

FIGURE 7.1 The credit multiplier process

as a deposit in Bank 2. The process of money creation through the credit multiplier continues until the initial amount of \$100 would have been multiplied by 10 to become \$1,000. The credit multiplier is thus defined as the inverse of the reserve-requirement ratio.

Two traditional sources of instability can be observed. First, assume a depositor at Bank 1 writes a check for \$100 to a beneficiary whose bank is Bank 3, and then Bank 1 finds it difficult to make the payment of \$100 and is caught with insufficient funds. If depositors at Banks 1 and 2 simultaneously exercise their drawing rights and write checks to a beneficiary at Bank 3, for amounts of \$100 and \$90, respectively, both Banks 1 and 2 will be caught short of funds. **Money creation at deposit banks leads, therefore, to an un-backed expansion of credit, which exceeds real savings in the**

TABLE 7.1 Impact of credit and market risks

Balance Sheet: Bank 1	
Assets	Liabilities
Reserves = \$10	Deposits = \$100
Loans and securities = \$50	Central Bank Advance = \$40
Borrowed reserves = \$40	
Losses = \$40	
Total = \$140	Total = \$140

economy. The central bank plays a role as the lender of last resort. It will advance liquidity in the form of discounts to banks that are short of reserves for settling their liabilities. Central banks that fear financial instability may charge punitive rates for such loans.

A second source of instability may result from depreciations in the value of assets. Assume the loans and securities of Bank 1 depreciate to \$50 because of non-recoverable loans (credit risk), or a speculative fall in the prices of bonds, mortgage securities, foreign exchange, and other assets, (market risk), as illustrated in Table 7.1. Assume that a depositor at Bank 1 writes a check for \$100 for a payee at Bank 3, and then Bank 1 will be short by \$90. Besides liquidating its assets at discount, Bank 1 will have to borrow or inject new capital of \$40 to be able to meet its debt obligations. The banking system as a whole may face a general speculative depreciation of assets (stock market crashes, a fall in securities, bonds, or mortgage asset prices, non-performing loans, etcetera). The bailing out by the central bank will increase bank reserves and will lead to an expansion of the money supply. Such bailouts are inflationary and will impose a tax on money holders, creditors, wage earners and pensioners in favor of debtors. In other words, the central bank makes the public bear the cost of asset price depreciation, while asset price appreciation remains private and benefits speculators or asset holders.

FINANCIAL STABILITY OF ISLAMIC FINANCE

As discussed in the previous chapter, theoretically, the Islamic financial system consists of a banking sector, a stock market, and a market for securitized assets. It was also shown that the banking sector may have a sub-sector which specializes in high-credit and short-maturity securities to finance trade or commodities on the basis of *murabahah* (cost-plus sale) to support the payment system. This would be analogous to the concept of narrow banking which has been suggested in the conventional system to promote stability in the payment systems and in the financial system.

Proponents of the Islamic system claim that a financial system based on the Islamic framework of risk sharing would be more efficient in allocating resources than a conventional interest-based system. This claim can be defended on the basis of the general proposition that any financial development that causes investment alternatives to be compared to one another based strictly on their productivity and rates of return is bound to produce improved allocations. Such a proposition is the cornerstone of the Islamic financial system. But would such a system also improve stability?

The general argument underlying the proposition that the Islamic financial system is more stable than the conventional system is based on three notions: (i) the avoidance of leverage and debt refinancing due to the prohibition of debt; (ii) the matching of assets and liabilities; and (iii) the elimination of the multiplier effect.

Absence of Leverage and Debt Refinancing

Leverage is absent from the Islamic financial system because of the constrained debt-carrying power of economic units in the system and on the argument that the inability to refinance positions in assets by creating additional debt, along with the non-existence of interest rates, renders the system more stable.

In a conventional interest-based system, the financing of investments and the ownership of capital assets, as well as of consumer spending, is carried out primarily through borrowing and lending, whereby a structure of expected money receipts embodies the various commitments to make payments on existing debt. The liabilities on the books of an economic unit at any time are the result of past financing positions that are taken on the basis of various margins of safety, one of which is an excess of anticipated receipts over payment commitments. Based on this relationship, an economic unit in such a system can assume one of three financial postures.

First, a given economic unit in every period of its operation will have cash flows from its participation in income generation, which are expected to exceed contractual payments on outstanding debt. Another posture may place an economic unit in a position in which, in the short term, payment commitments exceed their corresponding cash flows, even though the total expected cash flows (totaled over the foreseeable future) exceed the total payments on outstanding debt and the net income position of the short-term cash flows exceeds the short-term interest payments on debts.

Finally, a situation may arise in which not only do the short-term payment commitments exceed the expected cash flows, but the short-term interest payments on outstanding debt also exceed the income components of the short-term cash flows. It has been argued that, in such an interest-based system, there is a tendency on the part of the economic units (consumers, firms, banks and governments) to increasingly assume the last two types of financial postures, in which economic units can fulfill their payment commitments on debt only by the borrowing or selling of assets. Since the appreciation

of an asset constitutes a portion of returns on that asset, the tendency is to refinance rather than sell assets. For refinancing, the amount that the second type of unit needs to borrow is less than the maturing debt of the third type of unit, and the latter will only be able to meet its payment commitments by increasing its outstanding debt.

The last two types of unit engage in speculative financing in the sense that they have to exchange short-term liabilities for long-term assets, thus speculating that, when the need arises to refinance and roll over, the refinancing of their maturing debts will be available at non-punitive interest rates. The viability of the third type of unit will rest on the assumption that some assets will be sold at high enough prices sometime in the future. Both the second and third types are vulnerable to interest-rate fluctuations, since these units finance a long position in assets by issuing short-term liabilities; hence, their viability depends on the price and the extent of the availability of refinancing. Their commitments provide for the repayment of debt at a faster rate than their net income will allow for the recapturing of the money costs of capital assets. Besides, there is a high probability of present value reversal for these units at higher interest rates, since higher interest rates lower the value of all cash receipts, but this decrease is proportionately greater for more-distant receipts. That is to say, a dated set of cash flows which yield a positive net present value (excess of asset values over the value of debts) at a lower interest rate may yield a negative excess at higher interest rates.

High and rapidly rising interest rates increase financing activities in which investment undertakings depend on an increase in total short-term debt outstanding. This is because the interest payments that are due on earlier borrowings exceed the income earned by the assets. As the short-term debt that leads to a capitalization of interest increases relative to the gross capital income, there is an increase in demand for short-term financing because of the need to refinance debt. This increased need to rely on maturing debt not only shifts the demand curve for short-term debt to the right but also makes the curve less elastic. If, in addition, the supply of short-term refinancing is also inelastic, the short-term interest rates can increase rapidly, which, in turn, leads to higher long-term rates and a lower value of capital assets.

Moreover, rising short-term interest rates, in conjunction with increasing long-term interest rates, not only reduce the demand for capital assets but also increase the cost of production of the output with a longer gestation period, thus leading to a decrease in investment. If the process of falling asset values, rising carrying costs for asset holdings, and decreasing profits increases the probability of illiquidity and insolvency for a significant number of firms and financial institutions, the participants in the market may not be willing to roll over or refinance the maturing debts of these institutions and a crisis will develop. It follows that for any given regime of financial institutions, the lesser the weight of debt refinancing, the greater the stability of the system.

Inherent Matching of Assets and Liabilities

A bank in a conventional interest-based system is inherently exposed to asset and liability mismatches, which has been the source of instability in several financial crises in modern times. Such mismatches expose the banks to illiquidity, in the sense that their liabilities mature faster than their assets. To handle illiquidity the banks have three options. The first is to rely on the argument that the problem of liquidity is not so much a problem of maturity structure as one of shifting assets to other banks in exchange for cash. That is, if one bank can receive help from another bank when needed, there is no necessity to rely on maturing loans to provide liquidity; assets can be shifted to other banks before maturity as the need arises. The second option is for a bank to increase interest rates in order to attract greater deposits or maintain existing ones in times of difficulty, thus engaging in liability management to solve the problem of liquidity. If the short-term stock of total deposits is fixed within the banking system, these two alternatives can quickly spread the problem of illiquidity throughout the system. The danger that all banks can become illiquid, in the sense that their liabilities mature faster than their assets, cannot be met except via the third option, which is debt monetization; that is, the banks must sell their slow-maturing assets to the central bank in order to raise cash with which to meet fast-maturing liabilities. This option is not necessarily without cost. For one thing, once the banks resort to monetization, they may set in motion a vicious circle with its own momentum of acceleration.

An Islamic financial system can be expected to be more stable because of an inherent matching of assets and liabilities. First, the term and the structure of the assets and liabilities of the economic units are closely matched through profit-sharing arrangements. Second, the liabilities of each economic unit comprise equities and/or are fully amortized with an underlying future income flow. Third, the payment commitments of firms and financial institutions are, mostly, in the form of dividends that will have to be paid only if profits are received. Finally, no debt refinancing can take place on an interest basis; if there is any refinancing it must be on the basis of sharing of future income expected from assets. In an Islamic system, the danger of insolvency arises for economic units only if their revenues fall short of their out-of-pocket costs and commitments. Such a situation can only occur either as a result of poor management or extraneous economic factors, but it is not inherent in the financial system.

No Credit-multiplier Effect

The stability of the Islamic banking system was investigated using a formal mathematical approach by Khan (1987), who demonstrated that the system may well turn out to be better suited for adjusting to shocks that result in banking crises and a disruption of a country's payments mechanism. Khan's model assumes an Islamic banking system structured in accordance with

the “two-windows” model discussed earlier. In the model, the banks accept deposits on the basis of profit and losses as if they were equity where the nominal value of shares is not guaranteed and the rate of return on which is variable. The model is shown to have stability in response to certain types of shocks. A major policy recommendation emanating from this study is that such a system, in which demand deposits have a 100-percent reserve requirement and investment deposits carry no guarantees, has desirable and inherent safety benefits.

Conceptually, Islamic finance is a two-tier system: (i) a 100-percent money system, and (ii) an investment banking system, modeled as an equity shareholding system.⁶ Obviously, there is no money creation in a system with 100-percent reserve banking. Hence the credit multiplier is, by definition, zero for such a system. The investment banking accepts savings in the form of deposits and invests them in the purchase of equity shares. There is, therefore, no creation of money through credit, and investment is fully backed by savings. The amount of deposits in the investment branch will be determined by real savings and the savings-to-income ratio and not by the credit multiplier as in conventional banking. New cash flows to an Islamic investment bank originate from new savings, and not from the proceeds of loans transferred from one bank to the other. There is, therefore, a wealth-creating activity that generates new cash flows, and not money creation by the stroke of the pen as is the case in a conventional system. The process of savings and income generation can be described as follows: assume an Islamic investment bank accepts deposited savings in an amount of \$100. The bank invests this in the form of equity shares. Producing firms use this capital to buy machinery and raw materials, and to expand their production capacity. The recipients of the \$100, as a result of sales of their goods and services, are assumed to save, on average, a percentage of their income. For our purposes, we'll say 20 percent. Hence, they deposit new savings of \$20 at the Islamic investment bank. The latter purchases equity shares for \$20. Recipient firms invest the new capital. The recipients of the \$20, as proceeds of sales of their goods and services, will save, on average, 20 percent of their income, equivalent to \$4. It can be easily shown that the process of income and savings generation increases the initial \$100 of savings into \$125. If we assume an average savings ratio, s , then the savings multiplier is expressed as $1/(1 - s)$, and is directly proportional to the average savings ratio. The higher the savings ratio, the higher will be the accumulated savings.

The growth of financing activity will, therefore, be stable and determined by real growth in the economy, and not by unstable speculative finance or money creation by financial institutions. Accordingly, an Islamic system would not be expected to experience deep boom and bust cycles. Moderate and brief booms or recession may be generated by favorable climatic conditions or natural disasters, by productivity and technical change, or by real shocks. They cannot be generated by the financial system itself, as experienced and demonstrated under the conventional system. As shown in Mirakhor (1988), equilibrium in an Islamic economy thus structured will be

stable and the rate of return to the financial sector will be fully aligned with the profit rate in the real sector of the economy.

It is clear that if demand deposits are backed by a 100-percent reserve requirement, the run-associated features of fractional-reserve banking would be eliminated. By not imposing any reserve requirements for investment deposits and replacing the par conversion privilege with a net asset liquidation rule (for example, the rule that depositors bear the asset value risks on a pro rata basis), the incentive for runs on investment deposits would also be removed. The doctrinal justification for a 100-percent reserve requirement based on the property-rights argument was advanced in earlier chapters; the stability argument proposed is a further support for this view. Not all Muslim scholars, however, are convinced of the necessity of a 100-percent reserve requirement. The proponents of the two-tier *mudarabah* model argue that a fractional-reserve system fully guaranteed by a debt-issuance scheme coupled with careful project selection is sufficient to head off any potential run on the banks.

CONCLUSION

Classical economists recognized in their writings that banks create money. They also noted that business corporations, through issuing credit instruments such as bills of exchange, commercial papers and promissory notes, may contribute to an increase in quasi-money, when these instruments become monetized in the form of bank discounts or through endorsement. They identified the relationship between all forms of private credit instruments and circulating gold as the credit multiplier. The credit multiplier depends on the definition of money and quasi-money, on the degree of development of the credit system, and factors that motivate lenders to lend and borrowers to borrow. Cognizant of the money-creation power of banking and financial institutions, every country has adopted banking legislation and prudential regulation for limiting the use of this power beyond the norms of safety. The credit multiplier is inversely related to the reserve-requirement ratio in a fractional-reserve system. Under securitization and an asset-backed securities system, the credit multiplier is larger than under a reserve-requirement system and is theoretically unbounded. However, in practice, the abnormally inverted credit pyramid is bound to collapse when its underlying bubbles burst.

The credit multiplier was shown to be irrelevant for Islamic finance. The corresponding notion is a savings multiplier, which is directly proportional to the savings-to-income ratio. Islamic finance is theoretically immune from credit multiplication and the business fluctuations caused by credit booms and busts. The growth of financing activity will, therefore, be stable and determined by the real growth of the economy, and not by unstable speculative finance or money creation by financial institutions. Accordingly, an Islamic system would not be expected to experience deep boom and bust

cycles. Moderate and brief expansions and recession may be generated by good or bad crops, productivity and technical change, or by real shocks and not by the financial system itself. The general price level is stable and cannot be subjected to inflationary pressure. The rate of economic growth is stable and much higher than in a corresponding conventional finance system as Islamic investment banks finance only highly productive investment projects and not consumption, and are immune to the credit crises that characterize conventional finance.

Conventional banks fail to meet inherent stability conditions even in the presence of prudential regulations. First, credit losses from debt default or the depreciation of assets may create a large divergence in relation to liabilities that remain fixed in nominal value. Second, bank credit has no fixed relation to real capital in the economy and bears no direct relation to the real rate of return. Un-backed credit expansion through the credit multiplier and further leveraging is a fundamental feature of conventional banks. Cash flow could fall short of expectations and force large income losses on banks, especially when the cost of funds is fixed through a predetermined interest rate. Third, banks caught in a credit freeze, with a drying up of liquidity, may default on their payments. Fourth, banks are fully interconnected with each other through a complex debt structure; in particular, the assets of one bank instantaneously become liabilities of another, leading to fast credit multiplication. A credit crash causes a dramatic contagion and a domino effect that may impair even the soundest of banks.

Credit can be issued to finance consumption, and hence may rapidly deplete savings and investment. The depletion of savings could be significant if credit finances large fiscal deficits. Hence, credit is no longer directly related to the productive base, as it is in the equity-based system, and the income stream from credit is no longer secured by real output as shown for the equity system. Credit can expand through leverage to an unsustainable multiple of real national income, increasing the risk of default. Credit expansion through the credit multiplier is determined by the reserve-requirement system, whereas equity in the equity-based system cannot expand more than real savings. In the case of securitization, credit can, in theory, expand to an infinite degree.

In an economy governed by the principles of Islamic finance, the rate of return on equities is determined by the marginal efficiency of capital and time preference, and is positive in a growing economy. This implies that Islamic banks are always profitable provided that real economic growth is positive. This establishes a basic difference between Islamic banking, where profitability is fully secured by real economic growth, and conventional banking, where profitability is not driven primarily by the real sector and where banks may suffer losses even in the face of positive real growth. As we have seen, the Islamic banking system has two types of banking activity: deposit banking for safe keeping; and banking for payment purposes. This system operates on a 100-percent reserve requirement, and fees may be collected for this type of service. In this system, investment banking operates

on a risk/profit-sharing basis, with an overall rate of return which is positive and determined by the real economic growth rate. Islamic banks do not create and destroy money; consequently, the money multiplier, defined by the savings rate in the economy, is much lower in the Islamic system than in the conventional system, providing a basis for strong financial stability, greater price stability, and sustained economic growth.

Conventional banks issue debt and earn interest. Debt accommodation by banks has often been unlimited and has been checked only by crashes. We have shown that credit expansion may have no relation to the real capital base and no direct relation to the real cash flow in the economy that may be required for servicing debt. If financing were to be extended to consumption, then credit could erode the capital base and economic growth. The equilibrium interest rate that clears the money market may have no direct relation with the real rate of return in the economy. Such a deviation was acknowledged by the classical economists and was seen to be a cause of booms and busts, and excessive speculation in commodities and assets. Banks are obliged to pay the face value of their liabilities. In the case of credit loss, banks have to fully absorb these losses from their capital reserves or through recapitalization. Governments may be compelled to extend large and costly bailouts to rescue impaired banks and prevent a total collapse of the financial system.

The conventional system is vulnerable to many sources of instability. Besides the inability to reach full-employment output, the system can suffer from interest-rate distortions in relation to a natural interest rate and can suffer from the absence of a direct link to a real capital base that generates cash flow for servicing debt. Minsky (1986) described the conventional system as endogenously unstable, evolving from temporary stability to periods of crisis. Credit losses play havoc with the real economy and cause unemployment. The drying-up of credit during credit crashes makes the Modigliani-Miller theorem untenable. In such circumstances, leveraged firms will face higher financing costs for their investments or fluctuations in their operations. The issue of instability in conventional finance is not limited to the role of commercial and investment banks. In conventional finance, the central bank plays the critical role of lender of last resort. If it didn't do so, conventional banks—which are interrelated through loans—would risk simultaneous failure. Banks are exposed to credit and interest-rate risk and may run out of liquidity. In order to maintain their payments, the rediscount and borrowing from the central bank become pillars for the smooth functioning of conventional finance. In Islamic finance, banks do not have or cause any liquidity mismatch and are thus not dependent on central bank finance to maintain their liquidity.

Finally, we should note that the social and human costs of financial instability and financial crises, though impossible to quantify, might dwarf even the economic costs. The human cost of prolonged unemployment—its impact on the individual psyche and on families—cannot be overestimated. The impacts on individual regions are much more extreme than the average

effects. The unfair redistribution of wealth, at the expense of individuals on fixed incomes and creditors, is simply immoral. Islamic finance avoids these and other pitfalls of a financial system based on credit and leveraging. We cannot keep repeating the cycles of boom and bust and pretending that the next time the results will be different. We are living out the adage that defines stupidity as repeating the same act and expecting a different result the next time! It is time for the world community to lift its head out of the sand, to shed its reliance on debt, interest and leveraging, to totally revamp the financial system to rely on risk sharing.

ENDNOTES

1. This chapter is based on research presented in Askari *et al.* (2010).
2. Their proposals became known as the Chicago Reform Plan; it was economics professors at the University of Chicago—Henry Simons, Frank Knight, Aaron Director, Garfield Cox, Lloyd Mints, Henry Schultz, Paul Douglas, and A. G. Hart—who elaborated the Plan. Professor Irving Fisher from Yale University was a strong supporter of the Plan. His book *100% Money* was an attempt to win support among academics and policymakers for the Plan.
3. The consolidated account can be compared to the overall fiscal account of the government or to the balance of payments of a country. Each account is composed of two components: a current account and a capital account. The overall balance of the consolidated account should be sustainable for financial stability to be maintained over time.
4. For instance, the United Kingdom suspended the Gold Standard in September 1931, following a run on its gold reserves. Similarly, the US suspended the gold standard in August 1971 when its gold reserves fell critically below the level of dollars held by foreign central banks that had the legal right to convert dollars into gold at the rate of \$35 per troy ounce of gold.
5. Bills of exchange, promissory notes, and commercial papers were issued in much larger amounts than circulating currency during the eighteenth and nineteenth centuries. They were also considered as instruments of credit that economize on the use of gold or bank notes. When discounted with banks, these credit instruments contribute to expand bank credit.
6. Deviation from this definition makes Islamic finance simply another form of conventional finance.

CHAPTER 8

Islamic Financial Intermediation and Banking

Financial intermediaries are different from other economic agents. They not only channel resources from the capital surplus agents (generally, households) to capital deficit ones (the corporate sector), they also allow the inter-temporal smoothing of household consumption and business expenditures and thus allow both firms and households to share risks. Since the early 1980s, the increased complexity and volatility of the financial markets have led financial intermediaries to innovate and offer products to mitigate, transfer, and share financial risks.

The primary functions of a financial intermediary are asset transformation, conducting orderly payments, brokerage and risk transformation. Asset transformation takes place in the form of matching the demand and supply of financial assets and liabilities (for example, deposits, equity, credit, loans and insurance) and entails the transformation of maturity, scale and place of the financial assets and liabilities of the ultimate borrowers and lenders. The administrative function of an accounting and payments system (check transfer, electronic funds transfer, settlement, clearing) is considered another important intermediation function. Typically, financial intermediaries have also offered brokerage or match-making between the borrowers and lenders, and facilitated the demand and supply of non-tangible and contingent assets and liabilities, such as collaterals, guarantees, financial advice, and custodial services.

The nature of intermediation has changed drastically over the last four decades because of changes in macroeconomic policies, the liberalization of capital accounts, deregulation, advances in financial theory and technological breakthroughs. Financial intermediation in the form of traditional banking has declined considerably in developed countries, where market-based intermediation has become dominant. Traditional bank lending operations are being replaced by more fee-based services that bring investors and borrowers directly in contact with each other. Some degree of “dis-intermediation” has taken place due to the development of capital markets

which have changed the function of traditional financial intermediation. However, the complexity of markets in the wake of the financial crisis of 2007–09 has reignited the debate on the need for more intermediation.

Financial intermediation in Islamic history has an established historical record and has made significant contributions to economic development over time. Financiers in the early days of Islam were known as *sarrafs* and undertook many of the traditional and basic functions of a conventional financial institution such as intermediation between borrowers and lenders, operating a secure and reliable domestic and cross-border payment system and offering services such as the issuance of promissory notes and letters of credit. Commercial historians have equated the function of *sarrafs* with a bank. Historians like Udovitch considered them as “bankers without banks.” *Sarrafs* operated through an organized network and well-functioning markets, which established them as sophisticated intermediaries, given the tools and technology of their time. It is claimed that financial intermediaries in the early Islamic period instituted mutual-help arrangements to help one another overcome liquidity shortages. There is evidence that some of the concepts, contracts, practices, and institutions developed in the Islamic legal sources of the late eighth century provided the foundations for similar instruments in Europe several centuries later.¹

In all the models for Islamic financial intermediation and banking described earlier, the core principle is that the Islamic bank operates as an agent of the investor (depositor) and both agree to share the profits and losses of investments made by the bank. Any losses incurred as a result of the bank’s investment activities are reflected in the depreciation of the value of the depositor’s wealth. All models see the probability of losses minimized through a diversification of the banks’ investment portfolios and careful project selection, monitoring, and control.

Financial intermediation can take several forms in Islamic financial markets. For the purposes of this chapter, we focus on financial intermediation either through deposit-taking Islamic banks or through “Islamic windows.”

FINANCIAL INTERMEDIATION BY ISLAMIC BANKS

An Islamic bank is typically a hybrid between a conventional commercial bank and an investment bank, and thus resembles a universal bank. Table 8.1 constructs a conceptual balance sheet of an Islamic bank based on different functions and services to give us an overview of its structure, operations and capabilities of intermediation.

Liabilities

On its liabilities side, an Islamic bank offers current, savings, investment, and special investment accounts to its depositors. Unlike conventional commercial banks, which accept deposits with the promise to return the

TABLE 8.1 A stylized balance sheet of an Islamic bank

Assets	Liabilities
Trade Financing (<i>Salam, Murabahah</i>)	Demand Deposits (<i>Amanah/Waad</i>)
Leasing / Rentals (<i>Ijarah / Istisnah'</i>)	Investment Accounts (<i>Mudarabah</i>)
Profit/Loss Sharing Investments (<i>Mudarabah</i>)	
Equity Investments (<i>Musharakah</i>)	Special Investment Accounts (<i>Mudarabah</i>)
Fee for Services	Capital Equity Reserves

principal amount in full and a predetermined return, an Islamic bank would not be able to offer such explicit guarantees of principal and fixed return but would have to assure depositors that it would select the best opportunities that minimize risk of any loss for the depositors but still provide attractive market-competitive returns. Using the techniques of portfolio management and diversification, an optimal portfolio of trade-related and asset-linked securities can be financed by the depositors' funds. By deploying the funds in this fashion, the intermediary will be able to not only offer short-term time deposits with minimized financial risk and sufficient liquidity, but will also facilitate a system-wide payment system that is backed by real assets.

Current accounts are demand accounts kept with the bank on custodial arrangements and are repayable in full on demand. Current accounts are based on the principle of *wadia* (trust or safe keeping) or *amanah* (trust), creating an agency contract for the purpose of protecting and safekeeping the depositor's assets. The major portion of the bank's financial liabilities would consist of **investment accounts** that are, strictly speaking, not liabilities but a form of equity investment, generally based on the principle of *mudarabah*. Investment accounts are offered in different forms, often linked to a pre-agreed period of maturity, which may be from one month upwards and could be withdrawn if advance notice is given to the bank. The profits and returns are distributed between the depositors and the bank, according

to a predetermined ratio (typically 80:20 but may vary considerably from bank to bank).

A bank may also offer **special investment accounts** customized for the investors, who may be ordinary householders, high-net-worth individuals or institutional clients. These accounts also operate on the principle of *mudharabah*, but the modes of investment of the funds and distribution of the profits are customized to suit the needs of the clients. In general, these accounts are linked to special investment opportunities identified by the bank. These opportunities have a specific size and maturity and result from the bank's participation in a pool of investment, private equity, joint venture or a fund. To some extent these accounts resemble specialized funds to finance different asset classes. The maturity and the distribution of profits for special investment accounts are negotiated separately for each account, with the yield directly related to the success of the particular investment project. Special investment accounts have considerable potential for designing and developing funds with specific risk–return profiles to offer customers and clients opportunities to manage portfolios and to perform risk management. In addition to deposits, an Islamic bank offers basic banking services such as fund transfers, letters of credit, foreign exchange transactions, and investment management and advice, for a fee, to retail and institutional clients.

The last item on the liabilities side is, typically, equity capital and reserves accumulated over the time. It should be noted that given the prohibition of debt, Islamic banks do not carry any debt capital, which could be a significant source of capital for the conventional banks. Rather, they are capitalized through equity. It has been argued that since the mode of intermediation is based on the profit/loss-sharing agreement which is a “pass-through” system, Islamic banks do not need to keep significant equity capital. This notion may be theoretically correct but as we will see later Islamic banks are still required to maintain a certain minimum level of capital. They can also set aside a portion of the profits each year as reserves to be used during times of economic slowdown.

Table 8.2 shows the major liabilities of a typical Islamic bank broken into sub-categories used for reporting purposes.

Assets

While the liabilities side of the bank has limited modes of raising funds, the assets side can carry a more diversified portfolio of heterogeneous asset classes, representing a wider spectrum of risk and maturity profile. For short-term maturity, limited-risk investments, there is a choice of investing in short-term trade financing. Such assets originate from trade-related activities, such as *murabahah*, *bay' al-muajjil*, or *bay' salam*, and are arranged by the bank, which uses its skills, market knowledge and customer base to finance the trading activity. In addition, the bank can provide short-term funds to its clients to meet their working capital needs. The short-term maturity of these instruments and the fact that they are backed by real assets minimize their

TABLE 8.2 Liabilities reported on financial statement**Liabilities**

Customers' Funds
Current & Savings Demand Deposit Accounts
<i>Mudarabah</i> Investment Accounts
<i>Mudarabah</i> Savings Accounts
Other (customer accounts, special <i>Mudarabah</i> accounts, etc.)
Funds Due To Other Creditors
Funds Due To Other Creditors
Due to Banks and other Financial Institutions
Due to Subsidiaries and Associated Companies
Margins on LCs and Accounts Payable
Due to Employees, Contractors and Suppliers
Profit and Other Liabilities
Profit/Dividend Payable
Provision for Taxes and <i>Zakah</i>
Other Liabilities
Reserves
Shareholders' Equity

level of risk. The bank considers these securities highly attractive and gives them preference over other investment vehicles.

For medium-term maturity investments, the bank has several choices. The funds can be invested in *ijarah* and *istisna'*-based assets. A benefit of these contracts is not only that they are backed by an asset, but that they can also have either a fixed or a floating-rate feature that can facilitate portfolio management. The common features of Islamic and conventional leasing provide additional investment opportunities for the bank since investing in conventional leases with appropriate modifications can be made consistent with *Shari'ah* principles. However, leasing has its own overheads, which a bank may not like to accept. For example, leasing requires a bank to deviate from its primary role as a financial intermediary, in that it involves purchasing an asset and retaining ownership of it until the asset is disposed of, with the responsibility of maintenance and associated costs over the life of the contract. Disposing of the asset requires not only bearing all risks resulting from price fluctuations, but also some marketing expertise. All this will require the bank to engage in activities beyond financial intermediation.

In addition, an Islamic bank can set up special-purpose (customized) portfolios to invest in a particular asset class and sector and can finance these portfolios by issuing special-purpose *mudarabah* investment accounts. In some way, this segment of the assets side represents a "fund of funds," where each fund is financed by matching *mudarabah* contracts on the liabilities side

through special investment accounts. For longer-term maturity investments, an Islamic bank can engage in venture capital or private equity activities in the form of *musharakah*.

An Islamic bank can attract depositors/investors either by inviting them to share profits and losses on a general pool of assets maintained by the financial intermediary itself, or by acting as a dealer/broker for third-party products. The general pool could be in the form of various funds specializing in specific sectors or geographical regions. In this case, the investor/depositor will be placing funds with the bank in a fund of funds, which would be a collection of diversified portfolios of financial assets. The relationship between the bank and the depositors/investors could be on the basis of either a *mudarabah*, where the bank manages assets for a fee, or a *musharakah* (equity partnership), where the bank shares profits and losses with the depositors/investors. In either case, there is risk sharing between the financial intermediary and the depositor/investors.

On the other hand, the Islamic bank can simply act as dealer/broker and help the investor in selecting and placing funds in portfolios of independent fund managers who specialize in specific asset classes, investment styles, sectors, and maturity terms. In this case, the bank facilitates the purchase/sale of third-party products and has no liability regarding the outcome or the performance of those products. However, the bank may perform due diligence on the fund and its managers before making any recommendations to its customers.

Table 8.3 shows broad and detailed classifications of the assets side of a typical Islamic bank for financial reporting purposes. Typically, the assets are divided into banking and trading books. The banking book consists of old-fashioned investments and financing of real sector activities, whereas the trading book contains financial securities such as bonds.

SOURCES AND USES OF FUNDS

Table 8.4 shows how an Islamic bank raises funds (the sources) and how these funds are utilized (applied) through investments. The sources of funds are also the liabilities of the bank. When compared to a conventional bank, Islamic banks do not use debt as the source of funding, which prevents them from indulging in or creating leverage. With the exception of demand deposits, all the sources of funds are directly linked to the financing of assets and there is no disconnect between the sources and the application of funds. Whereas conventional banks tend to use the funds by investing heavily in debt securities (treasury bills and notes), Islamic banks use the funds to provide direct funding of real economic activities—an important function which has been fading from modern conventional banks.

As described in Chapter 6, the Islamic financial system proposes a capital market consisting of equity markets and securitized asset-linked securities. Islamic banks and financial intermediaries can serve three functions in

TABLE 8.3 Major assets on financial statements

Assets
i. Cash and its Equivalents
Cash in vaults
Cash with central bank
Balances with banks and other institutions
Cash equivalents
ii. Financing using Islamic Modes
<i>Qard-ul-hassan</i>
<i>Murabahah</i> and deferred sales
Leasing and hire purchase
<i>Mudarabah</i>
<i>Musharakah</i>
<i>Salam</i>
<i>Istisna'</i>
Others
Less provisions
iii. Portfolio Investments
Investment in companies, funds, shares
Investment in <i>Shari'ah</i> -compliant bonds, bills, securities
Investment in properties and real estate
Other investments
Less provisions
Other Assets
Prepaid expenses and other receivables (net)
Real estate and properties owned (net)
Fixed assets net of depreciation
Other assets (net)

TABLE 8.4 Sources and application of funds

Sources (liabilities and equity)	Application (assets)
Equity capital and shareholders' reserves	Short-term trade finance (<i>murabahah, salam</i>)
Demand and safekeeping deposits (<i>amanah</i>)	Regulatory cash-reserve requirement Medium-term investment (<i>ijarah, istisna'</i>)
Investment accounts (<i>mudarabah</i>) "pass-through"	Long-term partnerships (<i>musharakah</i>)
Special investment accounts (<i>mudarabah, musharakah</i>)	Fee-based services (<i>jo'alah, kifala</i> , and so forth)

Source: van Greuning and Iqbal (2008)

a securitized market. First, as “originator” of the assets, they can become the main and constant source of assets for the securitized market. In this way, Islamic banks become the supplier of the assets to the securitized market and then replace those assets with new assets. Second, similar to a conventional investment bank, Islamic banks can perform the important function of underwriting the asset-linked securities and also act as broker or dealer. Third, they can build a portfolio of asset-linked securities on their assets side. By keeping “asset-linked” securities on the assets, Islamic banks thus benefit from the liquidity of assets and the ability to buy and sell securities at market prices, which enable them to perform better portfolio management.

Table 8.5 shows different functional components of an Islamic bank from maturity and risk perspectives to show that an Islamic bank as a financial intermediary is able to offer the full spectrum of commercial and investment banking services in an efficient fashion. There is sufficient diversity on both the asset and liability sides to undertake all critical functions expected from an efficient financial intermediary.

DISTINCTIVE FEATURES OF THE ISLAMIC MODE OF INTERMEDIATION AND BANKING

Financial intermediation and banking differs from conventional banking in several ways. These are set out below.

Nature of Fiduciary Responsibilities

The agency theory has generated considerable interest in financial economics, including Islamic banking. In an agency relationship, one party (the principal) contracts with another party (the agent) to perform some actions on the principal’s behalf, and the agent has the decision-making authority. Agency relationships are ubiquitous: for example, agency relationships exist among firms and their employees, banks and borrowers, and shareholders and managers. Jensen and Meckling (1976) developed the agency model of the firm to demonstrate that a principal–agent problem (or agency conflict) is embedded in the modern corporation because the decision-making and risk-bearing functions of the firm are carried out by different individuals. They noted that managers have a tendency to engage in excessive perquisite consumption and other opportunistic behavior because they receive the full benefit from these acts but bear less than the full share of the costs to the firm. The authors termed this “the agency cost of equity,” and pointed out that it could be mitigated by increasing the manager’s stake in the ownership of the firm. In the principal–agent approach, this is modeled as the incentive-compatibility constraint for the agent, and an important insight from this literature is that forcing managers to bear more of the wealth consequences of their actions is a better contract for the shareholders.

TABLE 8.5 Functional components of an Islamic financial intermediary

Assets	Liabilities
Cash	Demand deposits (<i>amanah</i>)
100-percent reserves	
Trade Finance Portfolio	Short-term investment deposits (<i>mudarabah</i>)
Term: short-term	
Risk level: very low	
Instruments: <i>mudarabah</i> , <i>bay'salam</i>	
Portfolio of Consumer and Corporate Assets Financing	Restricted Investment deposits for varying maturities (<i>mudarabah</i>)
Term: short- and medium-term	
Risk level: low	
Instruments: <i>ijarah</i> , <i>istisna'</i> mortgages	
Syndicated Investment Portfolio	Restricted and unrestricted investment deposits. (<i>mudarabah</i>)
Term: Medium- to long-term	
Risk level: moderate to high	
Instruments: <i>mudarabah</i> , <i>musharakah</i>	
Fund Management	Wealth Management (<i>mudarabah</i> , <i>wikala</i> , <i>musharakah</i>)
Private Equity	
Joint Venture	
Term: Long-term	
Risk level: High	
Instruments: <i>mudarabah</i> , <i>musharakah</i>	
Fund of Funds	Investments through deposits or through tradable securities (<i>mudarabah</i> , <i>musharakah</i>)
Diversified portfolios specializing in market securities and investments in asset-linked securities of various risk and maturity profiles	
Fee-generating Activities	
Underwriting	
Asset Management	
Research	Equity capital (<i>musharakah</i>) Reserves

Applying the agency theory to profit/loss-sharing instruments such as *mudarabah* has been modeled by Haque and Mirakhor (1989) and Presley and Session (1994). These models found that under a *mudarabah* profit/loss-sharing contract, it is the managerial effort which picks up the role of policing the contract. A standard incentive-compatible interest-based contract

creates an explicit mapping between the input and remuneration of capital, so that the manager is left free to choose the individually optimal level of effort in each state contingent on the specified level of investment. However, in the case of a *mudarabah*, an explicit mapping between the remuneration of capital and the outcome of the project is created. A *mudarabah*, therefore, allows the contract to control directly the manager's incentive to exert effort, since this effort affects the relationship between capital investment and the outcome of the project. Under a *mudarabah* contract, the manager is free to choose the individually optimal level of investment in each state of the economy contingent on his contractually specified level of effort. Presley and Session's model concludes that these individually optimal levels correspond to the full-information, productively efficient levels such that a mean variance improvement in capital investment is obtained—that is, average investment is increased whilst inefficiently large fluctuations around this level are reduced.

With financial intermediation in Islam, the intermediary simply “passes through” the performance of its assets to the investors/depositors on its liability side. There is an element of risk sharing present in the contractual agreement between the financial intermediary and the depositors/investors. The assets on the asset side of the balance sheet could be in the form of over-the-counter assets financed by the Islamic bank or direct investments in marketable securities of *Shari'ah*-compliant assets; that is, equities or asset-linked securities. Table 8.6 describes the contractual roles of an Islamic financial intermediary (IFI). For Islamic banks, there is a greater diversity of contractual agreements as the bank may be acting as a trustee in one mode of intermediation and as a “partner” in another. The bank also enters into a principal/agent model on both sides of the balance sheet. The purpose of showing different contractual agreements is to show that Islamic banks have more fiduciary responsibilities which have a direct impact on the governance of the financial institution.

Profit/Loss Sharing

The profit/loss-sharing concept implies a direct concern for the profitability of the physical investment on the part of the creditor (the Islamic bank). The conventional bank is also concerned about the profitability of the project, because of concerns about potential default on the loan. However, the conventional bank puts the emphasis on receiving the interest payments according to set time intervals, and so long as this condition is met, the bank's own profitability is not directly affected by whether the project has a particularly high or a rather low rate of return. In contrast, the Islamic bank has to focus on the return on the physical investment, because its own profitability is directly linked to the real rate of return.

The direct links between the payment to the creditor and the profitability of the investment project is of considerable importance to the entrepreneur. Most importantly, profit-sharing contracts have superior properties in the

TABLE 8.6 Contractual roles of an IFI and a conventional bank compared

	Contract	Contractual role of IFIs		
		Trustee	Partnership	Principal/ agent
	Link to conventional finance	Agency/ brokerage	Investment banking	Conventional/ commercial banking
Liabilities—funding sources				
Demand deposits	<i>Amana</i> (Trust)	✓		
Investment accounts	<i>Mudarabah</i>			✓
Special-investment accounts	<i>Mudarabah</i>			✓
	<i>Musharakah</i> (Partnership)		✓	
Equity—shareholders' funds	<i>Musharakah</i> (Partnership)		✓	
Assets—application of funds				
Transaction contracts				
Short-term trade financing				
	<i>Murabahah</i>			✓
	<i>Bay' al-salam</i>			✓
	<i>Bay' al-muajjal</i>			✓
Medium-term investments				
	<i>Ijarah, Istisna'</i>		✓	✓
	<i>Mudarabah,</i> <i>Musharakah</i>		✓	✓
Long-term partnerships				
	<i>Mudarabah,</i> <i>Musharakah</i>		✓	
			✓	
Fee-based services				
	<i>Jo'alah, Kifala, etc.</i>	✓	✓	✓

Source: van Greuning and Iqbal (2007)

area of risk management, because the payment the entrepreneur has to make to the creditor is reduced in periods of economic downturn. Also, if the entrepreneur experiences temporary debt-servicing difficulties in the interest-based system, for example, on account of a short-term adverse demand shock, there is the risk of a magnification effect; that is, credit channels might dry up because of lenders overreacting to the bad news. This is due to the fact that the bank's own profitability is not affected by the fluctuating fortunes of the client's investment, except when there is a regime change from regular interest payments to a default problem. In other words, interest payments are due irrespective of the profitability of the physical investment, and the conventional bank experiences a change in its fortunes only when there are debt-servicing difficulties. However, a temporary cash-flow problem for the entrepreneur and just a few delayed payments might be seen to be a regime change, which could blow up into a "sudden stop" in lending. In the Islamic model, these temporary shocks would generate a different response from the bank, because the lenders receive information on the ups and downs of the client's business regularly in order to calculate their share of the profits, which provides the important advantage that the flow of information, as indeed the payment from the borrower to the lender, is more or less on an ongoing basis.

Enhanced Monitoring

Islamic financial contracting encourages banks to focus on the long term in their relationships with their clients. However, this focus on long-term relationships in profit/loss-sharing arrangements means that there might be higher costs in some areas, particularly with regard to the need for monitoring the performance of the entrepreneur. Conventional banks are not obliged to oversee projects as closely as Islamic banks, because the former do not act as if they were partners in the physical investment. To the extent that Islamic banks provide something akin to equity financing as against debt financing, they need to invest more in managerial skills and expertise in overseeing different investment projects. This is one reason why there is a tendency amongst Islamic banks to rely on financial instruments that are acceptable under Islamic principles but may not have the best risk-sharing properties, because in some respects they are closer to debt than to equity.

Asset/Liability Management

Theoretically, Islamic banks offer their asset portfolios in the form of risky open-ended "mutual funds" to investors/depositors. By contrast, banks in the conventional system finance the assets through issuing time-bound deposit contracts. This practice results in solvency and liquidity risks, since their asset portfolios and loans entail risky payoffs and/or liquidation costs prior to maturity, while their deposit contracts are liabilities that are often payable instantly at par. In contrast, Islamic banks act as agents for investors/depositors and therefore create a pass-through intermediation between

savers and entrepreneurs, eliminating the risks faced by their conventional counterparts.

One of the most critical and distinguishing features of financial intermediation by Islamic banks is the inherent design by which the assets and liabilities sides of the Islamic bank's balance sheet are matched. In a conventional bank, deposits are accepted at a predetermined rate, irrespective of the rate of return earned on the bank's assets side. This instantaneously creates a fixed liability without any certainty that the bank will be able to earn more than it promised or was committed to paying to the depositors. Since the return on the asset depends on the bank's ability to invest the funds at a higher rate than the one promised on the liability side and this rate is unknown, it can lead to the classical problem of mismatch between assets and liabilities.²

Since there is no such predetermined rate on the assets side of the Islamic bank, the asset–liability mismatch does not arise. It has been argued that because of the pass-through nature of the business and the close matching of assets and liabilities, financial intermediation by Islamic banks contributes to the stability of the financial system.

Universal Banking

It is also interesting to note that the structure of a hypothetical Islamic bank or financial intermediary combines the activities of commercial and investment banking, as shown by the boxes on either side of the balance sheet in Figure 8.1. Here, each box on the assets and liabilities sides represents a specialized function or financial service, whereas the arrows across liabilities and assets indicate how assets and liabilities can be matched. Each box can also help us understand the separation of assets and liabilities based on their function, risk profile, maturity structure and the targeted market. Similar to a conventional commercial bank, such a financial intermediary can raise funds as deposits and invest them in low-risk, high-quality, investment-grade trade financing or asset-backed securities. Like an investment bank, it can offer underwriting services, asset management through specialized *mudarabah* funds and other advisory services such as research about financial markets, the maintenance of benchmarks, portfolio management, and risk management.

Shari'ah Boards

One of the distinctive features of Islamic banking is the existence of a *Shari'ah* board that comprises religious scholars and the influence this board exerts on the operations of the bank. Islamic banks cannot introduce a new product without the prior permission and approval of their *Shari'ah* board and, depending on the affiliation of the religious scholars on the board to any particular school of jurisprudence, this can determine the success or failure of a product with its target clients. A shortage of *Shari'ah* scholars well

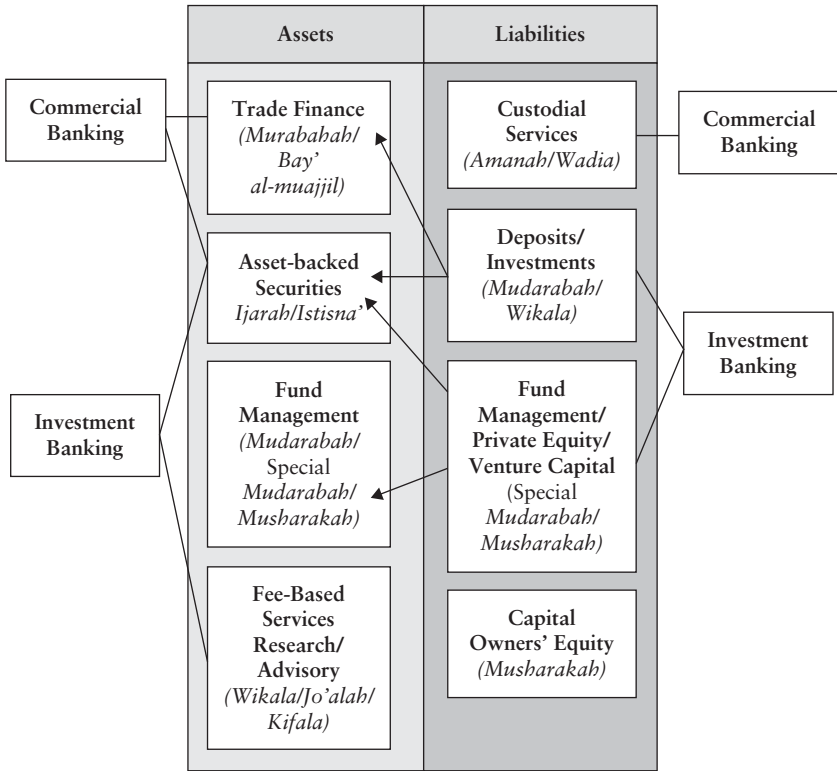


FIGURE 8.1 Conceptual balance sheet of an IFI

versed in both *Shari'ah* matters and modern banking, means that many of these scholars sit on a number of boards, so that each institution may claim strong endorsement to enhance the credibility of its practices. The existence of *Shari'ah* boards provides satisfaction to the depositors that the board is monitoring the institution's compliance with *Shari'ah* principles.

Table 8.7 shows the actual balance sheet of the Dubai Islamic Bank as of December 2009. On the liabilities side, customers' deposits are the main liabilities and there is no breakdown of types of deposits. On the assets side, there are four major assets. Of course, Islamic investments are the biggest contributor but there is no information on what mode of investment is used. After investments, cash reserves with the central bank are significant. The reason for keeping large cash reserves is that there is a lack of liquid investment vehicles available to Islamic banks. In addition, after the financial crisis, several financial institutions raised their cash reserves to show ample liquidity and to send a signal to their customers that their liquidity needs can be met easily. The third-largest category of assets is *sukuk* (Islamic bonds), investments which are part of the trading book. There is also noticeable size of real estate and property investments.

THE ROLES AND FUNCTIONS OF THE FINANCIAL INTERMEDIARY ARE SUMMARIZED BELOW.

- The distinction of the depositor is limited to demand deposits, while the depositor is treated as an investor for all other type of deposits.
- The depositor/investor can interact with the financial intermediary as principal/agent, directing the financial intermediary to invest funds for a fee, or can become a partner with the financial intermediary in sharing risks and, therefore, profits and losses.
- The financial intermediary can perform capital mobilization through direct financing or through the underwriting of marketable securities. The financial intermediary can construct diversified portfolios of assets with varying risks and maturities to match the depositors/investors' investment objectives.
- Given the basic building blocks of intermediation, an optimal and efficient intermediation can be implemented with a full spectrum of commercial- and investment-banking activities. Given this, we can say that intermediation resembles universal banking, with the major difference being that even the commercial banking is conducted on a risk-sharing basis and investment banking is encouraged.

TABLE 8.7 Dubai Islamic Bank: Balance sheet, December 2009

Dubai Islamic Bank	
Annual Report as of Dec. 31, 2009	
Assets	AED'000
Cash and balances with Central Banks	11,611,570
Balances and deposits with banks and other financial institutions	1,352,299
International murabahaat with financial institutions, short term	1,204,959
Islamic financing and investing assets, net	49,924,941
Investments in Islamic <i>sukuk</i>	9,290,797
Investments in associates	4,295,168
Other investments	1,925,950
Properties under construction	388,648
Properties held for sale	157,269
Investment properties	1,996,288

Receivables and other assets	1,464,071
Property, plant and equipment	657,795
Goodwill	34,516
Total assets	84,304,271
LIABILITIES	
Customers' deposits	64,195,503
Due to banks and other financial institutions	1,449,051
<i>Sukuk</i> financing instruments	2,415,034
Medium-term <i>wakalah</i> finance	3,752,543
Other liabilities	3,370,804
Accrued <i>zakat</i>	140,536
Total liabilities	75,323,471
EQUITY	
Share capital	3,617,505
Treasury shares	(70,901)
Statutory reserve	2,731,879
Donated land reserve	276,139
General reserve	2,350,000
Exchange translation reserve	(77,841)
Cumulative changes in fair value	(723,713)
Hedging reserve	50,600
Retained earnings	822,222
Equity attributable to equity holders of the Parent	8,975,890
Non-controlling interest	4,910
Total equity	8,980,800
Total liabilities and equity	84,304,271
Contingent liabilities and commitments	25,638,030

Other Forms of Intermediation

Whereas early forms of Islamic financial institutions focused on commercial banking activities, more diverse forms have emerged in the last two decades to cater to the demands of different segments of the market. Although the Islamic mode of banking has been mandated and adopted by the Islamic Republics of Iran, Pakistan and Sudan, the supply of *Shari'ah*-compliant products has been primarily led by the private sector. In the Islamic Republic of Sudan, however, the State has actively promoted the introduction of new modes of financing.

In fact, private Islamic banks as a group are becoming some of the largest private-sector financial institutions, with growing networks through branches and/or subsidiaries within the Islamic world. While there is no standard way of grouping Islamic financial institutions, they can be divided into the following broad categories according to the services they offer:

- Islamic windows
- Islamic investment banks and funds
- Islamic mortgage companies
- *Mudarabah* companies.

As we saw in Chapter 1, Islamic windows are not independent financial institutions, but are specialized set-ups within conventional financial institutions that offer *Shari'ah*-compliant products for their clients.

In the 1980s, the dearth of quality investment opportunities within Islamic banks created business opportunities for conventional Western banks to act on their behalf in placing funds in commerce and trade-related activities, by arranging for a trader to buy goods on behalf of the Islamic bank and to resell them at a mark-up. Gradually, Western banks began to offer Islamic products of their own and, given the growing demand for *Shari'ah*-compliant products, non-Western conventional banks also started offering Islamic windows targeting high-net-worth individuals who wanted to practice Islamic banking.

ISLAMIC BANKING: THEORY VS. PRACTICE

The structure and current practices of Islamic banks differ in several respects from the theoretical models discussed in the previous chapter. Some of these differences are the obstacles faced in the full implementation of an Islamic financial system. These factors not only affect the further evolution of the industry, but also pose challenges to the regulators. The following are the highlights of the main divergences between the theory and the practice.

Under-utilization of Risk-sharing Contracts

The first difference is the significant deviation of the structure of assets from what the theory prescribes. On the assets side of the balance sheet, as expected, a clear preference for asset-backed securities (based on trade finance) is evident, as opposed to partnership-based instruments requiring the sharing of profits and losses. This preference arises from the fact that sales-related securities are considered low risk and resemble familiar conventional fixed-income securities in their risk–return profile.

Islamic banks have not utilized partnership-based instruments, such as *mudarabah* and *musharakah*, on their assets side because of the high monitoring costs associated with these instruments resulting from asymmetrical

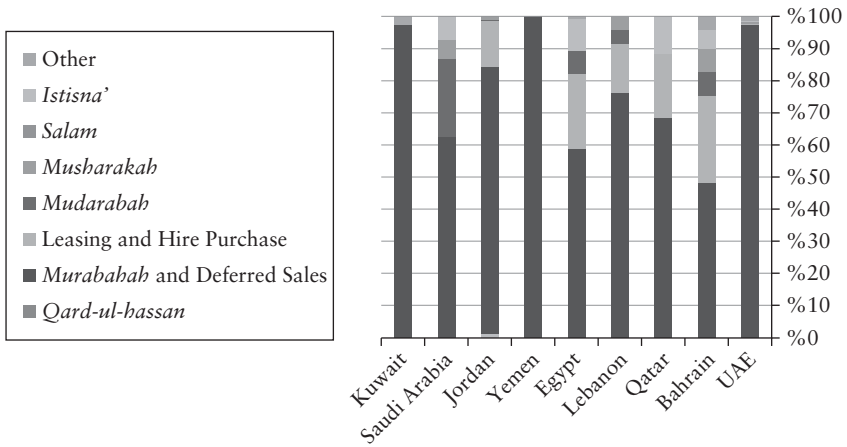


FIGURE 8.2 Composition of assets of Islamic banks, 2008

Source: Middle East Flagship Report (2010)

information and moral hazard. The banks are not willing to allocate their limited resources for monitoring purposes. In addition, the market for partnership-based financing requires a well-functioning infrastructure where information about potential entrepreneurs and their projects is readily available, and the majority of markets where Islamic banks are correctly operating lack such sophisticated infrastructure.

Figure 8.2 shows the composition of various modes of financing across different countries for 2008. The bulk of the financing is undertaken in the form of trade financing activities and, contrary to the partnership-based financing the system promotes, equity-based assets are seriously lagging behind. Heavy reliance on trade financing is often referred to by critics as “*mudarabah syndrome*” and is not considered as a positive feature. In addition to trade-based instruments, Islamic banks prefer leasing, which is considered to have less-uncertain returns than the partnership-based *musharakah* or *mudarabah*.

Separation of Investor Classes

Another aspect of the divergence between the practice and the theory is the choice and application of accounting policies that affect the allocation of income between shareholders and account holders or between different classes of account holders. In theory, Islamic finance has clear barriers in the deployment of assets between those funded by demand deposits, general investment accounts, special investment accounts and equity. However, current practice does not include such barriers, with the asset side treated as one large bucket with all stakeholders’ funds mixed together. In its functions, an Islamic bank is a hybrid of both a commercial and an investment bank,

and more akin to a universal bank. However, unlike conventional universal banks, Islamic banks do not erect firewalls to separate, legally, financially and managerially, their investment and commercial banking services. As a result, funds in investment accounts are not “ring-fenced” from the funds of others, including the equity holders. This is one of the most critical deviations in the practice of Islamic banks and one that poses a tough challenge to regulators because different stakeholders need to be regulated under different regulating principles and therefore taking a one-size-fits-all approach becomes restrictive and may defeat the whole objective of regulation in this case. This is further elaborated and discussed in the chapter on the regulation of Islamic financial institutions.

Investors’ Rights and Governance

Another divergence between principle and practice, related somewhat to the foregoing issues, is the status of the investment accounts. Although they are supposed to be operating on profit and loss principles, actual practice differs. IFIs have faced criticism when they write down the value of assets, because they do not in practice write down the value of deposits. This implies that losses on the asset side are absorbed by either other deposit holders or by the equity holders. This practice raises a question on their degree of transparency and information disclosure. It also raises the issue of the need to separate asset types to match them closely to liabilities, either through firewalling or through segmentation.

This deviation leads to the question of the governance rights of the investment account holders. Large investment accounts serve as sources of capital to finance pools of investments and assets of the financial institution, but their holders are not granted any participation in the governance or monitoring process. The majority of investment account holders are individuals who may not organize themselves collectively to perform the necessary monitoring. Under such circumstances, the responsibility of the regulators and the *Shari’ah* boards increases further, to ensure that adequate monitoring mechanisms are in place to protect the rights of the investment account holders.

CRITICAL ISSUES WITH CURRENT PRACTICE

Illiquidity

Predominantly, the transactions on the assets side of Islamic banks consist of customized or tailor-made transactions between the bank and its client. There is no organized market to securitize the bank’s assets and to trade the securities in the market, severely limiting the liquidity of the financial institutions. As a result, Islamic banks have limited themselves to a small set of asset classes, which constrain their opportunities for portfolio diversification

and its benefits. Although this practice is conservative in its nature as assets are collateralized, it has associated costs from the additional exposure to credit and operational risk. This limited set of asset choices is a major impediment to the further growth of the Islamic financial services industry.

As mentioned earlier, Islamic financial institutions operate on a limited set of short-term traditional instruments and there is a shortage of products for medium- to long-term maturities. One reason for these shortcomings is the lack of markets in which banks can sell, trade, and negotiate their financial assets. There are no avenues for securitizing dormant assets and taking them off the balance sheet. In other words, the secondary markets lack depth and breadth. An effective portfolio-management strategy cannot be implemented in the absence of liquid markets, as opportunities for diversification become limited. Since the needs of the market for liquidity and risk and portfolio management are not being met, a serious effect of this underdevelopment is that the system is not functioning at its full potential. There is a growing realization that sustainable long-term growth largely depends on having well-functioning secondary markets and on the introduction of liquidity-enhancing and risk-sharing products.

Limited Scope

In the absence of debt markets, the underdevelopment of equities markets and the lack of derivatives markets, the role of the financial intermediary providing Islamic financial services becomes critical. The financial intermediary not only becomes the main source of capital and risk mitigation, but is also expected to undertake other activities with a wider scope. The changing global financial landscape expects Islamic banks to go beyond their traditional core commercial banking role and develop other areas dealing with securities, risk management, and insurance businesses, which are currently either lacking or are on a limited scale.

The distinction between traditional commercial banking and investment banking is becoming blurred and there is a global trend of mixing financial services with non-banking services in an efficient fashion. Although this trend is prevalent in major industrial economies, it has not been embraced by many of emerging markets where Islamic finance is practiced. For example, a recent study, which ranked several countries in the Middle East region (where Islamic finance is dominant) according to their level of financial development, finds that throughout the region countries fared poorly on indicators for a strong institutional environment and for the development of the non-bank financial sector.³

Limited Maturity Structure

The over-dependence of Islamic banks on trade and commodity financing instruments has limited their choice of maturity structure, since a major portion of such financing is of short-term maturity. Whereas the theoretical

models expect the financial intermediaries to participate in the full range of maturity structures to get the benefits of portfolio diversification, in reality, Islamic banks shy away from instruments requiring a medium- and long-term commitment. A cursory look at the data on the asset maturities collected from six Islamic banks in 2003 makes it clear that 54 percent of their assets had a maturity of less than one year and 39 percent, of less than six months. IFIs tend not to invest in longer maturities given the lack of liquidity of the medium- to long-term assets. With this reliance on short-term maturity, Islamic banks are unable to offer investment opportunities to investors who are interested in long-term investments.

Small Size and Fragmentation

Although the number of Islamic financial institutions (IFIs) has grown, the average size of their assets is still small by comparison with their counterparts in the conventional system. As of 2010, the assets of the world's top Islamic bank equated to just 2 percent of those of the top conventional bank. Indeed, these assets amounted to only 35 percent of the conventional bank ranked at 120th. The top conventional bank of any Muslim country (Turkey) is ranked at 103 in the world (*The Banker* 2010a and 2010b).

Given their small size, Islamic banks are unable to reap the benefits of the economies of scale and scope and attendant efficiency gains.

Concentrated Banking

Islamic banks tend to be concentrated in their deposit base or asset base, often concentrating on a few select sectors and avoiding direct competition. For example, one IFI may specialize in financing for the agriculture sector, whereas another might do the same in the construction sector without attempting to diversify into other sectors. This practice makes IFIs vulnerable to cyclical shocks in a particular sector. Dependence on a few select sectors, or a lack of diversification, increases an IFI's exposure to new entrants in the same sector, especially to foreign conventional banks that are better equipped to meet these challenges.

This concentration of the deposit or asset base can also be viewed as a lack of diversification, which increases their exposure to risk. Kahf (1999) showed that the average financing activities of IFIs have been primarily trade oriented (32 percent) followed by sectors such as industry (17 percent), real estate (16 percent), services (12 percent), agriculture (6 percent) and others (17 percent). Islamic banks are not fully exploiting the benefits of diversification, which come from both geographical and product diversification. At present, they rely heavily on maintaining good relationships with the depositors to earn the depositors' loyalty. However, this relationship can be tested during distress or changing market conditions, when the depositors tend to change loyalties and shift to large financial institutions that are perceived to be safer.

This risk of losing depositors raises a more serious exposure, termed “displacement risk.” Displacement risk refers to a situation where, in order to remain competitive, an IFI pays its investment depositors a rate of return higher than what should be payable under the “actual” terms of the investment contract, by forgoing part or all of its equity-holders’ profits, which may adversely affect its own capital. This is done to encourage its investment account holders not to withdraw their funds. Through a geographical diversification of the deposit base, an IFI can reduce its exposure to displacement or withdrawal risks. With the changing face of the banking business and the introduction of Internet-based banking, achieving a high degree of geographical diversity on the liabilities side is conceivable and should be encouraged.

ENDNOTES

1. Chapra and Khan (2001).
2. The failure of Savings and Loans companies in the United States during the 1980s is a classic example of bank failures arising from assets-liabilities mismatch.
3. See Creane *et al.* (2003).

CHAPTER 9

Capital Markets

The role of capital markets in promoting an efficient financial system cannot be overemphasized. Given that a developed financial system can make positive contributions to economic development, the existence of vibrant capital markets becomes a necessity for any economy. Capital markets facilitate long-term financing for businesses and entrepreneurs by attracting savings from a large pool of investors. These markets provide long-term capital to entrepreneurs through a series of short-term contracts (securities) with investors who may enter and exit the market at will. An efficient capital market is expected to perform the following functions:

- To provide a mobilization mechanism leading to an efficient allocation of financial resources in the economy.
- To provide liquidity in the market at the cheapest price; that is, the lowest transaction cost or low bid-ask spread on the securities being traded in the market.
- To ensure transparency in the pricing of securities by determining the price of the risk premia to reflect the riskiness of the security.
- To provide opportunities for constructing well-diversified portfolios and to reduce the level of risk through diversification across geographic regions and across time.

Capital markets consist of primary and secondary markets. Whereas primary markets are important to raise new capital and depend on the supply of funds, secondary markets make a significant contribution by facilitating the trading of existing securities. In some ways, secondary markets play an equally critical role by ensuring liquidity and fair pricing in the market and by giving valuable signals about the security. In other words, secondary markets not only provide liquidity and low transaction costs, they also determine the prices of the securities and their associated risk on a continuous basis, incorporating relevant new information as it arrives.

Just as capital markets play a critical role in the conventional financial system, their role in the Islamic financial system is equally important. Whereas conventional capital markets have an established track record, Islamic capital

markets are at a comparatively early stage of development. Conventional capital markets have two main streams: the securities markets for debt trading and the stock markets for equity trading. As we have seen, Muslims cannot participate in debt markets of any kind. The concept of stock markets is in consonance with the *Shari'ah's* principles of profit/loss sharing, but not every business listed on the stock market is fully compatible with the *Shari'ah*. These issues present challenges for the development of Islamic capital markets.

The need for capital markets was realized at the early stages of development of the Islamic financial industry, but not much progress was made. During the 1980s and 1990s, Islamic financial institutions (IFIs) mobilized funds successfully through growing deposits, which were invested in a few financial instruments, mostly dominated by commodities or trade financing. However, limited investment opportunities, a lack of liquid assets and other constraints meant that the IFIs' asset composition remained fairly static and heavily focused on short-term instruments. With continuing demand for *Shari'ah*-compliant financing, there was a pressing need to develop capital markets to facilitate long-term financing for businesses and to create portfolio diversification opportunities for investors and financial intermediaries.

By the late 1990s, Islamic financial markets had realized that the development of capital markets was essential for their survival and growth. Meanwhile, the wave of deregulation and liberalization of capital markets in several countries led to close cooperation between IFIs and conventional financial institutions to find solutions for liquidity and portfolio management. Since then, several efforts have been made in this respect, particularly in the development of asset-backed securities and of Islamic funds comprising portfolios of securities such as, but not limited to, equity stocks or commodities. IFIs kept demanding a security that could behave like the conventional fixed-income debt security at a low level of risk but also complied with the *Shari'ah*. In addition, they wanted to extend the maturity structure of their assets to go beyond the typical short-term maturity given by trade-finance instruments. This led to experimentation with the *sukuk*, which has risk/return characteristics similar to a conventional debt security.

STOCK MARKETS AND ISLAMIC FUNDS

As discussed in Chapter 6, equities and stocks are the core capital markets in the Islamic financial system as they promote risk sharing and profit/loss sharing. With the exception of Malaysia, stock markets in Muslim countries are developing only gradually, forcing Islamic investors to invest in the stock markets of developed economies. However, there are certain rules which need to be followed in selecting stocks. Though there are growing numbers of Islamic funds becoming available that are *Shari'ah*-compliant, there is a need to develop stock markets in countries that are serious about developing Islamic finance. The concept of a market to trade equities is fully compatible with the *Shari'ah* but the operations and trading rules and practices should also be compliant.

Islamic Funds

Islamic investment funds emerged in the late 1980s, operating on the basis of a principal–agent model. Clients invest capital in the fund, which in turn channels capital only to select companies which satisfy *Shari'ah* requirements. Funds may be restricted to a specific asset class—such as real estate, leasing, commodities, or equities—or could be general purpose and diversified across asset classes, such as a hybrid of equities and commodities. As we have seen, Islamic investment funds operate on the basis of a variety of *Shari'ah*-compliant contracts, including *murabahah*, *musharakah*, *salam*, *istisna'*, and *ijarah*. The funds provide low-, medium-, and high-risk opportunities ranging from short-term (under one year) to long-term (over three years) maturity. Portfolios of *sukuk* are also available as investible funds. Figure 9.1 shows the breakdown of market share of different investment funds, illustrating that equity funds dominate the market.

Currently, there are about 750 Islamic funds, managing more than US\$50 billion-worth of assets. This is compared to more than 65,000 conventional funds, with more than US\$20 trillion in assets under management. It is worth noting that more than 50 percent of Islamic fund managers have less than US\$50 million under management. There is a growing trend of offering funds to institutional investors in addition to retail investors. For example, during the period 2005–10, 75 percent of funds introduced were targeted to institutional investors.

The principles underpinning activities of Islamic funds make for socially responsible investment and are therefore also attractive to non-Muslim investors interested in “ethical” finance. By performing the dual functions of risk intermediation and the effective allocation of excess liquidity, Islamic investment funds have earned a reputation as a fundamental pillar of the burgeoning Islamic financial industry.¹ They provide a wide array of portfolio-management options and mobilize long-term investments necessary for the expansion of capital markets.

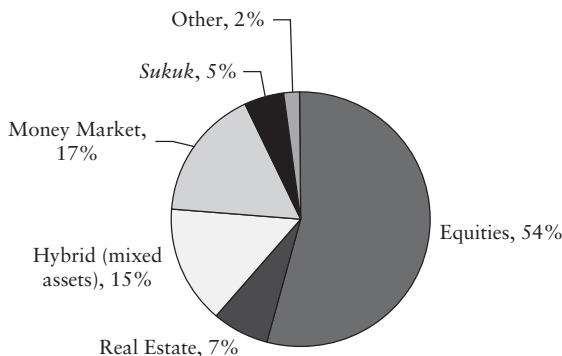


FIGURE 9.1 Distribution of types of Islamic funds, March 2011

Source: IFIS

With the growth of Islamic funds, a comprehensive array of indices which track the performance of *Shari'ah*-compliant equity portfolios are being offered by reputable sources such as Dow Jones. Empirical studies have concluded that *Shari'ah*-compliant funds have performed as well as—and, in some cases, better than—conventional funds, and there is no significant risk associated with investing in *Shari'ah*-compliant funds over conventional mutual funds. In fact, studies comparing the performance of Islamic and conventional funds before and during the global financial crisis of 2008 show that Islamic funds performed better on a risk-adjusted basis.²

Equity Funds

Islamic equity funds are similar to the Socially Responsible Investment (SRI) funds of the conventional market. In constructing equity funds, the stocks of companies involved in businesses considered unlawful under the *Shari'ah* are screened out before a filtration process is applied by each fund manager regarding certain financial ratios such as the existence of debt or income from debt securities.

While the first part of this process is easy enough, the second part is not as straightforward because it relies on the judgment of individual fund managers, and different jurisdictions have different practices with regard to other filtering criteria. The following are the general guidelines used for screening and filtering the stock of a company before it is included in an equity fund.

- ***Shari'ah*-compatibility of business:** The main business of the company should be in conformity with the principles of the *Shari'ah*. This constraint eliminates all companies dealing with the financial services industry operating on interest, such as conventional banks and insurance companies; companies manufacturing, selling or offering liquor and pork products; and businesses involved in activities such as gambling, night clubs, casinos, pornography, and so on (see Table 9.1, for example).
- **Existence of debt:** Stocks of companies that depend heavily on debt financing, as determined by their debt ratio, are eliminated. Different funds set different levels of tolerance depending on how strictly they want to adhere to the *Shari'ah*. The typical level of tolerance is a maximum debt-to-equity ratio of 33 percent. This constraint is applied for ensuring that the company is capitalized in an acceptable manner and with the expectation that debt may be eliminated in the future. Some *Shari'ah* scholars, however, encourage shareholders to raise their voices against the use of debt financing altogether.
- **Interest income:** Fund managers also try to avoid those stocks where companies have substantial amounts of income derived from interest on securities. This could be the case of companies that invest excess liquidity in debt securities and therefore earn interest income that becomes part of the company's profits. However, if only a negligible portion of income is driven through interest, *Shari'ah* scholars have given permission to

TABLE 9.1 Business activities excluded by the Dow Jones *Shari'ah* Board

Distillers and vintners	Restaurants and bars
Food products and tobacco	Conventional banks and financial institutions
Recreational products/services	Full-line insurance and insurance brokers
Harmful environmental records/ bad employee records	Conventional financial services
Food retailers and wholesalers	Property and casualty insurance
Broadcasting and entertainment / media agencies	Reinsurance and life insurance
Gambling / hotels / cinemas / pornography	Consumer finance
Alcohol and pork-related products	Human cloning and aborted human fetuses

Source: Dow Jones Islamic Market Index

acquire the stock on two conditions. First, the shareholder must express his disapproval against such dealings, preferably by raising his voice against such activities at the company's annual general meeting. Second, a cleansing of interest income should be done through a contribution to charity. It is suggested that the proportion of interest income in the dividend paid to the shareholder must be given in charity, and must not be retained by the shareholder. For example, if five percent of the company's income is derived from interest-bearing deposits, an equal percentage of the dividend must be given to charity to purify the income derived.

- **Negotiability of shares (liquidity test):** According to *Shari'ah* scholars, the shares of a company are negotiable only if the company owns some illiquid assets. Although there is no fixed tolerance level for illiquid assets, a ratio of 33 percent is typically used. The reasoning behind this constraint is that if all the assets of a company are in liquid form (that is, money), they cannot be purchased or sold except at par value, because money cannot be traded except at par.
- **Ordinary vs. preferred stock:** Although there is general consensus among *Shari'ah* scholars on the permissibility of ordinary shares, since they represent undivided ownership in the business of the company by the shareholders, other forms of shares such as preferred stock and warrants do not have the same permissibility. This is because, unlike ordinary shares, preferred stock and warrants promise a definite return to their holders.
- The demand for Islamic equity funds and the successful application of the screening process have been supported by the introduction of several equity indices. The Dow Jones Islamic Market Index (DJIMI), for example, was launched in February 1999, and was followed later that year by the Kuala Lumpur *Shari'ah* Index (KLSI) and the FTSE Global

Islamic Index Series (FTSE-GII). The market capitalization of the Global DJIMI as of February 28, 2011 was estimated to be US\$21.92 trillion, and the universe of *Shari'ah*-compliant stocks included 2,468 stocks (see <http://www.djindexes.com/islamicmarket/>). The number of the stocks included is relatively low because the DJIMI includes only those stocks that are open to an international investor who can repatriate the proceeds. As a result, several of the qualified local stocks are excluded. The screening process may also differ from index to index. For example, whereas the DJIMI applies ratios derived from both the income statements and the balance sheet, Malaysian indices use only income-statement ratios to determine debt or liquidity levels.

Table 9.2 shows the screening process used to construct the Dow Jones Islamic Index.

Figure 9.2 shows the trend of Islamic indices in different markets since 2004.

TABLE 9.2 Dow Jones Islamic Index screening

1. Screens for *Shari'ah*-compatible businesses:

Based on revenue allocation, if any company has business activities in the *Shari'ah*-inconsistent group or sub-group of industries, it is excluded from the Islamic Index universe. The DJIMI *Shari'ah* Supervisory Board established that the following broad categories of industries are inconsistent with the precepts of the *Shari'ah*: alcohol, pork-related products, conventional financial services (banking, insurance, etc.), entertainment (hotels, casinos/gambling, cinema, pornography, music, etc.), tobacco, and weapons and defense industries.

2. Financial ratios filter:

Stocks of companies passing the following filter for financial ratios are included as components of the Dow Jones Islamic Market Index.

2.1. Debt to Assets:

Exclude companies if Total Debt divided by Trailing 12-Month Average Market Capitalization is greater than or equal to 33 percent. (Note: Total Debt = Short-Term Debt + Current Portion of Long-Term Debt + Long-Term Debt)

2.2. Liquid Assets to Total Assets:

Exclude companies if the sum of Cash and Interest Bearing Securities divided by Trailing 12-Month Average Market Capitalization is greater than or equal to 33 percent.

2.3. Receivables to Assets:

Exclude companies if Accounts Receivables divided by trailing 24-month average market capitalization is 33 percent or more.

Source: Syed (2005) and www.djindices.com/islamicmarkets

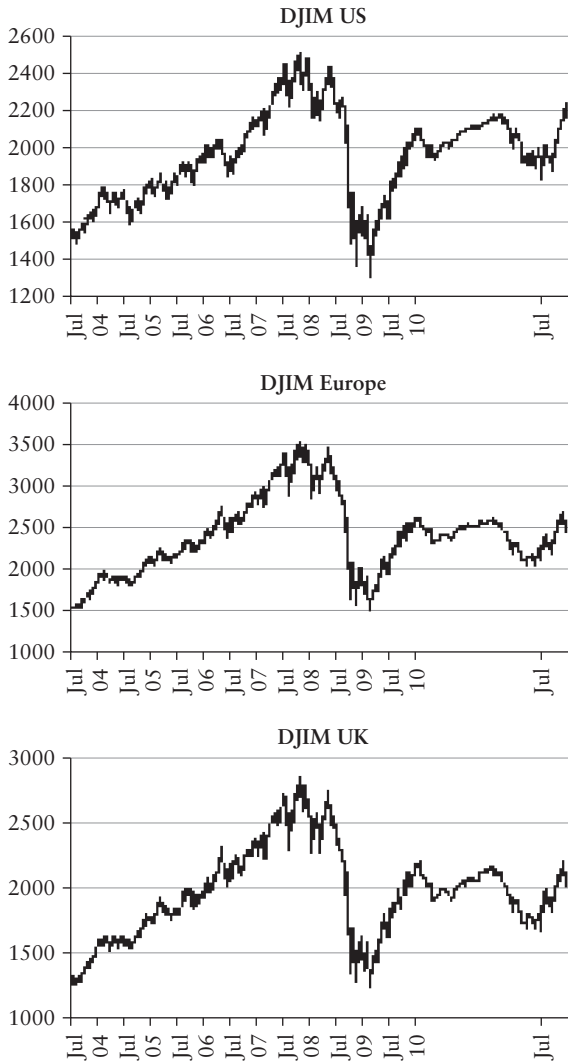


FIGURE 9.2 Dow Jones Islamic Index trends in Global (DJIM), US and European markets

Source: IFIS

Challenges for Equity Funds

The following issues and challenges need to be addressed for the further growth and development of Islamic equity funds:

- The compliance status of companies changes over time because of mergers and acquisitions, changes in the composition of business activities,

the availability of new financial information, changes in capital structure, and the daily change in market capitalization—the major decision-maker for *Shari'ah* financial ratios. This means that the compliance status needs to be monitored on a frequent basis so that:

- i) fund managers respond quickly to compliance changes
 - ii) *Shari'ah* boards are notified and consulted regarding status changes
 - iii) the necessary purification exercise is carried out with respect to status changes.³
- This means that Islamic funds require a higher degree of compliance and monitoring and support from good information and technology systems to ensure compliance.
 - The shallow stock markets in many OIC countries do not offer opportunities for meaningful portfolio construction after applying the screening criteria. Several of the listed stocks have weak financials and do not have depth in the market. In market capitalization terms, Malaysia has the largest segment of *Shari'ah*-compliant stocks, followed by the Karachi Stock Exchange (KSE), Turkey and Bahrain. The low proportion of *Shari'ah*-compatible markets is due to the high debt-to-equity ratio of a majority of the listed companies, which disqualifies them for inclusion in the equity funds.
 - The screening criteria are not very stable, as changing market conditions can change a company's financial ratios in such a way that it may or may not pass the filter set by the fund manager from one period to another. For example, depending upon the market price, a stock can be in and out of the fund during a relatively short period of time as a result of fluctuating debt-to-equity ratios. This can have an adverse effect on the diversification of the portfolio and may lead to additional transaction costs each time a portfolio is re-balanced.
 - As a result of the screening and filtering process, the resultant universe of stock may not be large enough to offer good opportunities for portfolio diversification. Efforts should be made to expand the universe of *Shari'ah*-compliant stocks.
 - On a more serious note, the main emphasis of fund managers has been on the screening mechanism, but little attention has been paid to certain market practices such as short-selling and margin account maintenance, which are not compatible with the *Shari'ah*. Practices followed by each fund manager should be clearly spelled out and should be cleared by *Shari'ah* scholars.

Commodity Funds

Commodity funds are also popular among Islamic investors, whose contributions are used in purchasing commodities for resale. The profits generated by the sales represent the fund's income of the fund, which is distributed pro rata among the subscribers. Commodity funds are subject to certain conditions such as (i) short sales are not allowed; (ii) forward sales are allowed only in the case of *salam* and *istisna'*; and (iii) dealing in certain

commodities, such as pork or alcohol, is prohibited. Many of the commodity funds are developed by financial intermediaries or by conventional Western banks to cater to high-net-worth individuals.

DEVELOPMENT OF EQUITY MARKETS

The Islamic economic system relies upon vibrant markets for equity-based securities. A formal model for a stock market organized in strict accordance with Islamic principles has yet to be formulated, but there have been a few attempts to identify the issues that distinguish an Islamic stock market from its conventional counterpart. There are at least three major structural issues that need to be resolved, however, as set out below.

Limited Liability

First and the foremost is the question of what is the best contractual agreement representing a share in a joint stock company with limited liability. Limited liability raises the issue of how to deal with a legal entity such as a corporation, which has a legal “personality” and needs to be treated as a “juridical person.” Some argue that limited liability conflicts with the basic Islamic moral and legal principle that obligations are, as it were, indestructible without agreed release of forgiveness from the creditor.⁴ In this respect, *fiqh* scholars need to address several critical issues such as the acceptance of a corporation as a partnership (on a *musharakah* basis) or some other similar contract. In addition, what happens to the liability in case of the insolvency of the juridical person (that is, the company)? Some *Shari’ah* scholars are of the view that there are certain precedents wherefrom the basic concept of a juridical person may be derived by inference.⁵

Contractual Structure of an Equity Stock

The second issue is related to the type of contract most appropriate to represent a common share as a partnership in a joint stock company. The *Shari’ah* identifies two broad categories of *musharakah* contracts: *musharakah mulk* which gives the partner ownership rights to a specific real asset; and *musharakah aqad*, which grants the partner ownership rights to the value of assets without any specific linkage to any real asset. It is important to understand this distinction. For example, if a stock is represented as *musharakah mulk*, then buying and selling of the stock will be equivalent to buying and selling an identifiable real asset and hence becomes subject to the rules applicable for *bay’* (trade/sale). On the other hand, if a stock is treated as *musharakah ‘aqd*, it is not subject to *bay’* rules but this raises other issues such as trading, valuation, and possession. A review of current rulings indicates that the joint stock company has been treated as a new form of *musharakah* which is neither of the above but a combination of the two, in that the rulings

regarding buying and selling stocks are largely treated under the former, while shareholder rights and basic investment operations are treated under the latter. This adds to the confusion surrounding the issue. Shabsigh (2002) argues that classifying the joint stock company as *musharakah mulk* renders most transactions in a stock market illegal from the *Shari'ah*'s point of view.

Negotiability and Tradability

The third, and most critical, structural issue to be resolved is related to the negotiability, transferability and tradability of stocks in primary and secondary markets. While Islamic law encourages trading and markets in all tangible goods and properties, it restrains, if not prohibits, the trading of financial interests under the suspicion of trading leading, through a back door, to the prohibited element of *riba*. The law blocks trading in monetary obligations (such as *dayn* (debt), currency, or equivalents of currency), obligations demarcated in generic goods (for example, so many bushels of a particular grade of wheat), and even contingent or future rights generally. For example, the *Shari'ah* ruling being followed at present is that the stocks of a company are negotiable only if the company owns some non-liquid assets. If all the assets of a company are in liquid form (that is, money), the stock cannot be purchased or sold other than at par value. With the changing economic structure where there is a large number of economic entities engaging in providing services and holding illiquid assets, this poses serious problems. Consequently, a financial intermediary cannot exist in the form of a public company.

In addition to these structural issues, there are several operational aspects of conventional stock markets which are in direct conflict with the principles of Islamic markets. The following three operational differences are noteworthy.

Margin Accounts

First, the widely accepted practice of maintaining a margin account to purchase stocks can be questioned. Since margin accounts allow a buyer to purchase stocks using leverage and borrowed funds at the prevailing interest rate, this arrangement cannot exist in the Islamic economy. The usage of leverage in stock trading will eliminate a large number of buyers from the market, which in turn will directly hamper the liquidity in the market and result in a higher transaction cost and operational inefficiency.

Speculative Trading

Second, it is argued that trading in the stock markets opens the door to speculation and leads to practices amounting to gambling—another element strictly prohibited in Islam. The practice of day trading, which is popular in the conventional markets, raises the question of speculation. Earlier researchers in Islamic economics raised the concern that trading in stock markets is speculative and may contain the element of gambling, and

therefore measures need to be taken to eliminate or discourage speculative behavior. Recent scholars have distinguished between speculation and calculated risk taking based on information available in the market. Several measures have been suggested to reduce unwanted speculation and to eliminate the element of gambling. These measures include designing a tax structure that is linked to the holding period of investment, introducing greater transparency, regulating institutional investors who influence the market, and imposing restrictions on price changes so that no dealer is allowed to push prices upwards or downwards rapidly.

In the Islamic framework, although speculation is not unlawful per se, professional speculators cannot exist, because most speculation is made possible only with funds borrowed on the prohibited basis of interest. However, this counter-argument does not address the contribution of speculators to price discovery, liquidity and the efficiency of the markets.

On a related matter, it has been argued that the presence of *ghabun*, the difference between the price at which a transaction is executed and the fair price (as per the opinion of valuation experts), makes a transaction unethical. The consensus view seems to be that marginal over-pricing is permissible, but gross over-pricing should be curbed. The issue of fair prices is also a tricky one, as pricing is a function of the information available in the market and the expectations of investors about the market and the security. Any measure, other than the forces of demand and supply, introduced to enforce prices, will introduce unwanted distortions and inefficiencies.

Short Selling

Third, the practice of short selling a stock is not compatible with the principles of Islam. According to Islam, an exchange contract is void unless the intention of the buyer is to buy and of the seller to sell, and that no-one sells what he does not have. This raises the question of trading a borrowed financial claim which does not appear to be compatible with *Shari'ah*. By eliminating the short-selling facility, markets will discourage speculative behavior but will also eliminate arbitrage opportunities, which may hamper price discovery.

Equity contracts and markets for equity-based capital are so vital in the Islamic financial system that the absence of such markets will hinder achievement of the full potential of the system. The structural and operational issues identified above are difficult but not insurmountable. Financial intermediaries cannot operate optimally without supporting markets and institutions in the financial system. Serious efforts should be made to encourage equity financing.

SECURITIZED MARKET: SUKUK

Efforts to develop and launch a *Shari'ah*-compatible bond-like security were made in Jordan as early as 1978, when the government allowed the Jordan Islamic Bank to issue Islamic bonds known as *muqaradah* bonds. This was

followed by the introduction of the *Muqaradah Bond Act* of 1981. Similar efforts were made in Pakistan, where a special law called the *Mudarabah Companies and Mudarabah Flotation and Control Ordinance* of 1980 was introduced. However, neither of these efforts resulted in any noteworthy activity, because of the lack of proper infrastructure and transparency in the market. The first successful introduction of Islamic bonds was by the Malaysian Government in 1983 with the issuance of the Government Investment Issues (GII)—formerly known as “Government Investment Certificates (GIC).” The pace of innovation was very slow and IFIs were unable to develop an active market for such securities. Meanwhile, the success of securitization of assets in the conventional markets provided a framework which could work for Islamic assets as well. It was not till the late 1990s that a well-recognized structure of an asset-backed security in the form of *sukuk* was developed in Bahrain and Malaysia. This structure is attracting the attention of borrowers and investors and is considered a potential vehicle to develop Islamic capital markets.

There are several advantages offered by a market for Islamic bonds or *sukuk* to meet the demands of the users of funds and a whole range of investors. The former gain direct access to the funds through the *sukuk* market and, at the same time, bypass intermediaries. They expect that an efficient *sukuk* market will ultimately lower their cost of funding. For investors, *sukuk* present them with greater choices on maturity and portfolio selection. A well-functioning primary and secondary *sukuk* market can provide much-needed liquidity to institutional investors and financial intermediaries, who become better equipped with portfolio and risk management. Finally, in many cases, the payoffs of *sukuk* resemble a conventional fixed-income debt security, which is popular among conventional investors. In this respect, *sukuk* can also serve as an integrating tool between Islamic and conventional markets.

What are *Sukuk*?

The word *sukuk* (plural of the Arabic word *sakk*, meaning “certificate”) reflects participation rights in the underlying assets. The term is not new and is recognized in traditional Islamic jurisprudence. The idea behind *sukuk* is simple. The prohibition of interest virtually closes the door for a pure debt security, but an obligation that is linked to the performance of a real asset is acceptable. In other words, the *Shari’ah* accepts the validity of a financial asset that derives its return from the performance of an underlying real asset. The design of *sukuk* is very similar to the process of securitization in conventional markets where a wide range of asset types are securitized. These asset types include mortgages, auto loans, accounts receivables, credit card payoffs, and home equity loans. Just as in conventional securitization, a pool of assets is built and securities are issued against this pool. *Sukuk* are participation certificates against a single asset or a pool of assets.

Formally, *sukuk* represent proportionate beneficial ownership of an asset for a defined period when the risk and the return associated with cash

flows generated by underlying assets in a pool are passed to the *sukuk* holders (investors). It is similar to a conventional bond as it is also a security instrument that provides a predictable level of return. However, a fundamental difference between the two is that a bond represents pure debt of the issuer but *sukuk* represent, in addition to the risk on the creditworthiness of the issuer, an ownership stake in an existing or well-defined asset or project. Also, while a bond creates a lender/borrower relationship, the relationship in *sukuk* depends on the nature of the underlying contract. For example, if the underlying contract is a lease (*ijarah*), this creates a lessee/lessor relationship, which is different from the typical lender/borrower relationship.

The core contract utilized in the process of securitization to create *sukuk* is the *mudarabah*, which allows one party to act as an agent (manager) on behalf of a principal (capital owner) on the basis of a pre-agreed profit-sharing arrangement. The *mudarabah* contract is used to create a special-purpose *mudarabah* (SPM) entity similar to the conventional special-purpose vehicle (SPV) to play a well-defined role in acquiring certain assets and issuing certificates against the assets. The underlying assets acquired by the SPM need to be *Shari'ah*-compliant and can vary in nature. The tradability and negotiability of issued certificates is determined on the basis of the nature of the underlying assets.

Figure 9.3 shows the process and linkage among the different players involved in structuring *sukuk*. This is a generic process and there will be differences depending on the type of underlying instrument used to acquire the assets. The structuring process involves the following steps:

Step I: An asset is identified, which is currently held by the entity wishing to mobilize resources and raise funds. In simple cases, this asset needs to be a tangible asset such as an office building, land, a highway, or an

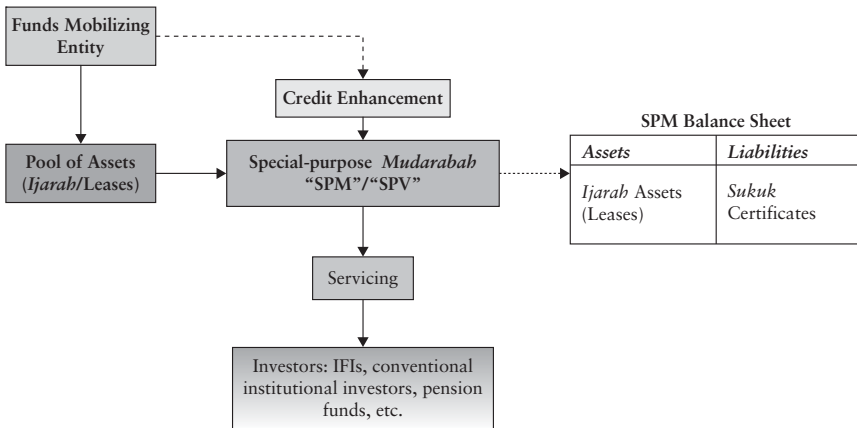


FIGURE 9.3 Anatomy of *sukuk*

Source: Iqbal (1999)

airport. But in other cases, a pool could be made from a set of heterogeneous assets combining tangible and non-tangible assets; that is, financial assets. Once the assets to be securitized are identified, they are transferred to an SPM for a predetermined purchase price. The SPM is established solely for this particular purpose and is a separate legal entity that may or may not be affiliated to the issuer. By establishing an independent SPM, the certificates carry their own credit ratings, rather than those of its original owner. Also, by transferring the asset to this special entity, the asset is taken off the issuer's balance sheet and is therefore immune to any financial distress the issuer may face in the future. Thus, the existence of an SPM provides confidence to the investors (*sukuk* holders) about the certainty of cash flows on the certificates and therefore enhances the credit quality of the certificates. An SPM also enjoys special tax status and benefits, and is considered a bankruptcy-remote entity.

Step II: The underlying asset is brought onto the asset side of the SPM by issuing participation certificates (*sukuk*) on its liability side to investors in an amount equal to the purchase price. These certificates are of equal value, representing undivided shares in the ownership of the asset. The proceeds from the sale of certificates are used to purchase the assets. The holders of the *sukuk* participate in the equity interest of the SPM's assets, which are jointly owned.

Step III: The SPM either sells the asset or leases it back to a lessee—an affiliate of the seller or the seller itself—in exchange for a future payment or periodic lease payments. For example, in the case of a lease, the asset will be leased to a lessee or to the issuer who will be responsible for making future rental payment on the lease. These future cash flows in the form of rental income are passed through to the holders of the *sukuk*. The cash flows are subject to a deduction of minor administrative, insurance, and debt servicing fees.

Step IV: In order to make the certificates of investment quality and to enhance their marketability, an investment bank may also provide a guarantee, which may be in the form of a guarantee of performance regarding the future payments or a guarantee to buy or replace the asset in the event of default. The investment bank or guarantor charges a few basis points as premium for the guarantee. This credit enhancement makes the certificates investment-grade securities and therefore makes them attractive to institutional investors.

Step V: During the course of the life of the *sukuk*, periodic payments are made by the benefactor of the asset (the lessee), which are transferred to the investors. These periodic payments are similar to coupon payments on a conventional bond. Unlike payments on a conventional bond coupon, which accrues irrespective of the outcome of the project for which the bond was issued, *sukuk* payments accrue only if there is any income from the securitized asset. However, the interesting point is that in the case of a lease-based *sukuk*, since the coupon payments are based on rental income and there is a low probability of default on rental income, investors consider these coupons

to have high expectations and low risk. Anyone who purchases *sukuk* in the secondary market replaces the seller in the pro rata ownership of the relevant assets and all the rights and obligations of the original subscriber are passed on to him/her. The price is subject to the market forces and depends on the expected profitability. However, there are certain limitations to the sale of *sukuk* in the secondary market, which are discussed later in this chapter.

Step VI: At maturity, or on a dissolution event, the SPM starts winding up by selling the assets back to the original seller/owner at a predetermined price and then paying back to the certificate holders or investors. The price is predetermined to protect against capital loss to investors. It is a common practice that the *sukuk* contract embeds a put option for the holders by which the issuer agrees to buy the asset back at a predetermined price, so that at maturity the investors can sell the *sukuk* back to the issuer at the face value. At the completion of the *sukuk*, the SPM is dissolved and it ceases to exist since the purpose for which it was created has been achieved.

The above-mentioned process is a general process to issue *sukuk*, but there are different variations depending on the type of contract used to create the underlying asset. Due to the diversity of contracts that are available, the Accounting and Auditing Organization of Islamic Financial Institutions (AAOIFI) recognizes the following different types of *sukuk*:

1. Certificates of ownership of leased assets (*ijarah sukuk*)
2. Certificates of ownership of right to use: (i) of existing assets, (ii) of described future assets, (iii) of services of specified party, and (iv) of described future services
3. *Salam* certificates
4. *Istisna'* certificates
5. *Murabahah* certificates
6. *Musharakah* certificates
7. *Mudarabah* certificates
8. *Muzaraah* (share-cropping) certificates
9. *Musaqah* (irrigation) certificates
10. *Mugharasa* (agricultural/seed planting) certificates

With the exception of *salam*, *istisna'*, and *murabahah* certificates (and some particular cases of *muzaraah* and *musaqah* certificates when the certificate holder does not own the land) these are all *Shari'ah*-compatible for trading in the secondary market. This restriction on tradability in the secondary market comes from a *Shari'ah* ruling by the Organization of Islamic Countries (OIC) *Fiqh* council which states that “a bond or note can be sold at a market price provided that the composition of the group of assets, represented by the bond, consists of a majority of physical assets and financial rights, as compared to a minority of cash and interpersonal debts.”

In other words, *sukuk* issued against a pool consisting of cash or debt-like instruments cannot be traded in the secondary market. This restriction

is imposed to avoid dealing with *riba* while trading debt securities in the secondary markets. *Shari'ah* is of the view that since *salam* and *murabahah* contracts create debt as the result of *salam*- and *murabahah*-based sale, *sukuk* based on these contracts cannot be traded in the secondary market.

Following is a discussion on selected types of *sukuk*.

Ijarah Sukuk For *ijarah sukuk* to qualify for securitization, the underlying leasing contract must first conform to *Shari'ah* principles. Secondly, the leased assets must have some beneficial usage for which the users are willing to pay a rent. Third, the leased assets must be of such a nature that their use is fully compliant with the *Shari'ah*. For example, the leasing of a casino building would not be acceptable. Finally, the maintenance expenditure related to the underlying asset is the responsibility of the owner—in this case, the holders of the *sukuk*.

The *ijarah* contract offers several advantages, which make it a natural candidate for securitization. These include:

Flexibility: The *ijarah* is one of the instruments that is most similar to the conventional lease contract and offers the flexibility of both fixed- and floating-rate payoffs. The cash flows of the lease, including rental payments and principal repayment, are passed through to the investors in the form of coupon and principal payments. This makes them attractive to conventional investors as well. There is flexibility in the timing of inflows and outflows since it is not necessary that the cash flows to the certificate holders should coincide with the timing of the rental payments. Another element of this flexibility is that the *Shari'ah* does not require that the underlying asset to be securitized in this way be in existence at the time of the contract.

Extended maturity: The *ijarah* contract can be of any length as long as the asset that is the subject of the contract remains in existence and the user can draw benefit from it. The possibility of an extended term means that the *sukuk* can be structured to provide an efficient mode of financing with a medium-to-long-term maturity.

Transferability: Since *Shari'ah* rules do not restrict the right of the lessor to sell the leased asset, persons who share the ownership of a leased asset through *sukuk* can dispose of their property by selling it to new owners, individually or collectively, as they may desire. This feature is critical in developing a secondary market for *ijarah*-based *sukuk*.

Negotiability: The *Shari'ah* requires that a bond or note such as *sukuk* can be sold at a market price provided that the majority of its underlying assets are physical assets. This makes *ijarah sukuk* completely negotiable and capable of being traded in the secondary markets. This feature makes them attractive to investors as it enhances their liquidity in the market.

The *ijarah sukuk* is also subject to risks other than the market risk. These are related to the ability and willingness of the lessee to pay the rental payments over the life of the *sukuk*. In addition, the return to investors is not always predetermined, as the lease is subject to maintenance and insurance costs. Therefore, the amount of rent given in the contractual relationship indicates a maximum possible return subject to a deduction for maintenance

and insurance expenditures. However, given that risk is protected through insurance and financial risk may be protected through guarantees, the return to the investors is fairly stable.

In the case where an asset that can be sold and leased back does not exist, another type of contract, *istisna'* can be utilized. An *istisna'* contract is suitable for situations where a new asset is created through construction or manufacturing activity to a specified description and at a predetermined price. For such cases, *darrat sukuk* have been suggested, which are *sukuk* against assets which do not exist at the time of securitization. A combination of *istisna'* and *ijarah* is used in the structure of the contract to first create the asset and then to rent it back to the originator. In addition to the originator of the asset, a new party becomes involved—the contractor, who is responsible for the construction of the asset before it can be handed over to the SPM for leasing.

Figure 9.4 shows how *sukuk* based on an *ijarah* contract are structured. A special purpose vehicle (SPV) is used to securitize the *ijarah*-based assets. At the inception of the *sukuk*, the asset owner (obligor) transfers the asset to the SPV (issuer) which, in turn, exchanges ownership rights with the *sukuk* proceeds from *sukuk* investors. Over the life of the *sukuk*, periodic lease rental payments are made to the SPV, which passes it on to the investors. At maturity, the principal amount is returned to the investors in exchange for the leased asset.

Salam Sukuk *Salam*-based *sukuk* have proved to be a useful investment vehicle for short-term maturity, since the underlying commodity financing tends to be for short-term tenor, ranging from three months to one year. They can be based on either spot sale (*salam*) and/or deferred-payment sale (*Bay' al-Muajjil*) or deferred-delivery sale (*Bay' al-Salam*) contracts, whereby the investor undertakes to supply specific goods or commodities, incorporating a mutually agreed contract for resale to the client and a mutually negotiated profit margin. The Bahrain Monetary Agency (BMA) was one of the innovators and originators of early *salam*-based *sukuk*.

According to the structure promoted by BMA, an SPM is set up, which buys a commodity such as crude oil or aluminum on a *salam* basis, whereby the purchase price is paid entirely up-front with the proceeds from the *sukuk* certificates. The delivery of the purchased commodity is set at a specified future date and, subsequent to the *salam* contract, there is a promise by the beneficiary of the commodity to buy the commodity from the SPM on the due delivery date. The return on *sukuk* is determined by the pre-agreed cost of financing the purchase.

In addition to being short term, the *salam sukuk* has another special characteristic. Because it results in a pure financial claim and is somewhat de-linked from the risk/return of the underlying asset, the *Shari'ah* treats it as a pure debt security, which cannot be traded in the secondary market. To do otherwise would introduce an element of *riba* into the transaction. This feature adversely affects the transferability and negotiability of these certificates in the secondary market. As a result, investors have no option but to hold *salam sukuk* up to the maturity of the certificates.

Structure	Asset Type	Description	Benefits	Considerations
<i>Ijarah</i>	<ul style="list-style-type: none"> Existing tangible assets such as plant, machinery, buildings etc. Usufruct rights pertaining to tangible assets can be considered as well 	<ul style="list-style-type: none"> Involves a sale and leaseback of tangible assets (or their usufruct rights) 	<ul style="list-style-type: none"> Most commonly-applied and accepted <i>sukuk</i> structure Tradable on secondary market Wide <i>Shariah</i> acceptability (AAOIFI-compliant) Relatively easy documentation process 	<ul style="list-style-type: none"> Identification of assets 100% of assets have to be tangible Assets remain in the ownership of investors till maturity Assets should be unencumbered at time of sale
Head-lease & Sub-lease	<ul style="list-style-type: none"> Existing tangible assets 	<ul style="list-style-type: none"> Involves long- and short-term leases of tangible assets 	<ul style="list-style-type: none"> Tradable on secondary market <i>Shariah</i> acceptability Template document available Avoid sale of assets which can be sensitive in certain jurisdictions 	<ul style="list-style-type: none"> Tangible assets required; with possibility of using suitable operating rights as underlying assets (subject to <i>Shariah</i> approval) Long-term lease has to be for a period of more than 50 years (for <i>Shariah</i> structuring purposes)
<i>Wakala</i>	<ul style="list-style-type: none"> <i>Ijara</i> assets <i>Shariah</i>-compliant equity instruments <i>Sukuk</i> certificates 	<ul style="list-style-type: none"> Involves appointing the obligor as investment agent to manage the assets for a fee 	<ul style="list-style-type: none"> Easily executable if <i>Shariah</i> compliant assets are available Used by surplus with <i>Shariah</i> compliant asset portfolios 	<ul style="list-style-type: none"> Identification of assets and substitution Assets need to have value at or greater than amount raised
<i>Istithmar</i>	<ul style="list-style-type: none"> Revenue generating agreements Linked to business activity 	<ul style="list-style-type: none"> Transfer of certain rights and obligations to issuer Income from agreements are used to service the periodic payments 	<ul style="list-style-type: none"> <i>Shariah</i> acceptability No tangible assets required Assets can be long-term agreements Template documents available Issuer does not give up operating control of the business 	<ul style="list-style-type: none"> Identification of assets and suitability Size of <i>sukuk</i> limited to size of business and require significant due diligence on business Non-Middle Eastern investors may require more education on the structure Introduces 'business' risks (performance risk of company) which is not a typical credit risk

FIGURE 9.4 *Sukuk al-ijarah* structure
Source: HSBC Amanah, Malaysia.