ISLAMIC FINANCE

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Abstract

This paper examines some micro economic and financial aspects of Global Islamic Financial services industry. The first part of this study discusses the background of the faith based economic systems and how the Islamic faith provides a complete framework for the economic well being of society. The second part comprises of:

- outline the strategic and operational vision for Islamic Financial Services.
- a demographic profile of the Muslim community and
- demand analysis of Shariah compliant investment and home financing products in the UK.

The final part we explore a comparative analysis between Islamic and conventional mortgages using illustration from banking practices. The principles differences between the two systems are found to be that equity ownership is shared under an Islamic system where as this is not the case under a conventional system.

INTRODUCTION

The popular wisdom of today attributes the decline of religion to the materialistic culture of modern times; this view is embedded in the understanding of religion, as only spiritual in nature and completely divorced from the worldly well being of an individual. This understanding of religion and particularly of Islam is misguided at best. Every religion has played a critical role in guiding the survival of civil society and shaping economic activity that, in time, would characterize markets. Early Christianity preached equal distribution of wealth and emphasized debt annulment. The main reason for propagating the concept of annulment was a function of the practice of usury or the charging of exorbitantly high interest rates that had the effect of doubling the debt principle over time. The same guidelines were provided by other faiths such as Hinduism. All these beliefs strongly reject the enforcement of the debt bond and uphold the concept of canceling debt.

Islamic banking is a growing phenomenon, which came into existence to satisfy the financial needs of devout Muslims (1.6 billion Muslims around the world) who observe the prohibition of Riba (usury). Many economists[1] have studied the macro-economic properties of banking institution in the framework of an isolated and ideal Islamic economy. In the age of integrated global financial markets, the instantaneous transformation of an entire financial sector to profit-and-loss sharing is very unlikely: so what is the outlook for Islamic banking?

Khan (1986) has noted that the abolition of interest-based transactions is not a subject alien to Western economic thought. Fisher (1945), Simons (1948) and Friedman (1969) have argued that the current one-sided liability, interest-based financial system can be fundamentally unstable. There are many such examples; the German hyperinflation of the 1920s, oil shock inflation's in Europe of the 1970s; and banking crises in Japan, East Asia, Russian and Argentina default and Enron bankruptcy, and so on.[2] The occurrence of crises is the result of a complex of factors emanating from over exuberance, greed, underestimation of risk, overexposure, currency failures, asset depreciation, faulty regulation, illiquidity, macroeconomic shocks and accountancy maladministration. Zarqa (1983), Khan (1986), Chapra (2000), El-Gamel (2000) and Abdul Gafoor (1997), have illustrated the macroeconomic stability that can form a profit and loss sharing system, an Islamic form of banking would replace interest-based transactions that characterize Western transactions.

However, the Islamic economic principles of sharing risks and rewards, and participating in the wealth creation activity via equity rather then debt has provided a solution that eliminates debt in its existing interest based form while continuing to promote entrepreneurship and creativity in the economic cycle. This requires equity participants to actively benchmark proposed projects against moral standards (social analysis) in addition to the financial parameters (risk analysis) leading to a clear comprehension of the wealth creation process at an individual level. In the Islamic economic model each individual is involved in the economic activity. In comparison, the debtor tends to be only remotely involved in scrutinizing the business proposal in the debt bond model – broadly content with earning interest on the loan regardless of the social and financial implications of the project.

I. Islamic Finance Strategic Vision

At present the rate of slow growth in the financial industry indicates that the product portfolios and markets have reached a certain level of maturity. Annual financial results for the year 2001 of major financial groups do not match the historic business growth. In this context, Islamic banking offers an excellent global opportunity of growth and profitability for an enterprising financial institution, specifically one with expertise in operating a community based banking model. The strategic vision is to develop Shariah compliant products and services that would not only satisfy the hitherto unmet needs of the 1.6 billion Muslims but would also attract millions of ethically motivated consumers. This provides a promising growth opportunity to the financial institution undertaking the challenge of market development. For Muslim and ethical consumers four key market segments can be further developed into Shariah compliant business units with specific products as follow:

Global Consumer Banking

Product portfolio should include saving plans, protection product, home financing, consumer durable financing, equity brokerage and personal pension/retirement planning products. E-commerce and intermediaries as well as traditional distribution through select branches should support the product portfolio mentioned above. These services should be maintained by professionally trained staff to promote recurring business. Anecdotal evidence suggests that consumers are willing to pay a marginal premium for these products.

Commercial Banking

Small and medium sized enterprises form the backbone of the world economy. These businesses are involved in manufacturing, trading and distribution of products and services. The product portfolio for this market segment should include trade finance, cash management, asset finance and bill discounting services. An E-banking solution coupled with a network of selected branches is proposed as the preferred distribution channel for these products.

Global Corporate Banking

Product portfolio should include investment & underwriting services, brokerage services, asset and commodity finance, commercial insurance and foreign exchange products. Shariah compliant version of these conventional products can be developed and distributed through existing channels. The target markets for these products are the firms listed on the Dow Jones Islamic Index, FTSE 4 Good Index and other similar indexes. Another target market is the countries that have signed up the various international agreements promoting ethical business practices. The audiences mentioned above would pay a premium for these products and services as they are cognizant of the cost implications of developing these specialized products.

Global Investment Management

The product portfolio for this market segment should include Shariah compliant tax efficient investment accounts, mutual funds, closed end funds, unit investment trusts, personal pension, retirement planning and medium net worth wealth management services. These investment solutions have been developed by a number of Islamic and conventional institutions for the high net worth individuals. It is important to note that historically the provision of these products to the growing medium net worth market segment has been fairly restricted.

II. UK Shariah Compliant Market Analysis

According to the International Association of Islamic Banks (IAIB), by 1998 there were 176 Islamic banks and financial institutions operating in 38 countries. These institutions had total assets of $148 billion, paid up capital of $7.3billion, and generated $1.2 billion in aggregate net profits latest year of operation. Sir Howard Davies, chairman of the Financial Services Authorities in the UK said "*there was a gap in the market for retail sector Islamic banking products, which would cater to nearly two million UK Muslims"*. There are approximately 3 million Muslims permanently resident in the UK (i.e. 50% of all UK ethnic minorities) with estimated saving of around £1 billion, while over half a million Muslims visited Britain in 2001, spending nearly £600 million[3]. The 5,000 richest Muslims in the UK have liquid assets of over £3.6 billion, according to wealth analysts' data monitor[4] HSBC, the UK-listed bank, which has £2 billion assets under management and three Islamic funds, is predicting growth of assets under management of up to 40 per cent for year 2002[5]. If we follow the Datamonitor (1999) research, then this indicates that out of their 1.65 million estimate, 300,000 Muslim adults in the UK have annual incomes in the range of £30000/= and above (see table 1). This means that approximately 25% of all adult Muslims are excellent prospects for banking and financial products.

Geographic Distribution of Muslims in UK

The distribution of Muslims in the UK falls into a number of well-defined regions in the South (London, Luton and Slough), the Midlands (Birmingham and Leicester), and the Pennines (Manchester, Lancashire, Leeds and Bradford), as well as smaller centre in Glasgow, Cardiff/Bristol and Bath. In some heavily populated areas, such as Leicester and Luton, for example, up to 20% of the population is Muslim. Indeed, Leicester is set to become the first ever "Islamic City" in the UK, within the next decade, as the Muslim population rises to above 50%; i.e. an "ethnic majority". Much of the Muslim population is centred on the South East of England, in Slough, and in North, West and Central London. Datamonitor estimates that 8% of the population in Greater London is Muslim, amounting to approximately 725,000 persons. This means that over 40% of the Muslims in the UK live in the Greater London area.

Muslim Population Profile

The Muslim population in the UK is predominately from the ethnic and cultural backgrounds of India (10%), Pakistan (38%), and Bangladesh (19%). (Approximately 16% of UK Muslims are of Middle Eastern origin, with the remainder coming from Africa (13%), Europe (3%) and Asia (1%).). Historically the ethnic groups originating from the Indian sub-continent have shown a higher rate of population growth, as compared to other groups in the UK; a trend that is likely to be confirmed anew by the forthcoming Official Census in 2001. The second and third generations Muslims from these ethnic groups have been born British nationals. They have shown tremendous success in educational and professional achievements. The group earning £30,000 or more per year basically comprises of these educated professionals. Research also indicates that these professionals are more knowledgeable of their religious and social roots. Thus, there is a natural inclination among them to align their financial decisions with the Islamic faith.

UK Mortgage Products Potential

A salient feature of home ownership in the UK is the high proportion of homes purchased through mortgage loans. As such, acquiring a mortgage is one of the first financial decisions that an individual makes in order to lead an economically secure life. According to the Britain 2001 Year Book, during 1999 British banks have written 756,000 mortgage loans while building societies and other lenders have written 426,000 mortgage loans.

However, none of these 1.18 million mortgage loans were designed to provide the Muslim community in the UK with a mortgage product in compliance with the injunctions of the Islamic faith. It is estimated that the Muslim population in the UK secures 5% of total mortgages. The Land Registry UK recently published that for the year 2001-2002, the average value of residential property In UK is £121,000, taking this estimate in account along-with the Muslim share of the existing mortgage market, the total market size for the Shariah compliant mortgages is in excess of £7 billion. The demand for the Shariah compliant mortgage by the ethically motivated consumers would also be significantly high, however due to unavailability of the relevant data it is not possible to provide an exact market size for the ethical consumer segment.

UK Investment Products Potential

Datamonitor estimates for the year 2000, of those British Muslims earning above £30,000 p.a., 182,000 had savings accounts, 141,000 had IS As, Peps and Tessa's, 86,000 owned shares and 16,000 had purchased unit trusts. Total ISA market was worth £48 billion in 2000, of which £28.4 billion in funds or shares and £19.6 billion in cash (9.3 million ISA plan holders); existing Pep market valued at £60 billion (5.5 million Pep plan holders). It is estimated that out of the above figures approximately 5% of the investment belong to British Muslims and these investors would respond favorably to the funds that observe the Shariah guide lines are UK registered and managed by leading Asset manager. It is worth noting that ISA transactions accounted for 50% of all new UK investment business; and 70% of total volume.

Table 1: Age and Income Analysis

Age Bracket	**Below £30k**	**Above £30k**
18-24	244,470	56,138
25-34	154,421	61,453
35-44	194,977	95,515
45-54	149,122	55,758
55-64	108,259	22,972
65 and over	70,925	2,005
Total	**922,174**	**292,941**

Source: Datamonitor, Policy Studies Institute, Labors Force Survey (1999).

Global Potential For Shariah Compliant Products

- $100 billion of retail funds available for Shariah investment, growing by 15% p.a.
- 160 Islamic financial institutions offering products/services.
- 102 Shariah mutual funds
- Only $2 billion invested in Shariah funds globally, including $700 million in one Saudi Arabian fund. This compares with £3.3 billion ($4.8 billion) invested in 95 UK ethical funds in the year 1999.
- Shariah mutual fund market expected to grow by 10% p.a. globally. However a significantly higher growth rate can be achieved by providing Shariah compliant financial products to Muslim and Ethical communities resident in Europe and USA.

U. K. Ethical Funds

The growth trend in the ethically managed funds provides an indication that Shariah funds have the potential to follow a similar growth pattern in the UK. Shariah funds can attract investments from the ethically as well as religiously motivated investors. These funds would potentially offer an avenue of diversification as well as satisfying the requirement that the investments decisions of the fund managers are guided by ethical as well as faith principles.

Fund Type	Product Providers	No. of Funds
Unit trusts, Oeics and IS As	28	41
Life Funds/SP Bonds	18	26
Pension Funds	17	28
Total	40	95

N.B. Some providers are in more than one category.
Funds under management = £3.3 billion (1999)
Source: "Money facts", October 2000

III. The United Bank of Kuwait in the UK

The Islamic Investment Banking Unit (IIBU) of the United Bank of Kuwait (UBK) in London has been offering Islamic house financing since 1997. The products, named as Manzil Murabaha (Home Purchase Plan) and Manzil Ijara.

Manzil Murabaha Home Purchase Plan

The Murabaha plan is based on the principle of trading or buying and selling goods at a profit IIBU contracts with the vendor and pays the deposit required when the contracts are exchanged. The sale price from IIBU to the client is the price paid by IIBU to the vendor, plus the return IIBU pays its investors, plus administrative expenses and a profit margin. The property after sale to the; buyer is registered in the buyers name and the buyer repays IIBU fixed monthly installments.

Murabaha Based Mortgage

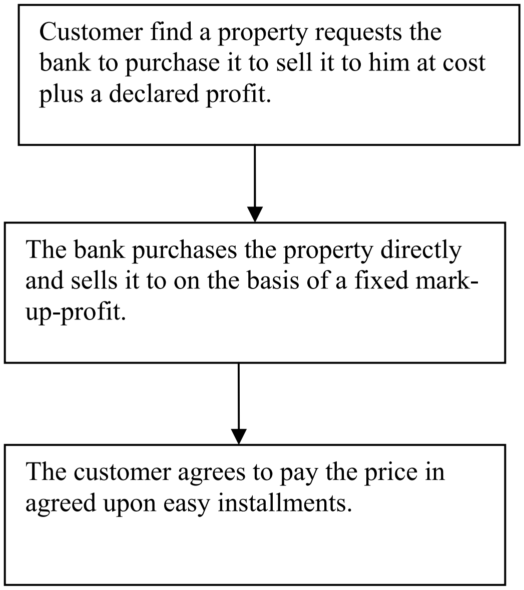

Figure 1

The key features are:

i. Clients identify the property that wish to buy and agree the purchase price with the seller of the property in the normal way.

ii. The IIBU will buy the property, and immediately sell it to the client at a higher price. This is calculated depending on the property value, payment terms (up to 15 years) and the amount of the first payment.

iii. When purchased, the property is registered in client's name. The sale between client and the bank is recorded in the Murabaha Contract.

iv. Clients first payment to the bank is made on the day of completion and is client's initial contribution is a minimum of 20% of the purchase price.

Manzil Ijara Home Purchase Plan

Ijara is proving to be most popular method of house finance. This is because it is more flexible than Murabaha if the client wishes to pay bank early or if the client wish to make additional, 'lump sum' payments.

Two Versions of Ijara based Mortgage

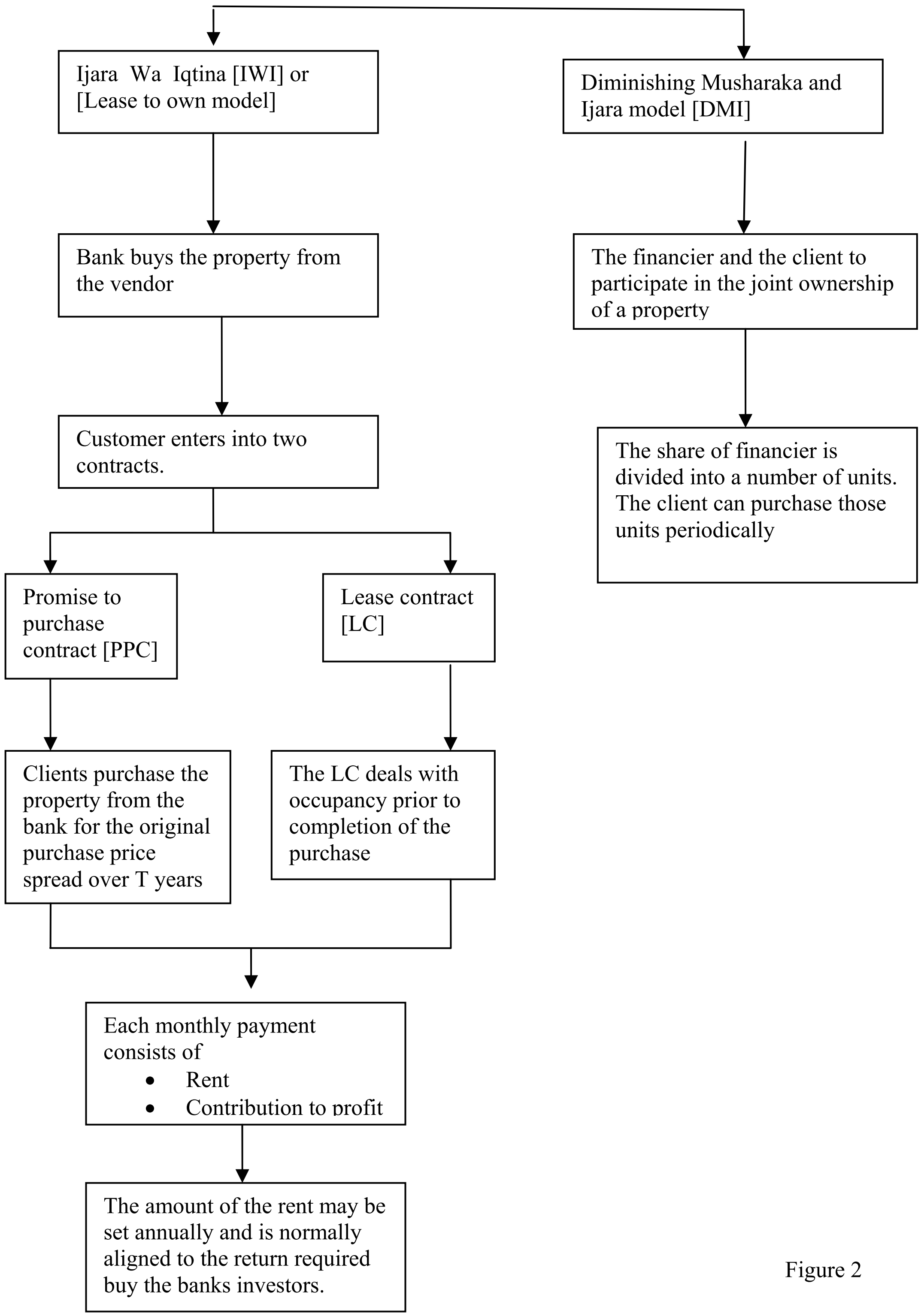

Figure 2

i. The client identifies the property that wish to buy and agree the purchase price with the seller in the normal way.
ii. IIBU will then sell the property to the client as detailed in an agreement titled 'Promise to Purchase' The purchase price between IIBU and client is the same price as the original purchase.
iii. At the same time Client will enter into a lease with IIBU which details client rights to occupy the property.
iv. The client pays IIBU monthly payment which is calculated so that part is applied towards the purchase of the property from IIBU and part of it is rent.
v. The payments are fixed every 12 months, April to April. At the beginning of April each year, IIBU will reassess the rent and payments are likely to vary.
vi. Client may purchase the property from IIBU at any time by paying the bank the balance of the purchase price.

A Comparison between Islamic and Conventional Mortgage.

Conventional Mortgage	**Islamic Mortgage**
The lender advances funds to the borrower and charges [interest] for the use of their money.	Based on trade [Murabaha] and leasing [Ijara], Islamic mortgages are Interest free.
Credit references, sources of income to be able to retune the loan before 65 birthdays.	Credit references, sources of income to be able to retune the loan before retirement age.
Most of the lender has no lower limit to the property value.	Minimum property value £50,000.
Up to 125% of the property value.	Up to 80% of the property value
Life insurance and building are mandatory in most cases.	There is no compulsory life and building insurance is required.
Lender never owns the property.	The bank puts itself in the position of owner of the property. Higher risks.
Payment term up to 40 years.	Murabaha up to 15 years minimum 5 years Ijara up to 25 years minimum 7.5 years
Income Multiples Up to 5 times primary annual income sole applicant.	Murabaha 2.5 times primary annual income Ijara 3 times primary annual income sole applicant
Arrangement fee usually up to £500.	Arrangement fee of 0.75% of the property value less the first payment.

IV. Comparison Analyses

Conventional Mortgage

For example the price is £ 100,000.00 the banks require 10 % deposit if the bank agrees to give a 30-year mortgage of £90,000, at an annual interest rate of 8 %, the monthly payments would be £660.39. Each payment will consist partly of interest due and partly the repayment of principal. The buyer will make 360 monthly payments, which add up to a total of £237,740.40 paid to the bank accruing £147,740.40 interest to the bank.

Table I: **Conventional Mortgage**

Payment Number	Monthly Payment	Interest	Principal	Balance after Payment
1	**£ 660.39**	**£ 660.00**	**£ 60.39**	**£ 89,939.61**
2	**£ 660.39**	**£ 599.60**	**£ 60.79**	**£ 89,878.82**
3	**£ 660.39**	**£ 599.19**	**£ 61.20**	**£ 89,817.62**
….				
120	**£ 660.39**	**£ 527.13**	**£133.16**	**£ 78,951.84**
….				
240	**£ 660.39**	**£ 384.83**	**£ 295.56**	**£ 54,428.98**
….				
359	**£ 660.39**	**£ 8.70**	**£ 651.69**	**£ 653.09**
360	**£ 660.39**	**£ 7.30**	**£ 653.09**	**£ 0.00**
Total	**£ 237,740.40**	**£ 147,740.40**	**£90,000.00**	

Islamic Mortgage (Co-Operative Bank)

Just as in the conventional arrangement, the coop bank will require some down payment. That will be client initial equity share. Let's assume client make the same down payment of 10 %, or £10,000. The coop bank puts up the remaining £90,000. Now client and the bank are co-owners. If client occupy the house, client will be required to pay rent to the owners. But client are also allowed to increase his/her ownership share at any time by making additional payments to the coop bank, in effect, buying out the bank's interest in the house. As client do so, his/her proportionate share increases while the coop bank's share decreases and the distribution of the rent payments will change accordingly.
The big question, of course, is what is a fair amount for the monthly rent? It might be reasonable to assume that it is equal to the monthly payments client would have made under the conventional mortgage arrangement, in this case, £660.39. At the outset, client will receive 10 % of that rent as his/her ownership share and the co-op bank will receive 90 percent, Let also assume that client apply his/her share of the rental payments to increasing his/her share of the ownership. Table 2 is an abridged amortization table which shows the respective returns to client and the coop bank. Under this arrangement, client will own 100 % of the property after making the 350th payment. Client will have paid total rent of £231,018.30. The bank's total share will have been £141,018.30. This is a saving of more than £ 6,000.00 or 4.1% over the amount of interest paid on the conventional mortgage.

Table II: Shared Equity Mortgage

With Rent Equal to Conventional 8%. 30 Year Monthly Payment
Owner's share applied to repurchase: No additional principal Payments

Payment Number	Payment Amt.	Client Share	Coop Bank's Share	Client Equity	Client Equity %	Coop Bank's Equity	Coop Bank Equity %
1	£ 660.39	£ 60.04	£ 594.35	£ 10,066.04	10.07	£ 89,933.96	89.93
2	£ 660.39	£ 60.48	£ 593.91	£ 10,132.52	10.13	£ 89,867.48	89.87
3	£ 660.39	£ 66.91	£ 593.48	£ 10,199.43	10.20	£ 89,800.57	89.80
…							
24	£ 660.39	£ 76.83	£ 583.56	£11,711.34	£ 11.71	£ 88,288.66	88.29
….							
120	£ 660.39	£ 144.54	£ 515.85	£ 22,030.94	22.03	£ 77,969.06	77.97
…							
240	£ 660.39	£ 318.43	£ 341.96	£ 48,536.24	48.54	£ 51,463.76	51.46
…							
359	£ 660.39	£ 652.52	£ 7.87	£ 99,461.37	99.46	£ 538.63	0.54
360	£ 660.39	£ 538.63	£ 3.56	£ 100,000.00	100.00	£ 0.00	0.00
Total	£ 231,018.30						

Problems In Provision Of Islamic House Financing In The UK

Discussions have been taking place with the Bank of England and the financial services authority (FSA) on these issues and Khan is confident that they will be resolved in time so that HSBC (Amanah Finance) can begin offering Islamic financial products in year 2003. That is not inconceivable as the regulatory authorities have already approved Islamic mortgages in the US. Khan believes that Islamic finance potentially has appeal for the mainstream as well as Muslim consumers because of its ethical basis. "Islam teaches us that money should be channeled toward the 'real' economy, the production of real goods and services and not the 'financial' economy such as hedge funds and derivatives," he argues. "It keeps us in touch with the real economy and away from speculation"[1].

A document jointly prepared by Barclays Group, HSBC, Union Bank of Switzerland, Ihilal UK, and United Bank of Kuwait lists the following major barriers to provision of Islamic house financing in the UK:

i. Under current regulations on lease agreements, the product has to be 100% risk weighted. In other words, HSBC (Amanah Finance0 says, *it has to set aside the full amount of the property to cover the full value of the house in case the buyer cannot afford to pay the rent, whereas a conventional mortgage has a risk weighting of only 50%*[2].

ii. Another impediment for Islamic mortgage is the prospect of double stamp duty. The first would arise when ownership is transferred from the seller to the bank at the start of the lease. The second would occur at the end of the lease when

[1] Mark Tran Monday May 27, 2002; Guardian
[2] Mark Tran Monday May 27, 2002; Guardian

ownership is transferred from the bank to they buyer. For an Islamic mortgage to be viable for a bank, the bank needs to be exempted from the second set of stamp duty. Former Barclays boss Andrew Buxton chairs a working party on Islamic mortgages set up by the bank of England. Buxton believes that a change in stamp duty rules could result in 500,000 more mortgages[3].

iii. Unlike a conventional mortgage, the proposed product would require two sets of solicitors. Islamic institutions would also want an exemption from a second set of solicitors.

iv. The inability to obtain financial assistance from the state in cases of financial hardship.

V. Conclusion

Islamic principles of interest are concerned with issues of fairness and justice rather than efficiency narrowly defined. These principles focus on the necessity of sharing risk in a fair and stable society, and upon problems of exploitation in markets where power is asymmetric this is the real Riba (usury) issue.

Our case analyses shows that the principles differences between Islamic and conventional housing finance is that the former is equity based and the latter is debit based. In an Islamic mortgage situation both the bank and the client share ownership [equity] and therefore share the risk of equity ownership. In conventional banking the client owns all the equity and the banks loan to the client is secured on the value of the property.

Putting aside the penetrating comment by Ahmed (1992), "It's not clear to whom we are cheating…", about hypocrisy in the current practice of Islamic banks, let us deal with the realm of the ideal. Consider an ideal situation in which Islamic principles of interest were adhered to by a substantial proportion of the world financial system. What they have in common is a prohibition of usury, or excessive interest rates. Could such an idealized system conceivably survive as a foundation of banking in a hypercompetitive global financial environment? Pure logic would dictate that this is not possible in a profit-maximizing world: that is if *excessive* includes interest rates that reflect high risk situations or situations of capital shortage: both of which would require high interest rates that might be considered usurious. We remarked at the beginning of the paper on the recurrent crises in the financial sector. Maladministration, deception and ethical behavior lie at the root of many of these problems: Enron and WorldCom are just two examples. The Islamic approach emanates from a foundation set of ethical principles. So discussion of Islamic finance in connection with global financial practices introduces an ethical dimension that is welcome. Also as Khan (2002) points out an Islamic system of finance might create a more stable world financial market.

NOTE

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[1] Khan 1995, Ahmed 1992, Umer Chapra.M 2000 and Abdul Gafoor. A.L.M 1997.
[2] The Economist December 31st 1999
[3] Birmingham Post Birmingham (UK); Sep 21, 2002 John Duckers.
[4] Nicholas Stephens Data monitor
[5] Financial Times; London; Feb 25, 2002. Mawson James.

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[3] The Sunday Telegraph; London (UK); Nov 3, 2002. Jenny Knight

REFERNCES

Ahmad, S. Towards Interest-Free Banking. New Delhi: International Islamic Publishers, 1992.

Chapra, M. The Future of Economics: An Islamic Perspective. Leicester, UK: The Islamic Foundation, 2000.

Dar, A. H., and Presley, J. R. "Islamic Finance: A Western Perspective." International Journal of Islamic Financial Services, 1 (1), April-June 1999, 1-6.

Dar, A. Islamic House Financing in the United Kingdom: Problems, Challenges and Prospects. London, 2002.

Davies, Ross. "Super-rich Ranks Growing Again." Evening Standard (London), 8 February 2002; available online at: http://www.thisismoney.com/20020208/nm44034.html

Druckers, John. Birmingham Post, September 21, 2002.

Fisher, I. The Theory of Interest. New York: Macmillan, 1930.

El-Gamal, M."Can Islamic Banking Survive a Micro-Evolutionary Prospective." International Journal of Islamic Financial Services, 21 Feb 1997.

Friedman, M. The Monetary Theory And Policy Of Henry Simons. In Friedman, M., ed., The Optimum Quantity of Money and Other Essays. Aldine, Chicago. 1969.

James, Mawson. Financial Times, February 25, 2002

Khan, M. "Islamic Interest-Free Banking: A Theoretician Analysis." Staff Papers of the IMF, 33, 1986, 1-27.

Khan, M. "Financial Modernization in 21st Century and Challenge for Islamic Banking." International Journal of Islamic Financial Services, 1 (3), October-December 1999.

Khan, M. "Monetary Policy and Central Banking in an Islamic Context." Paper presented at the Islamic Banking Conference, London, May 7-8, 2002.

Norwood, G. "The Housing Boom that Forgot Muslims." The Observer, June 16, 2002, http://money.guardian.co.uk/homebuying/mortgages/story/0,1456,739195,00.html.

Simons, H. Economic Policy For A Free Society. Chicago: U. Chicago Press. 1948.

Wilson, R. "Islamic Finance and Ethical Investment." International Journal of Social Economics, 24 (11), 1997, 1325-1342.

Zarqa, M. "Stability in an Interest-Free Islamic Economy: A Note." Pakistan Journal of Applied Economics 2, 1983, 181-88.