Opportunities in Emerging Islamic Financial Markets *

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1. Introduction

There are more than 1 billion Muslims in the world. The countries in which Muslims make up the majority of the population number more than 30, representing roughly 20% of the world's population. These countries account for roughly 5% of the world's GNP, while the share of global GNP of all Muslims is closer to 10%. Global economic changes - increased reliance on the market mechanism, privatization, financial liberalization - coupled with Islamic revivalism have prompted the development of financial systems based on Islamic doctrine in numerous Muslim countries. Historically, the most visible contributors to this development have been the oil rich countries of the Persian Gulf and North Africa, especially after their rapid build-up of external assets from 1974 to the early 1980s. The annual turnover of external investment, based on Islamic principles, emanating from the Middle East alone, is growing at an annual rate of 15% and is expected to reach \$100 billion by 1997 (International Herald Tribune 1994). Some estimates suggest that Islamic banking will be responsible for managing up to 50% of savings in the Islamic world within the coming 5 to 10 years (Al-Bahar 1994). For the future, the emerging Islamic economies of Indonesia and Malaysia

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can also be expected to play an important role in this development. Recent projections predict high real GDP growth rates in East Asian (7.6%) and in the Middle Eastern (3.8%) countries over the next two decades, with the expectations that Indonesia will become the world's 5th largest economy by year 2020 (*Economist* 1994). While emerging markets can be classified as a group, financial markets of the Islamic world are differentiated because of the role and impact of Islam.

Research by religious scholars has laid some of the theoretical and ideological foundation of what constitutes Islamic financial and banking system. Still the basic principles are by no means complete. The main area of focus in the literature has been on the Islamic economic, monetary, and commercial banking systems with little attention to sophisticated financial instruments, capital markets and financial systems. The clarity of Islamic finance can be complex and ambiguous when applied to anything but the most simplistic business transactions.

Currently, the market is dominated by a limited number of traditional instruments. A major roadblock for its expansion is the dearth of instruments which enhance liquidity of the market. Instead, the focus has been to expand the menu of products to cater to the different segments of the market. Derivative products are nonexistent and are subject to an on-going debate as to their conformity with Islamic principles. Still, because of the emerging financial opportunities in this area, several of the most sophisticated Western financial institutions have already established a significant position in this market to cater to Islamic institutions and to wealthy Muslim individuals. In this paper we argue that induction of liquidity enhancing instruments into the Islamic financial system will have a significant impact on this emerging market. More importantly, justifications for what derivative products can or ought to be accepted in the Islamic financial system are presented. Innovations to enhance liquidity of Islamic financial instruments, a process already underway, will expand market size. A careful examination of a limited set of derivatives reveals that they do not contradict Islamic principles; their introduction can change the nature and growth of the market dramatically; and with this predicted growth and expansion, the financial opportunities for Western institutions will be significantly enhanced.

2. The basics of an Islamic financial system

One of the prominent features of a system based on the Islamic principles is prohibition of charging interest. Throughout the history, similar prohibition with some variation has been practiced by various societies and religions including Judaism and Catholicism.¹ While the abolition of interest-based transactions is a central tenet of an Islamic financial system, it is by no means an adequate description of the system as a whole.² The demarcation between interest and return is critical in an Islamic financial system; Islam prohibits the former but encourages the latter.³ In addition to prohibition of interest, an Islamic system also embraces issues of property rights, equity participation, the sharing of risk-return, and the promotion of trade and enterprise.

The prohibition of interest is based on Islamic ethics and philosophy governing wealth – to discourage hoarding or squandering of wealth in order to promote its productive use (Carlson 1986). Thus, in forbidding interest and encouraging the pursuit of profit, Islam recognizes that interest arises from the loan of money, while profit arises from an investment of capital and entrepreneurial effort (Khan and Mirakhor 1993).

¹ Code of Hammurabi (c. 1750 B.C.) forbade charging compound interest and King Bocchoris of the Egyptian 24th Dynasty (c. 730-c. 715 B.C.) forbade the taking of interest in excess of the principal. Jews were prohibited by their religious law from charging other jews interest (Exodus XXII:25; Leviticus XXV:36-37). In Christianity, Gospels do not contain condemnation of the charging of interest at the market rate. The matter of usurious interest was taken up by the Church. The First Council of Nicaea (325 A.D.) prohibited usury among the clergy; and later, the Church obtained a ruling from Charlemagne (742-814 A.D.) that this prohibition be extended to laymen. It was only during the XVII century and under pressure of business exigencies that it was agreed that economic activity should be liberated from what were seen as obsolete limitations (Saleh 1992).

² The Muslims' holy book, *The Quran*, explicitly states the prohibition of payment and receipts of interest, or *Riba*. All schools of thought agree that *Riba* is not simply usury as often perceived by some. There is now a consensus of opinion that this prohibition extends to any and all forms of interest including *excessive* interest and the indexing of capital. Khan and Mirakhor (1987) define the term *Riba* as the addition to the amount of principal of a loan on the basis of time for which it is loaned, or of the time for which the payment is deferred. In accordance to Islamic jurisprudence it signifies the additional money charged in a money-money type exchange, or the uncompensated increase in a commodity-commodity transaction.

³ Khan Mohsin (1987) argues that Islam forbids a fixed, or a pre-determined return, on financial transactions but allows uncertain rate of return such as that represented by profits.

According to Islamic scholars, money represents the monetized claim of its owner to property rights created by assets through work (entrepreneurship) or transfer (acquisition or inheritance). Money is not capital per se. Instead money is 'potential capital' and becomes realized capital only when it is coupled with entrepreneurship. Time value of money can only be justified when money is utilized as productive capital. Similarly, earnings through 'trade' is sanctioned, while earnings through lending of money is forbidden (Zaidi 1991).

Contrary to the traditional capitalist system, in the economic paradigm of Islam 'capital' and 'entrepreneurship' are treated as a single combined factor of production. For a return, capital must also share the risk of loss. The reward for capital is a share in the profit (Zaidi 1991). Islam does not deny a return but advocates that such a return should be in exchange for the willingness of the lender to be also an investor and risk-taker in the overall project or enterprise (Hammad 1989). While a lender also assumes risk, the Islamic objection is that a lender's risk is not directly related to the profitability of the enterprise but to the solvency of the borrower (Khan and Mirakhor 1993).

In an Islamic financial system, it is only the real sector that determines the rate of return to capital, as opposed to being a mix of the real and monetary sectors. Since loan is not included as a business expense, 'earnings before interest and taxes' are the same as the 'returns of equity owners'. The return to liabilities on the balance sheet is a direct function of the return to the portfolio of assets and in turn assets are created in response to investment opportunities in the real sector. The return to financing is removed from the cost side and relegated to the profit side (Khan and Mirakhor 1993). Because of the principle of risk-sharing, a feature of Islamic financial markets is that it is an equity-based system, excluding without any qualifications a pre-determined rate of return and a guarantee on the nominal value of the investment.

Moreover, because investors in an Islamic financial system directly share in any risks, changes on assets side of balance sheet are immediately adjusted by an equivalent change on the liabilities side. It is strongly suggested that since the adjustment is rapid, economic instability may be reduced in comparison to adjustment to shocks in a Western enterprise where changes in guaranteed nominal returns go through an extended equilibrating process (Ghannadian and Klien 1991).

Various models have been developed for a typical commercial or investment banks. Most popular and prevalent is the one based on principal-agent model where bank acts as manager of customers' funds and generates income by charging fees for their services. The bank identifies viable projects and raises funds for financing. It earns fees for maintaining cash flows as a fiscal agent. Discounting of future cash flows as a technique for evaluating investment projects is not in conflict with an interest-free system. A notional expected rate of return on capital used for measuring the viability of a project is not un-Islamic (Zaidi 1991). However, requiring any kind of guarantees for the nominal value, or underwriting, or any floor or ceilings on rate of return is prohibited.

These are the basic, "bare-bones", principles of an Islamic financial system. It is within these boundaries that Western institutions are developing financial products to meet the growing demand of Islamic institutions and that of wealthy Muslims individuals around the world.

3. Market size and players

The modern history of Islamic banking dates back to the early post World War II era. During 1950s and 1960s Pakistan and Egypt made attempts to establish Islamic banking systems but without significant success. Then, beginning in the early 1970s a number of oil rich Middle Eastern countries started to accumulate substantial external assets. This development gave new direction and momentum to Islamic banking. Establishment of the Nasser Social Bank (1972), Dubai Islamic Bank (1975), Islamic Development Bank (1975), Kuwait Finance House (1977) and Faisal Islamic Banks in Egypt and Sudan (1977) satisfied the market demand during this period.

Creation of Islamic Development Bank, Jeddah (1975), with the purpose of involving all Islamic countries in the development of Islamic finance, is considered a watershed in the history of Islamic banking and finance. In 1979, Pakistan launched a program to transform its entire banking sector in accordance with Islamic law. Similar measures were followed by the Islamic Republic of Iran. During the 1980s, steady progress continued and new institutions

such as Al-Rajhi Islamic Bank (Saudi Arabia 1983) entered the market. Two types of institutions emerged to cater demands of different market segments. One group of banks provided typical commercial banking services while the other group concentrated on investments and international holding companies.

During the 1990s, there has been rapid growth in the capital base and assets of Islamic financial institutions. Similarly, many instruments have achieved maturity and various religious issues surrounding these instruments have been resolved. Currently there are about 160 institutions worldwide which adhere to Islamic principles. It is estimated that the 1994 annual turnover of external (invested outside of Muslim countries) Islamic investment exceeded \$60 billion compared to \$40 billion in 1991. This market is expected to grow at an average of 15% and it is projected to reach \$100 billion by 1997 (International Herald Tribune 1994). While it is claimed that deposits with Islamic banks are in the range of 5-10% of market share in the countries of the GCC,4 its true potential is estimated at 50-70%. Aggressive Islamic bankers are hoping to achieve this potential within the next 5 years. Advocates of Islamic Banking claim that the 1990s will be the decade when industry will grow at a rapid pace and will compete directly with conventional banking in many Muslim countries (O'Sullivan 1992). Bankers specializing in this market highlight the fact that no Islamic bank has ever failed (International Herald Tribune 1993). A major and significant segment of the supply side of the market is composed of several wealthy individuals who prefer to invest according to Islamic principles without any intermediaries. In addition to purely Islamic Banks, numerous conventional banks, such as Riyadh Bank in Saudi Arabia, have special departments which deal with Islamic financial instruments. These developments have attracted many Western banks who have captured significant business to meet the demands of Islamic institutions and wealthy individuals.

After less than two decades, institutions providing services to the religiously conscious customers have established themselves throughout the Middle East. In Iran and Pakistan, the entire banking system is officially Islamised, and there are signs that Malaysia and Indonesia are seriously considering reforms to permit financial institutions that

provide Islamic services. In Bahrain, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates (UAE) depositors have the option of placing their savings with institutions that are explicitly Islamic; in the GCC, only Oman has so far resisted the call to license an Islamic institution (O'Sullivan 1992). Islamic Development Bank based in Jeddah is a key player in this market. Its main objective is to foster economic development and social progress in the member countries and Muslim communities in accordance with the principles of Islamic law. It provides equity capital and interest free loans for development projects as well as trade finance and technical assistance.

In the private sector, the market is dominated by Al-Rajhi Group (Saudi Arabia), Kuwait Finance House (Kuwait), and the Al-Faisal Group (Bahrain), Al-Rajhi recorded a 25% increase in its assets in 1991. Dallah Albarka Bank (DAB) has already established the framework of a global network; it recently announced plans to open affiliates in Uzbekistan to supplement existing operations in Kazakhistan (O'Sullivan 1992); it claims to have achieved profits of 30% on its paid-up capital in Kazakhistan within four months (Rudnick 1992). Faisal Islamic Bank of Bahrain has been very active in Islamic syndication; a 9.6% rise in the net after tax profit to \$11 million was recorded in 1993 (International Herald Tribune 1994); the bank's financing portfolio rose by 19.4% to \$715 million from \$599 million; and equity at the end of 1993 was \$84.8 million (MEED 1993). Faisal Bank and Al Baraka Group's subsidiaries, such as Al Tawfeek and Al-Amin, have been working on developing Islamic products for international marketing (Nassief 1990). Kuwait Finance House has participated successfully in financing of Hub river power project in Pakistan and aircraft leasing for Kuwait Airways (International Herald Tribune 1994).

In Table 1, various financial indicators of prominent Islamic institutions are shown. The size of these figures represent only the tip of the iceberg. These institutions represent only about 5% of the Islamic institutions around the world and they omit the sizeable Islamic portfolio that are carried by special departments of numerous conventional banks, especially of those in the Middle East.

With the growth of Islamic deposits, Islamic institutions have, in turn, looked for external investment opportunities. Western banks and non-bank financial institutions have responded to their needs. List of active Western institutions providing financial services in this market includes Kleinwort Benson, Chemical Bank, Citibank, ANZ

⁴ The GCC is countries of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

KEY ISLAMIC FINANCIAL INSTITUTIONS – CAPITAL SIZE
(\$ million)

TABLE 1

Institution	1992	1990
Al Rajhi Banking and Investment Corp., Saudi Arabia	943	812
Kuwait Finance House, Kuwait	147	175
Faisal Islamic Bank – Bahrain	72	51
Faisal Islamic Bank - Egypt	132	109
Dar Al-Maal Al-Islami, Bahamas	n.a.	286
Dubai Islamic Bank, UAE	72	62
Al-Baraka Islamic Investment Bank, Bahrain	53	53
Qatar Islamic Bank, Qatar	59	53

KEY ISLAMIC FINANCIAL INSTITUTIONS - ASSETS SIZE (\$ million)

Institution	1992	1990
Al Rajhi Banking and Investment Corp., Saudi Arabia	7083	4943
Kuwait Finance House, Kuwait	4015	3877
Faisal Islamic Bank – Bahrain	197	140
Faisal Islamic Bank – Egypt	1869	1831
Dar Al-Maal Al-Islami, Bahamas	n.a.	391
Dubai Islamic Bank, UAE	1329	888
Al-Baraka Islamic Investment Bank, Bahrain	281	353
Qatar Islamic Bank, Qatar	638	562

Sources: MEED 1992 and 1993.

Grindlays, Midland Montagu, J.P. Morgan, Goldman Sachs and Bankers Trust. All have in-house Islamic financial experts or banking units. According to some estimates, 10% of Islamic investments are channelled through Western banks and other institutions and many commercial banks in the Persian Gulf have opened their own "Islamic windows" (*Financial Times* 1994). Kleinwort Benson has consolidated its growing share of the Islamic banking market by arranging short-term trade finance worth around \$4,000 million in 1992. Its business grew by 20% in 1992 and it hopes to capture an increasing market share in Saudi Arabia, Bahrain, Qatar, other GCC states, Turkey and in Egypt (*MEED* 1993). According to Kleinwort

Benson, their Islamic equity investment has outperformed most stock market indices in recent years (International Herald Tribune 1993). Banks in Europe that use Islamic principles include Denmark's Islamic Bank International and Britain's Takafol group (International Herald Tribune 1994). Citibank is one of the leading Western banks in this arena and has developed Islamic instruments as part of its drive into Middle East markets. It has captured business worth \$120 billion in the last 5 years (International Herald Tribune 1994). Chase Manhattan Bank arranged the offshore component of the leasing financing, a form of leasing for Emirates' purchase of an airbus. ANZ Grindlays Bank has consummated a series of Islamic deals in Pakistan (MEED 1993).

Currently, Islamic financial market is dominated by trade related transactions including cost-plus financing, leasing, and buy-back agreements. These constitute approximately 85-90% of all transactions while the rest comes from equity related transactions (*International Herald Tribune* 1994). In the past two years with the help of Western banks such as ANZ, Islamic banks in the Persian Gulf have managed to branch out of trade financing and into longer-term and more profitable asset-based transactions. Three years ago, 0.4% of Al Rajhi's assets were invested in maturities of over five years, compared with 10% in 1993 (*Financial Times* 1994).

About 75% of Islamic banking funds are invested in short-term commodity trades where in return for a fee, a middleman – often a Western bank – arranges for a trader to buy goods on an Islamic bank's behalf and to resell them at a predetermined mark-up. To minimize their credit risk further, Islamic banks often seek guarantees from third parties. At the same time, some Western banks, especially those with lower than a AAA rating have tapped Islamic funds as relatively cheap source of funding. Islamic banks are often willing to receive sub-LIBOR rates to get their funds invested (*Financial Times* 1994).

A new era of financial system is emerging: stock markets are now functioning in most Middle East economies. Islamic banks are willing to invest in ordinary shares in companies that do not generate profits from proscribed activities (O'Sullivan 1992). All Malaysian banks and financial institutions are now permitted to offer Islamic instruments. Indonesia, which has the world's largest Muslim population, has just opened its first Islamic bank, Muamalat Indonesia, with the special target of helping the country's small business development (Rudnick

1992). Bahrain is already considering creating an Islamic interbank market. Leading Islamic bankers claim that industry has proved itself and has demonstrated its financial viability and potential. The realization of this potential, however, is restricted by market liquidity and the range of instruments that have been sanctioned as Islamic.

4. Existing Islamic financial instruments

Since an Islamic financial system is designed to promote and encourage "trade" and "entrepreneurship", most existing instruments incorporate these features. Virtually every Western commercial transaction involves either a sale, lease, a sharing arrangement, or some combination of these basic building blocks. A close scrutiny of each transaction reveals that any such deal can be re-engineered using small fundamental components in full compliance with the Islamic financial system.

The following is a list and brief descriptions of some of the instruments currently available (offered by Western institutions to Islamic banks, non-bank institutions and wealthy individuals) in the market.

(a) Profit sharing agreement (Modarabah)

One of the oldest and basic financing vehicles is a business relationship between capital and management (or labor) in which there is complete dichotomy between proprietary and managerial rights (Ali 1986). It is an arrangement in which an investor or a group of investors entrusts capital or merchandise to an agent-manager who provides entrepreneurship and management to carry on a business venture with the objective of earning profits. In return, the investor(s) receives the principal and a previously agreed-upon share of the profit. As a reward for his labor or skill, the agent receives the remaining share of the profit. Any loss resulting from unsuccessful business venture is borne exclusively by the investor(s); the agent is not liable for any financial loss, losing only his expended time and effort (El-Ashker 1987).

While fixed ratios are permissible, fixed amounts of profit for either party (other than salaries of the agent) are not permitted. The capital is invested in a pre-agreed purpose as well as multi-purposes projects. Strict segregation is maintained from one agreement to another in terms of earning profits and bearing liability. Religious differences are no barrier in such an arrangement, that is both Muslims as well as non-Muslims may be party to the contract. However, if the agent is to be non-Muslim he has to adhere to the Islamic conditions of conducting business (for example trading in goods such as alcohol are prohibited).

Conceptually, this instrument is analogous to an investment fund where managers with appropriate skills are entrusted with the responsibility of managing a pool of clients' funds. For large projects, a syndication of funds can be formed. Recent innovations have led to development of negotiable certificates which carry a share in such funds, thus affording enhanced liquidity. The agent-manager has relatively limited accountability but has sufficient incentives to perform. But due to lack of any capital commitment on the part of the agent-manager, this mode of financing is considered as risky. With the development of financial markets where the historical performances of agents are readily available, the significance of this drawback can be reduced. Due to political and regulatory risks and unfavorable tax treatment, this mode of financing has not been very attractive for cross-border financing.

Application of such financing is not limited to any particular industry. Currently it is prevalent in real estate, housing, transportation and trading. A typical example would be the establishment of a fund by someone who is expert in transportation sector; the funds could be used for leasing aircraft on a close-end basis, while sources of funds can be from individuals and/or financial institutions. Marketability can be enhanced by issuing certificates of various maturities

(Rudnick 1992).

(b) Equity participation (Musharika)

This is analogous to a classical joint venture. Both parties contribute to the capital (including assets, technical and managerial expertise, working capital, etc.) of the operation in varying degrees and agree to share the returns as well as risks in proportions agreed upon in advance (Ali 1986). This instrument is characterized by equal

voting rights irrespective of capital contribution, rights to participate in management, and mutual risk sharing. There is wide range of variations currently being practiced. A self-liquidating form of participation can be agreed upon; whereby the ownership of the whole project or operation may pass to the partner (Khan Fahim 1983). Participation Term Certificates (PTC) can be issued for various maturities as a temporary partnership. Such certificates can be fully negotiable, tradable and transferable (Iqbal and Mirakhor 1987).

Traditionally, this form of transaction has been used for fixed assets, as well as working capital, financing for both medium- and long-term durations. For example, an investment bank enters into partnership with a real estate developer to construct a property by providing all the necessary capital as well as managerial resources. Rental value of the property can be assessed periodically and the stream of cash flow can be determined. Over a pre-defined period of time the joint venture will come to an end when one partner will buy out the shares of the others.

One application of this form of financing to working capital is where an importer fails to pay the full amount of the letter of credit at the time of delivery of goods. Instead of charging interest for the postponement of the payment, the bank will enter into partnership with the importer to share in the profits on an agreed ratio. This will generate both fee income as well as profits from the venture.

(c) Lease financing and hire purchase (Ijara)

Leasing and hire purchase arrangements that do not contain references to an interest rate or interest payments are an ideal Islamic financing vehicle, as they provide the Islamic institution with non-interest income from an asset that is being put to productive use by the lessee (Khan Mohsin 1987a). The underlying principal in leasing is that the financier (lessor) retains ownership of the equipment being financed, while the right of use is vested with the borrower (lessee) (Memon 1989). The lease contract specifies the duration of lease, timing and size of payments or installments, and obligation of each party during the contract. Leasing can take various forms starting from basic rental agreements to more sophisticated arrangements.

Financial lease is based on a contract between the lessor and the lessee for hire of a specific asset selected from a manufacturer (or

vendor). The rentals during the fixed "primary" period are sufficient to amortize the capital outlay of the leasing company and also provide an element of profit based on the estimated useful life and profit potential of the asset. The lessee has also option of a "secondary" period during which rental payment is reduced to one that is nominal (Memon 1989). In one variation of financial lease, the lessee establishes an investment fund with a bank (or lessor) until the accumulated funds equal the asset price.

Operating lease, also referred to as 'non-full payout' lease, is for short-term duration where rental installments are not likely to recover full cost of the asset. The residual value is recovered either through disposal of asset or by releasing the asset. Sales-aid lease is where a manufacturer offers a package deal with lease facilities to lessor. It is a marketing tool which can be used with a financial as well as an operating lease.

Contract hire lease is most commonly used in the West for fleets of motor vehicles which may be used by the lessee. The contract stipulates use of an agreed number of specified type of vehicles for a period generally less than the life of each vehicle. The lessor usually provides the repair, maintenance, servicing, and replacement of vehicles (Memon 1989).

Islamic lease contract is subject to certain constraints as compared to conventional lease or hire-purchase arrangement. The contract must involve an asset being put to real use rather than a dormant asset that is leased as a matter of convenience; the term of the lease must be related to the life of the asset in question; and the asset cannot be used in connection with activities or products prohibited in Islam.

The very nature of this instrument is that it generates series of periodic cash flows, secured by a valuable and marketable asset (both short- and long-term duration) and qualifies it for securitization. By adding an element of liquidity in the form of a financial paper, its marketability is enhanced. Despite the long-term investment, the investor is not stuck with fixed rate of return since periodic reassessment of installment, or payment, is permitted (Parvez 1991).

A recent (1994) example of an Islamic leasing operation is that for Kuwait Airways. An institutional investor organized a group of international investors to finance the leasing of aircraft for Kuwait Airways. The aircraft were leased to the airline for a specified period of time. The lease contract stipulated that at the termination of the

lease, the commercial value of the aircraft would be determined by five named appraisers and that the aircraft would be sold to Kuwait Airways at the appraised price. This leasing arrangement appealed to Islamic investors because transactions costs (for aircraft sales) at the termination of the lease are avoided and investors receive a "market" value from their assets.

(d) Trade with mark-up or cost-plus sale (Murabahah)

Another widely used instrument for short-term financing is based on the traditional notion of purchase finance. The investor undertakes to supply specific goods or commodities at the request of a client, with an agreed contract of resale to the client with a mutually agreed margin. Two conditions need to be satisfied: first, the financier has to take physical possession of goods and second, the rate of mark-up should not be tied to the length of the period over which financing is to be provided and/or the principal (Khan and Mirakhor 1987). Theoretically, each contract should be an exclusive contract where mark-up, or profit margin, is not fixed, or pre-determined, but is function of the cost and risk of procurement, earning potential of the acquired asset, and the nature of the client's business.

The critical difference between Islamic mark-up financing and traditional purchase financing is that the investor takes title to the goods in question and transfers that title to the ultimate purchaser. The investor takes all the risk since the client is under no contractual obligation to buy the goods. Until the client fulfills his original promise of "rebuying" the goods, the risk remains with the investor, thus justifying the profit (Khan Fahim 1983). The transfer of title raises questions of title defects, claims, risk of loss, and insurance that must be carefully considered in negotiating and drafting such contracts (Carlson 1986). There is, however, also the practice of financing a mark-up with the requirement that the buyer buys the goods. Such practice is common in foreign trade (Khan Fahim 1983). For example, a manufacturer of copper wires requires import of raw copper to be imported but does not have the necessary funds. An investor will arrange for the delivery of the copper, adding a profit margin over his own cost of acquiring the copper. The investor may allow deferred payment from the client or may give option to client to pay in installments. However, the critical element is that the investor is not entitled to any increase in sale price for deferring the payment.

The investor, on the other hand, may in the event of early payment allow rebate in price and may recover an amount which is less than the agreed price (Khan Fahim 1986).

(e) Trade with mark-down or discount sale

Another mode of short-term financing is an arrangement between an investor and a client where the former buys trade bills or marketable securities from the latter at a price below the face value for a specified period of time. The mark-down percentage is the investor's profit. The client assumes the responsibility for raising cash for repurchase of securities at a future date. The typical use of such an instrument is to provide additional liquidity to accounts receivable or securitizing accounts receivable.

5. Liquidity and securitization

A critical shortcoming of all traditional Islamic financial instruments has been the absence of liquidity. The problem of liquidity has, in turn, affected the maturity structure of investments that investors have been willing to acquire. Typically, most Islamic investors have been willing to acquire only short-term investments.

Until recently, neither Islamic or Western institutions were willing to commit the necessary time and resources to securitize existing Islamic assets and to develop a secondary market to enhance liquidity. But as the demand for financial instruments has grown to the necessary critical size and the market potential for liquid instruments has become apparent, securitization and market making will present rapidly growing and highly profitable opportunities for sophisticated Western institutions. This avenue of expansion into Islamic financial markets is likely to become the most rapidly growing segment of Islamic finance for Western institutions.

Two recent examples of liquidity enhancement represent a start in this direction. First, The Islamic Development Bank has sold certificates which are secured and backed by its own existing assets. The return on these certificates are directly linked to the return in these assets. And the certificates are, in turn, traded on the Bahrain Stock Exchange. A second liquidity enhancement instrument has been sold by a Western institution. Investors deposit funds in the institutions which, in turn, employs the funds in medium and long-term leasing operations. A predetermined percentage (in the range of 10 to 20) of the funds is kept for redemption and for investors to withdraw money. Leasing cost is linked to LIBOR (floating) and is passed through to the investors after deduction of fees and overhead. This financial arrangement is backed by a "guarantor of last resort" that monitors the performance of the fund and comes to investors' rescue in case of failure.

As these and other liquidity enhancing measures become known and accepted, the menu of Islamic financial products will become more diversified. The role of mark-up or cost-plus (*Morabahah*) restricted to trade will diminish and the significance of leasing (*Ijara*) and *Modarabah*, which are largely limited to medium- and long-term financing, will increase. The challenge of liquidity enhancement will continue to be a critical limitation to the expansion of a large array of Islamic instruments.

6. Innovations and emerging opportunities

Currently, the Islamic world is using a limited range of traditional instruments and debating the acceptability of other conventional financial instruments. Many sophisticated financial instruments are assumed to be interest based, a forbidden Islamic characteristic. Specifically, derivative financial products have matured over the years and hold an important and strategic position in Western financial systems. The result is a wave of innovative products spanning from forwards to swaps to structured deals being offered in the capital markets to accommodate the specific needs of investors. But derivative products are totally foreign to Islamic financial markets where so far the attention has been focused on justification and introduction of the simplest conventional instruments as discussed above.

Any financial product in Islamic financial system has to pass two tests: the *interest test* and the *uncertainty test*. The first test of a product is that it does not incorporate interest as defined within the context of Islam; and should follow the Islamic principles of risk

sharing. The second test requires that transaction should be devoid of uncertainty.⁵ The terms of the contract and the characteristics of the exchanged values should be clear. There should be no ambiguity or vagueness in the quality, the quantity, time and place of delivery, and the price of product. This test becomes critical in those transactions where delivery is in future.

The acceptance of derivatives in an Islamic system involves an examination of the anatomy of a basic derivative product, a forward contract, to check if it contradicts the principles of an Islamic financial system. If derivatives conform to Islamic principles, then the range and profitability of products offered by Western institutions are significantly enhanced.⁶

⁵ An Islamic transaction should be without any uncertainty (*Gharar*). Saleh (1992) treats uncertainty in price different from uncertainty in the terms of contract. He is of the view that uncertainty in the price should be examined in the context of interest (*Riba*). He lays the following three rules which should, in principle, avert *gharar* in any given transaction:

⁽a) there should be no lack of knowledge regarding the existence of the values to be exchanged;

⁽b) there should be no lack of knowledge regarding the quality, the quantity, and the date of future performance;

⁽c) control of the parties over the exchanged values should be effective.

⁶ Throughout this paper, there are references to the requirement that financial instruments must satisfy Islamic principles. The process and procedures by which this is established is itself a grey area. Basically, Islamic institutions and wealthy individuals rely on the judgement of a religious council (Sharia'h Council) for such a determination. The institution of Sharia'h Council is non-existent at the government level in almost all the non-Muslim countries. The exceptions are a few Muslim countries such as Pakistan, where it is recognized as a constitutional body and implementation of its recommendations is mandatory on the State, the role of Sharia'h Council in most of Muslim countries is only of an *advisory* nature. Therefore, its capability to maintain Islamic injunctions is dependent upon its legal status and the extent of implementation of its opinions. The Islamic banks working in different countries under different legal environments have, therefore, adopted different methods to ensure conformity of their business to principles of Sharia'h (Lawai 1994).

As a simple generalization, many Islamic banks belong to the International Association of Islamic Banks (IAIB). Each bank has a special board of religious scholars to whom all new products are referred for approval. In most cases, the religious board may seek the approval of the Supreme Religious Board in countries where it exists and this board may confer with the IAIB in its decisions. This procedure is not necessarily unidirectional and may involve modifications back and forth to satisfy the religious board

Forward contracts (Bay' Salam)

Islamic forward contract (Bay' Salam) is slightly different from the forward contract as practiced in the Western markets of today. Every Islamic school of thought agrees on legitimacy of the structure of Bay' Salam. Such transaction was practiced by the Prophet himself (Hammad 1989). Historically, Bay' Salam had been in practice in the agriculture sector where price of a product was determined in advance for a future delivery (Udovitch 1967). In this transaction, the buyer pays the seller the full negotiated price of a product that the seller promises to deliver at a future date. It is like a "future-purchase contract", made with the vendor who deals with goods which are not in his possession and on which he has no title (Hammad 1989). Still, a forward is not practiced mainly due to two reasons. First, Bay' Salam requires full payment at the time of contract whereas in Western forward contract only a compensating deposit with the bank may be required. Strict adherence to this condition appears contradictory to the principles of other Islamic transactions where it is legitimate to make payment in installments over the period of time with mutual agreement.⁷ Another way of satisfying this condition is by way of a parallel arrangement between the buyer and the seller at the time of contract by which seller extends an interest free loan of the full payment amount to the purchasers for the durations of forward contract. This loan is in return utilized to make full payment at the time of contract. At maturity purchaser repays the loan and takes delivery of the product.

Second reason for rejecting the forward contract is due to the misconception that interest in the forward price introduces interest (*Riba*) in the transaction.⁸ Although interest plays a role in the

determination of the forward price, it does not amount to paying or earning interest as prohibited by Islam. This confusion regarding the determination of the forward price is caused by the fact that historically research in this area has been conducted either by the religious scholars or by jurists. They have reached a conclusion that a forward contract fails to pass the "interest test" because interest is incorporated in the forward price and thus interest determines the gain or the losses in a forward contract. However, increase in the price is not prohibited by Islam and a predetermined price in no way predetermines the ultimate gain or loss of the transaction. Forward price is either at a premium or a discount.

There are three major players in the forward markets: speculators, hedgers and arbitragers. An equilibrium forward price is affected by what spot speculators expect, the supply and demand of commercial hedgers, and one that eliminates arbitrage profits. The forward price is the price that equilibrate demand and supply of all of these market participants and as a result forward prices have direct affect on spot prices. The effective holding period return to a buyer of a forward is determined by the unknown future spot rate at maturity, and since the future spot rate is determined in the market, so is the return. Actual payoff of the position is floating as value of forward contract fluctuates every day until contract matures. Final outcome and actual return is not known until maturity.

Now consider the second test of a transaction – to be free of uncertainty. In today's well developed and informationally efficient markets, there is less doubt that such a transaction will not satisfy the uncertainty test. In all forward contracts, counter parties have clear and precise knowledge of quality and quantity of the security. The price is fixed and the time and place of delivery are stipulated at the time of contract. By fixing future cash flows through a forward contract one does not make the outcome of a position certain – this depends on the future spot price, an unknown.

This simple analysis would lead us to believe that a forward contract does not violate any conditions of an Islamic financial system. Although forward contracts shift price risk from one counter party to another both are still subject to basis risk. Sharing of business risk is analogous to risk of a supplier who allows deferment of payment. Each counterparty is exposed indirectly to business risk as there is always possibility of default on any side.

⁷ The critical rule to follow is that deferment of the payment should be free of any cost or increase in price mutually agreed in the absence of any deferment arrangements. Islamic instrument *Morabahah* or *Bay' Mu'ajal*, which means deferred sale, allows payment in installments provided nothing extra is charged for this facility (Hammad 1989)

⁸ Generally Islamic jurisprudence allows a gain in deferred transactions when currency is the medium of exchange. Saleh (1992) provides a detailed comparison of different schools of thoughts. The debatable issue is whether a gain in the price is equivalent of a special kind of interest (*riba-al-nasi'a*) prohibited by Islam. The reputed jurist Ibn Qayyim al-Jawziyya differentiates between hidden *riba* and manifest *riba*. Manifest *riba* is *riba* by way of deferment (*riba-al-nasi'a*) and hidden *riba* is *riba* by way of increase. Ibn Qayyim suggested that hidden *riba* is *not* forbidden in itself but only when it is a way to gain manifest *riba*, which is forbidden for itself (Saleh 1992). In other words, an increase in price is acceptable but a further increase to allow deferment is unacceptable.

Forward contracts in foreign currency are a special case. Given acceptance of spot transactions in foreign currency as well as its treatment as a commodity, scholars can justify its qualification for forward contracts. There is historical evidence of forward exchange of currencies in early ages of Islam (Udovich 1967). However, many religious scholar and jurists have not allowed such transactions on the grounds that the forward price is purely function of interest rate differentials of two currencies. Although interest rate parity may hold, exchange rates are not solely a function of interest rate differentials. Balance of payments, expected inflation, seasonal demand and supply and foreign exchange reserves of a country are also vital variables in determining the future 'spot' price of a currency. Again the size of the gain and loss will be determined by the future spot price.

Swap agreements

A swap is a private contractual agreement in which two parties, called counterparties, agree to exchange stream of payments with each other over a specified period of time. A standard swap agreement clearly specifies the underlying security, rate of exchange applicable to each counterparty, timetable of payment, and other customized provisions. A swap instrument provides a mode of capital markets arbitrage between various world markets to lower cost of borrowing or increase asset yield, to manage the risk against uncertain fluctuation in price, and to circumvent adverse market conditions or regulations which would otherwise make standard capital market transactions difficult or impossible (Das 1989).

Besides judging the legitimacy of a swap agreement as an Islamic financial instrument, it should also be assessed as to its legal validity as a contract. A closer look at the structure of swap instrument reveals that it is simply a series of forward contracts. In other words, a synthetic swap agreement can be constructed by using a series of

⁹ It is believed that currency forwards were originated as attempts to side-step prohibitions on the payment of interest under Catholicism and Judaism in late medieval Europe (de Roover 1974).

forward contracts. Given the justification of forward contract in the previous section, a swap can be justified as a series of such contracts.

As a legally binding contract, a swap agreement has the effect of owning a security without holding title to it. It is a contract where two parties agree to swap cash flows based on notional assets or liabilities without going through the procedure of physical transfer or exchange of such. Both parties are still exposed to risks associated with the exchanged security. When combined with a covered long position, the net rate of return is still unknown until the expiration of the agreement, because relative positions may yield a profit but swap agreement may result in a loss.

At the present time, the swap instrument is non-existent in Islamic capital markets. With introduction of swap agreements, a wide range of techniques can be applied to counter the element of risk. Still not every kind of swap agreement in practice can be justified as a legitimate instrument. This is especially true in case of interest rate swaps which comprise the lion's share of the market in the non-Islamic world. Since Islamic financial system evolves around trade and commodity financing, commodity swaps can play an important role. This would give Islamic institutions a tool to cover against unexpected fluctuations in the markets and to reduce their risk to a more predictable level. Thus commodity swaps deserve more detailed discussion to illustrate their application in Islamic finance.

Commodity price swaps

A basic commodity price swap entails two counterparties exchanging cash flows at various points in time, with the specifics agreed in advance. In the standard case, the two counterparties agree to periodically exchange a fixed-price payment for a floating, or market, price payment for a given quantity of a commodity, for a specified period of time (J.P. Morgan 1992). Unlike forward contract which requires physical exchange of commodity, swap agreements do not require actual exchange of commodity but only price differentials are transferred to settle the agreement. Commodity swaps can be used to fix the price that a user of a commodity will pay for the commodity or to fix a price that a producer will receive from sale of the commodity (Kapner and Marshal 1990). The effect of such an exchange is that producers can more accurately estimate future revenue and users can do the same with their raw-material costs.

¹⁰ Interestingly, Dar Al Maal Al Islami's Sharia'h Board has approved the use of currency options (Khalaf 1994). With the approval of currency options, currency forwards should also be approved (see section on options).

Table 2

Example: An airline company wants to achieve more certainty in its cost of fuel and at the same time an oil refiner would like to position itself to get fixed future revenues. Both can enter into a swap agreement via a bank who facilitates the agreement.

Oil refiner: The oil refiner goes to swap arranger, a bank, who pays the refiner a fixed price over a period of time and, in return, refiner pays the bank the average market price (spot) for refined oil products. Over the same period of time, oil refiner sells refined oil products in market at spot price.

Airline Co.: The airline company with an objective of fixing the cost of fuel goes to the bank and arranges a swap. The company pays the bank its pre-determined price over the same period of time and receives an average market price (spot) from the bank. The airline company continues purchasing its fuel from oil market at the prevailing spot price.

Swap arranger/bank: The bank receives a fixed price from the airline company and passes it on to refiner. During the same period, it receives average price (spot) from refiner which it passes on to the airline company.

The oil refiner and the airline company have locked in prices at their desired level since any gains or losses in the spot market will be offset by gain or losses in the swap agreement. The bank earns fees and also makes a profit equal to differences between the refiner's target price and the airline company's target price.

Options

It may sound "daring" to claim options as an acceptable instrument until one discovers the similarities between a European option and Islamic instrument *Morabahah* ('mark up' or 'cost plus') as depicted in the following Table 2. *Morabahah* is a contract where investor undertakes the responsibility to supply goods with an understanding of resale to the client (potential buyer). However, the client is under no obligation to buy the goods. Until the client fulfills the original promise of "rebuying" the goods, the risk remains with the investor. This instrument offers the potential buyer full freedom either to execute the transaction and become actual buyer or not to exercise this option. In contrast, an option gives the holder a right to either buy or sell the underlying asset at a pre-negotiated period of

COMPARISON OF MORABAHAH (MARK-UP) AND OPTION

Morabahah (Mark-up)	Option
Client and investor have 'resale' agreement	Buyer and seller of the option
Delivery price is agreed upon	Strike price (K)
Agreement is for a specified time period	Expires after time T
Investor agrees to sell to client	Writes 'Call option' Buyer holds 'Call option'
Client is not obligated to buy	Option is a right and not obligation
Charges a mark-up for the service	Call premium (C)
Mark-up is function of riskiness of business	Call premium is function of volatility
Investor takes all risk	Call writer's payoff -MAX (S-K,0) Call holder's payoff MAX (S-K,0)
Procurement cost	Cost to carry

time. In comparison to the forward long position, the option (call) provides protection against the downside losses but keeps upside potential gains unaffected. General factors determining a reasonable mark-up include profitability of the asset, level of riskiness and procurement costs (which are very similar to the variables used in the option pricing models).

Commodity linked notes and bonds

This instrument is ideal for raising capital for enterprises whose revenues are dependent on a particular commodity. It gives flexibility to issuer if its revenues are dependent on the price of the commodity. Investor gets an indirect access to the commodity market. The following simple example can be used to illustrate the structure:

Example: An oil refiner buys crude oil in spot market and intends to sell it after processing it as refined products. An investor enters into agreement with the refiner to provide funds for buying a specified number of barrels of crude oil on the spot. In return investor will get periodic returns based on an index of representative refined oil products prices or the spread between crude and refined oil products, and a pre-defined deduction for the processing cost of the crude. At maturity of the contract, investor will receive his principal back. Borrower can benefit by

reducing the cost of processing and investor can benefit from a wider spread between crude and refined oil.

Commodity bonds can be introduced in different flavors. Principal amount of the bond will always have to be stated in terms of a commodity. Coupon can be linked to an index of a commodity or a basket of commodity prices.¹¹ The structure may seem to embrace business risk sharing by both the borrower and the investor, but in the reality investor's risk is narrowed to the credit standing of the borrower. From the investor's point of view, the instrument will give high yield if commodity price goes up and in event of drop in prices it will still make a profit due to spread from one market to another.

Income bonds (Al-Muqardha bonds)12

This instrument is similar to 'income bonds' in Western capital markets. The bond is normally issued for financing a specific project or business expansion. The principal is secured against an asset and the coupon payments are floating. Coupon payments are a function of asset performance and income.

Example: A manufacturing company is considering expansion by installing new machinery with a life of five years. Industry standards indicate that machinery accounts for 20% of the cost of goods. The company will issue a bond to buy the machinery and will redeem the investor's principal according to an agreed schedule. Second kind of payment will be identical to a coupon payment computed as function of income such as 20% of revenues.

One can also synthesize a zero coupon by borrowing relatively small amount of funds to start a project and return larger proceeds after completion of the project. Suppose a construction company who builds shipyards undertakes a project with expected future value of \$500 million at the end of 10 years. The company borrows \$200 million today to start the project and agrees to pay back an agreed upon percentage of sale value at the end of the project.

7. Innovations and opportunities for Western institutions

Although emerging financial markets have received a great deal of attention, those of Islamic countries have received less than what should be expected because of the special provisions of Islam. To date, only a few highly capitalized Western financial institutions have begun to provide Islamic financial services to Islamic institutions, Islamic departments within conventional institutions, and to wealthy Muslim individuals. These institutions have barely scratched the surface of potential financial opportunities. Their major constraint has been the unknowns and uncertainties of entering a new market, especially a financial market requiring a full appreciation of Islamic religious principles and the ambiguous interpretations that guide them.

Some Western institutions have taken a short-run or a "quick and dirty" approach to making money. They have noticed that for some Islamic institutions and individuals two provisions are critical guarantee of principal and the assurance (not the reality) that their funds are invested in accordance with Islamic principles. This observations is probably correct in some instances, but not in all. As a result, an institution in the U.S. has offered the following prescription: (i) 80% of funds are invested in zero coupons with a maturity of five years, (ii) the remaining 20% are invested in the commodity futures, and (iii) a bank guarantee for the principal is given. The principal is guaranteed and the return is "variable". The Western institutions has participated by earning a management fee and also in sharing of any profits from the variable return on commodity transactions. While this arrangement has worked in some cases, it is clearly un-Islamic - a zero coupon bond cannot qualify as an Islamic instrument. Their future in this market is limited.

¹¹ The use of an appropriate index in the above oil example and in the case of commodity bonds requires further elaboration. For an index to be permissible to most religious scholars, it must be an index of the specific trades. For instance, in the case of grains it must be an index of the specific grains in the contract; for real estate, it must be an index of the real estate in question and cannot be a general or a representative real estate index.

¹² International Finance Corporation (IFC) subscribed to income notes issued by a BRR Capital Modarabah in 1993. Return on notes is linked directly to the dividend rate declared by the issuer with an embedded option to convert notes to equity. The notes are secured by receivables from lease operations.

Other Western institutions have guaranteed the investors principal and have agreed to use the funds for commodity financing and offered the investor with a fixed and known return (usually with a few basis points around LIBOR). This arrangement has covered the lion's share of Islamic funds invested abroad. Again difficulties have arisen. A world-class British investment bank, under the above arrangement for investment of about \$500 million, did not live up to its agreement. It had issued paper that the commodity in question was stored in at a certain location but when the investor made a spot check, there was only an empty warehouse. The obvious motivation for the institution's dishonesty was to earn a higher return through alternative investments as the margin in such standard transactions are typically in the range of 10-15 basis points. But the resulting scandal has largely eliminated this institution from future participation in Islamic financial markets for the foreseeable future.

But highly rated Western institutions, such as J.P. Morgan and Banker's Trust, appear to have made a larger commitment and have taken a longer-run approach to this expanding market. For the moment, although they may earn 10-15 basis points on each transaction, with the principal turnover of 2 to 3 times the annual fees are still significant on large deals. More importantly, if they contribute to market liquidity (through securitization and market making), the volume and diversity of available business should expand significantly. At the same time, the long-run involvement and persistence of these well-known institutions should result in derivative instruments (with their higher attendant profit margins), such as forwards, swaps and options, becoming Islamically sanctioned financial products. Finally, wealthy Muslims may increasingly turn directly to Western institutions and by-pass Islamic institutions as intermediaries as Western institutions develop a longer track record. All in all, emerging Islamic financial markets are likely to provide highly profitable opportunities for Western financial institutions that take a long-term approach to this rapidly expanding market.

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