economic activities, which are normally and socially injurious for the society. Some IB and finance is provided based on the real production and economy, it has rather curtailed inflation. IB system which reflects equity participation is functioning in a triangular way that is the bank, the customer (depositor),, entrepreneur. The first tier is between the bank and the customer (depositor), the 2nd tier is between the bank and the entrepreneur.

The field of IB operations has recently widened an Islamic financial instruments have been developed to cover nearly all kind of business including consumer financing, project financing, house financing, working capital financing, import and export financing, venture capital etc.

4.1.1 Islamic Banking Movements in the World

The historical evolution of the concept of interest free banking date backs to 1963 in which year the effort to start Islamic bank where initiated in Egypt. It gained momentum in the 1970's when a number of commercial banks such as The Dubai Islamic Bank, The Kuwait Finance Home and The Baharain Islamic Banks were incepted. However the establishment of Islamic Development Bank in Jiddah in 1975 is a milestone in the institutional involvement in this issue. Islamic Banking is not restricted to muslim countries. At present about 75 countries are successfully doing interest free banking and more than 300 Islamic financial institutions were operating in the world from China to USA managing funds to the tune of dollar 300 billion.

While the growth of Islamic banking across the world was 20 per cent that of conventional banking was much less. This system has the added advantage of curbing speculative activity as all its financing is linked with commercial transactions.

According to the institute of Islamic Banking and Insurance, the total number of Islamic Financial Institutions which is more than 300 are working in the following countries like Albania, Algeria, Australia, Bahamas, Bahrin, Bangladesh, British Virgin Islands, Brunei, Canada, Cymen Islands, Cyprus, Djibouti, Egypt, France, Gambia, Germany, Guinea, India, Indonesia, Iran, Iraq, Italy, Ivory Coast, Jordhan, Kezkhastan, Kuwait, Lebanon, Luxemberg, Malaysia, Mauritania, Moroco, Netherlands, Niger, Nigeria, Oman, Pakistan, Palaestine, Philippines, Quatar, Russia, Saudi Arabia, Senegal, South Africa, Srilanka, Sudan, Switzerlad, Tunisia, Turkey, Trindad and Tobago, UAE, UK, USA, Yemen.

4.1.2 Objectives of Islamic Banking (Interest Free Banking)

1. To introduce interest free and non exploitative banking system as per the sheriah complient

2. To facilitate investment of saving for returns other than interest.

3. To channelize the funds to productive fields

4. To assist the poor and the deprived who are in need of money without the burden of the coast (interest)

5. To ensure economic and social justice.

6. To encourage profits from entrepreneurship

7. To efface speculation

8. To share the risk jointly by the provider of capital and entrepreneur

9. To ensure transparency in banking by upholding contractual obligations and disclosure of information

10. To admit the time value of money only to actual capital and not to potential capital. Money itself is potential capital. It becomes actual capital only when it joins a productive activity.

4.1.3 Instruments of Islamic Banking

1. Mudaraba- Profit Loss Sharing(PLS)

2. Musharaka- Joint Venture

3. Murabaha- Cost Plus

4. Murawamah- Negotiated Price

5. Hijara- Leasing

6. Khard Hassan- Good Loan

7. Bai 'mu'ajjal- Sale on Credit

8. Bai Al-Inha- Agreement of Sale and Buying Back

9. Bai Haqika Salam- Prepaid Sale

10. Bai Istisnas- Pre Production Credit

Section I

4.2 Efficiency of Islamic Banking at Global Level

This section examines the cost, profit, revenue and X-efficiency of Islamic banks in the world. First, it employs a stochastic (parametric) cost frontier approach to compute cost efficiency of a panel of Islamic banks over 1996-2003 periods. Second, it employs profit efficiency which considers both cost and revenue simultaneously to examine profit efficiency. Third, it employs revenue efficiency model to ascertain whether Islamic banks are innovating products to enhance their revenue. Fourth, it employs a nonparametric Data Envelopment Analysis (DEA), to calculate the overall, technical, pure technical, allocative and scale efficiencies. While technical inefficiency is caused and correctable by the management, allocative inefficiency is caused by regulation and may not be controlled by .the management. Finally, applying a Malmquist DBA method to the panel data over time, Malmquist Total Factor Productivity (TFP) indices are calculated. These indices will help us to examine the productivity improvement of Islamic banks over time in these countries. And if we adopt the system in Under Developed Countries (UDCS) the ignored poverty striken households can be brought into the path of economic advancement by using banking services and micro investments.

The long run sustainability of any bank regardless of the nature of the underlying banking philosophy, other things remaining constant, depends on the economic efficiency. A bank is economically efficient if it operates with both

technical efficiency and price efficiency. A firm is said to be more technically efficient than another if it produces relatively larger output from the same set of inputs. A firm is price efficient if it maximizes profits i. e. equates the marginal value of product of each factor to its price. Such a study is important both from operational as well as academic point of view. First, such a study will exhibit the expansion potentials of Islamic bands in a. mixed banking system. Second, it will have policy implications for Islamic banks and the banking system as how to improve cost efficiency and to adopt the same system is various countries especially in UDCS in the process of poverty eradication.

4.2.1 Parametric Frontier Studies:

With various econometric methods, economies of scale and scope of commercial banks operating in the U.S. have been extensively studied [Benston, Hanweck and Humphrey, (1982); Murray and White, 1983; Gilligan, Smirlock and Marshall, (1984); Kim. (1986):Berger Hassan and Tafte (2000) for Bangladesh, Lang and Welzel (1994) for Germany.

4.2.2 Non-Parametric Frontier Studies:

The Non Parametric Programming (NPP) approach used in this study to construct measures of overall, allocative and technical efficiency, and their changes over time is based upon the work of Farrell (1957) as well as extensions of it by Fare, Grosskopf and Lovell (1985) and Fare, Grosskopf, Norris and Zhang (1994). This

methodology has been used in recent studies by Aly et. al (1990), Rangan et. al (1988), Ferrier and Lovell (1990), and Elyasiani and Mehdian (1990, 1992, 1995), Sherman and Ladino (1995). There are only a few papers written on the cost efficiency banks in the developing countries using the DEA method, such as Bhattacharya, Lovell and Sahay (1997) for India, Taylor, Thompson,_Thrall, and Dharmapala (1997) for Mexico, Al-Faraj, Alidi, and Bu-Bshait (1993) for Saudi Arabia, Zaim (1995), Isik and Hassan (2000a,b) for Turkey. The results of all these studies reveal that, in general, banking firms experience an average efficiency of 77 per cent and median of 82 per cent (Berger and Humphrey, 1997), and these statistics are significantly different across countries.

The specific efficiency measures calculated can be given fairly simple interpretations. The technical efficiency measure gives the proportional reduction in input usage, which could have been achieved if the firm operated on the production frontier. The technical efficiency can be decomposed into the proportional reduction in input usage if inputs were not wasted (pure technical efficiency) and that reduction if there existed constant returns to scale (scale efficiency). As such, pure technical inefficiency reflects excess input levels for a given level of output. This inefficiency may be sustainable if competitive forces are weak. This inefficiency is unique in that it is caused by and correctable by management. From the society's standpoint, firms that operate at constant returns to scale represent the socially efficient level of operation. Therefore, choosing non-constant scale of operation also constitutes inefficiency.

The allocative efficiency measure gives the proportional reduction in costs if the optimal combination of inputs had been utilized. As such, allocative inefficiency reflects suboptimal proportions of factor inputs. Management cannot correct this inefficiency to the extent that it is due to regulation, such as the need to substitute service for interest payments on demand deposits. Overall efficiency measures the proportional reduction in costs which could have been achieved if firms had been both allocatively and technically efficient. The Malmquist-DEA technique allows us to decompose total factor productivity into changes in technical efficiency over time and shifts in technology over time. Improvements in technical efficiency change are considered to be evidence of moving close to the efficient frontier over time, whereas improvements in technological change are considered to be evidence of innovation.

4.2.3 The Efficiency Methodology

There are two main efficiency concepts, cost and profit efficiencies, which are widely used in the studies of efficiency [Isik and Hassan, (2001)].

4.2.4 Parametric Cost Efficiency

Cost efficiency is defined as a measure of how far a bank's cost is from the best practice bank's cost if they were to produce the same output under the same environmental conditions. One can obtain the cost efficiency of a bank by employing either a nonparametric or parametric approach. Nonparametric (non-stochastic) cost efficiency is calculated by employing linear mathematical programming techniques.

Whereas, parametric (stochastic) cost efficiency is derived from a cost function in which variable costs depend on the .input prices, quantities of variable outputs, random & error, and inefficiency (Aigner, etal (1977)), Meeusen and Broeck (1977)

4.2.5 Data and Definitions of Variables

To determine what constitutes inputs and outputs of banks, thus, one first should decide on the nature of banking technology. There are two main approaches competing with each other in this regard, production and intermediation approach (Sealey and Lindley, (1977)). Like many studies on banking efficiency (Isik and Hassan, 2001, 2002 and 2003 and among others), we adopt intermediation approach in this study.Accordingly, we model Islamic banks as multi-product firms, producing three outputs employing three inputs. All variables except for the input factor labor are measured in millions of U.S. dollars. The input vectors include (1) labor, (2) fixed capital, and (3) customer and short-term funding funds. We measure the labor by staff costs, capital by cots on premises and fixed assets, and customer and short-term funds by the sum of deposit (demand and time) and non-deposit funds as of the end of the respective year. Hence the total costs include both non-interest expenses and fees and operating costs and are proxied by the sum of labor, capital and customer and short-term fund expenditures. Obviously, all input prices are calculated as flows over the year divided by these stocks: (1) price of labour is measured as total expenditures on employees such as salaries, employee benefits and reserves for retirement pay divided by customer and short-term funding, (2) price of capital is measured as total expenditures on premises and fixed assets divided by

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customer and short-term funds, and (3) price of customer and short-term funding is calculated as total interest expenses on deposit and non-deposit funds divided by customer and short-term funding. On the other hand, the output vector includes (1) total loan (2) other earning assets and (3) Off-balance sheet items.

The data used in this study are cross-country bank-level data, compiled from income statements and balance sheets of 43 Islamic banks in 21 countries for each year in the 1998-2005 periods. Table No.4.1 gives the country-wise and year-wise breakdown of these Islamic banks. The input and output variables are defined in annexure 1 and their descriptive statistics year-wise are provided in table no. 4.1. The main data source is Bank Scope database compiled by IBCA. In so far as possible, the Bank Scope database converts the data to common international standards to facilitate comparisons. Other data sources include International Monetary Fund's International Financial Statistics (IFS), world Development Indicator (2005), and Global Development Finance (2005).

Table No. 4.1

Number of Banks by Country and By Year

Country Wear	1997	1998	1999	2000	2001	2002	2003	2004	2005
Algeria			1	1	1	1	1	1	1
Bahamas						1	1	1	1
Bahrain		3	3	3	4	5	5	4	4
Bangladesh		1	1	1	1	1	1	1	2
Brunei Darussalam	1	2	2	2	3	3	3	3	
Egypt	1	1	2	2	2	2	2	2	1
Gambia					1	1	1	1	
Indonesia				1	1	1	1	1	
Iran	1	1	1		3	3	3	3	
Jordan		1	1	1	1	2	2	2	2
Kuwait		1	1	1	1	1	1	1	1
Lebanon	1	1	1	1	1	1	1		
Malaysia			2	2	2	3	3	3	3
Mauritania						1	1	1	
Qatar		1	2	2	2	2	2	2	2
Saudi Arabia		1	1	1	1	1	1	1	
Sudan	1	2	2	3	3	3	3	1	1
Tunisia	1	1	1	1	1	1	1	1	
United Arab Emirates		1	1	1	1	2	2	2	2
United kingdom	1	1	1	1	1	1	1	1	
Yemen				1	1	2	2	2	2
Total	7	18	23	25	31	39	39	34	22

Source: Bank Scope Data Base (2006)

Table No.4.2

Sample Statistics of Variables: Outputs, Inputs and Input Prices

(Millions of U.S Dollars)

Year	1999 Mean	1999 S.D	2000 Mean	2000 S.D	2001 Mean	2001 S.D	2002 Mean	2002 S.D	2003 Mean	2003 S.D	2004 Mean	2004 S.D	2005 Mean	2005 S.D
Profit	6258.33	4508.34	7222.40	6172.42	2678.89	33462.33	5725.78	57732.94	31860.05	67163.32	11981.33	14432.76	209781.13	156632.76
Cost	29603.22	34698.44	30737.20	33792.12	225864.11	444564.972	165979.67	463536.22	323393.21	716128.06	236274.44	800742.03	256275.00	710742.03
Outputs														
Y1	363380.67	416207.77	412084.40	441364.79	1648745.4	3224360.05	1299686.4	3832482.9	2744720.6	5697788.4	2049386.6	6104788.7	2249386.6	5204788.2
Y2	134647.00	108220.77	96415.30	120543.41	1128565.8	2333976.22	696861.89	2231765.1	1626221.3	3441330.1	1035670.0	3603348.6	114670.0	3813348.4
Y3	106241.00	94786.53	100588.70	103549.16	1263827.7	2976931.54	712457.06	2590192.3	1527818.9	3398934.3	349634.6	1105074.6	569634.6	1205074.1
Inputs														
X1	7737.44	7735.97	7851.10	7959.844	159140.8	366874.65	92594.89	338940.86	171311.84	414820.64	107599.6	405800.83	117580.61	426800.82
X2	454050.9	480617.13	462242.6	526835.5	2226842.8	4056351.8	1246109.6	3516006.04	3219820.2	7191911.7	2869455.1	9095176.96	2939455.1	91151.76.2
X3	5000.67	4050.21	5381.0	4547.86	41789.9	87849.48	29612.11	87913.32	63166.89	143341.26	58208.88	204600.91	68217.67	213600.11
Input Prices														
P1	1.183	1.109	3.005	4.299	2.699	6.172	1.426	1.081	1.280	0.834	1.485	1.094	1.958	1.188
P2	2.387	2.5204	6.884	13.244	1.940	1.983	2.059	2.595	2.112	2.929	2.134	2.385	2.665	2.962
P3	3.153	8.500	3.513	7.707	8.169	23.491	6.909	16.735	9.445	24.693	17.328	36.268	18.091	38.345

Source: Bank Scope Data Base (2006)

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Table No. 4. 3

Summary Statistics of Efficiency Measures of (1999-2005)

Efficiency Measure	Mean	Minimum	Maximum
Panel A: 1999			
(CE)a	0.917	0.828	1.000
(AE)a	0.953	0.853	1.000
(TE)a	0.961	0.893	1.000
(PTE)a	0.990	0.923	1.000
(SE)a	0.971	0.894	1.000
PanelB: 2000			
(CE)	0.735	0.588	1.000
(AE)	0.771	0.664	1.000
(TE)	0.951	0.825	1.000
(PTE)	0.992	0.940	1.000
(SE)	0.959	0.829	1.000
Panel C: 2001			
(CE)	0.736	0.397	1.000
(AE)	0.865	0.604	1.000
(TE)	0.861	0.417	1.000
(PTE)	0.936	0.434	1.000
(SE)	0.922	0.558	1.000
Panel P.- 2002			
(CE)	0.418	0.103	1.000
(AE)	0.477	0.135	1.000
(TE)	0.827	0.335	1.000
(PTE)	0.921	0.484	1.000
(SE)	0.897	0.335	1.000
Panel E: 2003			
(CE)	0.472	0.072	1.000
(AE)	0.594	0.108	1.000
(TE)	0.801	0.477	1.000
(PTE)	0.918	0.508	1.000
(SE)	0.877	0.477	1.000
Panel F: 2004			
(CE)	0.394	0.182	1.000
(AE)	0.444	0.197	1.000
(TE)	0.900	0.723	1.000
(PTE)	0.970	0.800	1.000
(SE)	0.927	0.613	1.000
Panel G: 2005			
(CE)	0.645	0.263	1.000
(AE)	0.703	0.263	1.000
(TE)	0.936	0.614	1.000
(PTE)	0.945	0.633	1.000
(SE)	0.990	0.970	1.000
Panel H: All b			
(CE)	0.620	0.082	1.000
(AE)	0.733	0.074	1.000
(TE)	0.843	0.109	1.000
(PTE)	0.950	0.311	1.000
(SE)	0.891	0.266	1.000

a. (CE) = Cost Efficiency, (AE): Allocative Efficiency, (TE): Technical Efficiency, (PTE): Pure Technical Efficiency, (SE) Efficiency, b. Panel D: All gives the summary statistics for the pooled sample of (1995-2001) efficiency measures combined).

Source: Bank Scope Data Base (2006)

4.2.6 Data Envelopment Analysis (DEA)

Table No.4.3 reports sample statistics of the various efficiency scores of Islamic banks for the fiscal years 1999 (Panel 4.A), 2000 (Panel 4.B), 2001 (Panel 4.C), 2002 (Panel 4.D), 2003 (Panel 4.E), 2004 (Panel 4.F), 2005 (Panel 4.G), and overall (Panel 4.H). These results suggest that there is a downtrend in the cost efficiency of Islamic banks. The cost efficiency (inefficiency) was 91.7 per cent (9%) in 1999, 73.5 per cent (36.1%) in 2000 and 2001[***.] This means that the average Islamic bank could have used only 91.7 per cent, and 73.5 per cent of the resources actually employed in 1999, 2000 and 2001, respectively, to produce the same level of output in these years. More evidently, while the average input waste was only 9 per cent in 1999, it rose to 36.1 per cent in 1999 and 2000. The 36.1 per cent figure means that the average bank needed 36.1 per cent more resources to produce the same output as the average efficient bank. Apparently, there was substantial room for significant cost savings if Islamic banks had utilized their productive inputs more efficiently. These inefficiency levels are notably higher than those typically estimated for developed countries. For example, Berger et al. (1993) report cost inefficiency at 20 per cent for U.S. banks, and Altunbas et al. (1994) estimate it at about 5-10 per cent for British banks. It is worth noting that cost efficiency decreased dramatically from 73.6 per cent in 2001 to about 42 per cent in 2002, 2003 and 2004. However, the cost efficiency climbed to 64.5 per cent in 2005.

[***] The relations between efficiency (E) and inefficiency (IE) is IE = (1-E)

As the results in Panel I of Table No.4.3 indicate, over the years under study, the average technical is about 84 per cent, where the average allocative efficiency is is about 73 per cent. Also, in each year, technical efficiency of Islamic banks is consistently higher than allocative over the estimation period. This finding suggests that the dominant source of cost inefficiency is allocative (regulatory) rather than technical (managerial). Moreover, these results imply that Islamic banks do a better job employing available inputs than choosing the proper input mix given the prices. Hence, overall inefficiency in Islamic banks may be attributed to choosing the incorrect input mix rather than wasting of resources.

Furthermore, the decomposition of Total Technical Efficiency (TTE) into its components reveals that scale inefficiency for Islamic banks is also persistently higher than pure technical inefficiency. Pure technical efficiency is simply technical efficiency devoid of scale effects, i.e., the difference between technical efficiency and pure technical efficiency represents the cost operating at an incorrect scale. The results show that scale inefficiency is about 13 per cent, while pure technical inefficiency is about suggesting that the major source of total technical inefficiency for Islamic banks is scale inefficiency (output related) and not pure technical inefficiency (input related). This finding is consistent with results reported in some studies for other countries.

Table No.4.4

Summary Statistics of Productivity and Efficiency Changes for (1999-2005)

	CE	AE	TE	PTE	SE	ROA
AE	0.670**					
TE	0.532*	-0.398	.			
PTE	0.427	-0.205	0.688***			
SE	0.329*	-0.336	0.702**	-0.114		
ROA	0.024	0.334*	0.341**	-.670**	0.139	
ROE	0.100	0.212***	0.181*	-0.457	0.212	0.627**

Note: MI: Change in productivity (Malmquist index of productivity); TE: Change in technical efficiency; TC: Technological change; PTE: Change in pure technical efficiency, and SE: Change in scale efficiency

Source: Bank scope data base 2006

4.2.7 Productivity Progress

Table No.4.4 reports results from measuring productivity progress of Islamic banks. The results there indicate that these banks have experienced only 3 per cent productivity growth over the sample period. It is worth mentioning that productivity changes reflect the product of changes hi technical and technological efficiency. According to our findings, Islamic banks have been able to achieve such productivity improvement from becoming more technologically advanced (2.4 per cent), than from being more technically efficient (only .01 per cent).

The results further suggest that Islamic banks have achieved productivity growth of 21 per cent between 2001-2002, 6 per cent between 2002-2003, and 12 per cent between 2004 and 2005.On the other hand, those banks have registered productivity loss of 4 per cent between 1999-2000, 21 per cent between 2000-2001, and 10 per cent between 2001-2002.

4.2.8 Correlation of Efficiency Measures with Financial Performance:

In order to complement the results of efficiency measures, we correlated various accounting measures of bank performance with various efficiency scores. Return on Asset [(ROA) (Net Income/Total Assets)], and Return on Equity [(ROE) (Net Income/Total Equity)]. We calculated both rank-order Spearman correlation coefficients to examine the possible relationship among the X-efficiency measures and accounting measures of performance. The Spearman correlation coefficients are presented in Table No.4.5. The null hypothesis is that correlation coefficient between two variables is zero. As the results indicate, the Spearman correlation coefficients are all significantly different from zero, indicating that there is a strong association among the X-efficiency measures and proxy measures of performance. Cost efficiency (CE) is highly positively and statistically significantly associated with other X-efficiency measures, namely, AE, TE, PTE, and SE ($p_{CE,AE}=0.670$, $p_{CE,TE}=0.532$, $p_{CE,pTE}=0.427$, $p_{CE,sE}=0.329$, respectively). TE is more related to SE than to PTE ($p_{TE,sE}=0.702$ versus $p_{TE,pTE}=0.688$,), confirming the dominant effect of scale efficiency in determining the technical efficiency of the Islamic banks. Both ROA and ROE are positively and

statistically significantly correlated with all five efficiency measures. Overall, the statistically and significantly different from zero correlation coefficients discussed above suggest that various measures of efficiency are strongly associated with conventional accounting measures of performance,

Table No.4.5

Spearman Rank Order(s) Correlation Coefficients among Efficiency Estimates and Proxy-Measured of Performance

	CE	AE	TE	PTE	SE	ROA
AE	0.670**					
TE	0.532*	-0.398	.			
PTE	0.427	-0.205	0.688***			
SE	0.329*	-0.336	0.702**	-0.114		
ROA	0.024	0.334*	0.341**	-.670**	0.139	
ROE	0.100	0.212***	0.181*	-0.457	0.212	0.627**

a: Spearman correlation coefficient of tests for zero correlation. AVCR is average cost (Total cost / Total assets). ROA is return on assets (Net income / Total assets). REQ is return on equity (Net income / equity). : CE: Cost efficiency, AE: Allocative efficiency, TE: Technical efficiency, PTE: pure technical efficiency, SE: Scale efficiency.

*** Significant at the 0.01 level.

** Significant at the 0.05 level.

* Significant at the 0. 10 level

Source: Bank Scope Data Base 2006

Table No.4.6

Summary Statistics for the Stochastic Cost and Profit Efficiency

	Cost efficiency		Profit efficiency	
	Mean	Std. Dev.	Mean	Std. Dev.
1995	0.921	0.011	0.825	0.125
1996	0.907	0.008	0.864	0.206
1997	0.856	0.001	0.749	0.033
1998	0.768	0.172	0.783	0.039
1999	0.725	0.239	0.819	0.017
2000	0.711	0.030	0.858	0.116
20001	0.682	0.124	0.890	0.060
All	0.735	0.056	0.844	0.130

Source: University of New or leaves (2006)

4.2.9 Cost and Profit Efficiency

Table No. 4.6 reports the stochastic cost and profit efficiency estimations of the Islamic banks for the years under study[♦♦]. Table No.4.7 presents estimates of cost and profit efficiency functions. The average cost and profit efficiency over the years studies are about 74 per cent and 84 per cent, respectively. This implies that during the period (1999-2005), Islamic banks would have needed only 74 per cent of the resources they used to produce services they generated, while earning about 84 per cent of their potential profits on average. It seems that Islamic banks are relatively better at generating profits than controlling costs. It is worth noting that Islamic banks have achieved higher profit efficiency level than other banking sectors in other countries. On average, profit efficiency is reported to be only 64 per cent for U.S. banks (Berger and Humphrey, 1997) and 72 per cent for Spanish banks (Lozano, 1995).

[♦♦] Converted the Inefficiency scores (IE) into Efficiency scores by first taking antilog of inefficiencies and then using the following transaction E=1/(1+IE)

Table No.4.7

The ML Cost and Profit Frontier Parameter Estimates

	Cost function	Profit function
Coefficient		
a_0	12.291**	11.383*
a_{yi}	0.553	0.447
a_{y2}	0.199	-0.228
a_{y3}	0.324	-0.512
β_{p1}	-0.135	0.287**
β_{p2}	-3.095	-2.564
β_{p3}	0.123	-0.114
$a_{y1, y1}$	0.169	0.124
$a_{y2, y2}$	-0.149	-0.196
$a_{y3, y3}$	0.321	-0.135
$a_{y1, y2}$	0.157	-0.271
$a_{y1, y3}$	0.457**	0.167
$a_{y2, y3}$	-0.259	0.377-0.793*
$\beta_{p1, p1}$	0.563	-0.277**
$\beta_{p3, p3}$	0.708	0.669**
$\beta_{p1, p3}$	0.199**	0.134*
$\mu_{y1,p1}$	-0.750	0.201
$\mu_{y1,p3}$	-0.217*	-2.902
$\mu_{y2,p1}$	-0.172	0.587
$\mu_{y2,p3}$	0.411	0.152
$\mu_{y3,p3}$	-0.268	0.469**

Source: Bank scope data base (2006)

The inter-temporal comparison of the scores suggests that although cost efficiencies of the Islamic banks were practically stable between 1995 and 1997, they

dramatically fell between 2001 and 2004. Results indicate that cost efficiency in 2004 is much less than those in 1999and 2000. On the other hand, profit efficiencies were stable between 1999 and 2004, totally indicating good prospects in economic advancement and poverty eradication if it is implemented in various countries especially bless developed countries.

4.2.10 Second-Stage Regression

In order to determine which factors can affect the efficiency scores, it has been examined some aspects of banks' structure which is related to efficiency estimates. For this purpose, efficiency scores are regressed on a set of common explanatory variables. The following variables: banks size (measured by the value of total assets), profitability (measured by operating income to total assets) and the loan ratio (loan to total assets) were used for the purpose.

Table No. 4.8 reports the results of the regression estimation. It is important to note that dependent variables are the DEA efficiency scores. A positive coefficient implies efficiency increase whereas a negative coefficient means an association with an efficiency decline. The results suggest that bank size has significant positive influence efficiency, implying that larger banks tend to be more efficient. The positive sign o the ROA and ROE coefficients signals that higher efficiency is correlated with higher profitability. Consistent with Isik and Hassan (2000), our results suggest that the loan ratio exerts an insignificant impact upon all efficiency scores except with scale

efficiency; loan ratio has a significant positive relation with scale efficiency, indicating that output mix is favorable influencing scale efficiency.

The study investigates relative efficiency of the Islamic banking industry hi the world by employing a panel of banks during 1999-2005. Both parametric. (cost and profit efficiency) and nonparametric (data envelopment analysis) techniques are used to examine efficiency of these banks. Five DEA efficiency measures such as cost, allocative, technical, pure technical and scale efficiency scores are calculated and have been correlated with conventional accounting measures of performance. The results show that all five efficiency measures are highly correlated with ROA and ROE, suggesting that these efficiency measures can be used concurrently with conventional accounting ratios in determining Islamic bank performance.

The average cost efficiency (stochastic cost frontier) is 74 per cent, whereas the average profit efficiency (profit efficiency frontier) is 84 per cent. Although Islamic banks are relatively less efficient in containing cost, they are relatively efficient in generating profit. The average allocative efficiency is 74 per cent, whereas the average technical efficiency is about 84 per cent. This means that the dominant source of inefficiency is due to allocative inefficiency rather than technical inefficiency. These results are consistent with the fact that the Islamic banks operate in overall regulatory, environments which are not very supportive of their operations. Hassan (2003) found when Islamic banks operate in countries in countries such as Iran and Sudan where the entire banking system operate under Islamic Shariah, the banks become more

allocatively efficient. Average scale efficiency is about 89 per cent, and average pure technical efficiency is about 95 per cent, suggesting that the major source of the total technical inefficiency for Islamic banks is not pure technical inefficiency (input related) but scale inefficiency (output related). Our results indicate that there has been moderate increase in productivity growth over the years. The results show that larger bank size and greater profitability are associated with higher efficiency. These results indirectly support the economies of scale arguments in Islamic banking industry. Most of the Islamic banks are of smaller size compared to the conventional counterparts. It is imperative that Islamic banks be allowed to merge to obtain an optimal size in order to be more technically efficient and compete with their conventional counterparts.

The information obtained from efficiency studies can be used to help bank managers, government regulators and investors. Managerial performance can be improved by identifying "best practice" and "worst practice" associated with high and low efficiency firms, respectively. Success in competitive markets demands achieving the highest levels of performance through continuous improvement and learning. Frontier efficiency analyses can identify best practice banks and provide a numerical efficiency score and ranking for each bank that can be useful to policy makers, market analysts, and managers of competing banks.

Table No.4.8

Second-Stage Regression Results

Variable	CE	TE	AE	PTE	SE
Constant	0.564*** (2.352)	0.680*** (3.082)	0.865*** (4.328)	1.078*** (6.526)	0.606*** (3.951)
TA	1.1 (0.162)	2.133 (0.341)	-3.460 (-.061)	7.945** (7.10)	2.990* (1.689)
ROA	4.10 (1.919)**	7.55** (1.837)	3.45** (1.927)	6.129** (1.994)	1.669** (2.585)
ROE	4.322 (0.164)	4.689 (0.193)	4.409** (2.02)	-3.691 (-0.203)	8.427 (0.499)
LOGLOAN	3.975 (0.850)	4.77 (1.110)	-7.478 (-0.192)	-1.031 (-0.320)	5.746** (1.921)
R Square	0.319	0.539	0.339	0.676	0.538

Note: ROA is return on assets (Net income / Total assets). REQ is return on equity (Net income / equity). : CE: Cost efficiency, AE: Allocative efficiency, TE: Technical efficiency, PTE: pure technical efficiency, SE: Scale efficiency.

*** Significant at the 0.01 level.

** Significant at the 0.05 level.

* Significant at the 0.10 level

Source: Bank Scope Base 2006

Islamic banking emerged as a response to both religious and economic exigencies. While religious exigency calls for avoiding any transaction based on interest, economic exigencies, on the other hand, provide a new outlook to the role of banking in promoting investment/productive activities, influencing distribution of income and adding stability to the economy. Islamic banking is thus perceived as an improved system in all dimensions. However, in order to sustain in the long-run, the Islamic banking system has to be internally efficient and technologically advanced in order to compete with its conventional counterparts. Even by avoiding interest if Islamic banks

can maintain at least the same level of conventional banks indicates the good success of Islamic Banks. If the efficiency results of Islamic Banks are greater than conventional banks it indicates the tremendous success of the Islamic Banks over the conventional banks.

Section II

4.3 Efficiency of Islamic Banking at Country Level

This section investigates the efficiency of the Islamic banking sectors in 16 MENA[♦] and Asian countries during the period of 2001-2006. The efficiency estimates of individual banks are evaluated using the non-parametric Data Envelopment Analysis (DEA) method[♦♦]. The results suggest that the MENA Islamic banks have exhibited higher mean technical efficiency relative to their Asian Islamic bank counterparts. With pure technical inefficiency outweighs scale inefficiency in both the MENA and Asian countries banking sectors. The empirical findings also indicate that banks from the MENA region were the most efficient banks by dominating the top part of efficiency frontier over the period.

[♦] Middle East and North African countries
[♦♦] Used by Coelli (1996)

4.3.1 Data Sample, Inputs-Outputs Definition, and the Choice of Variables

It is commonly acknowledged that the choice of variables in efficiency studies significantly affects the results. The problem is compounded by the fact that variable selection is often constrained by the paucity of data on relevant variables. The cost and output measurements in banking are especially difficult because many of the financial services are jointly produced and prices are typically assigned to a bundle of financial services. Two approaches dominate the banking theory literature: the production and intermediation approaches (Sealey and Lindley, (1977).

Under the production approach, pioneered by Benston (1965), banks are primarily viewed as providers of services to customers. The input set under this approach includes physical variables (e.g. labour, material) or their associated costs, since only physical inputs are needed to perform transactions, process financial documents, or provide counseling and advisory services to customers. The output under this approach represents the services provided to customers and is best measured by the number and type of transactions, documents processed or specialized services provided over a given time period. This approach has primarily been employed in studying the efficiency of bank branches.

Under the intermediation approach, financial institutions are viewed as intermediating funds between savers and investors. In our case, Islamic banks produce

intermediation services through the collection of deposits and other liabilities and in turn these funds are invested in productive sectors of the economy, yielding returns uncontaminated by usury (riba'). This approach regard deposits, labour and physical capital as inputs, while loans and investments are treated as output variables.

Following among others, Hassan and Hussein (2003), Hassan (2005), and Sufian (2006), a variation of the intermediation approach or asset approach originally developed by Sealey and Lindley (1977) will be adopted in the definition of inputs and outputs used in this study. Furthermore, as at most times bank branches are engaged in the processing of customer documents and bank funding, the production approach might be more suitable for branch efficiency studies (Berger and Humphrey, (1997).

Due to entry and exit factor, the efficiency frontier is constructed by using an unbalanced sample of 37 Islamic banks operating in the MENA and Asian countries during the period 2001-2006 (Annexure 2) yielding 145 bank year observations. We are able to collect data on three outputs and two input variables. Data for the empirical analysis is sourced from individual bank's annual balance sheet and income statements. The Islamic banks are modelled as multi-product firms producing three outputs namely, Total Loans (y1), which include loans to customers and other banks, Income (y2), which include income derived from investment of depositors' funds and other income from Islamic banking operations, and Investments (y3), which include investment securities held for trading, investment securities available for sale (AFS), and investment securities

held to maturity, by engaging two inputs namely, Total Deposits (x1), which include deposits from customers and other banks and Assets (x2). All variables are measured in millions of US Dollars (US$) and are deflated against the respective countries inflation rates.

Summary Statistics of the Variables Employed in the DEA Model (in million of USD)

	Outputs	Mean	Min	Max	Std. Dev.
2001	Financing (y1)	2,072,602.20	41.73	10,127,108.75	2,858,233.51
	Investments (y2)	6,691,818.63	113.79	98,658,773.96	23,748,897.10
	Income (y3)	760,628.07	20.71	9,124,336.72	2,185,785.00
2002	Financing (y1)	436,725,814.92	71.43	5,464,190,981.43	1,403,710,407.37
	Investments (y2)	75,476,773.68	8.73	1,193,633,952.25	265,332,610.34
	Income (y3)	18,521,780.54	4.75	379,620,106.10	82,744,260.85
2003	Financing (y1)	26,572,480.58	2,009.60	416,601,653.92	92,380,809.38
	Investments (y2)	6,518,317.11	194.15	93,618,349.20	19,429,432.20
	Income (y3)	1,451,191.71	650.65	24,832,529.26	5,032,611.17
2004	Financing (y1)	18,135,724.37	5,224.93	323,001,142.04	67,651,398.47
	Investments (y2)	6,707,779.89	756.78	43,835,869.28	14,487,455.74
	Income (y3)	2,302,795.89	351.84	25,098,976.78	6,619,554.55
2005	Financing (y1)	14,044,631.95	277.97	311,078,473.37	55,650,834.74
	Investments (y2)	14,361,269.97	2.68	201,638,954.33	46,536,727.74
	Income (y3)	3,057,397.21	14.69	51,332,114.52	10,182,399.79
2006	Financing (y1)	13,057,215.55	608.50	238,726,790.45	46,704,970.74
	Investments (y2)	18,498,465.31	191.34	260,950,844.15	57,148,112.49
	Income (y3)	1,849,348.31	0.06	18,062,628.65	4,835,066.26
	Inputs	Mean	Min	Max	Std. Dev.
2001	Deposits (x1)	8,267,557.40	115.12	100,794,576.43	24,113,054.41
	Assets (x2)	12,826,816.98	460.00	137,966,754.66	33,304,908.22
2002	Deposits (x1)	5,980,134.28	40.47	57,721,407.81	13,404,907.36
	Assets (x2)	394,190,262.99	111.16	8,108,073,819.63	1,767,562,290.72
2003	Deposits (x1)	3,481,569.09	6,961.74	27,186,513.93	7,612,158.24
	Assets (x2)	30,061,673.61	10,952.30	632,102,153.22	125,771,372.95
2004	Deposits (x1)	5,814,208.50	5,861.32	40,606,842.97	11,409,513.78
	Assets (x2)	42,203,902.57	14,154.81	523,513,391.86	123,458,218.74
2005	Deposits (x1)	11,050,531.60	190.89	232,074,760.72	41,164,029.17
	Assets (x2)	39,202,139.38	375.66	521,518,425.02	114,739,713.41
2006	Deposits (x1)	14,250,404.28	497.19	304,246,781.34	58,669,598.79
	Assets (x2)	35,838,563.77	1.70	381,024,893.90	99,967,808.74

Source: Banks Annual Reports

The Technical Efficiency (TE) change of the MENA and Asian Islamic banking

sectors can be measured by the DEA method and its decomposition into Pure Technical

Efficiency (PTE) and Scale Efficiency (SE) components. In the event of the existence of scale inefficiency, we will attempt to provide evidence on the nature of the returns to scale of each Islamic bank. The Islamic banks' efficiency is first examined for each year under investigation before we proceed to examine the MENA and the Asian Islamic banks' efficiency results separately.

As suggested by Bauer et al. (1998), DeYoung and Hasan (1998), and Isik and Hassan (2002), constructing an annual frontier specific to each year is more flexible and thus more appropriate than estimating a single multiyear frontier for the banks in the sample. Following the earlier studies, for the purpose of the study, we prefer to estimate separate annual efficiency frontier for each year. In other words, there were six separate frontiers constructed for the study. Isik and Hassan (2002) contended that the principal advantage of having panel data is the ability to observe each bank more than once over a period of time. The issue is also critical in a continuously changing business environment because the technology of a bank that is most efficient in one period may not be the most efficient in another. Furthermore, by doing so, we alleviate, at least to an extent, the problems related to the lack of random error in DEA by allowing an efficient bank in one period to be inefficient in another, assuming that the errors owing to luck or data problems are not consistent over time (Isik and Hassan, 2002).

4.3.2 Efficiency of the MENA and Asian Islamic Banking Sectors

Table No.4.10 presents the mean efficiency scores of the Islamic banks for the years 2001 (Panel A), 2002 (Panel B), 2003 (Panel C), 2004 (Panel D), 2005 (Panel E), 2006 (Panel F), and All Years (Panel G). The results seem to suggest that the Islamic

banks' mean technical efficiency has been on a declining trend during the years 2001 to 2003, increased during the year 2004, before declining again in years 2005 and 2006. It is clear from Table No.4.10 that during the period of study, the Islamic banks have exhibited mean technical efficiency of 65.4 per cent. The results suggest that the Islamic banks could have saved 34.6 per cent of the inputs to produce the same amount of outputs that they produced. In other words, the Islamic banks could have produced the same amount of outputs produced by using only 65.4 per cent of the amount of inputs used. The decomposition of technical efficiency into its pure technical and scale efficiency components suggest that pure technical inefficiency dominates scale inefficiency of the Islamic banks during all years except for the year 2006 when pure technical efficiency was higher compared to scale efficiency. Overall the results imply that during the period of study, although the Islamic banks have been operating at a relatively optimal scale of operations, they were managerially inefficient to exploit their resources to the fullest.

The table no.4.10 presents mean, minimum, maximum, and standard deviation of the Islamic banks Technical Efficiency (TE), and its mutually exhaustive Pure Technical Efficiency (PTE) and Scale Efficiency (SE) components derived from the DEA. Panel A, B, C, D, E, and F shows the mean, minimum, maximum and standard deviation of TE, PTE, and SE of the Islamic banks for the years 2001, 2002, 2003, 2004, 2005, and 2006 respectively. Panel G presents the Islamic banks mean, minimum, maximum, and standard deviation of TE, PTE, and SE scores for all years. The TE, PTE, and SE scores are bounded between a minimum of 0 and a maximum of 1.

Summary Statistics of Efficiency Scores

Efficiency Measures	Mean	Minimum	Maximum	Std. Dev.
Panel A: All Banks 2001				
Technical Efficiency	0.869	0.255	1.000	0.189
Pure Technical Efficiency	0.907	0.266	1.000	0.188
Scale Efficiency	0.961	0.745	1.000	0.082
Panel B: All Banks 2002				
Technical Efficiency	0.545	0.217	1.000	0.259
Pure Technical Efficiency	0.607	0.217	1.000	0.286
Scale Efficiency	0.929	0.441	1.000	0.164
Panel C: All Banks 2003				
Technical Efficiency	0.231	0.028	1.000	0.320
Pure Technical Efficiency	0.334	0.057	1.000	0.349
Scale Efficiency	0.759	0.092	1.000	0.321
Panel D: All Banks 2004				
Technical Efficiency	0.842	0.251	1.000	0.196
Pure Technical Efficiency	0.909	0.621	1.000	0.126
Scale Efficiency	0.920	0.397	1.000	0.156
Panel E: All Banks 2005				
Technical Efficiency	0.817	0.440	1.000	0.183
Pure Technical Efficiency	0.825	0.458	1.000	0.183
Scale Efficiency	0.990	0.896	1.000	0.021
Panel F: All Banks 2006				
Technical Efficiency	0.640	0.237	1.000	0.255
Pure Technical Efficiency	0.798	0.329	1.000	0.209
Scale Efficiency	0.790	0.405	1.000	0.186
Panel G: All Banks All Years				
Technical Efficiency	0.654	0.028	1.000	0.324
Pure Technical Efficiency	0.727	0.057	1.000	0.307
Scale Efficiency	0.889	0.092	1.000	0.199

Source: Banks Annual Report (2007)

Table No.4.11 presents the results of the MENA Islamic banks. It is clear that the MENA Islamic banks' efficiency was on a declining trend from the years 2001 to 2003, increased in year 2004, before declining again during the years 2005 and 2006. The results seem to suggest that the MENA Islamic banks have exhibited mean technical efficiency of 66.7 per cent, suggesting mean input waste of 33.3 per cent. This implies that the Islamic banks in the MENA countries could have produced the same amount of outputs by only using 66.7 per cent of the amount of inputs it employed. From Table No.4.11 it is also clear that pure technical inefficiency outweighs scale inefficiency in determining the total technical efficiency of the MENA Islamic banks during the period of study.

During the period of study, we find that banks from Iran were the most efficient from the MENA region, exhibiting a mean efficiency score of 85.4 per cent, followed by banks from Bahrain and Qatar with a mean efficiency score of 77.8 per cent and 71.1 per cent respectively. On the other hand, the results seem to suggest that the Kuwaiti banking sector were the least efficient, recording a mean efficiency of 44.8 per cent, followed by Yemen, and Sudan banks with a mean efficiency levels of 47.8 per cent and 49.3 per cent respectively.

It is interesting to note that while pure technical inefficiency outweighs scale inefficiency in Bahrain, Qatar, Saudi Arabia, UAE, Yemen, Egypt, and Kuwait Islamic banking sectors, the results seem to suggest that scale inefficiency outweighs pure technical inefficiency in the Gambia, Iran, and Sudan Islamic banking sectors. In essence, the findings imply that while the Islamic banks in Bahrain, Qatar, Saudi

Arabia, UAE, Yemen, Egypt, and Kuwait were managerially inefficient in controlling their operating costs and utilize their resources to the fullest, the Islamic banks in Gambia, Iran, and Sudan were found to have been operating at a relatively non-optimal scale of operations i.e. either they were too small or too large to be scale efficient.

The table no.4.11 presents mean, minimum, maximum, and standard deviation of the MENA Islamic banks technical efficiency (TE), and its mutually exhaustive pure technical efficiency (PTE) and scale efficiency (SE) components derived from the DEA. Panel A, B, C, D, E, and F shows the mean, minimum, maximum and standard deviation of TE, PTE, and SE of the Islamic banks for the years 2001, 2002, 2003, 2004, 2005 and 2006 respectively. Panel G presents the MENA Islamic banks mean, minimum, maximum, and standard deviation of TE, PTE, and SE scores for all years. The TE, PTE, and SE scores are bounded between a minimum of 0 and a maximum of 1.

Similar to the MENA Islamic banks peers, the results from Table No.4.12 seem to suggest that the Islamic banks in the Asian countries have exhibited a declining trend during the earlier part of the study, increased in 2004, before declining again in years 2005 and 2006. During the years, the Asian Islamic banks have exhibited a lower mean technical efficiency of 61.4 per cent (MENA Islamic banks – 66.7 per cent). It is also clear from Table No.4.12 that pure technical inefficiency outweighs scale inefficiency in determining the total technical inefficiency of the Asian Islamic banks.

Table No.4.11

Summary Statistics of Efficiency Scores

Banks	Mean	Minimum	Maximum	Std. Dev.
Panel A: MENA Banks 2001				
Technical Efficiency	0.914	0.695	1.000	0.112
Pure Technical Efficiency	0.946	0.695	1.000	0.098
Scale Efficiency	0.968	0.745	1.000	0.081
Panel B: MENA Banks 2002				
Technical Efficiency	0.529	0.217	1.000	0.255
Pure Technical Efficiency	0.602	0.217	1.000	0.297
Scale Efficiency	0.922	0.441	1.000	0.181
Panel C: MENA Banks 2003				
Technical Efficiency	0.228	0.028	1.000	0.313
Pure Technical Efficiency	0.356	0.069	1.000	0.350
Scale Efficiency	0.723	0.092	1.000	0.347
Panel D: MENA Banks 2004				
Technical Efficiency	0.836	0.251	1.000	0.210
Pure Technical Efficiency	0.913	0.631	1.000	0.121
Scale Efficiency	0.906	0.397	1.000	0.175
Panel E: MENA Banks 2005				
Technical Efficiency	0.823	0.440	1.000	0.197
Pure Technical Efficiency	0.831	0.458	1.000	0.194
Scale Efficiency	0.989	0.896	1.000	0.024
Panel F: MENA Banks 2006				
Technical Efficiency	0.700	0.398	1.000	0.229
Pure Technical Efficiency	0.825	0.522	1.000	0.185
Scale Efficiency	0.840	0.558	1.000	0.149
Panel G: MENA Banks All				
Years				
Technical Efficiency	0.667	0.028	1.000	0.235
Pure Technical Efficiency	0.741	0.069	1.000	0.183
Scale Efficiency	0.890	0.092	1.000	0.078

Source: Banks Annual Reports (2007)

During this period of study, banks in Indonesia were the most efficient from the Asian region, exhibiting a mean efficiency score of 92.3 per cent, followed by banks in Pakistan and Bangladesh with a mean efficiency score of 64.3 per cent and 57.45 respectively. On the other hand, we find that the Islamic banks in Malaysia were the least efficient, recording a mean efficiency score of 50.5 per cent.

Unlike their counterparts in the MENA region, the empirical findings seem to suggest that pure technical inefficiency outweighs scale inefficiency in determining the total technical inefficiency in all of the Asian Islamic banking sectors. Thus, the findings imply that although the Asian Islamic banking sectors have been operating at a relatively optimal scale of operations, they were relatively managerially inefficiency in controlling their operating costs and utilizing their resources to the fullest.

4.3.3 Composition of the Efficiency Frontier

While the results above highlight the sources of technical inefficiency of the Islamic banks, we next turn to discuss the sources of the scale inefficiency of the Islamic banks. As have been mentioned earlier, a bank can operate at CRS or VRS where CRS signifies that an increase in inputs results in a proportionate increase in outputs and VRS means a rise in inputs results in a disproportionate rise in outputs. Further, a bank operating at VRS can be at Increasing Returns to Scale (IRS) or Decreasing Returns to Scale (DRS). Hence, IRS means that an increase in inputs results in a higher increase in outputs, while DRS indicate that an increase in inputs results in lesser output increases.

To identify the nature of returns to scale, first the CRS scores (obtained with the CCR model) is compared with VRS (using BCC model) scores. For a given bank, if the VRS score equals to its CRS score, the bank is said to be operating at Constant Returns to Scale (CRS). On the other hand, if the scores are not equal, a further step is needed to establish whether the bank is operating at IRS or DRS. To do this, the DEA model is used under the Non-Increasing Returns to Scale assumptions (NIRS). If the score under VRS equals the NIRS score, then the bank is said to be operating at DRS.

The table no.4.12 presents mean, minimum, maximum, and standard deviation of the Asian Islamic banks Technical Efficiency (TE), and its mutually exhaustive Pure technical Efficiency (PTE) and Scale Efficiency (SE) components derived from the DEA. Panel A, B, C, D, E, and F shows the mean, minimum, maximum and standard deviation of TE, PTE, and SE of the Islamic banks for the years 2001, 2002, 2003, 2004, 2005, and 2006 respectively. Panel G presents the Asian Islamic banks mean, minimum, maximum, and standard deviation of TE, PTE, and SE scores for all years. The TE, PTE, and SE scores are bounded between a minimum of 0 and a maximum of 1.

Alternatively, if the score under VRS is different from the NIRS score, than the bank is said to be operating at IRS (Coelli et al., 1998). Table No.4.13 shows the banks that lie on the efficiency frontier. The composition of the efficiency frontier suggests that the 100 per cent efficient banks vary between six to 19 banks. During the period of study, MENA Islamic banks seem to have dominated the efficiency frontier, while two MENA Islamic banks have failed to appear at least once on the frontier. It is also clear from the results that four MENA Islamic banks namely, Abu Dhabi Islamic Bank, Al-Baraka Islamic Bank, Arab Banking Corporation and Bahrain Islamic Bank were the global leaders by appearing the most on the efficiency frontier.

Banks	Mean	Minimum	Maximum	Std. Dev.
Panel A: Asian Banks 2001				
Technical Efficiency	0.658	0.255	0.900	0.351
Pure Technical Efficiency	0.722	0.266	1.000	0.398
Scale Efficiency	0.925	0.818	1.000	0.095
Panel B: Asian Banks 2002				
Technical Efficiency	0.597	0.372	1.000	0.296
Pure Technical Efficiency	0.622	0.372	1.000	0.279
Scale Efficiency	0.952	0.763	1.000	0.106
Panel C: Asian Banks 2003				
Technical Efficiency	0.239	0.057	1.000	0.374
Pure Technical Efficiency	0.264	0.057	1.000	0.367
Scale Efficiency	0.875	0.475	1.000	0.204
Panel D: Asian Banks 2004				
Technical Efficiency	0.865	0.602	0.995	0.152
Pure Technical Efficiency	0.894	0.621	1.000	0.157
Scale Efficiency	0.967	0.927	0.995	0.026
Panel E: Asian Banks 2005				
Technical Efficiency	0.804	0.605	1.000	0.159
Pure Technical Efficiency	0.812	0.605	1.000	0.164
Scale Efficiency	0.991	0.952	1.000	0.015
Panel F: Asian Banks 2006				
Technical Efficiency	0.496	0.237	1.000	0.268
Pure Technical Efficiency	0.736	0.329	1.000	0.259
Scale Efficiency	0.670	0.405	1.000	0.219
Panel G: Asian Banks All				
Years				
Technical Efficiency	0.614	0.057	1.000	0.254
Pure Technical Efficiency	0.685	0.057	1.000	0.296
Scale Efficiency	0.889	0.405	1.000	0.048

Source: Banks Annual Reports (2007)

In general, the table indicates that while the small banks tends to operate at CRS or IRS, the large banks tend to operate at CRS or DRS, the findings which are similar to the earlier studies by among others McAllister and McManus (1993) and Noulas et al. (1990). To recap, McAllister and McManus (1993) have suggested that while the small banks have generally exhibited IRS, the large banks on the other hand tend to exhibit DRS and at best CRS.

As it appears, the small Islamic banks have experienced increasing returns to scale (IRS) in their operations during the period of the study. One implication is that for the small Islamic banks, a proportionate increase in inputs would result in more than a proportional increase in outputs. Hence, the small Islamic banks which have been operating at IRS could achieve significant cost savings and efficiency gains by increasing its scale of operations.

In other words, substantial gains can be obtained from altering the scale via internal growth or further consolidation in the sector. In fact, in a perfectly competitive and contestable market, the efficient banks should absorb the scale inefficient banks, in order to exploit cost advantages. Thus, the banks that experience IRS should either eliminate their scale inefficiency or will become a prime target for acquiring banks, which can create value from underperforming banks, and thus streamlining their operations and eliminating their redundancies and inefficiencies (Evanoff and Israelvich, 1991).

On the other hand, the results seem to suggest that further increase in size would only result in a smaller increase of outputs for every proportionate increase in inputs of the large banks, resulting from the fact that the large banks have been operating at declining returns to scale (DRS) during the period. Hence, decision-makers ought to be more cautious in promoting mergers among the large banks as a means to enjoying efficiency gains.

Table No.4.13

Evolution of Efficiency Scores over the Years

Bank	Region	2001	2002	2003	2004	2005	2006	Count Bank
Abu Dhabi Islamic Bank	MENA	CRS	CRS	IRS	CRS	CRS	DRS	4
Al-Amin Bank	MENA				CRS	CRS	CRS	3
Al-Arafah Islami Bank	ASIA			CRS	DRS	CRS		2
Al-Baraka Islami Bank B.S.C	MENA		CRS	CRS	CRS	CRS		4
Al-Baraka South Africa	MENA	CRS	IRS	IRS	IRS	IRS	DRS	1
Al-Baraka Sudan	MENA			IRS	IRS	CRS	DRS	1
Al-Rajhi Banking	MENA	CRS	DRS	CRS	CRS			3
Al-Salam Bank	MENA						CRS	1
Al-Baraka Islamic Bank B.S.C.	ASIA					IRS	DRS	0
Arab Banking Corporation	MENA	CRS	CRS	IRS	CRS	CRS	DRS	4
Arab Gambian Islamic Bank	MENA				DRS	CRS		1
Bahrain Islamic Bank	MENA	CRS	CRS	CRS		CRS	DRS	4
Bank Al-Jazira	MENA	DRS	CRS	IRS		DRS		1
Bank Islam Malaysia Berhad	ASIA	DRS	CRS	IRS	DRS	DRS		1
Bank Mellat	MENA					IRS	CRS	2
Bank Muamalat Indonesia	ASIA					CRS	CRS	2
Bank Muamalat Malaysia Berhad	ASIA	CRS	CRS	IRS	DRS	DRS	DRS	2
Bank Refah	MENA	CRS	IRS			IRS		1
Dubai Islamic Bank	MENA	CRS	CRS	IRS	DRS	DRS	DRS	2
EG Saudi Financial Bank	MENA				IRS	CRS		1
Emirates Islamic Bank	MENA					CRS	DRS	1
Faisal Islamic Bank	MENA		CRS	IRS	CRS	CRS		3
Gulf Finance House	MENA			IRS	CRS	CRS	CRS	3
Islamic Bank Bangladesh	ASIA					CRS	DRS	1
Ithmaar Bank	MENA					CRS	DRS	1
Kuwait Finance House	MENA	CRS	DRS	IRS	DRS	DRS	DRS	1
Kuwait Finance House (Turkey)	MENA	CRS	IRS	IRS				1
Kuwait Finance House (Malaysia)	ASIA					CRS	DRS	1
Mashreq Bank	MENA ASIA	CRS	CRS	IRS	DRS	CRS	DRS	3
Meezan Bank		IRS	IRS	IRS	IRS	IRS	DRS	0
Qatar International Islamic Bank	MENA			IRS	IRS	CRS	CRS	2
Shah Jalal Islami Bank	ASIA		DRS	CRS	DRS	DRS	DRS	1
Shamil Bank	MENA	DRS	CRS	IRS	DRS	DRS	DRS	1
Sharjah Islamic Bank	MENA	IRS	CRS	IRS				1
Standard Chartered Modharaba	ASIA		CRS	CRS		CRS	DRS	3
Tadhamon International Islamic Bank		IRS	IRS	IRS	IRS		DRS	0
Taib Bank	MENA			IRS	DRS	IRS	DRS	0
Count Year		11	13	6	7	19	6	

Source: Banks Annual Reports (2007)

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The banks corresponds to the shaded regions have not been efficient in any year in the sample period (2001-2006) compared to the other banks in the sample.

'Count Year' denotes the number of banks appearing on the efficiency frontier during the year. 'Count Bank' denotes the number of times a bank has appeared on the efficiency frontier during the period of study.

In this paper, the performance of the MENA and Asian Islamic banks during the period 2001-2006 has been examined. The efficiency estimates of individual banks are evaluated using the non-parametric Data Envelopment Analysis (DEA) approach.

The empirical findings suggest that pure technical inefficiency outweighs scale inefficiency in the Islamic banking sector implying that the Islamic banks have been managerially inefficient in exploiting their resources to the fullest extent. The empirical findings seem to suggest that the MENA Islamic banks have exhibited higher technical efficiency compared to their Asian Islamic banks counterparts. During the period of study we find that pure technical inefficiency has greater influence in determining the total technical inefficiency of the MENA and the Asian Islamic banking sectors.

Section III

4.4 Efficiency of Islamic Banking in Jordan

Islamic banking in Jordan started around two decades ago. Since then it has played an important role in financing and contributing to different economics and social

sectors in the country in compliance with the principles of Shariah rules in Islamic banking practices. Since then have been limited studies on the financial performance of Islamic banks in the country. The study aims to examine and analyse the Jordanian experience with Islamic banking, and in particular the experience for the first and second Islamic bank in the country, Jordan Islamic Bank for Finance and Investment (JIBFI), and Islamic International Arab Bank (IIAB) in order to evaluate the Islamic banks' performance in the county. The study goes further to shed some light on the domestic as well as global challenges, which are facing this sector. However, this study used the performance evaluation methodology by conducting the profit maximization, capital structure, and liquidity tests.

With the continual growth of Islamic banking in the Arab and Middle East world, the concept has also engaged Jordan because it has open society, experience and active banking and finance sector, number of reforms has initiated to the banking sector during 1980s to strengthen the sector. But the most important factor, which assists Jordan to engage in Islamic banking, is that the majority of the populations (around 6 million) are Muslim (92 per cent), most of whom are keen and interest to obtain competitive financial services that meet their beliefs. Hence, the country was in a good position and ready to adopt Islamic banking concept and develop it further to its full potential.

The Islamic banking in Jordan started around two decades ago with the foundation of its first Islamic bank that is Jordan Islamic bank for finance investment in 1978, since then the Islamic banks in the country have grown in number and size with the establishment of more branches and more Islamic banks such as Islamic

International Arab bank and the establishment of other Islamic institutions such as Jordan Islamic Insurance, Islamic Investment House and Jordan Finance House. (Ahamed, (2004).

Hence, since there have been limited studies in the case of Islamic banking performance in Jordan, the objective of this paper is to examine and analyse the Jordanian experience in Islamic banking by evaluating the performance of Islamic banks in the country which have been operating since the last two decades. Nevertheless, the paper shed some light on the role of Islamic banking in Jordan in terms of financing and contributing various economic and social sectors in the country for the upliftment of the society and eradication of poverty.

4.4.1 Banking and Islamic Finance in Jordan

The banking system in Jordan was dominated by the Central Bank and Amman Financial Market. The central Bank established in 1964, was responsible for note issue, exchange reserves management, and regulation of credit. The banking sector during 1970s and the early 1980s has seen more than doubles loans and deposits. During this period the number of financial institutions tripled as the government encouraged the expansion of banking services as a key driver to its economic development policy. Deposits were attracted from other Arab countries, and the savings and remittances were also captured. These deposits were used as loans to growing companies that needed capital.

Furthermore, during the 1980s Jordan was the only Arab country in which the value of bank assets exceeded GDP. Commercial bank assets have risen from JD1.1 million in 1980 to JD2.3 billion in 1985. Total deposits as well increased from about JD800 million to JD1.7 billion. Strict Central bank consumer credit controls and government success in encouraging savings was resulted in a growth of 7 per cent per year from 1980 to 1987. The liquid money supply reached about JD900 million during this period, with no significant inflation. But during the mid-1980s, the government became cautious that the banking sector in the country was expanding rapidly (AME info, 2005).

It is worth noting here that in the late 1980s, thirty major banks and financial institutions operated in the country, among them eight major locally based conventional commercial banks, six foreign banks, two Islamic banks, and a host of smaller or more specialized foreign and domestic financial institutions. The Arab bank was by far the largest locally based commercial bank, a Palestinian institution that moved to Amman from Jerusalem in 1948. In terms of total assets the Jordan National bank, the Cairo-Amman Bank, the Jordan-Kuwait bank, and the Petra Bank were the most important local institutions. Foreign banks including Citibank, Grindlays bank, the Hong Kong-based British bank of the Middle East, as well as the Iraq's Rafidayn bank and Egypt's Arab land bank. Chase Manhattan Bank left Jordan following the 1984 government imposed financial regulations (JIR, 2005).

However, recently the numbers of banks operating in Jordan rose to twenty four banks at the end of 2004, of which fourteen are commercial, eight foreign banks and two Islamic banks (Central Bank of Jordan, 2004). In addition to that there are four

specialized credit institutions in Jordan such as Industrial Development Bank etc. These banks carry out business throughout the Kingdom through a network of 447 branches and 154 representative offices. Thus, the population branch index of operating banks, at the end of' 2004, was nearly 11.9 thousand citizens per branch. On the other hand, the number of branches of Jordanian banks operating abroad reached (124) branches, of which 52 branches are operating in Palestine in addition to ten representative offices (Central Bank of Jordan, 2004). In addition to that, it is worth noting here that Amman Stock Exchange (ASE) was established in 1976, considered to be the most efficient stock exchanges in the Arab World, as well as the largest and fastest growing markets in the region opens to investors. The ASE is one of the few Middle East and North African countries (MENA) markets, which engaged in the International Finance Corporation Emerging Markets Index. Its market capitalization to GDP ratio of 73.1% is one of the highest in the region, exceeding that of many countries such as Israel, Saudi Arabia, Egypt, and among others (JIB, 2005).

4.4.2 Islamic Banking in Jordan

As indicated earlier that Islamic banking in Jordan has been operating for around 2 decades. As indicated earlier that Islamic banks paid no interest on deposits, and collected no interest on loans. Instead, they made equity investments in companies and then shared in the venture's profit or loss, some of which would then passed on the depositors. Currently there are two Islamic banks listed in the Amman Stock Exchange (ASE) (Jordan Islamic Bank for Finance and Investment and Islamic international Arab bank PLC).

4.4.3 Jordan Islamic Bank for Finance and Investment

Jordan Islamic Bank for Finance and Investment was established as a public shareholding company in 1978 and was licensed with the objective to practice financing, banking and investment activities in compliance with the provisions of Islamic Shariah law. Since its establishments the bank succeeded in achieving growth (Table No.4.14) and in establishing itself as one of the leading banks in Jordan by providing all kinds and investment activities.

Table No. 4.14

Jordan Islamic Bank for Finance and Investment (JIBFI) Aggregates during 1998-2003

	1998	1999	2000	2001	2002	2003
Total Assets	706.763	657.562	658.892	703.843	797.012	975.490
Direct Credit Facilities, Net	391.594	277.572	250.958	252.571	281.369	321.983
Customers Deposits	534.821	547.794	564.577	621.509	710.520	876.956
Total Shareholders' Equity	50.910	52.588	54.529	53.578	55.592	56.983
Growth (%)						
Total Assets		-6.9614	0.2022	6.8223	13.2371	22.3935
Direct Credit Facilities, Net		-29.1176	-9.5880	0.6427	11.4020	14.4343
Customers Deposits		2.4257	3.0638	10.0839	14.3218	23.4245
Total Shareholders' Equity		3.2965	3.6899	-1.7430	3.7575	2.5022

Source: Central Bank of Jordan and Amman Stock Exchange (2004)

The Bank plays an effective role in developing the economic and social activities as evidence by the growing number of people to deposit their' savings with the bank, and channeling these deposits towards investment and creating jobs. The number of people who benefited from interest free loans reached about 144,000, and the total loans granted to them amounted to JD 51.1 million. Furthermore, with the objective of the bank to increase its presence in the country to reach all citizens who is interested to use Islamic banking products (such as Mudaraba, Musharka, Murabaha etc), the bank has increased its network, which comprised of 52 branches and 12 cash offices. It is worth noting here that the number of accounts opened with the bank thought its network, has reached 997,000 accounts, the number of the bank's employees has reached 1418 in 2004. Furthermore, the Bank has been successful in establishing correspondent relations with more than 300 international banks (JIBFI, Annual Report, 2004).

4.4.4 Islamic International Arab Bank

The Islamic International Arab Bank (IIAB) is the second bank in Jordan to operate according to Islamic Shariah. It began its operations in February 1998 with four branches in Jordan. The bank is offering a complete set of Islamic banking, financing and correspondence services. The Islamic international Arab Bank aims to .cover economical and social needs within the banking sector, in accordance with the Islamic banking Shariah rules. The Islamic International Arab Bank is now ranked as the fourth bank in Jordan with a paid-up capital, which amounts to 40,000,000 Jordanian Dinars. The total number of Islamic International Arab Bank employees by the end of 2002 reached 217, compared with 207 by the end of 2001. The numbers of branches are 11

around the kingdom. Table no. 4.15 summarizes the banks aggregate during the period 1998-2003 (IIAB, 2002).

Table No.4.15

Islamic International Arab Bank Aggregates during 1998-2003

	1998	1969	2000	2001	2002	2003
Total Assets	137.294	216.321	197.036	253.246	314.741	385.529
Direct Credit Facilities, Net	85.982	145.747	55.174	97.063	105.927	122.670
Customers Deposits	94.408	169.233	77.361	112.436	152.328	197.594
Total Shareholders' Equity	40.610	42.025	45.177	45.559	47.085	48.917
Growth (%)						
Total Assets		57.561	-8.915	28.528	24.282	22.491
Direct Credit Facilities, Net		69.509	-62.144	75.922	9.133	15.806
Customers Deposits		79.257	-54.287	45.339	35.480	29.716
Total Shareholders' Equity		3.484	7.500	0.846	3.349	3.892

Source: Central Bank of Jordan and Amman Stock Exchange 2004

4.4.5 Performance Analysis of Islamic Banks in Jordan

According to the financial management theory banks' performance can be evaluated by using many financial ratios, for example profitability ratios, liquidity ratios, among other ratios. For example Patnam (1983), Sabi (1996) and Samad (1999), among others have used many financial ratios to evaluate or analyze the bank's performance. However, in the context of this study, and in order to examine the performance of Islamic banking in Jordan, "Banking Efficiency Model" will be taken into consideration to measure the bank's performance. Due to an unavailability of long period time series data for Islamic International Arab Bank (IIAB), this study is limited

only to four years time series data. But nevertheless this study is important since there have been no studies on the development of Islamic banks in Jordan.

Hence, performance evaluation is an important step to measure the growth and development of any bank. It is customary in commercial banks to evaluate their objectives and goals. The main objective of Banks and any institutions is to maximize profits. Without making profits firms are unable to continue work and develop services. On the other hand, Islamic banks have also other objectives besides making or maximizing profits; their aim is to achieve economic and social welfare and to ensure that there is no exploitation of the customers.

Table No.4.16

Profitability and Performance for Jordan Islamic Bank for Finance and Investment

Profitability and performance,	2000	2001	2002	2003
Return On Assets (ROA) %	0.33	0.14	0.26	0.33
Return On Equity(ROE) %	3.95	1.88	3.68	5.62
Net Interest and Commissions Income/Operational	88.41	86.31	90.37	87.44
Credit Interest / Credit Facilities, Net %	11.89	10.75	10.15	10.09
Net Income / Total Revenues %	6.38	3.18	5.89	7.95
Total Revenues / Total Assets %	5.12	4.50	4.37	4.13
(Provision for Credit Facilities + Interest in Suspense) / Credit Facilities	9.95	10.65	11.01	6.86
Net income/total liabilities	0.36	0.16	0.28	0.35

Source: Central Bank of Jordan 2004

Profitability and Performance for Islamic International Arab Bank PLC

Profitability and performance	2000	2001	2002	2003
Return On Assets (ROA) %	1.59	1.14	0.58	0.52
Return On Equity (ROE) %	6.94	6.33	3.88	4.08
Net Interest and Commissions Income/Operational Income%	33.43	44.21	62.50	60.20
Credit Interest / Credit Facilities, Net %	8.95	6.68	6.39	5.66
Net Income / Total Revenues %	32.03	26.75	18.66	19.30
Total Revenues / Total Assets %	4.97	4.25	3.11	2.68
(Provision for Credit Facilities + Interest in Suspense) / Credit Facilities	1.43	1.48	1.40	1.51
Net Income/Total Liabilities	2.06	1.39	0.68	0.59

Source: Central Bank of Jordan 2004

4.4.6 Profit Maximization Test

Eight indicators of profitability and performance are taken to evaluate the bank performance (see Table No.4.16 and Table No. 4.17).

Table No.4.16 and Table No.4.17 show that both measures of performance ROA and ROE have a positive sign in both banks. Both measures of performance are higher in Islamic International Arab Bank in all years compared with the Islamic Bank for Finance and investment. The ROA in 2000 is 0.33 per cent in Jordan Islamic Bank for Finance and Investment compared with 1.59 per cent in Islamic International Arab Bank. Figure no.4.1 and no.4.2 show the ROI and ROE for Jordan Islamic Bank for

Finance and Investment from 1989-2003. It seems that the bank ROI is decreased during 1991, 1997, 1999, 2001, and 2002. The decrease during the years 1999, 2001 and 2002 could be as a result-of competition between the two Islamic banks while the deceasing during 1991 could be as a result of Gulf War one.

Figure No.4.1

Return on Investment (ROI) for Jordan Islamic Bank for Finance and Investment

Figure 1: Return on Investment for Jordan Islamic Bank for Finance and Investment (ROI)
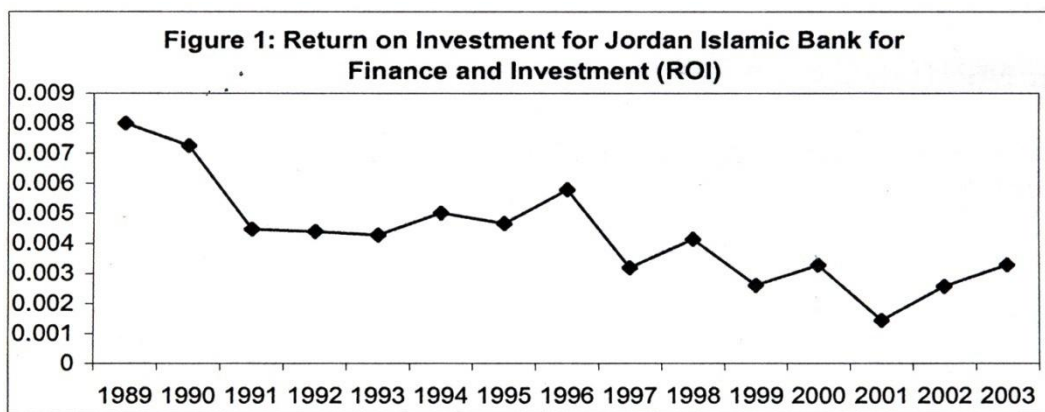
Source: Amman stock Exchange and JIBFI 2004

Figure No.4.2

Return on Equity (ROE) for Jordan Islamic Bank for Finance and Investment

Figure 2: Return on Equity for Jordan Islamic Bank for Finance and Invetsment
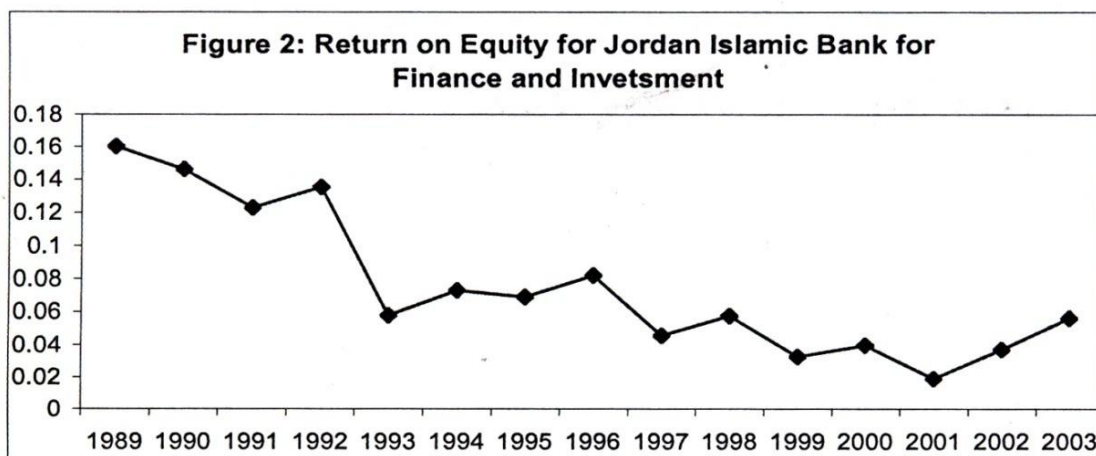
Source: Amman stock Exchange and JIBFI 2004

The bank performance measure ROA is decreased in both banks in 2001 and increased in both banks in 2002 and 2003, but ROA is still higher in Islamic International Arab Bank than in Islamic Bank for Finance and Banking.

Figure No.4.3

Total Assets in Islamic Banks in Jordan, 1998-2003

Figure 3 : Total Assets in Islamic Banks in Jordan, 1998-2003
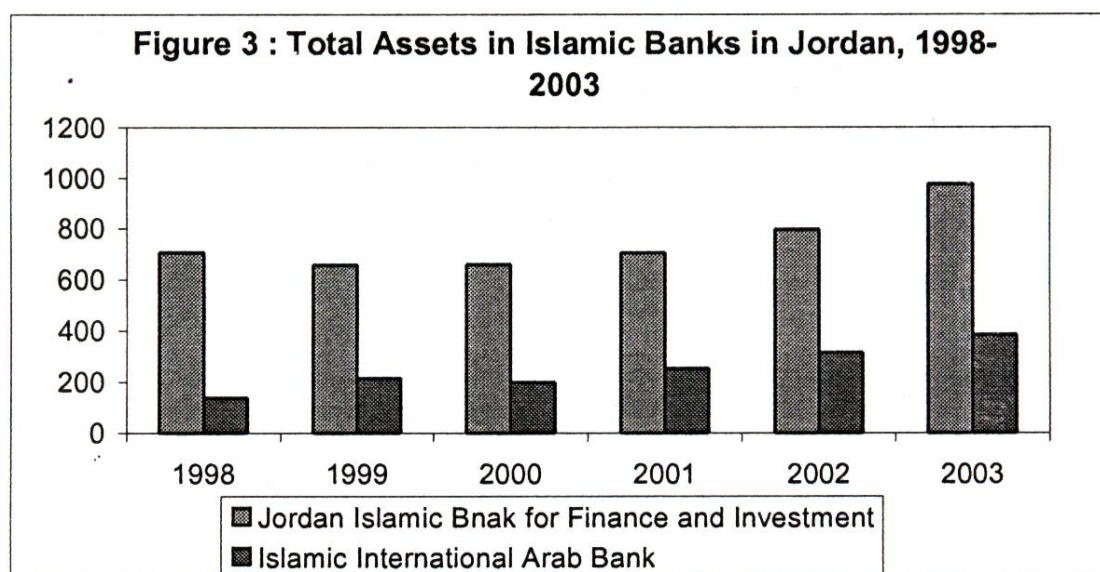
Source: Amman Stock Exchange 2004

Figure No.4.3 shows that the total assets in the Islamic bank for finance and investment is more than the total assets in the Islamic international Arab bank in about 461.856 millions in 2000 and 589,961 millions in 2003. Also, the total shareholders' equity in Islamic Bank for finance and investment is greater than the total shareholders' equity in Islamic international Arab bank in about 9.352 million compared with 8.065 millions in 2003 (Figure no.4.3).

Furthermore, other measures of performance are calculated to measure the performance taking into account the facilities and liabilities. Net Interest and Commissions Income/Operational Income in 2000 is 88.41 per cent in Jordan Islamic

bank for finance compared with 33.43 per cent in the Islamic International Arab Bank. This ratio increased in both banks in 2002 and is still very high in Jordan Islamic bank for finance 87.44 per cent in 2003 compared with 60.20 per cent for the Islamic international Arab bank. This ratio shows that the Islamic International bank increased its interest and commissions income, which indicates that the bank expanded its activities in at a higher rate. Credit Interest / Credit Facilities, Net, Net Income / Total Revenues, and Total Revenues / Total Assets are also calculated for both banks. Both ratios Credit Interest / Credit Facilities, and Total Revenues / Total Assets are higher in Jordan Islamic Bank for finance and investment compared with the Islamic international Arab bank ratios (see Table No.4.16 and Table No.4.17). For example, the ratio of credit interest / credit facilities in Jordan Islamic bank for finance and investment is 11.89 per cent in 2000 compared with 8.95 per cent for the Islamic international Arab bank.

The Net Income / Total Revenues ratio is 6.38 per cent in 2000 in Jordan Islamic Bank for finance and investment compared with 32.03 per cent hi Islamic international Arab bank. While, this ratio increased in 2003 reaching 7.95 per cent in Jordan Islamic Bank for finance and investment it decreased in Islamic International Arab bank to reach 19.30 per cent and this could be as a result of increasing the administration expense resulting from expansion and opening of new branches.

Another ratio is calculated the (Provision for Credit Facilities + Interest in Suspense) / Credit Facilities ratio is very high in Jordan Islamic Bank for Finance and investment compared with the same ratio in Islamic international Arab bank. For example, the (Provision for Credit Facilities + Interest in Suspense) / Credit Facilities

ratio is 6.86 per cent in 2003 for Jordan Islamic bank compared with 1.51 per cent for Islamic international Arab bank. Furthermore, Net Income/Total Liabilities is lower for Jordan Islamic bank compared with Islamic international Arab bank. Another measure of performance that used to evaluate the bank performance is the bank earnings per share (EPS). Figure no.4.4 shows that this ratio for the Jordan Islamic Bank for finance and Investment decreased during the last 6 years. The performance measures show the ability and the efficiency of both the Islamic banks to increase its income and decrease its expenses.

Figure No.4.4

Ratio for the Jordan Islamic Bank for Finance and Investment
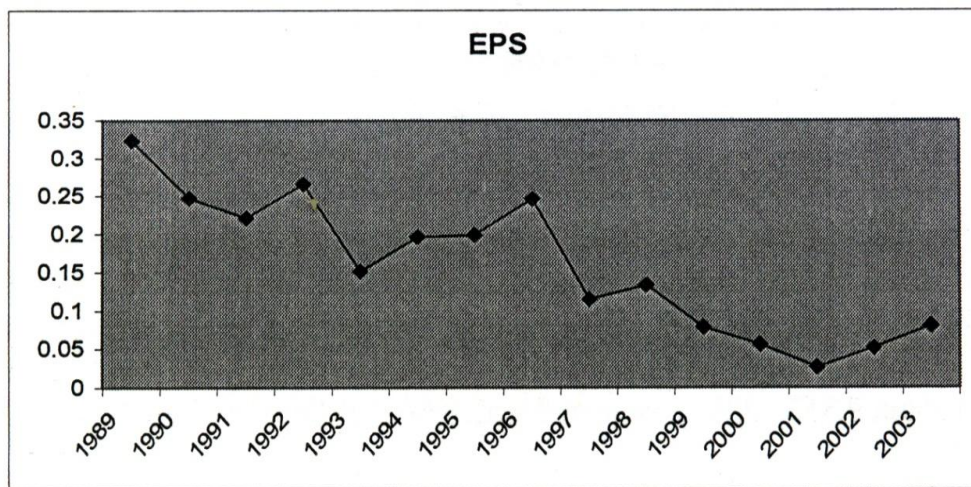
Source: Amman stock Exchange 2004

4.4.7 Capital Structure

The importance of the capital structure analysis is that it reflects the bank risk. It reflects as well the structure of the bank loans and deposit and to what degree the bank is able to face the emergency of the demand deposit. Furthermore, it reflects what types

of investment the banks concentrate on, and whether the bank prefers to invest in long term or short term investment.

Table No.4.18

Jordan Islamic Bank for Finance and Investment Capital Structure

Capital Structure	2000	2001	2002	2003
Equity Ratio per cent	8.28	7.61	6.98	5.84
Shareholders Equity / Total Deposits%	9.59	8.56	7.78	6.46
Debt Ratio per cent	91.72	92.39	93.02	94.16
Total Deposits / Total Assets per cent	86.30	88.95	89.69	90.36
Net Credit Facilities to Total Assets per cent	38.09	35.88	35.30	33.01
Net Credit Facilities to Total Deposits per cent	44.13	40.34	39.36	36.53
Shareholders' Equity to Credit Facilities, Net per cent	21.73	21.21	19.76	17.70
Current assets/Total assets	39.467	41.121	40.328	51.041
Total debt/Total equity	1, -108.33	1,213.67	1,333.69	1,611.91

Source: Central Bank of Jordan and Ammar Stock Exchange 2004

Table No.4.19

Capital Structure for Islamic International Arab Bank

Capital structure	2000	2001	2002	2003
Equity Ratio per cent	22.93	17.99	14.96	12.69
Shareholders Equity / Total Deposits per cent	31.47	23.48	18.64	15.29
Debt Ratio per cent	77.07	82.01	85.04	87.31
Total Deposits / Total Assets per cent	72.87	76.61	80.24	82.97
Net Credit Facilities to Total Assets	28.00	38.33	33.66	31.82
Net Credit Facilities to Total Deposits per cent	38.43	50.03	41.95	38.35
Shareholders' Equity to Credit Facilities, Net per cent	81.88	46.94	44.45	39.88
Current assets A Total assets	48.12	51.07	49.40	50.14
Total debt/Total equity	336.14	455.87	568.46	688.12

Source: Central Bank of Jordan and Ammar Stock Exchange 2004

Table no.4.18 and Table no.4.19 show ten ratios to measure the capital structure of the Islamic banks. The equity ratio reflects the total equity/ total assets. The equity ratio decreased to 5.84 per cent in 2003 compared with 8.28 per cent in 2000 for the Jordan Islamic Bank for Finance and Investment. The equity ratio also declined to 12.69 per cent in 2003 compared with 22.93 per cent in 2000. The lower amount of equity ratio for Jordan Islamic Bank for Finance and Investment reflects the expansion of this bank in total assets. On the other hand, the higher equity ratio in Islamic international

Arab bank indicates that the bank is expanding its investments. The shareholders equity/total deposits reflect the percentage of total equity to total deposit. The Shareholders Equity / Total Deposits decreased from 9.59 per cent in 2000 to 6.46 per cent for the Jordan Islamic Bank for Finance and Investment. Also this ratio is decreased from 31.47 per cent in 2000 to 15.29 per cent in 2003 for Islamic international Arab bank. The decrease in this ratio reflects the increase in customers' deposits. As we can see from the table the Islamic international Arab bank increased the deposits from the years 2000 until 2003 at a higher rate.

The debt ratio in both banks is very high as a result of high percentage of customer deposits and because the bank depends on customer deposits to lend money. For example, the debt ratio is increased from 91.72 per cent in 2000 to 94.16 per cent in 2003 for the Jordan Islamic Bank for Finance and Investment, and also increased from 77.07 per cent in 2000 to 87.31 per cent in 2003 for the Islamic international Arab bank. As shown in Tables 5 and 6 show that both banks increased their debt ratio. The results in the previous ratio are explained by the ratio of Total Deposits / Total Assets ratio. This ratio shows the growth of the bank's deposits in both banks. Both ratios, Net Credit Facilities to Total Assets and Net Credit Facilities to Total Deposits for the Jordan Islamic Bank for Finance and Investment are decreased in 2003 in comparison with 2000, 2001, and 2002. Both ratios increased in the case of the Islamic international Arab bank in 2003 (see Table no.4.18 and Table no.4.19).

Figure No.4.5

Credit to Deposit Ratio for Jordan Islamic Bank for Finance and Investment

Figure 5: Credit to Deposit Ratio for Jordan Islamic For Finance and Investment
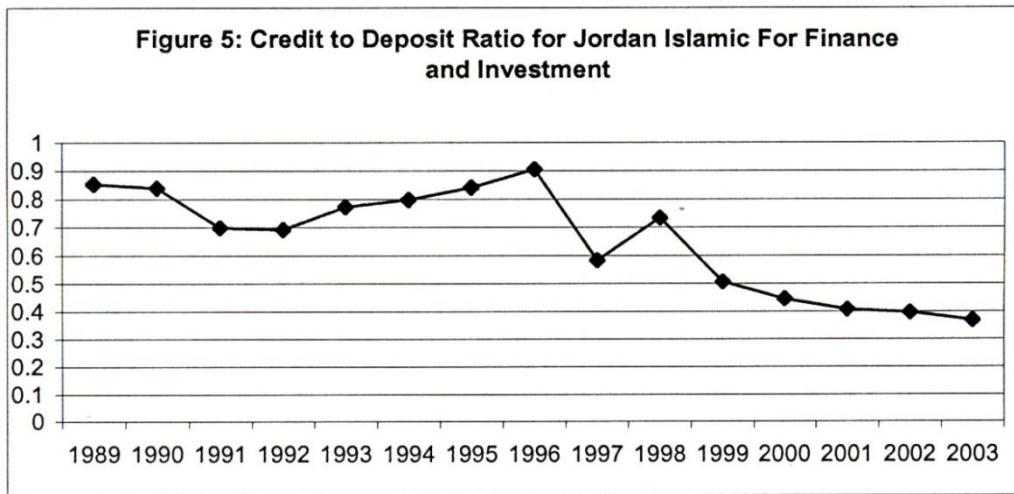
Source: Amman stock Exchange, Annual Reports 2004

Another ratio that shows that Jordan Islamic Bank for Finance and Investment increase their lending activities more than the Islamic international Arab bank is the Shareholders Equity to Credit Facilities. For example, shareholders Equity to Credit Facilities are 17.70 per cent and 21.73 per cent in 2003 and 2000 respectively for Jordan Islamic Bank for Finance and Investment, while it is 39.88 per cent and 81.88 per cent in 2003 and 2000 respectively. The results also reflect that the Islamic international Arab bank facilities growing at a higher rate. Figure no.4.5 indicates that the credit to deposits ratio decreased in the last five years for the Jordan Islamic Bank for Finance and Investment. The decrease in this ratio could be as a result of a higher increase in the deposits compared with low increase in credit. Figure 6 show the yearly credit issued by Jordan Islamic Bank for Finance and Investment increased from 1989 to 2004. The credit facilities are in an increasing function during the last 15 years. The increase in the credit facilities reflects the bank growth in credit in the Jordanian market.

Yearly Islamic Bank Credit for Jordan Islamic Bank for Finance and Investment

Figure 6: Yearly Islamic Bank Credit for Jordan Islamic Bank for Finance and Investment
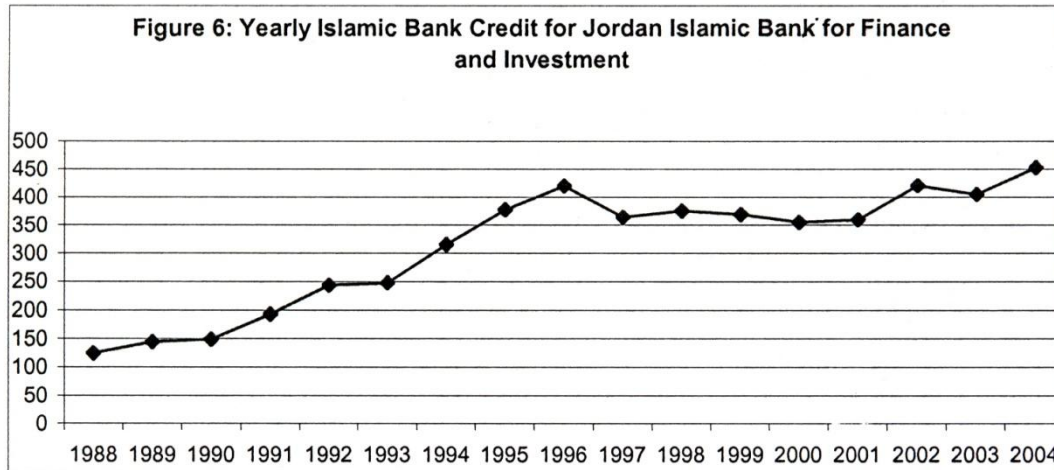
Source: Central Bank of Jordan

Current assets/total assets ratio reflects the structure of assets, as a measure of liquidity. The current assets/total assets increased in both banks. For example, the current assets/total assets increased from 39.467 per cent in 2000 to 51 .041 per cent in 2003 for Jordan Islamic Bank for Finance and Investment. This increase is due to the increase in the bank's deposit as well as other assets, in which the bank expanded its investment in facilities. This suggests that this Islamic bank focuses on the short-term investment rather than the long-term investment.

Another measure of capital structure is the total debt/total equity. Table no.4.18 and Table no.4.19 show that total liabilities/total assets ratio increased for both banks. The main reason for this increase in this ratio resulted from the increases of the customer deposits in a high percentage. The total debt/ total equity are 1,611.91 per cent for Jordan Islamic bank for finance and investment in 2003 compared with 688.12 per

cent in 2003 for the Islamic international Arab Bank. This indicates that the bank increased its activities and is growing in the market. This ratio increased more than 100 per cent in the Islamic international Arab Bank, meaning that the bank expand its activities and growth in deposit.

4.4.8 Liquidity Measures

Liquidity management ensures the Bank's ability to meet its short-term and long -term funding commitments while achieving the optimal return on investment. The liquidity position of the Bank, as well as strategies and adjustment of policies are an important aspect that affect the bank position and ability to expand and issued loan, and expand in investment activities. Liquidity analysis at different levels includes a maturities analysis of assets and liabilities are important for banks to be sure about the liquidity of the bank. It also includes an analysis of the source and use of funds.

As discussed earlier, the capital structure of Islamic banks become stronger and more dependent on short term investment rather than long term investment in both banks. The structure of its capital affects the liquidity risk. To evaluate the bank liquidity risk and its ability to pay its obligations three measures of liquidity are taken. Table 7 and table no.4.21 summarize these ratios in both banks. Jordan Islamic Bank for Finance and Investment increased its quick ratio in 2003 to 0.56 per cent compared with 0.46 per cent in 2000. The quick ratio in the Islamic international Arab bank is higher, which is 0.60 per cent in 2003 and 0.66 per cent in 2000. The other ratio is the cash and investments to total deposits; this ratio is nearly close to 65 per cent in both banks in 2003. The increase indicates that there is a growing rate of lending facilities.

Furthermore, this ratio reflects the banks' ability to cover loans from assets as well as to face the instant demand for deposits. Both banks have the ability to meet the instant demand for money. Another ratio that measures the liquidity is (Cash + Trading Investments)/ Total Deposits. This ratio in Islamic international Arab bank is higher than in Jordan Islamic Bank for Finance and Investment.

Table No.4.20

Bank Liquidity Jordan Islamic Bank for Finance and Investment

Liquidity ratios	2000	2001	2002	2003
Quick Ratio (Times)	0.46	0.46	0.45	0.56
Cash & Investments to Total Deposits%	61.94	64.31	56.78	65.13
Cash + Trading Investments / Total Deposits (Times)	0.46	0.47	0.45	0.56

Source: Central Bank of Jordan (2004)

Table No.4.21

Islamic International Arab Bank PLC

Liquidity ratios	2000	2001	2002	2003
Quick Ratio (Times)	0.66	0.67	0.62	0.60
Cash & Investments to Total Deposits%	66.04	66.67	64.23	64.75
Cash + Trading Investments / Total Deposits (Times)	0.66	0.67	0.62	0.60

Source: Central Bank of Jordan (2004)

4.4.9 Challenges and Prospects of Islamic Banking

Islamic banks in Jordan have a great potential to grow positively in the coming years as they are focusing on many strategies to attract more customers from Muslim as well as non Muslim through enhancing their market activities to increase the awareness of the banking services, strengthening the relationship with the customers. In other words, Islamic banks in Jordan are trying to build a good and long relationship between the Islamic banking products and customers. Islamic banks in Jordan have great potential to attract foreign capital investment from other Muslim and neighbouring Arab and Middle Eastern countries, especially after the September 11 event.

Islamic Banks in Jordan have played an important role in financing and developing various sectors in the Jordanian economy by using many elements of the Islamic products such as Musharaka, Mudaraba, Murabaha Istisn'a, or Mudaraba, among many others. For example, Table No.4.23 indicates the case of Islamic International Arab Bank and its contribution to various sectors in the economy such as Industry and Mining, Agriculture, construction, trade, and among others. Where most of these sectors are in urgent needs for finance, thus Islamic banks play an important role in financing of business operation and improve their business performance and create jobs in the labour market. Furthermore, this is as well the case of other Islamic banks in the country, as shown in Table No.4.24 that Jordan Islamic Bank plays as well an important role and committed to its social role. For example continue its program for financing small-scale industries. And since the start of this program, the bank has financed close to 40 projects with a cumulative cost of about ID 700,500 (JTBFI, 2003). Moreover, Table No.4.24 shows the bank's contribution to different sectors of the

Jordanian economy and covers a wide range of social activities and utilities including hospitals, medical clinics, education sectors, transports and many others. According to classification of the Central banks, the contribution of the bank in these activities reported as shown in Table No.4.24.

Table No.4.22

The Elements of the Financing and Investment Portfolio (Case of Islamic International Bank)

	1999	2000	2001	2002
Murabaha	16,711,772	29,314,743	49,087,017	46,274,243
Mudaraba	279,366	1,311,785	1,052,426	2,905,134
Musharka	...	325,284	626,993	605,132
Istisn'a	755,928	1,390,300	1,151,330	936,531
Specified Commodities Investments	69,502,530	121,216,710	163,260,477	137,105,390
Customers' Liabilities-Letters of Credit	4,404,745	8,368,316	5,878,097	6,231,320
Customers' Liabilities- Letters of Guarantee	1,173,921	1,856,350	2,443,216	3,736,371
Acceptances	682,084	1,898,128	2,546,015	4,061,085

Source: (IIAB, 2002)

Table No.4.23

Contribution of Islamic Banks in the Following Sectors (Case of Islamic International)

	1999	2000	2001	2002
Industry and Mining	1,618,631	2,165,131	2,070,024	2,527,679
Agriculture	205,732	525,747	590,980	711,323
Construction	795,328	1,034,227	4,158,566	4,946,451
General Trade	9,068,609	7,592,845	12,993,493	9,613,811
Transportation Services	674,874	504,756	289,578	108,346
Properties, Real Estate Financing	2,048,528	5,074,269	7,959,681	8,881,677
Automobile Financing	1,341,555	3,151,534	7,421,749	7,980,575
Consumer Goods Financing	1,924,993	9,545,582	9,871,763	9,355,737
Others	370,536	3,081,791	6,561,932	6,595,441

Source: (IIAB, 2002)

Table No.4.24

Contribution of Jordan Islamic Bank in various Economic Sectors 2002-2003, (in thousand JD)

Sectors	2002	2003
Agriculture	1,070	1,261
Industry and Mining	31,496	33,420
General Trade	55,205	95,072
Construction	113,832	116,770
Transport	45,645	57,137
Miscellaneous	233,143	168,638
Total	480,391	472,298

Source (JIBFI, 2003)

Moreover, Islamic banks in Jordan has the potential to increase its customer base to cover most geographical parts in Jordan by opening new branches and offices in order to be nearby the current as well as the potential customers. They are working hard to achieve their goals despite the strong local and the difficult circumstances facing this sector. Even though, the bank has the potential to grow further and to enhance development among the production sectors in the country as evidenced by the bank's performance and its strategies. Among the strategies which the Islamic banks are looking for in Jordan, maintaining the strength of the Banks' financial position; increasing the Islamic banks market share, optimising the profits of shareholders and depositors, increasing the ethical values and performance standards, among other strategies. Hence, the Islamic banks in Jordan are trying to adopt all the necessary needs and other means to achieve their goals by increasing their customer base, increasing the awareness of the Islamic banking products, adopting all the new financial and investment tools, adopting IT to provide the best for its customers.

Further, Islamic banking is Jordan however has to concentrate on risk management and product innovation; the issue of human capital needs greater attention, and development to meet the requirements of more diversified business activities. By using performance evaluation procedures which are important to measure the growth and development of any bank. It is seen that the performance measures of both banks (IIAB and JIBFI) showed that the efficiency and the ability of both banks has increased and both banks have expanded its investment and activities and playing an important role in financing important projects in the market. These Islamic banks have a high growth in the credit facilities and in the profitability. Another interesting 'finding of the study is that these Islamic banks have focused on the sort-term investment rather than

the long run investment, perhaps this seems to be the case in most Islamic banking practices where the capital structure become stronger and depend on short term investment. In comparison with the two banks, the results showed that Jordan Islamic Bank for Finance and Investment has increased their lending activities more that the Islamic International Arab bank and the facilities of the latter are growing as well at a higher rate. The results show also that the Islamic bank for Finance and Investment has a high profitability that encourages other banks to practice the financial Islamic products.

The review in this study also medicates that Islamic banking in Jordan has played an important role in financing and contributing to various sectors in the country such as Industry and Mining, Agriculture, construction, trade, and among other.

Furthermore, this study also shed some light on the development of Islamic banking globally and this sector has grown not only in the Muslim world, but also has gained significant attention in the Western world as well, with over 250 Islamic banks worldwide and managing assets and client money around, US$ 400 billion. Hence, the growth of these banks is a proof of the success of the idea of Islamic Banks in the world wide and world can escape from the exploitation of interest, the consequent inflation and economic backwardness and an indication that these banks continue to grow in number and size worldwide.

Section IV

4.5 Efficiency of Islamic Banking in Algeria

This section deals with a detailed analysis of the Islamic banking in Algeria following the financial liberalisation initiated in the 1990 s. It seeks to examine the performance of the sole bank offering Islamic financial products in Algeria, Banque Al Baraka d'Algerie. This section also aims to analyses the methods adopted by the bank to improve the allocation of its financial resources and to boost its earnings and eradication of poverty.

The research uses a single country study (Algeria) because it has a unique experience in relation to Islamic finance. To examine how much this system helps for the financial upliftment of less development countries. The economy of Algeria is also unlike those of other Middle Eastern and North African nations (Abed and Davoodi. 2003). Besides, Algeria has adopted a distinctive approach in liberalising its financial market Since 1990.

The first Islamic bank to open its doors in Algeria is Banque Al Baraka d'Algerie in 1991. The bank's operations are still limited in scale and scope. However, there is steady increase in the number of savers and borrowers using the bank. The bank also expanded its network to include 1 8 branches across Algeria.

4.5.1 Islamic Banking vis-a-vis Conventional Banking

It has been argued that the main difference between Islamic banks and conventional banks is "the time value of money" (Moore, 1997. pp. 248-50). The function of both banking models is the same, i.e. to act as an intermediary between savers and borrowers. In conventional banking model, the interest rate determines the yield on financial products. Whereas, the Islamic banking model uses profit- and loss-sharing criteria to distribute net profits to the bank, to depositors, and to entrepreneurs.

Warde (2000) notes that conventional banking performance is based on trial and error and they are free to select instruments that match their strategies. By contrast, Islamic banks' products must conform to principles set by Sharia boards, and this prevents Islamic banks from diversifying their portfolios. To avoid this problem, Warde proposes that Islamic banks improve their lending policy and exploit all market segments that fit with the Islamic mode of financing.

Warde pointed out that Algeria used Profit - and loss-sharing modes of financing which mean that instead of lending to borrowers at fixed interest rates, a bank forms a partnership with the borrower. Mudaraba (sleeping partnership) and musharaka (long-term equity) are the two main forms of this mode of financing.

Warde stresses that depositors and bankers in this financing scheme associate their loyalty with the success of the project. Besides, entrepreneurs focus on the project's long-term profit instead of debt servicing; this reduces the rate of default on investments (Warde, 2000).

Figure No.4.6 shows the net profit (loss) realised by Al Baraka Banking Group subsidiaries from 2004 to 2006. It is evident that almost all subsidiaries of the group are making positive return from their investments with two exceptions of Al Baraka Bank of Lebanon (across the period) and Al Baraka Islamic Bank (in 2006). The net loss made by the two subsidiaries is due to high operating expenses and to financing loss provision. The figure also indicates a fluctuation in the net profit achieved by some of the subsidiaries because of the continuous change in the economic conditions of the country in which they operate and their portfolio base. However the success of implementing instruments of I.B is vivid from the figure.

Figure No.4.7

Net Profit of Al Baraka Banking Group Subsidiaries in Million USD, 2004-2006
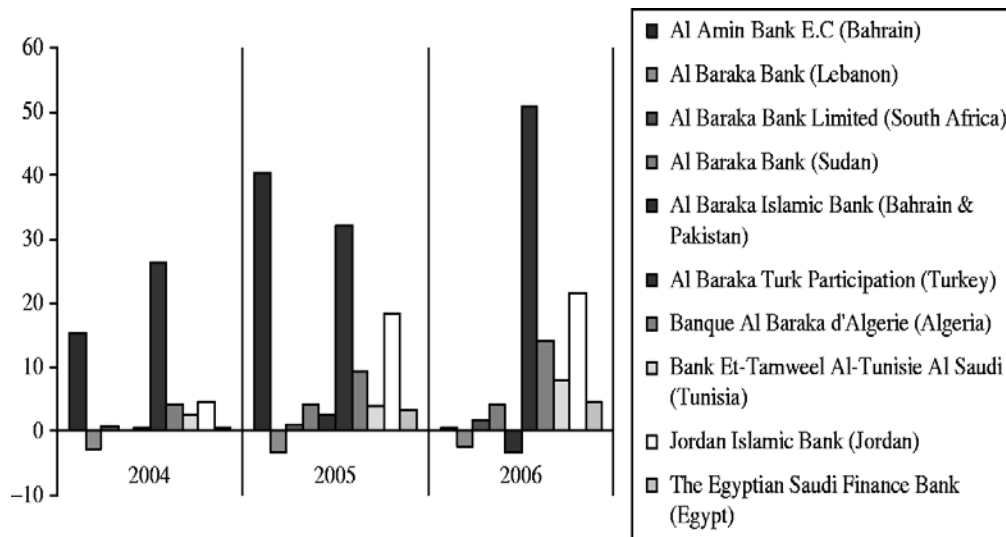
Source: Al Baraka Banking Group (2007)

A large amount of Islamic banks' credit is in the form of short-term loans. Duncan (1996) suggests introducing products that can be used for long- and medium-term financing; he also notes that Islamic banks need to reduce their overall short-term lending. Because investment projects can be risky, banks are required to analyse their investors' credit-worthiness accurately. The development of project financing is certainly a major step Hoards modern Islamic finance (Duncan, 1996).

Wealthy Muslims are the main source of capital for most Islamic banks. The exceptions are Iran, Malaysia, Pakistan and Sudan, where governments play a primary role in converting conventional banking into Islamic banking. In those countries, banks are forced to make all their services fulfill profit- and loss-sharing paradigm of financing (El- Hawary D Grais N. Iqbal 2007). Figure no.4.7 shows a steady increase in the total assets of Al Baraka Banking Group subsidiaries, which operates in countries where both banking models exits and countries where Islamic banking prevail. This increase attributes mainly to the growth in murabaha sales receivables (sale of assets at cost plus mark-up) and ijara muntahia bittamleek (form of leasing in which the lessee has the option to purchase the leased asset by the end of the lease term). However, there is clear variation in the assets' growth rate realised by each of the subsidiaries. This can be explained by the differences in the economic environment in which the group subsidiaries operate. For example, the Egyptian economy is more dependent on services than the Algerian economy where exporting oil is the main driving force of economic growth and demand for financial services.

1. The financial system must be market-oriented. Investments are financed according to demand and supply rules.

2. Demand for long-term investment accounts is low, compared with the demand for short-term investment account.

3. The return from investmentStdepends upon "the marginal efficiency of investment". The profit mast-be shared between banks, depositors and investors.

Figure No.4.8

Total Assets of Al Baraka Banking Group Subsidiaries in USD Millions, 2004-2006
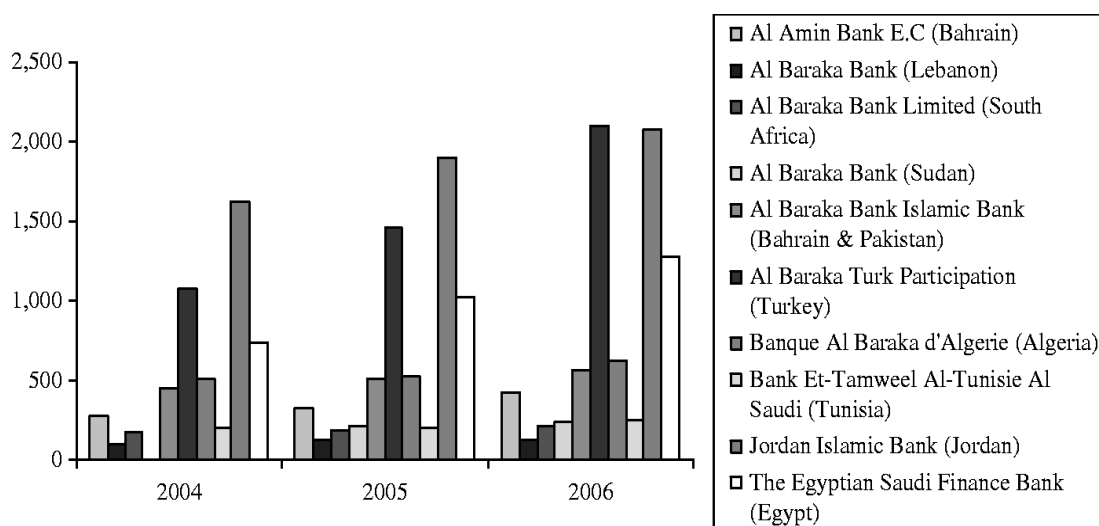
Source: Al Baraka Banking Group (2007)

4.5.2 The Algerian Banking Industry

Modern banking began in Algeria in the mid-nineteenth century (Ernest-Picard. 1930) The French authorities established many commercial and merchant banks to facilitate the financing of commerce (Rossignoli, 1973). Those banks operated only in major cities; they did not serve rural areas. Some projects acquired credit through issuing, deposit and merchant banks; people's bank's funded small firms; and the Caisse de Credit Agricole Mutuel served the financial needs of the agricultural sector.

After independence, many European investors left Algeria. This had negative implications on the national economy as whole and on the banking sector in particular. Credit to the public and private sector declined dramatically because of the fall in the amount of deposits held at French commercial banks and credit institutions. To improve the mobilisation of financial resources and to obtain control over the national banking sector, the Algerian financial authorities established several state-owned banks and nationalised almost all foreign banks. Both measures led to the creation of a state-owned banking sector and to the disappearance of foreign players (Gafoor, 1995).

The main roles of state-owned banks were collecting deposits at low interest rates and financing government expenditures and state-owned enterprises. This meant that interest rates on deposits and loans were negative in real terms. Banks were also forced to lend to particular sectors of the national economy such as agriculture and real estate. The central bank provided the commercial banks with liquidity by rediscounting their bills at fixed rates.

State-owned enterprises were operating according to the government's plans for employment and consumer prices, and were not concerned about productivity and profitability. This resulted in a decline in state-owned enterprises capital output ratios. The increase in the state budget deficit due to declining oil revenues' led to a fall in the amount of subsidies the government extended to the public sector. State-owned enterprises became unable to service their debts and non-performing loans began to augment. These non-performing loans caused an imbalance in the state-owned banks' balance sheet. The sudden decline in oil prices in 1986 made matters worse, and non-

performing loans accounted for a high proportion of commercial banks' assets. To reduce the pressure on state-owned banks, the government initiated financial liberalisation in the 1990 s (Benhalima. 1998).

The financial liberalisation programmes introduced in the 1990 s had the following goals:

1. To decrease the government's role in the financial sector;

2. To organise local savings;

3. To introduce market-oriented banking mechanisms;

4. To improve banks' solvency; and

5. To enhance competition in the banking sector (Jbili et al, 1997).

The Law on Money and Credit of 1990 was the first step to be taken by the Algerian government to remove many barriers towards domestic and foreign banks. The law enabled both private banks and foreign banks to operate in parallel with state-owned banks. It also allowed state-owned banks to select their borrowers and to finance other businesses, which were not their speciality.

Table No.4.25

Distribution of Credit to the Economy by Sector and by Maturity, 2001-2005

	2001	2002	2003	2004	2005
	In billions of USD; end-of-period				
Public sector	9.587	56.5	56.5	56.5	56.5
Private sector	4.376	43.5	43.5	43.5	43.5
Local administration	0.002	0.0	0.0	0.0	0.0
Total	13.965	100.0	100.0	100.0	100.0
	In percent of total credits				
Public sector	68.6	56.5	56.5	56.5	56.5
Private sector	31.3	43.5	43.5	43.5	43.5
Local administration	0.1	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0
	In billions of USD; end-of-period				
Short-term	6.64	7.88	9.99	11.49	12.61
Medium-term	6.85	7.56	7.22	9.08	10.93
Long-term	0.46	0.45	0.61	0.72	0.72
Total	13.95	15.89	17.82	21.29	24.26
	In percent of total credit				
Short-term	47.6	49.6	56.1	54.0	52.0
Medium-term	49.1	47.6	40.5	42.6	45.0
Long-term	3.3	2.8	3.4	3.4	3.0
Total	100.0	100.0	100.0	100.0	100.0

Source: Bank, Al Baraka, Algeria

Direct lending to state-owned enterprises and the treasury was gradually removed to enable banks improve the quality of their credit. This led to an increase in the amount of credit extended to the private sector. Table No.4.25 shows that the credit to private sector increased by 58.5 per cent from 2001 to 2005. The total amount invested in the private sector almost levelled the investment made in the public sector by the end of 2005. The table also exhibits that most of the credit granted is in the form of short- and long-term loans. In 2005, for example, long-term loans accounted only 3 per cent of the total credit to the economy.

The government replaced non-performing loans of state-owned banks with bonds (Nashashibi et al, 1998). The first bonds issued in 1992-93 and they accounted

for about 23 per cent of GDP. The treasury used external debt rearrangement to pay back most of those bonds. In 1994, an audit of public banks' balance sheets showed that banks, except Banque Nationale d'Algerie, needed injections of capital. In 1997, the financial authorities issued the second loan-bond swap. Those bonds accounted for 8.5 per cent of GDP and they were not serviced in cash (Lradian et al., 2000).

After 1994, the authorities initiated further financial restructuring to improve commercial banks' accounting standards. All banks, conventional or Islamic, are required to meet the capital/risk-weighted asset ratio. In 1995, the government introduced new financial regulations for provisioning, risk concentration, and loan classification (Nashashibi et al. 1998).

The inflation rate, which has a direct impact on real interest rates, increased considerably the early years of financial liberalisation. This was due to the removal of price control and the liberalisation of foreign exchange. This resulted in negative real deposit and lending rates, with the lowest rates occurring in 1992 and 1995. The real lending rates become positive from 1996 and for real deposit rates from 1997 (Figure no. 4.8). This is explained by the macroeconomic stabilisation, which was achieved after the full liberalisation of foreign exchange and the creation of market-based instruments to finance the government budget. Algeria's foreign reserves increased to around USD97 billion and foreign debt declined to USD4.7 billion in 2007. The government has also continued its liberalisation of various sectors of the national economy resulting in an increase in foreign direct investments.

Figure No.4.9

Inflation, Nominal and Real Deposit and Lending Rates, Algeria, 1992-2009
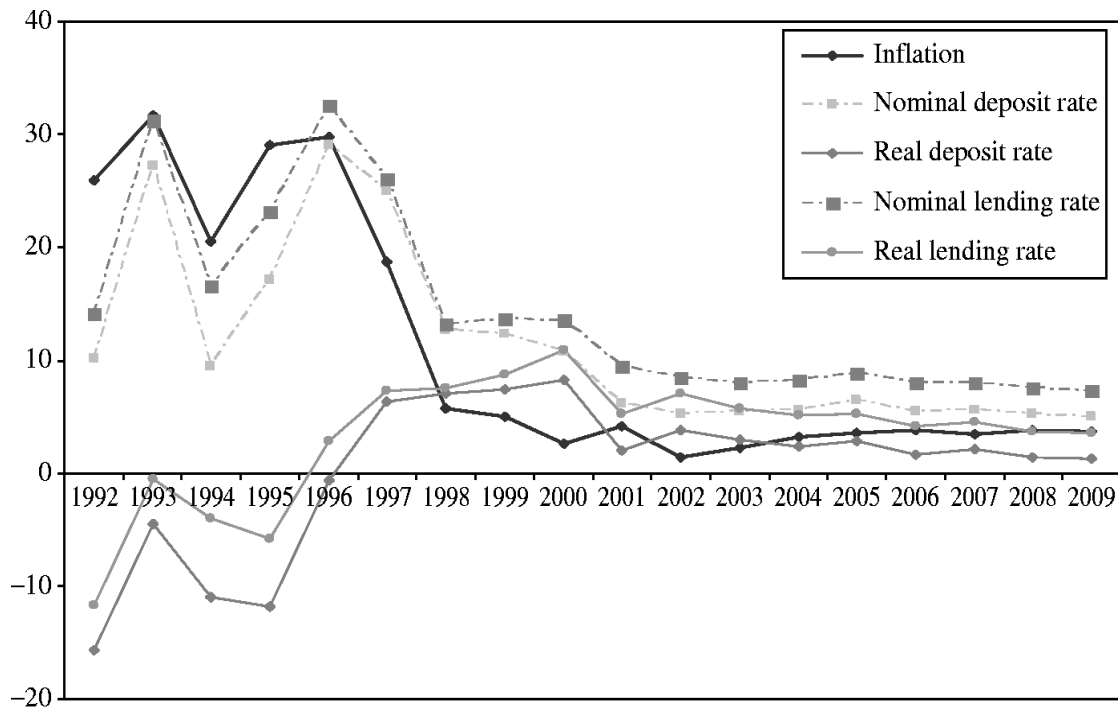
Source: Bank of Algeria, IMF and World Bank Statistics (2010)

Another stage in financial liberalisation is the entry of foreign banks into the national market.

Foreign banks outperformed local banks in Algeria. The ratios of net margin/total assets, non-interest income/total assets and net profit/total assets of foreign banks exceeded those of domestic banks (Lee, 2002).

The rules governing Islamic banking in Algeria are similar to those adopted in other markets across the globe. Profit and loss sharing mode of financing is used in the allocation of funds. Therefore, Banque Al Baraka d'Algerie only engages in activities

that are considered halal according to the Islamic law. Savers receive part of the profit generated by the bank each financial year. The bank also deals with the central bank under the same principle (not paying interest on borrowed funds).

4.5.3 Analyses of data collected on Banque AI Baraka d'Algerie

Banque Al Baraka d'Algerie offers four principal instruments: taadjir (leasing), musharaka (equity participation), murabaha (profit sharing agreement), and salam (deferred delivery payment). Taadjir is used by the bank to finance the acquisition of products such as vehicles, machinery and other equipment. The most important form is a lease where a proportion of the instalment goes towards the final purchaser. This instrument accounts for about 10 per cent of the bank financial transactions. Another product offered by the bank is musharaka, which is similar to a classic joint venture.

The bank also owns a proportion of the existing company's capital or of its new projects. Salam product encompasses two types of financial instrument: bay' muadjal (differed payment sale) and bay'salam (differed delivery sale). Bay' muadjal is designed for sp'ot sales as well as managing credit sales. In bay'salam, the commodity is delivered immediately, but the payment is delayed for an agreed period.

In short-term financing, the bank offers five products:

1. Murabaha;

2. Salam;

3. Debiteurs divers (Divers Debit);

4. Istisna'a; and

5. Securities.

Out of these products, murabaha is the bank's main product, accounting more than 80 per cent of its financial transactions. It is a favoured product for financing domestic and foreign trade (interview notes). Salam is the second most popular financial instrument. Other financial products are used in less than 5 per cent of financial transactions.

Banque Al Baraka d'Algerie offers two types of investment account: the non-committed participative accounts and the committed participative accounts. The holder of a committed participative account has the right to invest his savings in one or several specified projects. The project earnings are shared as stated in the agreement. The holder of a non-committed participative account can choose where to invest his funds in accordance with the amount of capital required for each project. Profit is allocated in proportion to the duration and amount of deposits.

Figure No. 4.10

Al Baraka Banking Group Subsidiaries Operating Incomes and Operating Expenses in USD Millions, 2004-2006

Source: Al Baraka Banking Group (2007)

232
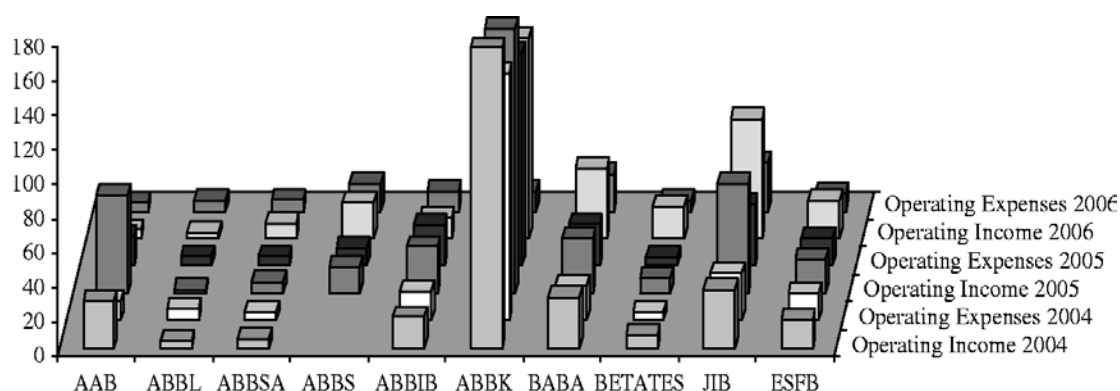
The bank activities are highly concentrated due to the absence of financial products geared towards medium- and long-term financing. The largest proportions of the bank loans are used to finance trade. The industry sector, transport, agriculture, and public works receive only a small proportion of the bank loans. Interviewees argue that it is safer to finance trade than other sectors of the national economy. They also note that existing products are more suitable in financing trade. Figure no.4.9 shows the operating incomes and operating expenses of Banque Al Baraka d'Algerie compared to those of Al Baraka Banking Groiip subsidiaries. The bank is ranked fourth in terms of operating income and third in terms of operating expenses in 2006. The high operating incomes achieved by the bank attributes to an increase in the bank services, to a robust position in foreign trade financing and to high economic growth of Algeria. The rise in operating expenses is due to the increase in staff costs, amortisation, and depreciation following the expansion of the bank network.

It is noted that the bank can use financial instruments launched by other major Islamic banks - such as Faysal Islamic Bank of Bahrain and Jordan Islamic Bank – to improve its lending and borrowing capabilities. Examples of innovative Islamic financial products are syndication and revolving finance. These instruments would enable the bank to diversify its portfolio and to hedge .against market risks. The bank can also create new financial instruments by making conventional banking products comply with Islamic modes of financing (Bank of Algeria 2007).

Figure No.4.11

Banque Al Baraka d'Algérie Net Profit, 1996-2006
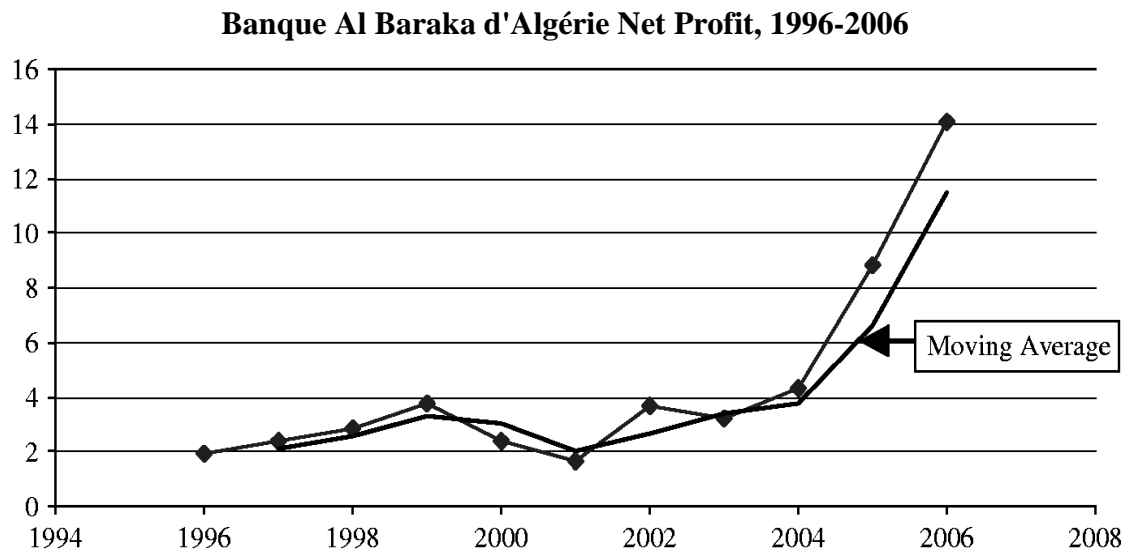
Source: Al Baraka Banking Group, Algeria (1996-2006)

The profit of the bank fluctuated over the years of its operation in Algeria. The highest protitligure was achieved in 2006 (Figure no.4.10). The moving average shows an upward trend for the net profit across the period. Senior managers note that the increase in profit attributes to an effective investment strategy adopted by the bank. The bank is funding various projects in construction, transportation, groceries, and oil industry. The income generated from fees and commissions has also mushroomed over the last 10 years. Respondents also argue that the bank has a potential to boost its profit by expanding its customer portfolio, offering various financial solutions, reducing the costs associated with their investments and developing the bank IT systems.

One of the items affecting the financial performance of the bank is bad debts. Most of the bank's bad debts derive from financing by murabaha and leasing - these accounted more than 70 per cent of doubtful debts in 2006 (Banque Al Baraka d'Algerie Annual Reports. 2006)

Table No.4.26

Banque Al Baraka d'Algérie Key Profitability and Efficiency Financial Ratios, 2001-2006

	2001	2002	2003	2004	2005	2006
Average net profit to total assets (%)	2.41	1.84	1.41	1.17	1.05	0.95
Average net profit to total deposits (%)	5.52	2.44	1.79	1.42	1.79	1.19
Total financing to deposits (%)	95.0	92.3	85.3	NA	NA	NA
Return on equity (ROE) (%)	11.60	18.36	20.28	29.30	NA	NA
Return on total assets (ROA) (%)	NA	1.42	1.35	6.24	6.13	7.09
Profit/loss per employee (P/L) (%)	NA	NA	NA	7.96	7.26	7.99
Net interest margin (NIM) (%)	NA	1.28	0.85	0.93	1.70	2.44

Source: Bank, Al Baraka, Algeria

As shown in Table no.4.26 is a decline in the average net profit to total assets and the average net profit to total deposits. This is due to the significant increase in total assets and total deposits compared to profit achieved for the period concerned. The main financial items contributing to the increase in the bank assets are murabaha sales receivables, customer accounts, ijara muntahia bittamleek, and unrestricted investment accounts. In 2006, sales receivables went up by 19 per cent and ijara muntahia bittamleek increased by 20 per cent. Table II-also exhibits a steady decline in the ratio of total financing to deposits.

This indicates that the bank is relying less on borrowed funds, which reflects an improvement in its financial performance. The return on total assets ratio increased steadily from 2001 to 2004. This indicates that the bank is effective in investing its funds and utilising its earnings. Revenues are generated primarily from financing sales and investments and from fees and commissions. Return on total assets was low in 2002 and 2003 and then increased substantially to reach its highest value in 2006 at 7.09 per

cent. This reflects an improvement in the use of the bank assets to boost its earnings. The ratio of profit/loss per employee is satisfactory indicating that the bank's labour is highly productive. Finally, the net interest margin is fluctuating and low in average. This implies that the bank investment decisions are resulting in high operating expenses and as a result reducing the bank's yield. In general, the calculated financial ratios point to a continuous increase in the bank's profitability and efficiency.

The bank considers three criteria in selecting its investments: the level of risk, the expected rate of return, and the duration of the project (interview notes). The survey shows that the bank uses its funds to finance medium-sized enterprises and to grant credit to wealthy individuals. Average income individuals and large firms receive only a small proportion of the bank funds. The bank also extends a small amount of credits to individuals with small-incomes in the form of consumer loans.

The main risks facing Banque Al Baraka d'Algerie are outlined in Figure no.4.11. These risks are identified by assessing the key financial instruments offered by the bank and the business environment in which it operates. Out of these risks senior managers agree that transparency risk and credit risk are affecting the bank performance substantially. They suggest that in order to improve market transparency, the bank needs to keep its records according to international accounting standards and to disclose details of its lending and borrowing regularly (interview notes). Likewise, to reduce credit risk, the bank is required to assess the creditworthiness of the entrepreneurs before extending any credit to them.

Figure No. 4.12

**Risks Associated with Islamic Financial Institutions vis-à-vis Banque Al Baraka
d'Algérie**
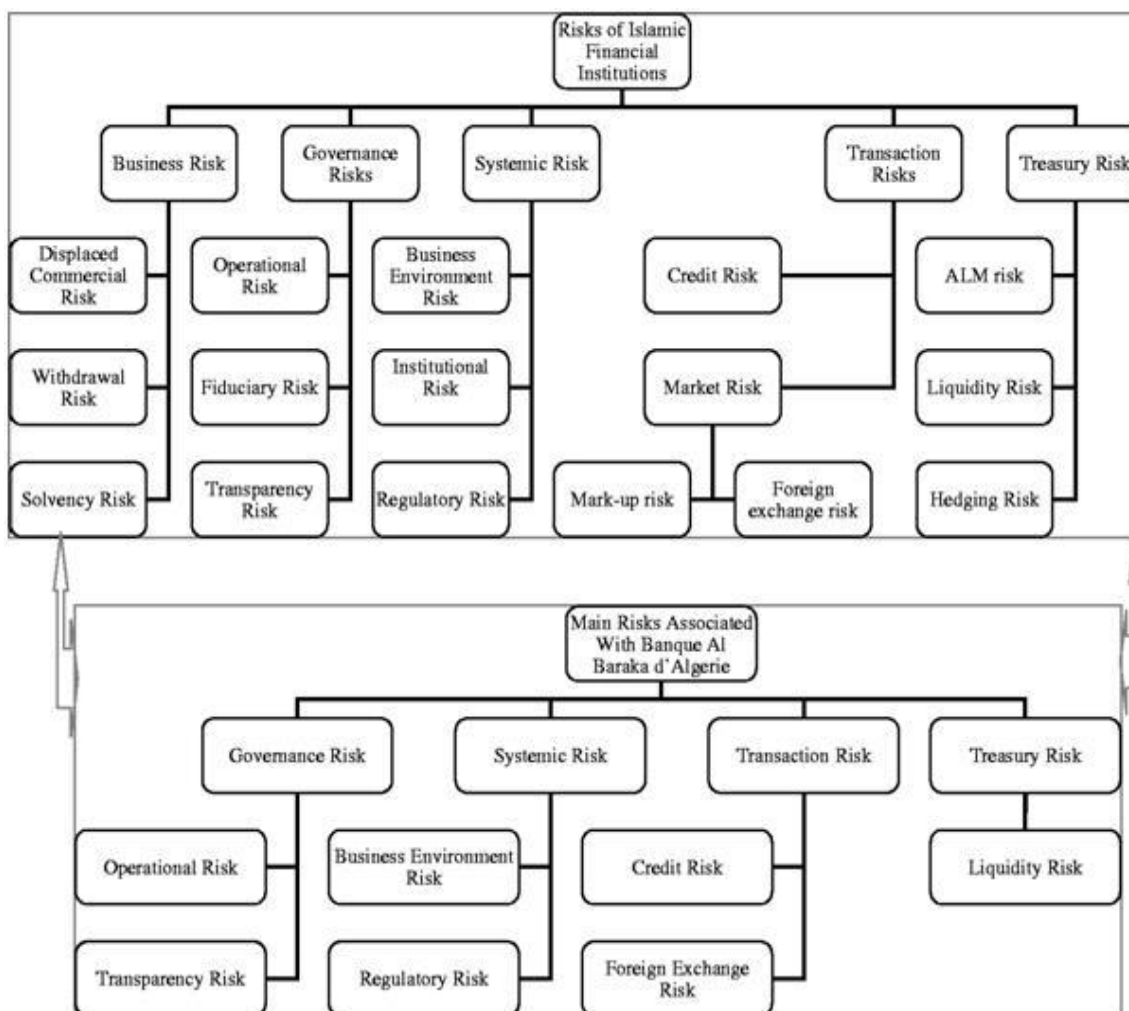
Source: Bank, Al Baraka, Algeria (2007)

To summarise, Banque Al Baraka d'Algerie mode of receiving funds and
financing is still \underdeveloped, as reflected by the small number of financial
solutions available to its customers. However, the bank strives to improve the quality of
its portfolio by initiating further Sharia compliant products, adopting good investment
strategies and making large provisions for bad debts. The study pertains that converting

conventional products to create sustainable medium- and long-term Islamic financial instruments. This would enable the bank to satisfy its customers demand and as a result increase its market share and wealth creation.

The study shows that the existence of Islamic banking in Algeria can be attributed to the process of financial liberalisation. However, the sole Islamic bank operating in the national financial market, Banque Al Baraka d'Algerie, offers a limited number of financial products, and most of them are used in short-term financing.

It is essential, therefore, to introduce other financial products and to have comprehensive financial guidelines from the Sharia board to determine if the new instruments are permitted or forbidden. The harmonisation of rules that govern Islamic banking would help the bank to effectively manage its assets and liabilities, improve market transparency and enhance the presence of the bank in the Algerian financial market.

It is found that the bank performance has improved. Good investment strategies enabled the bank to boost its earnings. Financial ratio analyses also show an improvement in the bank profitability and efficiency. The bank has introduced various methods to enhance the allocation of its financial resources with the framework of Sharia. The result is an increase in the number of bank branches and services. However, there are many constraints facing the bank. This includes: insufficient level of deposits, limited capital, high level of transparency risk and credit risk, and high concentration of banking activities.

Section V

4.6 The Relevance of Islamic Banking in India

Interest free banking is a system which is completely devoid of interest. Such a prohibition of interest is based on the principle of Shariah which perceives interest as a means to cause injustice and exploitation. The system generally upholds the humanitarian concept. It paves way for equity financing with risk to capital and reduces speculative concept. Existence of this financial intermediary will do very much to reduce the economic imbalances. Owing to its merits and advantages it is now expanding a worldwide market. At product about 75 countries are successfully doing interest free banking with more than 300 institutions covering a total asset of about US $ 1400 billion.

India is very keenly considering the introduction of Islamic Banking. Islamic as a concept has gained momentum world over and in India over the past few years. Several foreign banks operating in India, like Citibank, Standard Chartered Bank, HBSC are operating interest free windows in several West Asian countries, Europe and USA. There is also a growing awareness about the concept among Indian banks and it is generally felt that there is a huge potential market in India for Islamic banking products.

This made the Reserve Bank of India to open the eye lids and to set up a committee headed by Mr. Anand Sinha, chief general Manager in-charge, department of banking operations & development to look into the matter. After various committees appointed and reports obtained the government recommended putting into practice the

Islamic banking, the last UPA government was seemingly keen to give it a final nod. It was said by the Prime Minister Manmohan Singh to deliberate over the principles of Islamic banking and finance with the experts during his visit to Qatar and Oman recently. Top officials accompanying prime minister to his Middle East tour told that his government is willing to make this operational after taking into confidence the coalition partners in the ruling amalgamation. At a time, when economic crisis has taken a toll on the markets and world's leading economy, Islamic has a ready remedy, and is proving to come to the rescue of many.

As has been widely accepted that Islamic banks are built on its tough concrete base of equity financing rather than debt financing which is quite common which is quite common in traditional banking. This system is known by different names like interest-free banking, shari'a banking etc. Its beauty is inherent in the interest free dealing in any type of its business. Islam prohibits "riba" (interest or usury). Its against Islamic shari'a (Islamic jurisprudence).

Our prime minister is talkative always about the inclusive growth. Really it is an utopian dream in the context of the present economic system supported by the present day banking system in India. India has to wage battle with inflation, deficit financing and GDP management. Inflation is an inverse relationship with liquidity. Even the most radical Keynesians cannot explain the present negative correlations of macroeconomic theories. The macroeconomic equations are smoky under the present economic turmoil. We are trying to ease liquidity by pumping currency through acrobatic exercises of "repo", "reverse repo" and SLR rates. This would increase the creditworthiness of banks and thus flow currency on to the hands of customers in the form loans. They can keep

their pockets heavy through paying less interest for their old loans. This would definitely help to stretch purchasing power of common man and thus help inflation. But what was experiencing since last year? Inflation has reduced from a two digit to one digit figure?!! The prices of commodities were increasing but now it shows decreasing trend by 3.1 per cent. Shall it by a mere declining of oil prices?

RBI is focused on financial sector growth by increasing credit business with additional liquidity; and lacks the plan to allocate the excess of liquidity according to growth plans. Now we are in a stage when RBI instead of mere counting the liquidity growth, steps must evaluate the impact of increased liquidity, credit and interest on our GDP, national income and consumption levels because these all are important for stable inclusive growth. If we not allow increased liquidity to share by all segments, it will create imbalances among segments which might yield stagflation.

Increasing liquidity is not always fruitful unless unambiguous planned policies are promulgated. Liquidity can be increased through foreign inflows also. But it would squeeze the foreign exchange in the form of interest outflows. The increase in liquidity must be shared by all sections of economy and it is known as inclusive growth otherwise the higher liquidity itself become a burden. Why can't we think about increasing liquidity through domestics savings?

Again, as per Prime Minister's voice, domestic savings must also be inclusive. We don't know whether any statistics are available regarding the financial inclusion or exclusion of any community. But the Sachar committee report exhibits the pathetic condition of financial exclusiveness of India's second largest community of 160 million

Muslims. Around 60 per cent of the Muslims are financially excluded and the banking habits of these people are negatively correlated. This is only due to the Quranic revelation that interest is prohibited. They cool their thirst of finance through the establishment of interest frees NBFCs and Co-operatives. It is the prime duty of a democratic pluralistic society to bring this group under the main shadow of banking through the establishment of Islamic banking. This is not an article to uphold the rights and conditions of Indian Muslims but as a major segment in the nation building should not be garbage out. Indian Muslims have a share of 7.4 per cent savings deposits while they just get 4.7 per cent credit in term of PSAs. If we consider this has a base for the national average in the scheduled commercial banks, Indian Muslims loose around Rs 66,700 crores annually because they have a credit deposit ratio of 47 per cent against the national average of 74 per cent. It depicts that Indian Muslims are sparing around 27 per cent of their deposits by indifferent attitude towards availing credit. This is only because they fear God as paying and receiving interest is "haraam" (prohibited) as per their belief. The deficit of this credit is like an economic assassination as 31 per cent of this community is under poverty line. Muslim avail just 4 per cent and mere 0.48 per cent credits from special financial institutions like NABARD and SIDBI respectively because there also the community has to indulge in interest which is strictly prohibited in Islam.

So the Indian Muslims are expecting an interest-free banking system in India by which we can bring approximately 60 million Muslims to the formal financial sector. It is not necessary to have a formal Islamic banking institution or a central Islamic bank. The RBI may itself formulate rules and regulations and make ease some of its stringent policies like SLR. The nationalized banks can champion the cause for such move as it

would bring around an additional savings of 1,00,000 crores and a credit worth of Rs 2,00,000 crores which will lead to higher profitability, something higher than the SLR.

Besides is wide geographical scope, the expansion of the Islamic finance has been also taking place across the whole spectrum of financial activities, ranging from retail banking to insurance and capital market instruments. The most striking phase could be the growth of Sukuk, the most popular form of securitized credit finance within Islamic finance. Sukuk commoditize capital gains from bilateral risk sharing between borrowers and lenders in sharia-oriented finance contracts into marketable securities without interest rate charges. Holders of sukuk or Islamic bonds, who are paid returns derived from underlying assests instead of interest, have been shielded from the worst effects of the subprime mortgage meltdown which has hit the conventional banking sector.

The rise of the Sukuk market as an alternative investment activity is attracting the attention of an increasing number of private sector and official circles across the globe including the British government which is reportedly mulling to become the first Western government to buy this kind of Islamic bond.

Conventional bank follows interest based while Islamic banks follow investment or equity based business. Islamic banking is restricted to Islamic acceptable deals, which exclude e.g. alcohols, pork, gambling, etc. Thus ethical investing is the only acceptable investing, and moral purchasing is encouraged. Islamic banking is risk based while traditional banking is less risky. Once the depositor has an investment with the

traditional bank, it's the banks responsibility to nurse the money and the investor can sit back risk free.

Islamic banking is investment based contract banking in which both the parties (the bank and the investor) join in to a valid contract to share the profit and loss on that investment. Thus traditional banks are concerned with interest sharing while Islamic banking is profit and Loss Sharing (PLS) based or equity based.

Islamic bankers describe depositors as akin to partners – their money is invested and they share the profits or, theoretically, the losses. Rather than lending money to a home buyer and collect interest on it, an Islamic bank buys the property and then leases it to the buyer for the duration of the loan. The client pays a set amount each month to the bank and at the end obtains ownership.

The Indian plus points: Everybody knows that India is an emerging economy and in fast track of reducing deficit financing. But whatever, strains she has taken is not so fruitful to have an inclusive development as Prime Minister suggested.

The main stream financial system and banking is one of the reasons for this dead lock. There many countries like Indonesia are an interesting example which can resist the negative impacts of the financial crisis. It has a large enough population and state budget to propel steady economic growth, even faced by a financial tsunami, and every prospect of diversifying export markets and funding sources reasonably fast. Indonesia adopted cent percent Islamic banking.

Do not rise the eye brows as it sound Islamic, it is not only for Muslims otherwise it would not have been adopted in china even. The largest bank recently opened the shutter is in England and it has now five branches. This is not for a community or its property.

There is no escaping situation from the impact of this series of financial and economic downturns and the associated stock market crashes and wild currency fluctuations. However, for the developing economies of Asia, the Middle East and Latin America, and even for Africa, these changes represent new opportunities. These events are symbolic of a changing global balance of power where the United States and Europe have to adjust to the rising economic power of Asia, the Middle East and the BRICs countries. (Brazil, Russia, India, China). This is more beneficial to India as it ahs abundant skilled manpower and one of the finest democracies of the world.

The crisis will accelerate demands for economic and social progress in India like countries, but mot on the basis of simply bowing to Western theories of liberalization and globalization.

This is a crisis of capitalism and even the greatest advocates of the market are forced to face reality that when capitalism fails it has to be bailed out by the state. But communism also played its role with full decoration as sited by the china's economy. It followed and grasped mass production through adhering producer's market and a full export oriented market. They product less for their people but more for others. In the economic tsunami, when all doors closed and warehouses were dumped with garbage.

The Islamic finance system, which introduces greater discipline into the economy and links credit expansion to the growth of the real economy, is capable of minimizing the severity and frequency of financial crisis. This is especially suitable for India like country as we have a marriage between capitalism and socialism named as mixed economy.

The Islamic system does not allow the creation of debt through direct lending and borrowing. It rather requires the creation of debt through the sale or lease of real assets by means of its sales – and lease – based modes of financing. There every debt or savings in other words there will be equal assets of equal liabilities. The liquidity is cent percent. So on question of financial crisis arises.

The asset which is being sold or leased must be real, and not imaginary or notional; the seller must own and possess the goods being sold or leased; the transaction must be genuine with the full intention of giving and taking delivery; and the debt cannot be sold and thus the risk associated with it cannot be transferred to someone else.

Financing extended through the Islamic products can expand only in step with the rise of the real economy and thereby help to curb excessive credit expansion. This would help to eliminate most of speculative transactions. Speculation and short selling are the main Causes for Indian stock exchange crashes But speculative business is not allowed in Islamic shari's, thus in Islamic finance too.

The most important of financing of our economy is deficit financing. This is one of the important reasons for inflation. During this situation the government will borrow

money either from the public, financial agencies or from the central bank. These borrowings have no relation with any asset creation. As such they are inflationary, unproductive. Whereas Islamic bank lend money to the government or anybody on the basis of partnership in assets (investments), project etc. Thus Islamic bank would encourage capital formation by the Government at a higher rate than the interest base borrowing by the Government. This will have a direct effect in the society through higher investment, higher growth and more employment. The dream of inclusive growth can at least be started. The Islamic system does not allow the creation of debt through direct lending and borrowing. It rather requires the creation of debt through the sale or lease of real assets by means of its sales- and lease-based modes of financing.

The assets which is being sold or leased must be real, and not imaginary or notional; the seller must own and possess the goods being sold or leased; the transaction must be genuine with the full intention of giving and taking delivery; and the dept cannot be sold and thus the risk associated with it cannot be transferred to someone else.

In Islamic finance, our dealing has to be tied to actual economic activity like an asset. You have to have a building that was purchased, a service rendered, or a good that was sold.

The great convergence of interest would come if the Islamic Banking Institution (IFIs) would grasp the opportunity presented by the current by the financial crisis to greatly expand joint investments with governments and other financial sources, including multilaterals and bilateral aid funds, to finance the power stations and water and sanitation projects which the Indian economy needs now. The best financing option

for enhancing infrastructure in India Islamic financing. We need better roads, electricity and communication projects which need millions or rupees that cannot be afforded by the government without shouldering with interest based banks. The suggestion is to have equity based capital. The accountable reservoir of wealth is waiting in Middle East countries both with their governments and with petrodollar giants to have gap in the interest free banking and to share with these types of projects.

One must remember that 50 per cent of our rain fed land needs irrigation which needs equity finance to reduce credit cost. The total infrastructural investments is estimated to be 9 per cent of GDP by 2011-10 which means we require Rs.5,74,096 crore by 2011-12 for financing our infrastructure. The total investment amounts to Rs 20, 56,150 crore for the 11th five year plan. Of which Rs. 14, 36,559 crores is supposed to be met from public Investment and Rs.6,19,591 from private investments. Islamic financing is the best alternative for these investments. If the central government and RBI make a green nod to start a Islamic bank with full swing millions will flow from the international markets. It's better than the present FDI which will swallow major part in the form of interest.

No company can exaggerate its financial figures to boost up its stake value in the stock exchanges. The air bubbles in the financial statements mislead the investors and when the real figures get undisguised, the share values will be carpeted and the investor is waiting suicide. This was happened for many companies worldwide in the present financial tsunami. A prominent example in India we have faced now is Satyam Computers. This will never happen in case of Islamic financial institutions.

Therefore, it is the earnest request to every Indian brotherhood to pressurize the respected India panorama who is responsible for establishing an Islamic financing institution as early as possible. If viable are not available, better to have one in the government domain and throw away the hasty prejudices as it sounds Islamic.

CHAPTER-V

THE RELEVANCE OF ISLAMIC MICRO FINANCING

This chapter deals with the Relevance of Micro Financing. Micro financing refers to provision of financial services usually in the form of small sized financial transactions, who usually fall outside the reach of formal finance. It includes provision of thrift, credit and other financial activities. It also refers to the provision of financial services to poor or low income clients, including consumers and self employed. Micro credit should not be confused with micro finance which addresses a full range of banking needs of the poor. It includes not just credit but also saving, insurance and fund transfers. According to Dr. Mohammed Yunus of Bangladesh "Micro financing refers to a host of financial services, savings, loans and other financial products that are available economically lower strata of the society.

Micro credit is a central service provided under micro finance which involves provision of small scale loans to the lower income and to the poor. Other innovations include housing micro finance, pensions, savings, transfer services, mission insurance and remittance management. It also includes financing Small Micro Enterprise (SME) which produces goods and services utilizing few employees and capitals

5.1 Micro Financing Models

Micro financing institutions provide to entrepreneurial poor financial services that are tailored to their needs and conditions. Good micro finance programmes are characterized by small, usually short-term loans; stream lined, simplified borrower an investment appraisal; took disbursement repeat loans after timely repayment; and convenient location and timing of services. In most cases micro finance programmes are structured to give credit in small amounts and require repayment at weekly intervals within a short time period- usually a month or few months

5.2 Grameen Bank Model

This model requires careful targeting of the poor through means tests comprising mostly of women groups. The model requires intensive field work by staff to motivate and supervise the borrower groups. Groups normally consist of 5 members who guarantee each other's loans. A number of variants of the model exist; but the key feature of the model is group-based and graduated financing that substitute's collateral as a tool to mitigate default and delinquency risk. In the country of its origin i.e. Bangladesh, a shariyah-compliant replication has been attempted by Islamic Bank Bangladesh Limited (IBBL).

5.3 Village Bank

This model involves an implementing agency that establishes individual village banks with 30-50 members and provides "external" capital for onward financing to individual members. Individual loans are repaid at weekly intervals over 4 months

5.4 Credit Union (CU)

It is a nature of non-profit financial cooperative owned and controlled by its members. CUs mobilize savings, provide loans or productive and provident purposes and have member ships which are generally based on some common bond. CUs are quite popular in Asia, notably in Sri Lanka.

5.5 Self- Help Groups (SHGs)

This model originating in India is based on self-help groups. Each SHG is formed with about 10-15 members who are relatively homogeneous in terms of income. An SHG essentially pools together its members' savings and uses it for lending. Typical SHGs are promoted and supported by Non Government Organizations (NGOs), but the objective is for them to becomes self sustaining institutions.

5.6 Islamic Micro Financing (IsIMF)

IMF refers to micro financing reoriented by shariyah compliant financing and enterprising with mission based and market based by profit/loss sharing interactions replaced in the place of interest.

5.7 Shariyah Complient Financing (SCF)

It is a model of delivering financial products under micro financing without charging interest from the borrowers. It is a financial activity under the guidance and supervision of shariyah. It helps to overcome the impediments to country's growth and development in dual ways. Firstly by avoiding interest, the reward for capital, the prices of commodities can be reduced leading to increase in consumptions to which in turn help for increase in production-income and employment opportunities. Secondly interest free micro financing allows the establishment of institutions creating to the diverse needs of the society after breaking the vicious circle of poverty. A comparative study of the Conventional Micro Financing (CMF) and IMF is possible from the table no. 5.1

Social economic justice and equitable distribution of income are among the permanent goals of an economy and these goals can be reflected in a financial system if it follows interest free micro financing it is a positive move towards the economic growth of an economy (Mohammed Yunus, 2006- Bangladesh). In India were there exist unemployment and poverty, this system has significant role to play.

Table No.5.1

Comparative Study on Operational Details of IsMFI and Conventional Micro financing

Operational Details	Conventional MF	IsMFI
Liabilities (Source of fund)	External Funds/Savings	External Funds, Savings, Islamic Charitable Sources
Assets	Interest Based	Interest Free
Financing Poorest	Poorest are Left Out	Poorest Included by Integrating Zakath with IsMFI
Transfer of Funds	Cash Transfer	Goods Transfer
Deductions at Inception	Part of Fund Deducted at Inception	No Such Deduction
Target Group	Mostly Woman	Family
Work Incentive of Employees	Monetary	Monetary and Non Monetary
Dealing with Default	Group pressure/Threats	Group/ Spouse, Pressure and Ethics
Social Development Program	Secular or Non Islamic	Secular and Islamic

Source: IBF Network Jeddha (2004)

In India most of the interest free financial institutions are functioning in unorganized sector offering micro-finance the downtrodden sections of the society. Majority are in Kerala state. Many are in tiny sector offering interest free loans in small denominations to 1000s of rural people. They are small traders, agriculturists and consumers. The sources of capital in these institutions are the donations collected from well wishers and philanthropists. The replacements are made in easy installments. This

type of interest free loans to small traders and farmers are of great help to save them from the exploitation of local money lenders. There is ample scope in our economy to develop such institutions to function as an alternative to rural credit on cooperative basis without charging interest. Very few of them are working in organized sector in the state like Maharashtra, UP, Karnataka and Kerala. These institutions are registered as Non-Banking Finance Company with RBI.

A viable alternative for rural credit expansion is formulated through micro finance. The success story of Grameen Banking at Bangladesh and award of Nobel Prize to Dr. Mohammed Yunus have provided a new impetus to the interest free units of this country in micro financing.

Objectives of Interest Free Micro Financing

1. To introduce non exploitative finance as per the shariah compliant

2. To facilitate investment of saving for return other than interest

3. To channelise the funds to the productive fields

4. To assist the poor and deprived who are in need of money without the burden of the cost via interest

5. To ensure economic and social justice

6. To encourage profits from entrepreneurship

7. To efface speculation

8. To ensure the risk jointly by the provider of capital and entrepreneur

9. To ensure transparency in banking by upholding contractual obligations and disclosure of information

10. To admit time and value of money only to actual capital and not to potential capital. Money itself is potential capital. It becomes actual capital only when it joins a productive activity.

Micro financing system can be well utilized for the poverty eradication and reduction in inequality, if the system is modified by shariah-compliant rules. Thaha Abdul Basser of Harvard University discussed the validity of Islamic Instrument of monitory waqf as a means of financing shariah- compliant micro finance. IMF aims at social justice by avoiding the exploitation of borrowers from the clutches of interest. This system does not allow exploitation with higher returns. In conventional form of micro finance the net result in the economy is not so attractive because of high operating cost passed on to the customer in the form of high interest rate. This disadvantage is mitigated by IMF. With its traditional funding system such as, zakath, sadaqua, qridhassan, cash waqaf and return from awquaf.

Concern over credit provision and finance accessibility for the poor to bring poverty alleviation via micro finance is also relevant to Islamic bank which makes a new frame for IMF, should place greater social welfare responsibilities and religious commitments to achieve Islamic economic objectives, including social justice, equitable distribution of income and wealth and promoting economic development.

While Islamic banks may emulate the existing model of micro finance practice, the activities however must be carried out in ways which do not conflict with principle of shariah. In other words IMF initiatives should be free from any involvement of activities prohibited by islam and from elements like usury (riba or interest), gambling

(miser), harmful substance (darar) and excessive ambiguity(gharar). Having mentioned this, Islamic banks can always learn from various approaches used by micro financial institutions to ensure effectiveness in providing finance to the marginalized society.

In addition to the innovative approaches used by many micro finance institutions, Islamic banking can apply diverse financial instruments together with other available mechanisms such as zakah, charity and waqf which can be integrated into micro finance programs to promote entrepreneurship amongst the poor and subsequently alleviate poverty (Akhtar (1996), Al- Harar (1995).

5.8 Approaches to Poverty Alleviation through IMF

Islamic economic system use poverty to be a curse to be eradicated through productive efforts.

5.8.1 Charity

Charity occupies a central position in the Islamic scheme of poverty alleviation. The broad term for charity in Islam is sadaqa (obligatory alms). When compulsorily mandated on an eligible person is called zakath. Funds mobilized through this tool tend to fluctuate from time to time and are meant mostly for the extremely poor and it functions as a safety net for meeting their immediate and basic needs. Benefits from waqfs assets are of course meant to flow to the community at large and also on a sustainable basis.

5.8.2 Economic Empowerment

While Islam strongly encourages charity from the givers point of view, it seeks to minimize dependence on charity from the beneficiaries' point of view and restricts the benefits to flow to the poorest of the poor and the destitute that are not in a position to generate any income and wealth. The system aims to implement a strategy of poverty alleviation through economic empowerment by utilizing charity and waqf.

5.8.3 Freedom from Riba

IMF products and services are essentially in the nature of contracts. All contracts in shariah must be free from certain forbidden elements like forbidden from riba (interest). The Holy Quran declares "all has permitted trade and forbidden riba (2:275). The holy Quran declares trade to be lawful means of livelihood as opposed to riba, which is forbidden for being oppressive and exploitative.

Figure No.5.1

Vicious Circle of Poverty
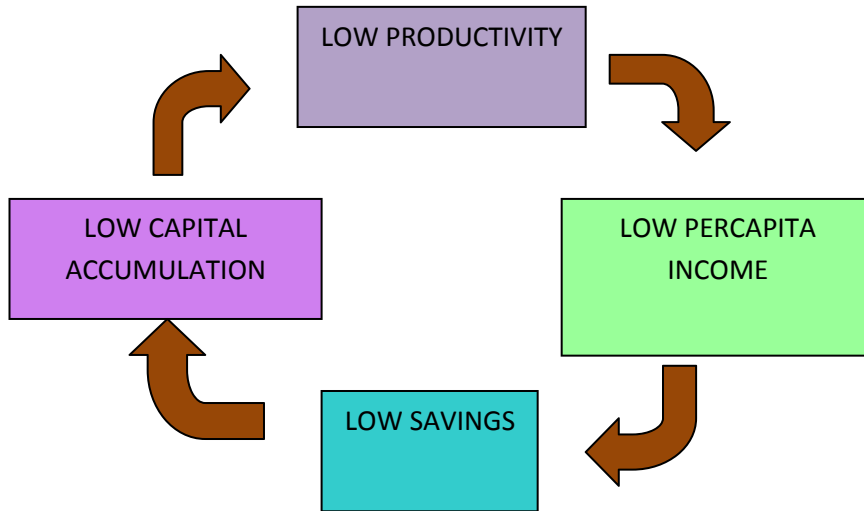
Figure No.5.2

Breaking Vicious Circle of Poverty in Islamic Micro Finance
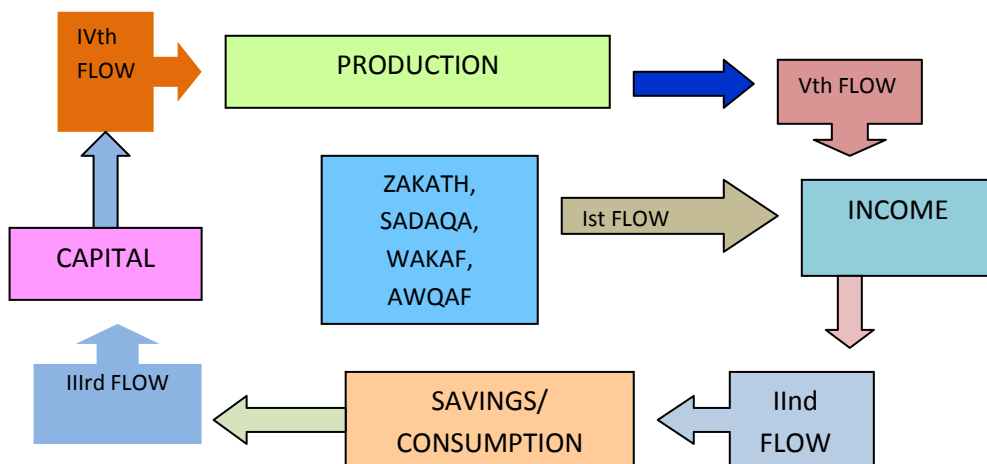
5.8.4 Freedom from Gharar

While prohibition of riba is absolute some degree of gharar or uncertainty may acceptable in certain forms of contracts. The presence of excessive gharar makes a contract forbidden. Eg: (a) By Al- Hasah, is a type of gharar and a type of sale whose outcome is determined by the throwing of stones

(b) By Munabadha, which is sale performed by the vendor throwing a cloth at the buyer and achieving the sale transaction without giving the buyer the opportunity of properly examining the object of the sale.

(c) By Mulamasa, where the bargain is struck by the touching the object of the sale without examining.

5.9 Relevance of Islamic Micro Financing

Though generally micro financing can alleviate poverty it will become a reality only if the poor could break vicious circle of poverty (figure no.5.1). Under developed countries are characterized by low productivity, low per capita income, low saving and low capital formation. IMF can help to break this vicious cycle of poverty with the help of the financial instruments namely, zakkah, sadaqa and awqaf as a safety net to take care of the consumption needs and saving needs of the extremely poor and destitute. The awqaf which is ideal for creation and presentation of assets can build capacity for

production and distribution and provides technical assistance for skilled improvement and development of human resources as shown in figure no.5.2.

Figure no.5.1 shows the vicious circle of poverty. About 90 per cent of the people in developing countries lack access to financial services from institutions either for credit or savings. With their limited income they themselves cannot save and invest leading to low capital, low productivity, low income and low saving. Figure no.5.2 shows how does this circle is broken in IMF.

Islamic approach to poverty alleviation is more inclusive than the conventional one. It provides for the basic conditions of sustainable and successful microfinance, blending wealth creation with empathy for the poorest of the poor. It also follows that the Islamic approach is a composite of mission based and market based interventions. It favors equity – based and co – operation - based models in contrast to mechanisms that create and perpetuate debt.

5.9.1 Mission Based (Charity Based)

A mission based approach to poverty alleviation and development in IMF involves several not – for – profit mechanisms, such as sadaqa, zakath, awkaf and quard hassan.

A non – profit 9charity based (or mission – based) model of micro finance is shown in figure no.5.3. The model may be described in activities as follows:

Figure No.5. 3

Model of Microfinance using Islamic Not-For-Profit Models
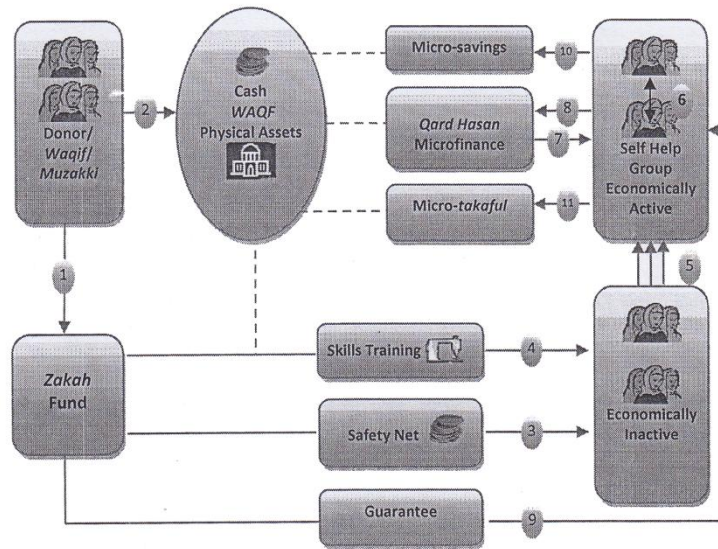
Source: IBF Network Jeddha (2004)

1. IMF institutions or programme creates a zakah fund with a contribution from muzakki (givers).

2. Program facilitates waqf of physical assets as well as monitory assets. The physical assets are used to facilitate education and skilled training. The monitory assets may be in the form of a cash waqf or simply as ordinary sadaqa.

3. Program carefully identifies the poorest of the poor who are economically inactive and directs a part of zakah fund towards meeting their basic necessities as grand and safety net.

4. Programme provides skills training to economically inactive utilizing assets under waqf.

5. Beneficiaries graduate with improved skills

6. Beneficiaries are formed into groups with mutual guarantee under the concept of kafala

7. Financing is provided in the basis of qard hassan to the group; also to individuals backed by guarantee under the concept of kafala.

8. Group members pay back and in turn, are provided higher levels of financing.

9. Additional guarantee against default by the group is provided by the zakah fund and actual defaulting accounts are paid off with zakah fund; this is indeed the distinct feature of this model.

10. Group members are encouraged to save under appropriate micro savings schemes.

11. Group members are encouraged to form a Takaful fund to provide micro insurance against unforeseen risks.

The distinguishing feature of this model is the use of kafala as a guarantee mechanism at the group or individual level and it acts as a guarantee scheme against specific risks and uncertainties.

5.9.2 Market Based (For Profit)

IMF need not be restricted to not for profit modes alone. It permits for profit trade and creation of wealth also. The poor need a range of micro finance service such as micro savings, micro credit, and micro equity, micro – takaful and micro-remittance. In the context of main stream Islamic finance we come across a host of for- profit modes through which such services may be provided to the poor.

1. Micro Savings: It is a critical financial service for poor and excluded households. Micro servers are motivated by a host of factors such as safety, convenience, returns and personalized service. The contact underlying a savings product must be free from elements of riba n gharar. Various contractual options for designing savings products are wadia, qard hassan and mudaraba.

2. Micro Credit: Islamic alternative to interest based conventional loan is trade based or lease based credit that permit the ownership and use of commodities or physical assets needed for productive enterprise while differing the payments to future time periods. There are several such products developed by main stream Islamic financial institutions involving murabaha, bai-muajjal, ijara, bai-salam, bai-istisna, bai-istijrar etc.

3. Micro Equity: IMF instruments may consider various partnership based modes or equity based modes for micro finance. Like mudaraba and musharaka. The former involves a combination of entrepreneurship and capital and while the latter involves a partnership in entrepreneurship and capital.

4. Other Subjects: the poor also need many other services besides saving and financing such as, the remittance. These services may be easily provided by and IMF instruments in a fee based framework. Inorder that these services are provided in a riba free manner. Scholars insist that the quantum of fee is de linked from the quantum of funds involved and is based on the costs incurred in the process of offering the services.

5.9.3 A Composite Model of IMF

Earlier we have discussed a model of micro finance based on Islamic nonprofit modes. We now combine with for profit modes and present a composite model of IMF. It is presented in figure no.5.4. The model may be described in terms of activities as follows:

Figure No.5.4

Composite Model of Islamic Microfinance
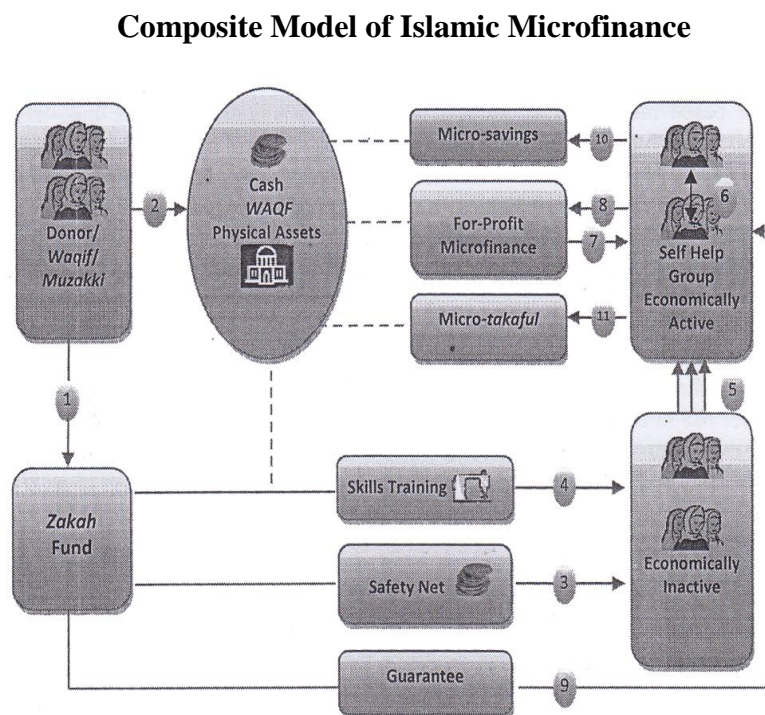
Source: IBF Network Jeddha (2004)

1. IMF institutions or program creates a zakah fund with a contribution from muzakki (givers).

2. Program facilitates waqf of physical assets as well as monitory assets. The physical assets are used to facilitate education and skilled training. The monitory assets may be in the form of a cash waqf or simply as ordinary sadaqa.

3. Program carefully identifies the poorest of the poor who are economically inactive and directs a part o zakah fund towards meeting their basic necessities as grand and safety net.

4. Program provides skills training to economically inactive utilizing assets under waqf.

5. Beneficiaries graduate with improved skills

6. Beneficiaries are formed into groups with mutual guarantee under the concept of kafala

7. Financing is provided using a combination of for -profit debt based modes such as, bai-muajjal, ijara, salam, istisna or isijrar or equity based modes such as mudaraba or musharaka.

8. Group members pay back their debts and meet the expectations of equity providers and in turn are provided higher levels of financing.

9. Additional guarantee against default by the group is provided by the zakah fund and actual defaulting accounts are paid off with zakah fund; this is indeed the distinct feature of this model.

10. Group members are encouraged to save under appropriate micro savings schemes.

11. Group members are encouraged to form a Takaful fund to provide micro insurance against unforeseen risks.

5.10 A Case Study of IMF in Bangladesh

This study organizes as a case study of IMF in Bangladesh by making a comparative analysis of secular and Islamic Non Government Organizations (INGO) in

implementing micro credit programs for the poor in Bangladesh (1999-2005) and a study on specialized activities and a study on specialized activities for poverty alleviation and employment generation through Islamic micro credit sector in various institutions during 2001-2008.

5.10.1 Secular and INGO's in implementing micro credit programs

The basic difference between a secular and INGO's is that the former follows an interest-based lending policy where as the latter follows interest-free, collateral-free lending under shariah compliant schemes.

MFIs (successfully pioneered the micro credit delivery mechanism for lower income people in Bangladesh through small amount of collateral free, interest free loans since 1971. the poor and the landless in Bangladesh do not have access to a formal financial system for credit as the system is based on collateral and interest to circumvent the situation, the Nobel prize winner Prof. M.Yunus of the now famous Grameen Bank has innovated a system of credit delivery to the poor without collateral through Islamic and secular NGOs.

5.10.2 Micro Credit Sector in Bangladesh

Micro credit has become the core program for nearly all NGOs working with the rural and urban poor in Bangladesh. Although there are several NGOs registered in Bangladesh approximately 250 NGOs have reasonably micro credit programs. Four

large MFI dominate the sector, the Grameen Bank a formal specialized bank for the poor, the Bangladesh Rural Advancement Committee (BRAC), Proshika and the Association for Social Advancement (ASA) which introduced both Islamic and secular MFI.

The demand for micro credit from the poor and the opportunity of achieving financial viability through creating more employment vacancies, have encouraged NGOs to introduce micro credit in big way especially by using a Islamic Financial Instruments (IFI) among several INGOs 6 members selected for our study dominated the sector like, Al-Falah A'am Umayan Sangastha, Dinajpur; Islamic Cultural Society, Jhalakati; Noble Foundation and Literary society, Bogra; Rural Economic Support and Care for the Under privileged, Rangpur; Rural Development Scheme of Islamic Bank Bangladesh Ltd.; Muslim Aid Bangladesh.

At the end December 2005 there were nearly 9.75 million[*] borrowers of which Gramin Bank had 3.068 million[**], BRAC, Proshika and ASA served 2.626 million[***], 0.962 million[♦] and 0.9282 million[♦♦] borrowers respectively. The 148 Small and Medium MFIs(SM-MFIs) financed by the Pallikarma Sahayak Foundation (PKSF) reached 0.793 million[♦♦♦] borrowers.

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[*] Ministry of finance 1999
[**] The Grameen bank statement 2005
[***] BRAC- Dhakka 2006
[♦] Proshika- Dhakka 2006
[♦♦] ASA,"ASA at a glance monthly monitoring report of ASA December   2005"
[♦♦♦] PKSF" summary of PKSF loan program December 2005"

Other NGOs and government programs serve the remaining borrowers. A total amount of Taka51,917.23 million(US$1080.8 million) was disbursed by Grameen Bank, Taka26,767.16 million by BRAC, Taka11,676.2 million, Proshika Taka3,883.6 million, Taka6,806.8 by ASA and 148 SM-MFI financed by PKSF Taka2,782.23 million during 2005. The outstanding loans of these organizations at the end of 2005 where Taka51,316.56 million[*].

The Islamic NGOs, in membership, savings, disbursement of loans etc initially were very weak and later it became very efficient compared to other secular NGOs. The typical micro credit programs existing in Bangladesh has the following features

1. it is collateral-free

2. Islamic NGOs are always collateral free and riba free[**].

3. Secular NGOs issues loans on the basis of conventional and Islamic financial instruments.

4. loans are issued among members mobilized in the groups ranging from 5 to 30 members

5. Members meet once in every week and make a small saving deposit with the concerned MFIs.

6. Loans are usually given for 1 year and recovered in weekly installments or on profit/loss basis.

In Bangladesh micro credit especially Islamic micro credit creates a virtuous cycle to break the vicious circle of poverty. The infusion of credit creates self

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[*] Compiled based on the data from various MFIs
[**] Riba- Arabic word for interest

employment for the borrower, increases the income leading to increased consumption saving, additional credit increases further income and so on and the borrower is expected to come out of poverty. In most cases there is significant improvement in social indicators such as children's school enrolment, fertility rates and use of clean drinking water.

5.10.3 Micro Credit Information of Banks, MFI and NGOs

Table No. 5.2

Sector-wise Distribution of Loans of 369 NGOs Including ASA, BRAC and PROSHIKA

Sector	% of Disbursement Until 2005
Agriculture	12.19
Fisheries	4.33
Food Processing	10.17
Small Business	42.13
Cottage Industries	2.83
Transport	3.39
Housing	1.49
Health	0.51
Education	0.04
Livestock	17.94
Others	4.81
Total	100

Source: Credit and Development Forum (CDF) (2005)

Table No. 5.3

Cumulative Disbursement of Banks, Micro Credit (Taka in Millions)

Bank	1998-99	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05
Sonali Bank	637	668.2	638.3	1246	1506	1436	4041.5
Janatha Bank	127.4	130.9	200	469	627	1063	959
Agrani Bank	72.8	94	248	297	410	460	266
BKB	171	221	462	846	1290	1466	442
RAKUB	49	72.8	101	113	107	111	37.6
TOTAL	1057.2	1186.9	1649	2701	3940	4536	5746.1

Source: CDF Statistics, December 2005 and Ministry of Finance (2006)

The mobilization of weakly saving is an important part of the micro credit program. The net saving mobilized by 369 NGOs including BRAC, ASA and Proshika at the end of June 2005 was taka 4, 288 million. An analysis of areas of disbursements by these 369 NGOs shows that the loans are given mainly for common traditional activities in the rural economy. The major sectors are small business (42.13 per cent) livestock (17.94 per cent) agriculture (12.19 per cent) see table no. 5.2

The banks take part in the poverty alleviation programs through direct approach and through linkage with secular and Islamic MFIs. During 1998/99 and 2004/05, the collective cumulative disbursement of 5 banks (Sonali, Janatha, Agrani, BKB, RAKUB) in the poverty alleviation programs amounted to Taka5,746.1 million. It is 81.6 per cent increase compared to the figure of 1998/99. It is encouraging that the recovery rates of some micro credit programs are far better compared to the overall repayment situation of commercial banks. Most of these credit programs share common features such as

loans without collateral, disbursement through homogenous groups, choice for interest or PLS, some mandatory savings, close supervision etc. Some other banks like BASC Bangladesh Ltd., Employment Bank, Ansar VDP Bank, Cooperative Bank etc have some collateral free credit programs for the poor but charged interest at 12 per cent.

Until August 2005, Grameen Bank, the largest micro credit institution had an outreach of 3.066 million members of which more than 2 million were women (Grameen Bank, 2005). Out of the 495 NGOs reported, 130 NGOs have credit programs for urban peoples. However 94.52 per cent of their disbursements are concentrated in rural areas. Among the noble MFIs other than Grameen Bank some of the largest NGOs in Bangladesh such as BRAC, ASA, Proshika etc are involved in the collateral free credit activities as fully secular and semi secular (with IFIS) banking.

Table No. 5.4

Growth of Collateral Free Interest Free Micro Credit Program of BRAC, ASA and PROSHIKA Before and After Implementing IsMFI in 1998 and 2005

	BRAC			ASA			PROSHIKA		
	1998	2005	% increase	1998	2005	% increase	1998	2005	% increase
Disbursement of Loan (Taka in Million)	29955	38549.6	22	13559.1	17626.8	23	8185.2	9412.98	15
Total Members	2484045	2757289.9	11	894119	10371780.04	16	1242867	1379582	11
Net Saving (Taka in Million)	2237	2908.1	30	1081.1	1513.54	40	471	706.5	50
Total Outstanding (Taka in Milion)	4921.1	5314.78	8	2218.5	2351.61	6	2678.9	2920	9

Source: CDF Statistics (1998) and (2005)

Among the notable MFIs other than Grameen Bank, some of the largest NGOs in Bangladesh such as BRAC, ASA, Proshika etc are involved in collateral-free, interest-free in credit activities in Bangladesh as fully Islamic and semi secular modes (with Islamic economic instruments) see table no.5.4. The net saving and its percentage of increase after implementing Islamic micro financial instruments particularly in 2005 is very high when compare it with respective ratios of disbursement of loan and consequent increase in saving in 1998. it shows the effectiveness of implementing Islamic mode of micro financing (hijara and mudaraba). While increase in disbursement of loan from BRAC, ASA and Proshika during 2005 compared to 1998 are 22 per cent, 23 per cent and 15 per cent respectively as an impact of favorably utilization of these loans, the increase in savings are 30 per cent,40 per cent,50 per cent respectively. Profit Loss Sharing (PLS) system, interest-free loans, implementation of mudaraba and hijara as Islamic financial activities brought some positive result in the eradication of poverty by providing more employment opportunities and increase in income.

Table No. 5.5

The Disbursement of Credit for Poverty Alleviation, by IsMFIs, Banks and GOs (Taka in Million).

	2005 (Cumulative)	% of Total
GOs	16063.40	7.75
NGOs (IsMFI)	53644.0	25.89
Banks	39289.80	18.97
Grameen Banks	98471.1	47.39
Total	207168.3	100

Source: Ministry of Finance, Bangladesh (2005)

Among the micro credit institutions, the performance of formal sector banks and GOs sre not so extensive and praiseworthy. The Grameen Bank and NGOs, by using

IsMFIs could do disbursement of credit by 47.39 per cent and 25.89 per cent respectively which are comparatively the highest among others.

In Bangladesh MFIs especially with Islamic financial instruments seems to have a larger role than that of formal sector banks in agriculture where people have more employment opportunities to eradicate poverty signs, and its roll is growing. As of 2005 out of the cumulative total disbursement of major NGOs of Taka60013 Million, Taka 7476.53 million were disbursed as agricultural loans. This represents 12.46 per cent of total cumulative disbursement of loans of these institutions as compared to 12.19 in June 2005 (CDF 2005). Moreover the important point is that all these loans are collateral free and riba free and are maintaining good repayment rates.

Table No.5.6

Recovery Performance of the Micro Credit Programs of NCBs and GOs.

Name of Bank/ Organisation	Recovery Rate as % (2005)
Sonali	88.94
Agrani	99.21
Janata	80.15
BKB	71.58
RAKUB	81.99
BRDB	87.81
Ministry of Youth & Sports	68.53

Source: Ministry of Finance, (2005)

Following the success of IMFIs in the field of micro credit, banks have introduced a number of riba free, collateral free programs replicating the models of micro finance in their poverty alleviation programs. Though their overall performance is not as good as MFIs(see table no.5.5) still it has been observed that the micro credit programs of the banking sector that are based on the group lending approach with IFIs

have been showing comparatively better results. Most of the micro credit programs of MFIs are maintaining very good repayment performance as shown in Table no. 5.6

Table No.5.7

Recovery Performance of Some NGOs and Grameen Bank using IsMFIs like Musharaka and Mudaraba.

NGO/GB	Recovery Rate as % (Up to 2005)
BRAC	98.20
ASA	99.96
PROSHIKA	95.47
Total of all NGOs	93.18
Grameen Bank	92.10

Source: CDF Statistics, (2004) and Grameen Bank (2005).

Here ASA keeps the highest recovery rates as 99.96 per cent. though Gramin Banks keeps comparatively lowest recovery rate it could maintain 92.1 per cent.

5.11 Comparative Analysis of Secular and Islamic NGOs

5.11.1 Islamic NGOs

There are several NGOs currently operating in Bangladesh that provide micro financial services based on Islamic principles started since 1993. at the beginning these NGOs were very small in terms of their membership and saving. But in the later period of their implementation it could out compete the circular NGOs in this respect.

Table No.5.8

Membership & Savings Information of NGOs- Islamic and Secular Under Study in 1999 and 2005

Name of the NGO	Membership Total		Savings		Beginning Year
A. Islamic NGO	1999	2005	1999	2005	
1. Alfalah A'am Unnayan Sangastha Dinajpur	4031	40 lakhs	54.35	6232.4	1994
2. Islamic Cultural Society (ICS), Jahalakati	2383	28 lakhs	12.66	5211.3	1997
3. Noble Foundation and Literary Society, Bogra	915	2.5 lakhs	7.60	82.6	1997
4. Rural Economic Support and Under Privileged, Rangpur	2411	26.7 lakhs	16.10	1200	1992
5. Rural Development Scheme of Islami Bank, Bangladesh Ltd.	25335	30 lakhs	12.077	3200.5	1996
6. Muslim Aid Bangladesh	1110	24 lakhs	11.37	4625.3	1993
Total	35885	2.454 crores	114.157	20552.1	
B. NGO Secular					
1. Sagarika Samaj Unnayan Sangastha Noakhal	5609	21 lakhs	38.27	4201.6	1993
2. Shaplaful, Bagerhat	1486	10 lakhs	4.16	1926.6	1994
3. Programs for People's Development, Sirajgang	2724	6.6 lakhs	31.88	1800.6	1994
4. Pallimangal Karmasuchi, Dhaka	5984	11 lakhs	78.46	2000.6	1995
5. Society for Social Services, Tangail	27533	16.6 lakhs	400	2156.6	1991
6. Noabeki Bazar Co-operative Society Sathkhira	8950	15 lakhs	84.7	3156.6	1992
Total	52286	80.2 lakhs	640.59	15242.6	

Source: Annual Reports of Respective NGOs (2006)

Tables 5.8 and 5.9 provide basic information on membership, borrowers, savings, and disbursement of loan and the rate of recovery of these NGOs. The Rural Development Scheme of Islamic Bank Bangladesh Ltd is the largest in the sector.

5.11.2 Secular NGOs

For the sake of comparison NGOs of similar size have been selected. Though these NGOs are relatively more experienced and worked more efficiently than Islamic NGOs during 1999, it became far below the levels of Islamic NGOs in 2005 periods. This may be due to the merit and feasibility of Islamic financial instruments used in Bangladesh for the smooth functioning of micro financing scheme.

Table No.4.7 shows the comparative performance of INGOs and secular NGOsin eradication of poverty with two periods that is 1999 and 2005. in the aspect of membership and saving position the INGOs shows a better position than secular NGOS where we compare their performance in this respect in the period 1999 and 2005.When we analyze the membership position there were 35885 members in INGO totally while there were 52286 members in secular NGOs in 1999. But the situation became very well in favour of INGOs in 2005, considering the total number of members in secular NGOs. It was 2, 45, 40,000 members in INGOs in 2005, while it was only 80.2 lakhs in secular NGOs. The savings increased from 114.157 million in 1999 to 20,552.1 million in 2005, in the case of INGOs. In the case of secular NGOs it increases from 640.5million Taka to only 15,242.6million Taka in 2005. in the early stage in the aspect of membership and saving position INGOs were worst than secular NGOs. But later INGOs out compete the secular NGOs in all respects. The comparative study of

increasing membership in Islamic NGOs and secular NGOs during the period 1999 and 2005, there is 683.85 times increase in Islamic NGOs while it is only 153.38 times. In respect of saving it is 180 times increase and 23 times increase respectively. The tremendous performance of Islamic NGOs may be due to the attraction from the people in avoiding interest and the expectation of getting profit out of the investment.

Table No.5.9

Disbursement, Borrowers, Recovery of Micro Credit in Islamic and Secular NGO in 1999 and 2005

Name of the NGO	Cumulative Disbursement		Borrowers		Rate of Recovery	
A. Islamic NGO	1999	2005	1999	2005	1999	2005
1. Alfalah A'am Unnayan Sangastha Dinajpur	4.4	6.69	2956	3500	99.67	99.71
2. Islamic Cultural Society (ICS), Jahalakati	1.7	2.25	1858	2600	95.16	95.71
3. Noble Foundation and Literary Society, Bogra	.9	1.35	781	2100	99.89	99.69
4. Rural Economic Support and Under Privileged, Rangpur	2.5	3.7	1804	3200	99.00	99.71
5. Rural Development Scheme of Islami Bank, Bangladesh Ltd.	19.02	31.35	16494	30125	99.00	99.66
6. Muslim Aid Bangladesh	2.5	4.31	1110	3001	80	83.22
Total	31.02	49.65	25003	44526		
B. NGO Secular						
1. Sagarika Samaj Unnayan Sangastha Noakhal	4.26	4.89	2274	2500	98.42	97.00
2. Shaplaful, Bagerhat	1.15	1.38	785	1100	99.24	99.00
3. Programs for People's Development, Sirajgang	2.63	3.44	2093	3111	99.05	91.00
4. Pallimangal Karmasuchi, Dhaka	7.2	9.80	4857	7118	99.99	88.61
5. Society for Social Services, Tangail	56.56	79.18	24149	23115	98.32	85.71
6. Noabeki Bazar Co-operative Society Sathkhira	7.08	12.10	4971	6771	99.94	89.61
Total	78.88	110.79	39129	43715	594.96	550.93

Source: Annual Reports of Respective NGOs

As shown in table no.5.9, average increase in the disbursement of loan of INGO in the period between 1999 and 2005 is 55.66 per cent and average rate of recovery is 96.28 per cent. While the same in the case of secular NGOs are 35.33 per cent (disbursement of loan) and 91.82 per cent (recovery of loan). Number of borrowers also increased in INGOs than in secular. NGOs in the period between 1999 and 2005. In INGOs there 48.84 per cent increase I borrowers while there is only 10.49 per cent increase in secular NGOs.

5.12 Specialized Activities for Poverty Alleviation and Employment Generation Through Islamic Micro Credit Sector (IsMCS) in various institutions during 2001-2008

Selected institutions in micro credit sector are BRAC,ASA, swanirvar Bangladesh, Proshika, Thankamara Mohila Sobuj Sangha(TMSS), Shakthi Foundation, Society for Social Development, Buro Bangladesh. Main Islamic MFI used are Musharaka, Mudaraba etc.

Table No.5.10

Percentage Increase in Beneficiaries through Islamic Micro Credit Programs of Selected Institutions during 2001-2008

Name of Institution	Cumulative Position of Beneficiaries in 2001	Cumulative Position of Beneficiaries in 2008	Percentage Increase in Beneficiaries
BRAC	4138133	8448107	51%
PROSHIKA	2723272.09	2807497	3%
ASA	1579372	7132427	77.8%
Swanirvar Bangladesh	751865	1317426	42.9%
TMSS	216839	702745	69%
Shakti Foundation	63100	181990	65%
BURO Bangladesh	96537	2081263	95%
Society For Social Services	52491	346284	84%

Source: Concerned NGO 2008

BRAC: It established in 1972 is the largest NGO providing micro credit and started IsMF in 1994.This organization is working in 2000 slams and 70,000 villages throughout the country. Compared to 2001, this institution achieved 51 per cent increase in the number of beneficiaries by 2008 by using IsMFI.

ASA: ASA started its activities as a specialized micro finance service provider in 1991. it has gradually developed into a self reliant organization promoting micro credit Islamic micro financial instrument by 1994. It is the only organization which is implementing and expanding micro credit program at the lowest cost by using Musharaka as financial instrument. Compared to 2001 it achieved 77.8 per cent increase in the number of beneficiaries.

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Swanirvar Bangladesh: it is promoting the spirit of self- reliance by providing credit from nationalized commercial banks, PKSF and other sources in Mudaraba mode.since its inception in 2001 to June 2008 it disbursed a sum of Taka 3959.41 crore to 2807497 landless people. Comparing these periods there is 42.9 per cent increase in the number of beneficiaries.

Proshika: For sustainable economic development, income and employment generation of its group members, impart training arrangement for its beneficiaries under micro credit program in organic agriculture, livestock, small business etc through 10.88 lakhs projects. It achieved only 3 per cent increase in the beneficiaries compared to the periods 2001-2008.

TMSS: TMSS is working for poverty alleviation, socio-economic development since 1980 and started using ISMFI since 1994. During the period 2001-2008 it could increase the beneficiaries by 69 per cent.

Shakthi Foundation: this organization is engaged in promoting credit facility for women living in slums of Dhaka, Chittagong, Khulna and other major towns and cities. It could increase the number of beneficiaries by 65 per cent from the period 2001-2008.

Society for Social Development: this organization came into being in 1986 and started Islamic micro financing since 1995 with the objective to contribute to sustainable social development. There is 84 per cent increase in beneficiaries through the effort of this institution from 2001-2008.

Buro Bangladesh: to alleviate the poverty, this organization is spread in 9026 villages in 42 districts of the country with sustainable savings and credit program. There is 95 per cent increase in the number of beneficiaries through the programs of these institutions from 2001-2008.

In the aspects of disbursement of loan and recovery all these institutions show tremendous growth. As shown in table no 5.10

Micro-Credit Programs of Three Specialized Institutions using IMF and conventional systems: Three specialized institutions are Grameen Bank (used conventional instruments), PKSF (used Islamic instruments), BRDB- Bangladesh Rural Development Board (used conventional instruments).

Table No. 5.11

Comparative Study of Three Specialised Institutions, Grameen Bank (Conventional), PKSF (IsIMFI), BRDB (Conventional) in Micro Credit Programs.

Institution	Cumulative up to 2001	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	Cumulative up to 2008
Grameen Bank(Conventional)									
Disbursement	14704.08	143625	1879.81	2335.62	3148.37	4590.55	5019.44	5561.85	38676.76
Recovery	13389.7	1529.55	1676.33	1980.16	2581.54	3769.82	4802.52	4955.09	36684.71
Rate of Recovery (%)		98.29	99.00	99.96	98.95	98.49	98.61	98.11	98.11
No. of Beneficiaries (cum)	2389387	2367641	2786748	3626937	4764216	6390148	7208455	7527700	
PKSF (IsIMFI)									
Disbursement	948.12	254.74	304.10	340.56	366.00	692.62	1350.70	1408.11	5664.91
Recovery	294.57	104.15	160.39	243.00	342.13	437.58	638.94	1009.88	3230.63
Rate of Recovery (%)	98.40	98.41	98.17	97.40	96.96	96.71	98.60	97.32	97.32
No. of Beneficiaries (cum)	2629174	3857357	4485832	5104940	5522406	6778262	7723029	8298335	8298335
BRDB(Conventional)									
Disbursement	2743.06	324.41	354.74	419.44	654.86	683.77	862.73	796.06	6789.07
Recovery	2291	290.01	312.54	319.66	474.18	720.04	887.07	680.52	6037.40
Rate of Recovery (%)		91	90	94	89	94	93	94	94
No. of Beneficiaries (cum)	1021118	1221816	1546117	1926112	2011621	2322215	2368115	2481000	2481000

Source: Concerned Institutions

In the integrated micro credit program launched for the period 2001-2008 Grameen Bank and BRDB used conventional system of financing and achieved 68 per cent and 58.84 per cent in the number of beneficiaries respectively during the period

2001-2008. It is far below the rate of percentage achieved by PKSF in the number of beneficiaries by using IsMFI. It achieved 96.8 per cent increase in the number of beneficiaries during the period 2001-2008.

Table No.5.12

Comparative Study of Micro Credit Programmes of Other Commercial and Specialized Banks through Islamic and Secular Sectors

Commercial and Specialised Banks	No. of Beneficiaries			Disbursement up to 2008 (Taka in crore)			Rate of Recovery (%)		IsIMFIs used (%)	
	Islamic Sector	Conventional Sector	Total	Islamic Sector	Conventional Sector	Total	Islamic Sector	Conventional Sector	Musharaka	Mudaraba
Ansar-VDP Development Bank	462478	170391	632869	380.1	370.58	750.68	95.76	89.1	28	12
Social Investment Bank Ltd.	27413	7288	41989	39.1	37.98	77.08	97.00	87.1	20	22
National Bank Ltd.	1085	42536	43621	28.1	27.07	55.11	96.00	69.8	19	22
Islamic Bank Ltd.	488523	66617	555140	830.1	821.93	1652.03	99.00	90.1	21	22
Trust Bank Ltd.	04	12480	12484	118.1	110.4	228.5	87.25	80.2	28	20
Basic Bank Ltd.	257848	46589	304437	80.1	82.5	162.6	100.00	98.6	20	20
Pubali Bank Ltd.	13640	0	13640	10.00	10.10	20.10	100.00	95.6	20	21
Uttara Bank Ltd.	47520	5213	42307	360	363.48	723.48	98.25	91.6	30	20
Total	1298511	35114	1646487	1845.6	1823.98	3669.58				

Source: Related Banks

Other commercial and specialized banks are also conducting micro credit programs to alleviate poverty and create self employment alongside in the nationalized commercial banks operating Islamic and secular sectors of financing. Up to 2008, out of 16,46,487 number of total beneficiaries achieved through selected 8 institutions as

shown in table 13.11, 12,98,511 numbers of beneficiaries are through Islamic sector and only 3,51,114 through secular sector. That means, 78.86 per cent increase in the number of beneficiaries in Islamic sector and 21.14 per cent in secular. In the matter of disbursement it is 50.29 per cent in Islamic sector and 49.71 in secular sector out of the total disbursement. In the aspect of recovery also Islamic sector out compete the secular sector by having an average recovery percentage of 96.65, while it is 87.76 per cent in the case of secular sector. Average use of instrument 23.25 per cent in Musharaka and 18.375 per cent in Mudaraba. These are all shows the high efficiency of using Islamic micro financial instruments for the micro credit programs in Bangladesh for the creation of self employment and thereby alleviating poverty.

CHAPTER – VI

THE IMPACT OF SHARIAH-COMPLIANT

FAMILY INSURANCE (TAKAFUL)

CHAPTER-VI

THE IMPACT OF SHARIAH-COMPLIANT FAMILY INSURANCE (TAKAFUL)

6.1 Nature of Family Takaful in Malaysia

This chapter deals with impact of Shariah-Compliant Family Insurance (Takaful) on social and economic development as a saving and investment instrument with respect to Malaysia .Insurance or Takaful in Arabic, means joint guarantee. In practice, however, it can be visualized as a pact among a group of members or participants who agree to jointly guarantee one another against loss or damage that may be inflicted upon them. Each member of the group pools effort to support the aggrieved member. This is similar to some customs or traditions practiced in Arab society during the Jahiliyyah period, where mutual help was extended within the society upon the death of its members. They contribute together in terms of energy to help settle the funeral affairs of the deceased member. Some were more sympathetic, and went further to offer material or financial assistance to the deceased family. During the era of the Prophet Mohammed s.a.w., some of the practices of the Jahiliyyah were continued. This specifically involved the payment of compensation to the relatives of the deceased in one tribe when killed by a person from another tribe. The practice was thought to be able to reduce the tension between the tribes, as the Arabs during that era, were more prone towards revenge. This practice of paying compensation is called diyat or blood money and must be paid by the killer's relative's Aqilah to the heirs of the deceased. This was later extended to include that if a tribe killed someone from another tribe, all

the people from the same tribe must be held responsible to compensate the deceased relatives under the doctrine of Aqilah enshrined under Article 3 of the Madinah Constitution.

In this era of peace, however, members of society pool resources in order to compensate one another after sustaining an accidental loss. A person in distress or experiencing loss may not be the result of animosity between humans as witnessed during the pre-Islamic age, but more so from unexpected events, such as natural death, health impairment, unemployment, sickness, retirement and others. Because in essence insurance is an important device created to solve many social obligations, as mentioned above, there must, therefore, exist an urgent need to create a shari'ah based insurance practice, especially in developed Muslim majority countries, such-as-Malaysia. Which can be easily implemented in all secular and non secular countries and thereby we can introduce an insurance system fully free from exploitation.

As outlined by Chua (2000), the characteristics of shari'ah compliant insurance are that both parties be sincere and the policy is for the sake of the hereafter and that there is nothing illegal in its aim and operations. It must be a commercial, profit-sharing, muddrabah-based contract between the insured or participant, who is the provider of funds, and the insurer or takaful operator (custodian and manager of the funds). It has to be stressed that the creation of the takaful contract itself is very much in line with Islamic values. These are, providing financial help against unexpected future loss, contributing to the reduction of poverty, as well as encouraging the development of mutual cooperation and the spirit of brotherhood. It ultimately, cultivates solidarity, establishing a self-reliant society, and lastly, encouraging trade and commercial activity

to flourish. Insurance or takaful is a mechanism to help the ummah (community) solves some of the social economic, problems faced by many nations in this world. As narrated by Abu Hurayrah, the Prophet s.a.w. says,

"Whoever removes a worldly grief from a Muslim, Allah will take away one of his grief in the hereafter, whoever alleviates the needy, Allah will alleviate from him in both the world and hereafter."

Hence, bearing this in mind, Malaysia took the bold step of establishing the first Islamic insurance company or takaful operator in 1984, followed by a second takaful operator in 1994 and a third and fourth in 2003.

Yusof (1996) cited a number of reasons influencing the design and offerings of takaful business. First, Muslims felt the need to practice Islam and apply its rules and regulations in total. Second, Muslims desire a financial system that is able to create a truly Islamic economy for the sake of the ummah. Third, with the establishment of the Islamic banking system an inherent need arose for takaful or Islamic insurance to complement its services and offerings.

It was the historical evidence that led Muslim jurists to acknowledge that the basis of shared responsibility in the system of aqilah, laid the foundation of mutual insurance, and in general conclude that insurance in Islam must be based on the principles of mutuality and cooperation. Muslim jurists' acceptance of insurance is outlined as follows:

1. The spirit of cooperation will lead to a common good,

2. Assistance is provided to those in need through the contributions,

3. The donation of a small sum is intended to divide losses and spread liability according to the community pooling system,

4. All elements of uncertainty, gharar and miser will be eliminated through the contribution and compensation offered,

5. There is no taking advantage of another at the cost of other individuals, i.e. a fair scheme for all.

In light of the above explanations, one should take note that in a family takaful contract, once it is signed, the participant shall agree to relinquish as a donation, a certain portion of his contribution enabling him to fulfill his obligation of mutual help and joint guarantee, called tabarru'. The incorporation of tabarru' is to eliminate both the element of gharar and maysir. Besides enabling the participants to perform their divine duty of helping the unfortunate few in hardship, there is another aspect of the contract called mudarabah, which comprises of the profit-sharing element between the participants and the takaful operator to enable both parties to reap some worldly benefits. This is allowable in Islam. Therefore, the takaful contract affords the protection element as mentioned above as well as the savings or investment element. If the participant dies before maturity, the takaful operator will compensate the heirs of the deceased; however, if the participant lived until maturity, the benefits will be paid to him. Either way, the social obligation of helping the unfortunate few, as well as preparing for retirement days when one is physically helpless, will be met by this scheme. The nobility of this contract can never be over emphasized.

It is without doubt, a financial instrument catering for both the worldly affairs as well as the affairs of the hereafter. According to the views of 'ulama', for as long as the shari'ah conditions are met, i.e. risk sharing under the ta'awuni principles, coincidence of ownership, participation in management by the contributors of funds or participants, avoidance of riba at all costs and shying away from haram investments, and the incorporation of the management practice of muddrabah, takaful is definitely acceptable in Islam. Putting it simply, takaful practices, allows piety, brotherhood, charity, mutual guarantee and is self-sustaining, which no other financial instrument could compete with.

This chapter analyses two things: First, to investigate whether any relationships exist between the macro economic variables and the demand for family takaful (Islamic life insurance) with a case study in Malaysia. Second, to examine whether the establishment of takaful institutions has produced a positive social economic impact by making a case study in Malaysia as measured by the economic indicators. Islamic life insurance or family takaful is a form of savings instrument that is popular among several Muslim nations, specifically among Malaysian Muslims in general and has its appeal due to its shari'ah compliant attributes compared to conventional life insurance products. This study found that from the time of inception, Takaful Malaysia in 1984, their existence has had a healthy impact on the socio economy of the country. This is attested by the effect that the positive employment increment and its profit before tax and zakat (tithe) has on the economy. Being the pioneer in offering shari'ah compliant insurance products, Takaful Malaysia's profit performance and its capacity to generate new business in the form of premium or contribution is directly affected by the macro-economic variables, as measured by Malaysia's gross domestic product, consumer price

index and treasury bills or short-term interstates. If this trend continues, then it is signaling to the countries of the world the necessity to provide a conducive economic environment that will ensure this business activity continues to flourish in various countries. Lastly, it is common knowledge that 90 percent of the, Muslim market, comprising the indigenous race or Malays, have not purchased any form of life insurance or family takaful, thus, it is pertinent that the Central Bank of Malaysia, the regulatory body of financial institutions in Malaysia, considers issuing new licenses to would-be takaful operators to provide a wider offering of takaful products that would appeal to this untapped market.

6.2 Performance of Family Takaful Business in Malaysia

The family takaful business, accounting for 66.7 per cent of total contributions in 2002, remained the major income generator for the takaful industry in Malaysia. Market penetration, based on the number of new businesses, also increased tremendously, even during the period of the economic or financial crisis of 1997-2000 (Table No.6.1). This pattern seems to indicate that Malaysian Muslims in general already have a high level of awareness of the importance of the family takaful's role in their daily lives.

Table No.6.1

New Business

Year	No. of Certificates	Contributions (Millions)	% Change (Contributions)
1997	50,005	79.2	44.0
1998	56,126	119.3	50.7
1999	100,511	154.6	29.6
2000	163,492	279.5	80.8
2001	221,868	1,306.4	367.4
2002	237,037	452.2	-52.5 *
2003	263,101	511.0	13.0

*Excludes the annuity scheme marketed to contributors of Employees Provident Fund discontinued in May 2001.

Source: Takaful Annual Report, Central Bank of Malaysia (2002/03)

Likewise, the total assets of the takaful funds accounted for 5.6 per cent of the total assets of the insurance sector (Central Bank of Malaysia Takaful Report, 2003), a marked increase since its entry into the industry, from USD 0.5 million in 1986 taUSD995 million in 2003. Moving forward, there are indications of definite potential growth for the takaful industry as it remains positive with the entry of two new industry players.

If the trends are indeed the indicators of a positive outlook for the life insurance and family takaful business, the penetration rate of about 3 percent of the Gross Domestic Product (GDP) in the year 2000 and an increase of 1.5 percent according to the Central Bank of Malaysia Takaful Report (2003) to 4.5 percent of GDP could be expanded further. Market penetration of family takaful, measured by the number of certificates in force to total population, increased from 3.2 percent to 3.8 per cent to RM

251.5 million, constituting 28.3 per cent of total net contribution income in the year 2002. Thus, then, it is natural to ask whether the GDP is a good predictor for the demand of family takaful or Islamic life insurance and whether there are any other economic indicators that could accurately predict the performance of the family takaful business in Malaysia?

A study carried out by Ahmad Baharul-Ulum and Yaakob (2003); found that the GDP has indeed played an important role in determining the demand for life insurance (measured by the new and in-force policy) in Malaysia. This concurred with another study by Outreville (1996), which showed a positive and significant relationship of GDP to the growth of life insurance. Other studies have also shown other economic variables predictive roles as well. This includes Chang's (1995) findings that interest rates, mortality charges, life policy sales, short-term interest rates, savings and inflation rate or the consumer prkje index haj a direct influence on life insurance demand. Given this backdrop, the question that this research seeks to answer then is, do all these economic factors have the equivalent predictive qualities for the demand for family takaful or Islamic life insurance policies?

6.3 Methodology

6.3.1 Data Collection

Annual data on GDP, CPI, TBR rates and KLCI for the period covering 1995 to 2003 were used in this study (Central Bank Annual Report 1995-2002). The economic factors being the independent variables while the demand or growth for family takaful

policies, measured by the i) new business/certificates issued for family takaful, ii) profits (before and after zakdt and taxes), and iii) premiums or contributions being the dependent variables. Although the pioneer takaful operator began operation ten years earlier, this study took into account the period of the last nine years when the second takaful operator started, i.e. 1994. Likewise, the yearly new business/certificates issued for family takaful, inclusive of, individual, group and annuity schemes as well as the participants' contributions (premium), were extracted within the same period from the Central Bank of Malaysia Takaful Report (1995-2003), the respective company's annual reports (Takaful Malaysia and Takaful Nasional 1995-2003) for the relevant year under study as well as assistance from the officer from the particular company involved in the study.

Our empirical analysis will therefore be based on the following empirical models:

Empirical Models

i) New business = a_0 + a_1 GDP + a_2CPI + a_3TBR + a KLCI + e_1

ii) Profits (B/A) = a_0 + a_1GDP + a_2CPI + a_3TBR + a KLCI + e_1

iii) Premium contributions = a_0 + a_1GDP + a_2CPI + a_3TBR + a KLCI + e_1

The other aspect of the study, i.e. the employment rates, income tax and zakat, looked into the possibility of an impact on social and economic development for the nine-year period. This information was obtained from the respective company's financial report and from the relevant officer from the organization concerned.

The plans considered as a savings instrument under the family takaful policy include individual, group and annuity policies. Mortgage takaful plans although dominating the family takaful business (accounting for 70.4 percent of total new business contributions for 2002) is not included in this research because it does not have a savings element but rather a protection mechanism to safeguard financial obligations in case of early death.

6.3.2 Analysis

In statistics, it is assumed that when variables have a consistent and systematic linkage between them, a relationship is present. In this research, correlation and regression techniques were used to help determine if such a relationship exists. The test for correlation was carried out between new business, profits (before and after taxes and akafz) and premiums (dependent variables) and the economic variables, the independent variables (GDP, CPI and TBR and KLCI). The test found the presence of a relationship between new business and economic variables for both companies (TM and TN) as well as when combined. The direction of the relationship was found to be positive for new business and CPI and GDP, but negative for TBR and KLCI. This is consistent with the study of Redzuan and Yaakob (2004), which states that the conventional life insurance in Malaysia is a luxury good and, therefore, is positively related to economic growth. Interest rates and stock returns may have a negative effect on the demand for life insurance as they are seen as alternative savings instruments. Our results seem to echo this finding and that of Redzuan and Yaakob (2004). However, our study indicates that there seems to be a negative correlation between family takaful and the inflation rate. This could be due to the fact that in Malaysia, family takaful is seen as a luxury good

and therefore an increase in the general price level leads to a decrease in the demand for family takaful. A test on the strength of the association and the size of the correlation coefficient seemed to indicate that there is a high correlation in the relationship in question (Table 2). Rules of thumb have been proposed, that coefficient correlation between (+-)' .91 to (+-) 1.00 are considered "very strong," (+-) .71 to (+-) .90 are "high," (+-) .41 to (+-) .70 are moderate and the rest are small to negligible.

Looking at the pattern of the relationship, a statistical significance exists between the demand for family takaful and the economic variables namely, the GDP, CPI, TBR and KLCI (Kerala Lumpur Composite Index).

Table No.6.2

Correlation Coefficient Size between Variables

Serial Correlation among Variables

	CPI	GDP	TBR	KLCI
NB (M'sia)	0.777427**	0.601228*	-0.851275**	0.559275*
|NB (Nasional)	0.65757	0.822255**	-0.772775**	-0.067351
!NB (Combined)	0.851445**	0.73512**	-0.931967***	-0.362471
BP (M'sia)	0.126733	0.004678	-0.21118	-0.40465
BP (Nasional)	0.710814**	0.600977*	-0.771187**	-0.540037*
BP (Combined)	0.775318**	0.596585*	-0.831287**	-0.518293*
PA (M'sia)	-0.167746	-0.23486	-0.0138	-0.100983
PA (National)	0.71037**	0.623105*	-0.774144**	-0.523405*
PA (Combined)	0.794577**	0.623304*	-0.872414**	-0.374968
Premium (M'sia)	0.554394*	0.419631*	-0.658331	-0.402801
Premium (Nasional)	0.674153**	0.548964*	-0.721772**	-0.473649*
Premium (Combined)	0.684766	0.53192	-0.753099**	-0.448508*

Source: Kulalaumpur, Bimb Institute of Research and Training 2004

***   Very strong coefficient correlation

**   High coefficient correlation

*   Moderate coefficient correlation

Note: NB = New Business

BP = Profits before Taxes and Zakat

PA = Profits after Taxes and Zakat

A second analysis was conducted, where multiple regressions was used to test for a significant relationship between the macroeconomic indicators and the demand or growth of family takaful. All four macroeconomic variables, namely the GDP, TBR, CPI and KLCI indicated a negative relationship to the demand (measured by the new business) for family takaful policies of Takaful Malaysia (TM). However, only TBR and KLCI were found to be significant. Perhaps, this can be explained by consumers

tending to invest in alternative saving instruments (in money market or stock market) when the investment returns are higher. Also, given its long-term nature of investment, it is naturally attractive as compared to short-term investments during periods of economic uncertainty. This finding is not consistent with that of Chang (1995) who asserts that short term interest rates were found to be insignificant with the sales of universal life policies.

For Takaful Nasional (TN), only GDP was found to be a significant variable. At this juncture, we conclude that different macroeconomic variables seem to affect the demand for family takaful offered by both firms. These differences in the findings could be due to the small sample bias present in the study (only two companies were involved). Some deductions could be made at this point, i.e. Malaysians generally view the idea of purchasing family takaful or life insurance as a -luxury good. Normally, the size of income generated predicts the demand for the product and during the 1997 financial crisis, demand for family takaful (as measured by new business) for Takaful Nasional was negatively affected.

Generally, the results for Takaful Malaysia provide some information about the accuracy of the prediction. In this case a relatively high adjusted R-squared at 83 percent indicates that the observed values for the dependent variable falls close to the values predicted by the regression model.

It is also possible that due to the relatively short period taken for this study, no significant relationship was established between profits (before and after taxes and zakdt), premiums and the economic variables.

Table No.6.3

Regression Analysis - Demand for Family Takaful Policy (New Business) and Economic Variables for Takaful Malaysia

Model	Coefficient	t-value	Adjusted R-squared	F-value	Durbin-Watson Statistic
CPI	-5.160464	-0.803942	0.83	11.14*	2.48
GDP	-8.127	-0.523880			
TBR	-1.480	-2.230920**			
KLCI	-1.730257	-2.980126**			

Source: CBM (Central Bank of Malaysia) Takaful annual Report (2004)

** Significant at the 0.05

* Significant at the 0.01 level

Table No.6.4

Regression Analysis - Demand for Family Takaful Policy (New Business) and Economic Variables for Takaful Nasional

Model Watson	Coefficient	t-value	Adjusted R-squared	F-value	Durbin-Statistic
CPI	14.53495	1.599902	0.679	5.239**	2.179
GDP	4.918332	2.229706**			
TBR	0.326683	0.883731			
KLCI	0.931889	1.134051			

Source: CBM (Central Bank of Malaysia) Takaful annual Report (2004)

** Significant at 0.05 level

6.4 Employment Market

Based on the performance of the takaful industry and its effect on the social-. economy of the country and on the employment creation by both takaful operators, a positive trend seemed to appear. This could indicate acceptance of the service provided to the public and the need for such a service is creating an increase in the job-market. Over a twenty-year period for Takaful Malaysia and Takaful Nasional, they have, combined, created a job market comprising of 1.5 percent of the national employment (Table No.6.5). Compared to other industries, this shows a promising trend. Of the approximately 6 percent contribution by the finance, insurance, real estate and business services sector to the employment market, 1 percent is contributed by the takaful industry (Figure No.6.1).

Table No.6.5

Employment by Sector

	(*000)		Share (%)		Change (%)	
	2000	2001	2000	2001	2000	2001
Agriculture	**1,407,5**	1,397.1	15.2	14.8	**-0.8**	-0.7
Manufacturing	2,558	2,574.2	27.6	27.4	9.2	0.6
Wholesale/retail/hotels	1,584.2	1,627.4	17.1	17.4	4.5	2.7
Finance/Insurance/ |Real estate/business	508.7	527.1	5.5	5.7	**7.3**	3.6
1 Government services	981.0	998.6	10.6	10.6	2.1	1.8
Others	2,231.18	2,286.7	-	-	-	-
Total	9,271.2	9,411.1	100.0	100.0	-	-

Source: Economic Report, Ministry of Finance 2001-2002

Despite the impact of the global economic slowdown and the number of retrenched workers increasing, which was especially felt in the manufacturing sector, electronics and electrical sub-sectors, (69.4 per cent) the finance, insurance, real estate and business service job loss was negligible. In fact in the takaful industry, no retrenchment exercise was carried out, and the reverse situation occurred, i.e. creation of new job opportunities as indicated by an earlier analysis and illustrated in figure no. 6.1 below:

Figure No.6.1

Takaful Industry Employment Rate vs. Nasional Employment Rate
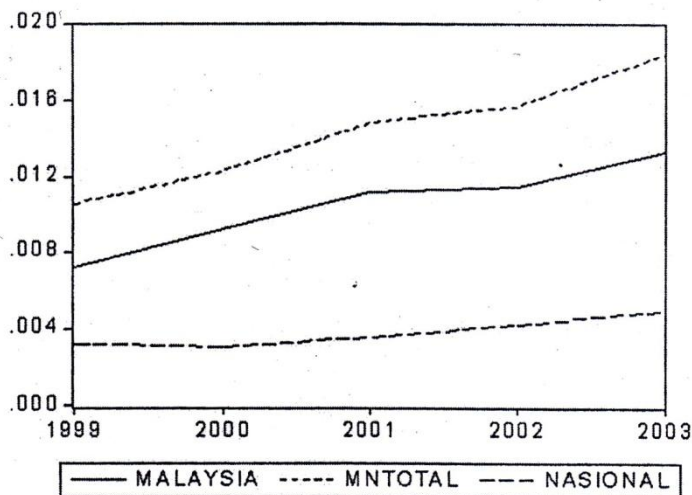
Data Source: Economic Report, Ministry of Finance 2001-2002

The performance of the takaful business as measured by total income (contribution receipts and investment earnings) and expenditure (claims, surrenders, profit payments le takaful, commission and management expenses) (Table No. 6.6), showed a steady and positive increase even during the difficult times. This also seems to indicate a healthy growth and a bright future ahead.

Table No.6.6

Income & Outgo

Item	1995	1996	1997	1998	1999	2000	2001	2002	2003
Income	40.6	97.5	138.7	193.5	264.8	883.8	1,327.4	799.0	969.0
Outgo	5.8	14.5	24.7	42.4	60.1	126.2	210.1	284.7	359.3
Excess	34.8	83.0	114.0	151.2	204.7	757.5	1,117.4	514.3	609.7

Data Source: Central Bank of Malaysia Annual Report 1999-2003

Subsequently, looking at Table No. 6.7 below, regression analysis on Takaful Malaysia's net profit versus the economic variables showed statistical significance, mainly indicating that the economic variables, the GDP, CPI and TBR are good predictors of its profits performance. This scenario does not exist in Takaful Nasional's experience. There is a possibility that being the "new kid on the block", the nine year period of this study is not long enough to show any significant results. When short-term interest rates are low, the public turns to Takaful Malaysia's family takaful policies as a form of safe investment, and vice-versa. This study also found that the inflation rate factor (CPI) has an effect on the demand for family takaful products and concurred with earlier studies Cargill and Troxel (1979) and Mass (1994), which found negative correlations with life insurance demand. The latter and this research found a significant and negative relationship with demand for family takaful or Islamic life insurance products.

Table No.6.7

Regression Analysis of Net Profit vs Economic Variables for   Takaful Malaysia

Model	Coefficient	t-value	Adjusted R-square	F-value	Durbin-Watson Statistic
CPI	-34.53177	-4.062**	0.669	5.051*	2.145
GDP	-8.127	-3.938**			
TBR	-1.480	-4.281**			
KLCI	-1.114	-1.449			

** Significant at 0.05 level

Source: Economic report (Regression analysis) Ministry of Finance Malaysia (2003)

Analysis on the tax and zakdt also showed a positive and increasing trend during the period under study (Figure No.6.2). From its humble beginnings, Takaful Nasional contributions to the GDP increased from nil to 14 percent and dropped to a record low of almost? Zero again in 2003. This fluctuation however is not present in Takaful Malaysia's performance, considered to be more stable, contributing between 2 to 5 percent of the GDP during the 9-year period. From the trends above, Takaful Malaysia seemed to be more resilient financially, economically stable, and generally not affected by economic conditions. This is testimony to its almost 20-year existence whilst at the same time leading the market in the industry. Putting it in more divine terms, the barakah achieved due to one's effort to enshrine the tenets of Islam will result in returns that know no bounds.

Figure No.6.2

Tax & Zakdt of the Takaful Industry to Gross Domestic Product
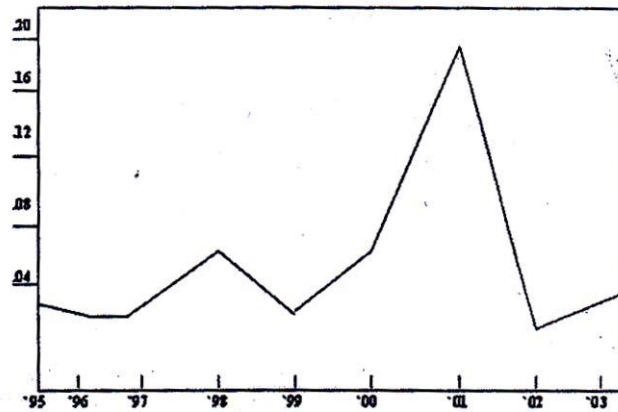
Data Source: Economic report (Regression analysis) Ministry of Finance Malaysia (2003)

This study concluded that to a certain extent, the economic variables, namely, the GDP, CPI, TBR and KLCI may be important and potential indicators in determining the performance of the takaful industry, particularly the family takaful market. While it is normal to conclude that the higher the income of a country, the higher will be the demand for family takaful policies, this study showed the reverse is true for the case of Takaful Malaysia where demand is measured in terms of net profits earned. The general public has a very high awareness of the product and its benefits; therefore, no amount of contraction in income will induce them to reject purchasing the policies. That family takaful policy will be considered only as a last choice amongst all the wants in life does not hold true here because the occurrence of an unexpected event is enough to influence the purchase of the product. It has reached the standard of being a necessity, just like any other necessity in life such as food. It is of paramount importance to outline here that what makes the product appeal to the masses, is its saving and protection element, i.e. either in life or in death, one gets to experience its benefits and advantages. On

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survival, one is assured of a sum of money to send his/her children to school up to tertiary education, provides for his/her retirement needs, medical expenses, and other benefit payouts during periods of hardship and many more. On the other hand, if one were deceased, his/her contributions would have alleviated the burden of his family and the family of others who have met the same fate.

To ensure that the other 90 percent of the Muslim population do purchase family takaful products in the future, the promotion exercise to be undertaken by takaful operators needs to emphasize and promote the role of its products and its benefits in this world and the hereafter. Sometimes, in any promotional effort, it may become more effective if the savings and investment element is made known rather than disclosing only the benefits of what is offered after one is deceased.

A few limitations that need to be highlighted include, the period undertaken for this study, which is relatively short, i.e. nine years, could have posed a problem to the analysis resulting in no significant relationship between the variables in question. Additionally, the small sample size, that is, with only two companies in the survey, does not augur well for the research. However, the results of the study have shown some positive socio-economic impact on Malaysia in terms of employment opportunity and contribution to the country's gross domestic product, an experience, although small in contribution, could be used as a model for other countries in order to boost savings and investment in their respective countries.

CHAPTER – VII

MAJOR FINDINGS, SUGESTIONS AND CONCLUSIONS

CHAPTER-VII

MAJOR FINDINGS, SUGESTIONS, AND CONCLUSIONS

7.1 Major Findings

7.1.1 Efficiency of Islamic Banking at World Level

There are five Data Envelopment Analysis (DEA) used for measuring the efficiency such as cost , allocative , technical, pure technical and scale efficiency course. They were calculated and correlated with conventional accounting measures of performance and they were also correlated with Return on Asset (ROA) and Return on Equity (ROE) suggesting that these efficiency measures can be usual, concurrently with conventional accounting ratios. The average cost efficiency is 74 per cent whereas profit efficiency is 84 per cent. Although Islamic bank at the world level are less efficient in containing cost, they are relatively efficient in generating profit. The average allocative efficiency is 74 per cent whereas the average technical efficiency is 84 per cent. This means that dominant source of inefficiency is due to allocative inefficiency rather than technical inefficiency. These results are consistent with the fact that the Islamic banks operate in overall regulatory. Average scale efficiency is about 85 per cent and average

pure technical efficiency is 95 per cent. The result shows that there has been good increase in productivity growth over the years, 1997-2006. The results of show that larger bank size and greater profitability are associated with higher efficiency-supporting the economies of scale arguments in Islamic banking industry.

Islamic banking emerged as a response to both religious and economic exigencies. While religious exigency calls for avoiding any transaction based on interest, economic exigencies, on the other hand, provide a new outlook to the role of banking in promoting investment/productive activities, influencing distribution of income and adding stability to the economy. Islamic banking is thus perceived as an improved system in all dimensions. However, in order to sustain in the long-run, the Islamic banking system has to be internally efficient and technologically advanced in order to compete with its conventional counterparts. Even by avoiding interest if Islamic banks can maintain at least the same level of conventional banks indicates the good success of Islamic Banks. If the efficiency results of Islamic Banks are greater than conventional banks it indicates the tremendous success of the Islamic Banks over the conventional banks.

The study also shed some light on the development of Islamic banking globally and this sector has grown not only in the Muslim world, but also has gained significant attention in the Western world as well, with over 250 Islamic banks worldwide and managing assets and client money around, US$ 400 billion. Hence, the growth of these banks is a proof of the success of the idea of Islamic Banks in the world wide and world can escape from the exploitation of interest, the consequent inflation and economic

backwardness and an indication that these banks continue to grow in number and size worldwide.

7.1.2 Efficiency of Islamic Banking at Country Level

The empirical findings suggest that pure technical inefficiency outweighs scale inefficiency in the Islamic banking sector implying that the Islamic banks have been managerially inefficient in exploiting their resources to the fullest extent. The empirical findings seem to suggest that the MENA Islamic banks have exhibited higher technical efficiency compared to their Asian Islamic banks counterparts. During the period of study we find that pure technical inefficiency has greater influence in determining the total technical inefficiency of the MENA and the Asian Islamic banking sectors.

7.1.3 Efficiency of Islamic Banking in Jordan

Study on Islamic Banking with respect to Jordan found that IIAB and JIBFI showed, the efficiency and ability of both banks have increased and both banks have expanded its instrumental activities playing an important role in financing important projects. Another interesting finding of the study is that these banks have focused on the short term investment rather than long term investment because of the strength of capital structure depends on short term instrument. Islamic Bank for Finance and Investment (IBFI) has a high profitability that encourages other banks to practice

financial products of Islamic Bank. The study evaluates that the growth of these banks is a proof of the successes of the idea of Islamic banking in the world wide and the world can escape from the exploitation of interest and consequent inflation and economic backwardness and an indication that, these banks continue to grow in number and size worldwide. Islamic banking in Jordan has played an important role in financing and contributing to various sectors in the country such as Industry and Mining, Agriculture, construction, trade, and among other.

7.1.4 Efficiency of Islamic banking in Algeria

The major finding shows that the existence of Islamic banking in Algeria can be attributed to the process of financial liberalisation. Financial instruments like Murabaha, Ijara, Muntahia were widely used for short term financing which helped the country for the best reallocation of financial resources. However, the sole Islamic bank operating in the national financial market, Banque Al Baraka d'Algerie, offers a limited number of financial products, and most of them are used in short-term financing. During the study period it is found that the bank is relying less on borrowed funds, which reflects an improvement in its financial performance. The Return on Total Asset Ratio (ROA) increased steadily during the period. This indicates that the bank is effective in investing its funds and utilising its savings. The ratio profit/loss per employee is satisfactory indicated that banks labour is highly productive. The calculated financial ratios point to a continuous increase in the bank's profitability and efficiency.

It is found that the bank performance has improved. Good investment strategies enabled the bank to boost its earnings. Financial ratio analyses also show an improvement in the bank profitability and efficiency. The bank has introduced various methods to enhance the allocation of its financial resources with the framework of Sharia. The result is an increase in the number of bank branches and services. However, there are many constraints facing the bank. This includes: insufficient level of deposits, limited capital, high level of transparency risk and credit risk, and high concentration of banking activities.

7.1.5 Islamic Micro financing

The comparative analysis and statistical sudy on secular and Islamic Non Governmental Organizations (NGO's) found that there are several NGO's currently operating that provide micro financial service based on Islamic principles started since 1993. At the beginning these NGOs were very small in terms of their membership, saving, borrows and disbursement and rate of recovery etc. But later it could outcompete the secular NGO's in all these respect. Though these NGO's are relatively more experience and worked more efficiently than Islamic NGO's during 1999, it became far below the levels of Islamic NGO's in 2007 period. This may be due to the merit and feasibility of Islamic financial instruments used in Bangladesh for the smooth functioning of micro financial schemes. The significant difference between INGO's and secular NGO is that while the later charges 15 per cent-20 per cent interest, the former do not provide any interest but apply the concept of bay-muajjal (sale on credit),musharaka of the total increase in employment opportunities 70 per cent of the

increase is through the performance of Islamic NGO's in micro financing using the "ijara" and "musharaka" as financial instrument.

Islamic NGO's have basically copied the micro credit mechanism developed by Gramin bank followed by all NGO's in Bangladesh. However there might be small variations introduced by each NGO's to suit its on situations.

In Bangladesh, Islamic micro credit created a virtuous cycle to break the viscous circle of poverty by creating self employment for the borrower, increase income leading to increased consumption, saving and additional credit increases further income and so on and the borrowers are expected to come out of poverty. In most cases there is significant improvement in social indicators such as children school enrolment, fertility rates and the use of clear drinking water.

The net saving and its percentage of increase after implementing Islamic micro financial implement particularly in 2005 is very high when compared it with the respective ratios of disbursement of loans and consequent increase in saving. It shows the effectiveness of implementing Islamic mode of micro financing with "ijara" and "mudaraba". Among the micro financing institutions the performance of the formal sector and government's organization are not so extensive and price worthy, the out rich, repayment performance and the saving mobilization of all the existing collateral free- interest free programs of NCB, BKB and PAKB are showing remarkable improvements.

In Bangladesh, Islamic micro financing instruments seems to have a larger role than that of formal sector banks in agriculture where people have more employment opportunities to eradicate poverty signs and its role is growing. As of 2005, out of Taka 60013.45 million, Taka 7476.53 million were disbursed as agricultural loans which represents 12.46% of the total cumulative disbursement of loans (CDF 2005) and all these loans are collateral free- interest free and are maintaining good repayment rates.

Following the success of the Islamic micro financing instrument (IMFI) in the field of micro credit, many banks have introduced a number of riba free (interest free) – collateral free programs replicating the models of micro finance in there poverty alleviation programs. Though their overall performance was not as good as formal MFI, still it has been observed that the micro credit programs of the banking sector that are based on the group lending approach with IFIs have been showing comparatively better results. Most of the micro credit programs of MFI are maintaining very good repayment performance.

In comparative analysis of secular and Islamic NGOs found that NGO's providing micro financial services based on Islamic principles started since 1993 and at the beginning these NGOs were very small in terms of their membership and saving. But it could outcompete the secular NGOs in this respect. For the sake of comparison NGOs of similar size have been selected. Though these NGOs are relatively more experienced and worked more efficiently during 1999 it became far below the levels of Islamic NGOs in 2007. In the aspect of average increase in disbursement of loan and

recovery Islamic NGOs are better than secular NGOs during the period 1999 and 2007. In 2005 borrowers in INGO increased by 48.84 per cent while it was only 10.49 in Secular NGOs. During the period saving increased from Taka 114.157 million to 20552.1 million in Islamic NGOs while it was increased to Taka 15242.6 million from Taka 640.59 million in Secular NGOs.

Existing bias among NGOs is to include mostly women in their programs. Islamic NGOs includes both men and women. Islamic NGOs have basically copied the micro credit mechanism developed by the Grameen Banks. In disbursement INGO showed 55.66 per cent increase while secular NGOs showed 35.3 per cent and in recovery it was 96.28 per cent in INGO and 91.82 per cent in Secular NGOs.

During 2001-2002 to 2007-2008 periods in Bangladesh there were specialized activities for poverty alleviation and employment generation through Islamic micro credit sector. Case study on selected institutions like BRAC, ASA, SWANIRVAN BANGLADESH, PROSHIKA, TMSS, SHAKTI FOUNDATION, SOCIETY FOR SOCIAL SERVICES, and BUREAU BANGLADESH Etc. brought significant result in the increase of employment, beneficiaries, disbursement and recovery of loans etc. Financial instruments like Qirdhasan and Mudaraba took the major role in this respect achieving 70 per cent growth.

Studies on the three specialized institutions, Grameen Bank, PKSF and BRDB in the performance of micro credit programs using IMFI also shows good result in

bringing more employment opportunities and beneficiaries. Main instruments used are Musharaka and Mudaraba. PKSF used Islamic Micro Financial Instruments (IMFI) and achieved 96.8 per cent increase in the number of beneficiaries while it was 68 per cent and 59.59 per cent in Grameen Bank and BRDB respectively which used Non Islamic Micro Financing Instituions. In the disbursement and recovery of loans under the scheme of Mudaraba and Musharaka the commercial banks Ansar-VDP Development Bank, the SIB Ltd., the NB Ltd., the IB Ltd, and the TB Ltd., the BB Ltd., the PB Ltd. and the UB Ltd. shows amazing results. In the aspect of recovery it was 96.65 per cent increase in Islamic sector while it was 87.76 per cent in secular sector. In disbursement of loans it was Taka 1845.6 million in Islamic Sector while it was 1823.98 in Conventional sector. In the case of beneficiaries it was 1298511 persons in Islamic sector while it was only 351114 in Conventional sector.

7.1.6 Islamic Life Insurance or Family Takaful in Malaysia

It is found that Islamic Life Insurance or Family Takaful is a form of saving instrument leading to investment and creation of more income and employment when it is compared to conventional life insurance program in Malaysia. This attested by the effect that the positive employment increment and its profits and fund are invested in Ijara and Mudaraba instrument. Malaysia's profit performance and its capacity to generate new business by using the premium fund is directly affected by their macro economic variables as measured by Malaysia's GDP, Consumer Price Index (CPI), TBR and KLCI. Looking at the pattern of relationships a statistical significance exists between the demand for family Takaful and these economic variables. It is assumed that

when variables have a consistent and systematic linkage between them, relationship is present (In this research correlation and regression analysis were used)

The test found the presence of a relationship between new business and economic variables for both companies(TM and TN) as well as when it is combined the relationship was positive for new business and CPI and GDP but negative for TBR and KLI. This is because of the fact that Takaful business in Malaysia is a luxury good and therefore positively related to economic growth (Redzuan and Yaakob (2004)). Here interest rate and stock returns may have a negative effect on the demand for Takaful as they are seen alternative saving instruments. Study finds that there seems to be a negative correlation between family Takaful and inflation rate. This also is due to the fact that in Malaysia Family Takaful being a luxury good, an increase in the general price level leads to a decrease in the demand for Family Takaful. A test on the strength of the association and the size of the correlation coefficient it seemed to indicate that there is a high correlation in the relationship in question. The coefficient of correlation between (+-).90 to (+-) 1.00 are considered as very strong, (+-).71 to 90 is high, (+-).41 to (+-).70 is moderate and the rest are small to negligible.

7.1.6.1 Employment Creation

Based on the performance of Takaful industry and its effects on the social economy of the country and on employment creation by both Takaful operators in the country a positive trend seemed to appear. This could indicate acceptance of the service

provided to the public and the need for such services in creating an increase in job markets. Both Takaful Malaysia and Takaful National created a job market comprising of 1.5 per cent of the national employment while conventional insurance could only .005 per cent of the national employment. For the same the contribution of the banking sector is .05 per cent, from real estate it is .028 per cent and from other business service sector is 1 per cent. The reason for the high contributive nature of Takaful industry to employment is their efficiency in creating a fund and invest them properly and to bring good income and employment opportunities.

7.2 Suggestions

Islamic Economic instruments like Interest Free Banking, Equity Finance, Micro Financing, and Takaful etc have good impacts in several countries including non Islamic countries. Several countries including Western Europe, America, England and various Asian countries have implemented the Interest Free Banking and Micro Financing successfully. Our Prime Minister Mr. Manmohan Singh is having very favourable attitude towards it. Due to various hindrances in the creation of the required rules and regulations we could not implement any of the systems of Islamic Economics in India .We should make the people aware of the system and its merits etc.; we could bring an economy free from the exploitation of interest. The teaching, training and research are the where-with-all for the development of any discipline. This is more so for the disciplines like Islamic Banking, Islamic Micro Financing and Islamic Insurance (Takaful) which are still nascent but feasible for mitigating economic exploitation and to bring distributive justice.

7.3 Conclusions

By utilising the Islamic Economic Instruments like Interest Free Banking, Profit Loss Sharing,   and Collateral Free – Riba Free Micro Financial Systems effectively as study shows we can maintain distributive justice, eradication of poverty by increasing employment opportunities. The model of income determination in the interest free Islamic economy paves the way for framing a new approach in physical and monetary policies for the stabilization of the economy. However such schemes will be somewhat different in nature and deviate in some cases from the traditional ones. Most of the development problems like the ones in which US and Mexico are entangled presently would not rise in such economy. The fact that many Conventional Bank including some major Multinational Western Banks have also started using Islamic Banking Techniques provides an additional support to the viability of Islamic Banking.

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ANNEXURES

Annexure - I

Variable Definitions Banks' Inputs and Outputs for Islamic Banks

Variables	Description
Cost	Total Cost (Includes Profit Shares, Personnel Expense, Commission Expense, Fee Expense, Trading Expense, Other Operating Expense) (US$).
PI	Price of funds (%) (Total Non-interest Expenses/Total Customer Deposits (Demand, Saving and Time Deposits).
P2	Price of labour (%) (Total Personnel Expense/Total Assets).
P3	Price of Physical Capital (Non-interest Expense/Average Assets).
Yl	The US $ Value of Total Aggregate Loans (All types of loans) (US$).
Y2	The US $ Value of Total Aggregate other Earning Assets (Short-term Investment, Equity and other Investment and Public Sector Securities (US$ millions).
Y3	The US $ Value of the Off-balance Sheet Activities (Nominal Values, US$).
XI	Customer and Short-term Funding
X2	Labour
X3	Fixed Assets

Source: Bank Scope Data (2002)

Annexure - II

Country \ Year	2001	2002	2003	2004	2005	2006
Bahrain	3	4	6	6	8	8
Bangladesh		1	2	2	3	2
Egypt		1	1	1	1	
Gambia				1	1	
Indonesia					1	1
Iran	1	1			2	1
Kuwait	1	1	1	1	1	1
Malaysia	2	2	2	2	3	2
Pakistan	1	2	2	1	3	3
Saudi Arabia	2	2	2	2	2	1
Turkey	1	1	1			
United Arab Emirates	4	4	4	3	4	4
Qatar			1	1	1	1
South Africa	1	1	1	1	1	1
Sudan			1	1	1	1
Yemen	1	1	1	1		1
Total	17	21	25	23	32	27

Source: Bank Scope Data (2007)