ISLAMIC FINANCIAL SERVICES

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FOREWORD

The Islamic financial services industry has witnessed a frenetic pace of growth during the last decade. While estimates about the size of the industry differ, conservative sources put the total assets of Islamic financial institutions at two hundred and thirty billion US dollars. Islamic financial institutions operate in over seventy-five countries and they are expected to grow at over fifteen percent during the next five years. Notwithstanding the encouraging data, the fact remains that the industry is too small compared to the size of its potential market. The strength that lies in the number of one billion Muslims is yet to be exploited. One of the key impediments to the growth of Islamic finance is lack of awareness among Muslims about the Islamic alternative models of banking, insurance and investments.

Another key area of concern relates to lack of human resources adequately trained in the models and tools of Islamic finance. Islamic financial institutions have generally been recruiting from the pool of conventional bankers and financial professionals, who often find it too comfortable to camouflage conventional products and services as Islamic ones. The unsavory outcome of this is there for all to see. We now find a wide range of products and services, which are Islamic in form but conventional in every other sense. A solution to the above perhaps lies in creating greater awareness among market participants through research, education and training. The depositors, investors, bankers,

insurance professionals, financial analysts, regulators and policy makers need to be told the full story - why conventional financial products and services are not acceptable in *Shariah*; what are the specific elements and features that are unacceptable; what are the Islamic alternative products and services that fulfill similar needs and address similar concerns and finally whether the alternatives are efficient as well.

The present text by Dr Mohammed Obaidullah is a step in this direction. The text spans over all areas of Islamic financial services, such as, commercial banking, insurance, investment banking, fund management, project finance and what have you. In each area, the ideal Islamic alternative model is presented after a careful evaluation of the conventional product. To add spice to the story, the text includes over twenty illustrations from real life. I am sure the text would address a long-felt need, serve as a useful guide and be of immense help to students, researchers, teachers, finance professionals, regulators and policy makers in the area of Islamic finance.

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PREFACE

This is a book about products, processes and mechanisms that *are* in use in the Islamic financial services industry. The text also focuses on how financial products and services *should be* designed and offered in this industry, given the need for full *Shariah* compliance. Instead of presenting facts and figures that quickly become obsolete, the text describes how financial products and processes develop as solutions to problems and as responses to profit opportunities and need for *Shariah* compliance.

The distinctive feature of this book is presentation of the products and services in the form of flow charts and blue prints that facilitate conceptual clarity and greatly simplify the learning process. For each product, the text provides a blue print that helps differentiate between conventional and Islamic products. All sensitive issues related to *Shariah* compliance are presented as "Issues in Product Management".

The text covers products and services relating to commercial banking, insurance, investment banking & financial engineering, fund management and project finance and is therefore, neatly divided into five parts – each part devoted to one of the relevant sectors (in addition to the introductory part). Each part begins with a discussion of how products and services are conventionally offered in these sectors. This is followed by an evaluation of the same from the standpoint of *Shariah* compliance. Major elements and features that violate the

Shariah are highlighted. Then the Islamic alternative is presented. Since many of the Islamic alternative products and services require a more elaborate discussion, the discussion is extended over subsequent chapters.

The coverage of the text is up-to-date. There are frequent references to real-life practices. The text includes over twenty illustrations of actual products as they are offered to the Muslim investor or depositor community. These are presented as "Concepts in Practice" and appear as box items, distinct from the main contents. The information for the illustrations have been carefully culled from public sources – from websites of a cross-section of Islamic financial institutions and presented without any element of tinkering.

Organization and Contents

The text is organized as follows. **Part One** spans over two chapters. Chapter One provides an overview of the Islamic financial system. It presents an interesting blueprint of the Islamic financial system with all its components. Prior to this, norms of ethics and efficiency and how these shape the contours of a financial system are presented. Chapter Two elaborates on the norms of Islamic finance, such as, prohibition of *riba* and *gharar* and the need for mutual cooperation.

Part Two spans over seven chapters dealing with products and services that broadly fall under commercial banking. Chapter Three sets the tone with a discussion of how conventional commercial banking is practiced and undertakes an assessment of the same from the standpoint of *Shariah* compliance. The Islamic alternative models of commercial banking, as these have evolved over time are then presented. Chapters Four-Nine undertake a more elaborate discussion of specific products and services. Chapter Four focuses on the liability side of the balance sheet of an Islamic bank and discusses various deposit-related products that help mobilize funds from the savings-surplus units. The spotlight then shifts to the asset side of an Islamic bank. Financing products of an Islamic bank could be equity or partnership-based or debt-based. Chapter Five is devoted to the equity-based financing products. Chapters Six-Eight discuss debt-based financing products. The more popular financing products based on *murabaha*, *bai-bithaman-ajil* and *ijara* are discussed in Chapter Six. Lesser popular financing products based on *salam*, *istisna*, *qard*, *istijrar* are discussed next in Chapter Seven. All controversial products are relegated to Chapter Eight. It includes all debt-based financing products that are widely perceived to be *Shariah*-compliant in form only and not in spirit. Chapter Nine discusses fee-based commercial banking products.

Part Three is devoted to insurance and comprises two chapters. Chapter Ten begins with how conventional insurance is practiced and undertakes an assessment of the same from the standpoint of *Shariah* compliance. The Islamic alternative models of insurance are then presented briefly. The Islamic insurance products based on *tabarru*, *mudaraba* and *wakala* are discussed in a more elaborate manner in Chapter Eleven.

Part Four comprises three chapters dealing with investment banking and financial engineering. Chapter Twelve initiates the discussion with how conventional investment banking is practiced and undertakes an assessment of the same from the standpoint of *Shariah* compliance. The Islamic alternative investment banking products – both in the pre-market stage and after-market stage are then presented briefly. Chapter Thirteen focuses on venture financing, creation of securities and other services, such as, stock broking. Chapter Fourteen is entirely devoted to risk management products based on derivatives and financial engineering. The Chapter undertakes an elaborate discussion of basic risk management products based on options, forwards and futures and swaps. Some innovative examples of Islamic financial engineering are presented as product possibilities.

Part Five is devoted to fund management and project finance and comprises three chapters. Chapter Fifteen discusses how funds are managed conventionally through various mutual funds, unit trusts and real estate investment companies. The Chapter undertakes an assessment of the same from the standpoint of *Shariah* compliance. The Islamic alternative fund management products are then briefly presented. Chapter Sixteen elaborates on various issues relating to the fund management products. Chapter Seventeen deals with project finance. It begins with a discussion of project finance as is undertaken in the conventional way and goes on to examine the issue of *Shariah* compliance. Some project finance structures that are deemed Islamic are then presented. The important issue of risk sharing and management in the context of project finance is then discussed.

The text is targeted at graduate students and practitioners who would like to be initiated into the new discipline of Islamic finance. It therefore, avoids use of mathematical proofs and derivations. It also avoids highlighting areas of disagreement among scholars on the Islamicity or otherwise of specific products, processes and mechanisms, as this would be highly confusing to a new entrant into the field. We have in the recent past witnessed sharp differences of views on many *exciting* products that seek to address an economic need but are deemed controversial and score low in terms of *Shariah* compliance. Current literature on Islamic finance is replete with publications

that try to make a case in favor or against a particular product, service or process. The text of course, makes no attempt to evade the all-important issue of *Shariah* compliance. In most cases, the consensus view of mainstream contemporary scholars is presented and all "controversial" issues are presented as they are – labeled as "controversial" and relegated wherever possible to a separate chapter.

For easy reading and comprehension, there are no footnotes, and no endnotes. **References** are neatly divided into five parts that correspond to the structure of the contents and are presented at the end of the book. Since the book steers clear of arguments and proofs, the references are more in the nature of **Suggested Further Readings** in the areas. Readers may note that wherever I have quoted from the holy *Quran*, the first numeral within bracket refers to *Surah* number and the second numeral after colon refers to Ayah number.

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Part I

A FINANCIAL SYSTEM BASED ON ETHICS

Chapter 1

ISLAMIC FINANCIAL SYSTEM: AN OVERVIEW

The *raison d'etre* of a financial system is to transfer funds from savings-surplus units to savings-deficit units in the economy. It facilitates intermediation between savers and investors. The latter are supposed to use funds primarily for investment in productive assets and add to the wealth of the economy. All economic units can be classified into one of the following groups: (i) households; (ii) business firms and (iii) governments. Savings of an economic unit is essentially the difference between its income and expenditure over a period of time. Households typically receive income in the form of wages and salaries and make frequent expenditures on durable and non-durable consumer goods and services and for real estate in the form of home mortgage payments or rents. Businesses sell goods and services to households and businesses for revenues, and their expenditures are for wages, inventory purchases, and other production costs. Occasionally, businesses make capital expenditures in the form of new buildings and equipments. Governmental units obtain income by collecting taxes and fees and make expenditures for a host of public services. For a given time period, any unit within a group can have one of three possible budget positions: (i) a balanced position, where income and expenditures are equal; (ii) a surplus position, where income for the period exceeds current expenditures; or (iii) a deficit position, where expenditures for the period exceed receipts. The financial system seeks to ensure that funds flow from savings-

surplus units (SSUs) to savings-deficit units (SDUs). As a group, households are typically SSUs while business firms and governments fall in the category of SDUs.

Financial System Efficiency

Promotion of efficiency is accepted as the primary goal of policy makers and regulators of financial systems. The criteria to measure efficiency of financial systems are well defined in literature. Financial system efficiency is measured in terms of efficiency achieved in mobilizing savings from the savings-surplus units in the economy and in allocating these funds among savings-deficit units in the economy.

It is generally believed that an increase in the range of financial assets and instruments would improve efficiency in mobilization of funds. Every saver or investor has unique risk-return expectations. The greater the variety of risk-return combinations offered by financial assets, the better would be the match between what investors need and what is available in the system. The notion of allocational efficiency implies that funds flow into desirable projects. More funds should flow into projects with higher profitability and lower risk (hence, higher value) and vice versa. This implies that financial instruments issued by such projects should involve a lower cost of funds for the issuer. Prices and rates of financial instruments should reflect the intrinsic worth or value of an instrument. If the instrument or project is more valuable, it should command a higher price. A high price implies low rates or low cost of funds. Pricing efficiency is a prerequisite for allocational efficiency.

For example, suppose you receive a *qard hasan* student loan of SR10,000 at the beginning of the university semester. But you need only SR2,000 of it towards tuition fee and purchase of study materials for the current semester and another SR3,000 towards living expenses for the term. You deposit the balance SR5,000, needed for the forthcoming term, into a three-month *mudaraba* deposit. You can invest in this rather high-return savings scheme of the local Islamic bank because you are willing to invest your money for a fixed time period. The bank then pools your SR5,000 with funds from other students and makes a large *murabaha* financing to the local book-seller to set up an internet browsing section. Given the cost of funds and its profit-maximizing goal, the bookseller selects only the most profitable projects and drops other projects whose returns would be below the firm's cost of capital. Other firms with projects that promise low returns will also find money too expensive to finance those projects. If the financial system is working efficiently, the return you receive will be the highest possible rate for your

money for a three-month period, the book seller will have borrowed money at the lowest possible cost, and only those projects with the highest rate of return will have been financed. The more efficient our financial system, the more likely this is to happen.

Note that prices and rates would reflect the intrinsic value of a financial instrument when all parties are adequately informed about the project – its return potential and the risks it involves. Thus, the financial system must ensure costless flow of relevant information. Informational efficiency of the system is therefore, a prerequisite for pricing and hence, allocational efficiency. As we shall see later an Islamic financial system puts great emphasis on all these dimensions of efficiency.

Another prerequisite to pricing efficiency is operational efficiency, which implies that transactions should be executed at minimal costs. High transaction costs prevent prices and rates from adjusting to changes. A related notion of efficiency is full-insurance efficiency that deals with availability of methods and avenues of sharing and transferring risk within the system.

From the above, it is clear that any move that reduces transaction costs, simplifies transaction system, increases the availability and accuracy of information, improves information processing by participants is a step towards improving the allocational efficiency of the system. Instantaneous and accurate price adjustment also presupposes that intense competitive pressures force all participants to react without any lag and that the system is dominated by rational investors who would not over-react or under-react. An efficient system is also a stable system where violent swings in prices and rates due to irrational behavior of the participants are ruled out.

Financial Products and Services

A financial system seeks to (i) mobilize funds form SSUs and (ii) channel the same into SDUs. The latter are supposed to use these funds efficiently in productive projects and add to the wealth of the economy. The process involves use of financial products and services. These financial products and services are created and provided by financial institutions.

It is important to understand at the outset that financial institutions perform two different types of roles in the process – of intermediaries and of facilitators depending upon whether the process is indirect or direct. In a less developed financial system the process is mostly indirect with intermediaries playing a major role in the process. They intermediate between the SSUs and

the SDUs. They mobilize funds from SSUs by offering them a range of "deposit" products. Then they channel the funds into SDUs by offering them various "financing" products. There is no direct linkage or interaction between SSUs and SDUs. They have no rights or obligations with respect to each other. Financial institutions that act as intermediaries, are mostly commercial banks. In a more mature financial system the process involves a direct offer of financial products by the SDUs to the SSUs. Financial institutions now act as facilitators in the process. They help business firms and governments in various ways in raising the funds from households. They help SDUs design and create "securities" (*sukuk*), price them, and market the same to SSUs. Financial institutions that act as facilitators, are called investment banks.

The first task of mobilizing funds involves offering the SSUs a range of financial products that match with their needs and expectations. These may be in the nature of various "deposit" products offered by an intermediary (where the process is indirect) and financial securities offered by SDUs (where the process is direct). You must recognize that every economic unit may have a unique need or expectation. What are the needs of an investor or buyer of a deposit product or financial security? An investor likes returns. The higher the expected returns the more attractive the product is and vice versa. An investor also dislikes risk and uncertainty. Risk refers to the possibility that the actual reward or return would turn out to be less than what is expected. The higher the risk associated with a given product, the less attractive the product is, and vice versa. Risk may itself be defined in various ways. Risk may relate to the volatility of returns. The higher the volatility, the higher is the risk. Risk may also refer to liquidity of the product or the ease with which the same may be sold for a fair price. Every investor may also have a unique time horizon or maturity preference. Given these multiple needs, if a product is less attractive along one dimension (say, more risky) then it must be more attractive with respect to the second dimension (or should promise more returns). Products designed to mobilize funds from SSUs must consider the characteristics and preferences of the household sector in terms of return-risk-maturity and other dimensions. In the Islamic financial system, the SSUs have a unique requirement – conformity to *Shariah*. Financial products must not violate norms of Islamic ethics to be acceptable to the Islamic SSU. For instance, as we shall see later, deposit products and fixed-income securities that violate the *riba*-prohibition norm have no place in the Islamic financial system.

The second important task is to channel the savings or funds into SDUs. As mentioned above, the needs and requirements of the business firms and governments should now be taken into consideration in designing financial products and services. These needs may relate to cost of funds, maturity, level

and pattern of expected cash inflows from the project and the like. The products are in the nature of various "financing" products offered by intermediaries (where the process is indirect) and financial securities offered by SDUs (where the process is direct). As mentioned above, financial products must not violate norms of Islamic ethics to be acceptable to the Islamic SDU. For example, a business firm would not seek an interest-based loan, nor would offer interest-yielding debt securities.

Besides the general categorization of financial institutions into intermediaries and facilitators or into commercial and investment banks, a closer examination would reveal many different types of players performing specific tasks that help achieve overall objectives of the financial system. For instance, insurance companies are a kind of contractual savings institutions that obtain funds under long-term contractual arrangements and invest the funds in the capital markets. These institutions are characterized by a relatively steady inflow of funds from contractual commitments with their insurance policyholders. They provide various risk management products to economic units and hence, help achieve full-insurance efficiency of the financial system.

Financial Markets

Financial intermediaries buy and sell financial products and securities in financial markets. As one might expect, there are many different types of financial products and securities issued by financial intermediaries and a large number of markets in which these are bought and sold. In this and the following sections, we shall briefly describe the different types of financial markets.

Primary and Secondary Markets

Financial markets may be divided into primary and secondary markets. A primary market represents the point at which financial products and securities are first offered by SDUs. A secondary market is one in which initial buyers resell their products and securities before maturity. Products and securities can be sold only once in a primary market; all subsequent transactions take place in secondary markets. The function of secondary markets is to provide liquidity to the products.

Money and Capital Markets

Financial markets may be classified by the maturity of financial products traded. The money market trades short-term debt instruments with maturities of one year or less. The purpose of capital markets is to channel

savings into long-term productive investments. Capital markets encompass all long-term debt instruments and equity obligations.

Spot Market and Futures Market

The spot market is the market in which products, such as, stocks, commodities or foreign currencies are traded for immediate delivery and payment. The spot market is also called the cash market. The futures market is the market in which products are traded for future delivery at a specified price.

Option Market

The option market is the market in which instruments are traded for conditional future delivery. Typically, an option gives a party the right without any obligation, to buy or sell a product, such as, stocks, commodities or foreign currency.

Foreign Exchange Market

The foreign exchange market is the market in which foreign currencies are bought and sold. Foreign currencies are traded either for spot or future delivery.

In the subsequent sections we will consider each of the financial products - relating to commercial banking, investment banking and insurance and the markets where these are traded. The common feature of all these products and markets is that they conform to norms of *Shariah* and Islamic ethics. Hence prior to considering each one of these products we need to correctly understand the norms of *Shariah* and Islamic ethics. We attempt this in a following section. We begin with the notions of financial system ethics as understood conventionally and then move on to notions of Islamic financial ethics.

Financial System Ethics

While a financial system must be efficient, it must also be ethical and fair to all participants. The idea of ethics or fairness in the financial system is generally discussed within a framework of entitlements or rights of savers and investors. You must recognize however that there is a general dearth of literature on financial ethics. A recent study by Shefrin and Statman (1992) identifies seven classes of fairness relevant to a financial system - freedom from coercion, freedom from misrepresentation, right to equal information, right to

equal processing power, freedom from impulse, right to trade at efficient prices, and right to equal bargaining power.

Freedom from Coercion

This freedom implies that investors have the right not to be coerced into a transaction. A transaction is fair if it is backed by the free will of all the parties to the contract. Another dimension to this freedom is the right not to be prevented from entering into a transaction. This freedom may also imply the right to search for information and at the same time, not to be forced into making specific disclosures.

Freedom from Misrepresentation

This freedom implies that all investors have the right to rely on information voluntarily disclosed as truthful. This does not imply any kind of compulsion to reveal information. However, a case of deliberate disclosure of inaccurate information involves a claim against the provider of information.

Right to Equal Information

This right entitles all investors to equal access to a particular set of information. A party in possession of a specific set of value-relevant information is forced to disclose it to others. For example, at the time of an Initial Public Offer (IPO), the promoters may be forced to reveal all value-relevant information known to them to the market. Similarly, investors with privileged access to "inside information" are prevented from using such information in their transactions. The mandatory disclosure norms, as well as the insider trading regulations obviously negate the freedom against coercion of a market participant.

Right to Equal Information Processing Power

This right entitles all investors not only to equal access to a common set of information but also to a "competency floor" of information processing ability and protection against 'cognitive errors'. This right may take the form of compulsory disclosure of information in a "processed" form or prohibition of certain transactions where certain groups of investors may be at an information-processing disadvantage.

Freedom from Impulse

This right entitles all investors to protection from imperfect self-control. This ensures that an investor is prevented from making mistakes, which are harmful to his own interest. For example, the regulatory authority may ask the sellers to provide a three day "cooling off" period during which they can cancel an impulsive transaction. While providing for the rights to equal processing power and to freedom from impulse, the regulator assumes a paternal role and seeks to protect the investors.

Right to Trade at Efficient Prices

This right entitles all investors to trade at prices they perceive as efficient or correct. The alternative is to let prices adjust by whatever amount necessary to equate supply and demand by investors, even if this process creates excessive volatility.

Right to Equal Bargaining Power

This right entitles all investors equal power in negotiations leading to a transaction. Unequal bargaining power can occur when one party to the transaction has deficiencies in information processing or imperfect self-control. Unequal bargaining power may also otherwise exist, as in case of low-networth investors competing for allotment in an IPO with high-networth investors. It may be noted that all the latter six norms negate the first, that is, the freedom from coercion.

Norms of Ethics in an Islamic Financial System

Islamic scholars have undertaken a thorough examination of relevant verses from the holy *Quran* and the *Sunnah* and have long established the basic principles, which govern the rights and obligations of participants in a financial system. We present below some important norms of Islamic ethics as are applicable to financial systems in brief. We will undertake a more elaborate discussion in the subsequent chapter.

Freedom to Contract

Islam provides a basic freedom to enter into transactions. The holy *Quran* says:

*Allah has made trade lawfu*l.(2:275).

Further, no contract is valid if it involves an element of coercion for either of the parties.

The holy *Quran* also says:

Let there be among you traffic and trade by mutual goodwill (4:29).

However, this basic norm does not imply unbridled freedom to contract. Exchange is permitted only when undertaken in permissible commodities or property (*maal*). For example, trade is not permissible in alcohol and pork. Even trade in stocks or ownership interests in companies dealing with or producing these commodities is not permissible. An important question pertains to the definition of property or *maal* in Islam. Since, rights are not deemed to be *maal* by majority of *Shariah* scholars, they do not permit trading in financial options. We will find more instances of this and discuss this issue in greater detail at a later stage. The freedom to contract in Islam may also be sacrificed when there is a trade-off with other norms requiring specific injunctions.

Freedom from *Al Riba*

All forms of contracts and transactions must be free from *rib*a. *Riba* means 'excess' and the prohibition of *riba* implies that there is no reward for time preference alone. Reward, returns or benefits must always accompany liability or risk. The question of *riba* has been addressed in a large body of literature and there is a general consensus about the meaning and implications of *rib*a.

Freedom from *Al Gharar* (Excessive Uncertainty)

All forms of contracts and transactions must be free from excessive *gharar* (or uncertainty). This implies that contracting under conditions of excessive uncertainty is not permissible. Islamic scholars have identified the conditions and highlighted situations that involve excessive uncertainty and consequently, disallow a contract.

Freedom from *Al-Qimar* (Gambling) and *Al-Maysir* (Unearned Income)

Contracting under excessive uncertainty *(gharar)* is akin to gambling *(al-qimar)*. And uninformed speculation in its worst form is also akin to gambling *(al-qimar)*. The holy *Quran* and the traditions of the Prophet (pbuh) explicitly prohibit gains made from games of chance, which involve unearned income *(al-maysir)*. Here it may be noted that the term speculation always

involves an attempt to predict the future outcome of an event. But the process may or may not be backed by collection, analysis and interpretation of relevant information. The former case is very much in conformity with Islamic rationality. An Islamic economic unit is required to assume risk after making a proper assessment of risk with the help of information. All business decisions involve speculation in this sense. It is only the gross absence of value-relevant information or conditions of excessive uncertainty that makes speculation akin to a game of chance and hence, forbidden.

Freedom from Price Control and Manipulation

Islam envisages a free market where prices are determined by forces of demand and supply. There should be no interference in the price formation process even by the regulators. It may be noted here that while price control and fixation is generally considered as unIslamic, some scholars admit of its permissibility. Such permissibility is subject to the condition that price fixation is intended to combat cases of market anomalies caused by impairing the conditions of free competition. It is a requirement that the forces of demand and supply should be genuine and free from any artificial manipulation. Islam therefore, condemns any attempts to influence prices through creating artificial shortage of supply *(ihtikar*). Similarly, any attempt to bid up the prices by creating artificial demand is considered unethical. Such an action of bidding up the price without an intention to take delivery is termed as *najash* and is not permissible.

Entitlement to Transact at Fair Prices

Prices that are an outcome of free play of forces of demand and supply without any intervention or manipulation are believed to be fair. However, in some instances, pricing is based on a valuation exercise. In such cases the difference between the price at which a transaction is executed and the fair price (as per the opinion of valuation experts) is termed as *ghubn*. The presence of *ghubn* makes a transaction unethical.

Entitlement to Equal, Adequate and Accurate Information

Islam attaches great importance to the role of information in the market. Release of inaccurate information is forbidden. The concealment of vital information *(ghish*) also violates the norms of Islamic ethics and according to the traditions of the Prophet (pbuh), the informational disadvantaged party at the time of the entering into the contract has the option to annul the contract. The traditions refer to price information in the market as well as other information

relevant for valuation of the commodity. Islamic scholars are of the opinion that a transaction must be free from *jahalah* or misrepresentation to be considered Islamic. The institution of a transparent market is, thus, quite important and transactions should be executed within the market after taking into account all relevant information. It may be noted that the traditions (*ahadith*) that deal with the issue, refer to a commodity transaction. In case of a commodity transaction, the commodity in question is subject to inspection and both the parties can be reasonably sure about the benefits that are going to flow from future possession of the commodity. Unlike a commodity, however, the benefits from possession of a financial asset are in the form of expected cash flows. These expected cash flows are subject to continuous revision as new events occur. Hence, Islamic ethics requires that all information relevant to expected cash flows and asset valuation should be equally accessible to all investors in the market. It is consistent with the investors' right to search information, freedom from misrepresentation, and right to equal information.

Freedom from *Darar* (Detriment)

This refers to the possibility of a third party being adversely affected by a contract between two parties. If a contract between two parties executed with their mutual consent is detrimental to the interests of a third party, then it may enjoy certain rights and options. A case in point is the pre-emptive right (*al-shufa*) of a partner in joint ownership. This pre-emptive right may be extended by analogy, to a situation where existing minority shareholders are being adversely affected by any decision of the controlling shareholders, such as, to sell additional stocks to the public, to effect a change in management, asset sale, mergers and acquisitions etc.

Mutual Cooperation and Solidarity

This norm is central to Islamic ethics. The second verse of *Surah Al Maida* in the holy *Quran* says:

> "Assist one another in the doing of good and righteousness. Assist not one another in sin and transgression, but keep your duty to Allah" (5:2)

The following *ahadith* by the Prophet (pbuh) reinforce this principle of cooperation and mutual assistance.

> "Believers are to other believers like parts of a structure that tighten and reinforce each other." (Al-Bukhari and Muslim)

> "The Believers, in their affection, mercy and sympathy towards each other, are like the body- if one of its organs suffers and complains, the entire body responds with insomnia and fever." (Muslim)
> "Whosoever removes a worldly hardship from a believer, Allah (*swt*) will remove from him one of the hardships of the Day of Judgment. Whosoever alleviates from one, Allah (*swt*) will alleviate his lot in this world and the next...." (Al-Bukhari)

The list of norms of Islamic ethics stated above is by no means exhaustive. It differs from the norms of mainstream financial ethics significantly - in imposing injunctions against *al-riba, al-qima*r, *and al-maysi*r. In so far as the rights relating to information are concerned, there is a lot in common between Islamic and mainstream financial ethics. Of course, the rights are much more aggressively and explicitly ensured in the Islamic framework, with a provision of rights or options for the informationally disadvantaged party to reverse its position. The next important question is how to prioritize various norms of Islamic financial ethics when there is a possible conflict or trade-off. The Islamic ethico-legal system has a clear scheme of priorities in legislation. Where there is a clear injunction in the holy *Qura*n, for example, in the form of prohibition of *riba* and games of chance, these must be observed at all costs. Next in importance are the norms that follow from the *Sunna* or traditions of the Prophet (pbuh), and *ijma* or consensus, in that order. For example, the basis of the right of pre-emption *(al-shuf*a) and the principle of freedom from *darar* is *Sunna* and hence, these are accorded lower priority than prohibition of *rib*a. There may be certain areas however, which are "unrestricted" by *Sharia*h. What should be the guiding principle for the regulator in establishing a system of priorities in these areas? For example, if the regulator believes that majority of investors are naive and irrational, can it take a paternal approach and protect them just as parents protect their children? It is quite possible that investors may lack information-processing ability and even if all relevant information were made available to them, they would not be in a position to assimilate and interpret such information and take rational investment decisions. Similarly, investors may over-react to information and behave in an irrational way. In such cases, can the regulator deny permissibility to specific transactions? How would the nature and extent of intervention by the regulator be determined?

Maslahah Mursalah (Unrestricted Public Interest)

Problems such as above may be resolved in the framework of *maslahah mursalah* or "unrestricted" public interest, which is a valid framework of Islamic legislation. The framework is called "unrestricted" public interest on account of its being undefined by the established rules of *Sharia*h. *Maslahah*

consists of "considerations, which secure a benefit or prevent a harm but are, in the mean time, harmonious with the objectives *(maqasi*d) of *Sharia*h. These objectives consist of protecting five essential values, namely, religion, life, intellect, lineage and property, which have a much wider scope and meaning. For instance, protecting the right to live includes protecting the means, which facilitate an honorable life, such as, freedom to work and travel. Protection of property requires defending the right of ownership. It also means facilitating fair trade and lawful exchange of goods and services in the community. Thus, the framework essentially involves a comparison of benefits and costs at a macro-level. And needless to say, this principle of ensuring maximum net social benefits is clearly accorded a lower priority than principles emanating directly from the holy *Quran* and the *Sunn*a. Of course, this specific norm ensuring maximum net social benefits is a valid, and at the same time, a dynamic basis of regulation and legislation in the Islamic framework. It is dynamic, because it can meet the challenges of ever-changing circumstances facing a Muslim society. The nature and intensity of factors affecting social benefits and costs are likely to vary across space, and time.

A review of the above list would quickly suggest that in a given situation there is a possibility of conflict between different classes of investor rights. Similarly, there is a possibility of conflict between concerns about financial system ethics and efficiency. In a conventional financial system there has often been a tug-of-war between ethics and efficiency with the balance tilting in favor of the latter. In an Islamic financial system, by definition, concerns about conformity to norms of Islamic ethics dominate all other concerns. All transactions in an Islamic system must be governed by norms of Islamic ethics as enunciated by the *Shariah*. Islamic systems are, in essence, ethical systems. We undertake a more elaborate examination of the major norms in the next chapter. In what follows we provide a brief sketch of the various components of an Islamic financial system. We highlight all the products and services that we would cover in the latter chapters of this book that conform to the above norms of Islamic ethics.

Islamic Financial System: A Blueprint

An Islamic financial system, by definition, provides a linkage between SSUs and SDUs through an array of financial products and services that do not violate the above norms of Islamic ethics. And Islamic scholars have not only established the basic principles and norms, but also identified the contractual mechanisms that conform to these norms and do not violate them in any manner. Below, we provide an overview of the various financial products and the underlying contractual mechanisms. These contracts, called *Shariah*-

Products/Services	Underlying Contract(s)
• **Deposit Services**	
Current Deposit	*Wadiah Wad Dhamana / Qard Hasan*
Savings Deposit	*Wadiah Wad Dhamana / Mudaraba*
General Investment deposit	*Mudaraba*
Special Investment deposit	*Mudaraba*
• **Retail / Consumer Banking**	
Housing & Property Finance	*BBA / Ijara wa Iktina /Diminishing Musharaka*
Hire Purchase	*Ijara Thumma Al-Bai*
Share Financing	*BBA / Mudaraba / Musharaka*
Working Capital Financing	*Murabahah/ Bai Al-Einah/ Tawarruq*
Credit Card	*Bai Al-Einah/ Tawarruq*
Charge Card	*Qard Hasan*
• **Corporate Banking/ Trade Finance**	
Project Financing	*Mudaraba / Musharaka / BBA / Istisna / Ijara*
Letter of Credit	*Musharaka/ Wakala/ Murabaha*
Venture Capital	*Diminishing Mudaraba/ Musharaka*
Financing Syndication	*Musharaka + Murabaha/ Istisna / Ijara*
Revolving Financing	*Bai Al-Einah*
Short-term Cash Advance	*Bai Al-Einah/ Tawarruq*
Working Capital Finance	*Murabaha/ Salam/ Istijrar*
Letter of Credit	*Murabaha*
Letter of Guarantee	*Kafala + Ujr*
Leasing	*Ijara*
Export/ Import Finance	*Musharaka/ Salam/ Murabaha*
Work-in-Progress, Construction Finance	*Istisna*
Bill Discounting	*Bai al-Dayn*
Underwriting, Advisory Services	*Ujr*
• **Treasury / Money Market Investment Products**	
Sell & buy-back agreements	*Bai al-Einah*
Islamic Bonds	*Mudaraba / Mushraka + BBA / Istisna / Ijara*
Government Investment Issues	*Qard Hasan/ Salam/ Mudaraba*
• **Other Products & Services**	
Stock-Broking Services	*Murabaha/ Wakala/ Joala*
Funds Transfer (Domestic & Foreign)	*Wakala/ Joala*
Safe-Keeping & Collection (Negotiable Instruments)	*Wakala/ Joala*
Factoring	*Wakala/ Joala/ Bai al-Dayn*
Administration of Property, Estates and Wills	*Wakala*
Hiring of Strong Boxes	*Amana/ Wakala*
Demand Draft, Traveller's Cheques	*Ujr/ Joala*
ATM Service, Standing Instruction, Telebanking	*Ujr*

Exhibit 1.1 Range of Islamic Banking Products and Services

nominate contracts or *uqud* are extensively discussed in literature on Islamic law (*fiqh*) and you may find their finer details in any standard classical text of *fiqh*. There are exchange-based contracts, such as, *murabaha, bai-bithaman-ajil, ijara, salam, istisna, istijrar* that create debt and hence, underlie debt-based financing products and securities. There are participatory contracts, such as, *mudaraba* and *musharaka* that underlie equity-based financing contracts and securities. These also underlie some deposit products used for mobilizing funds from SSUs. There are contracts, such as, *wadiah, amana, qard* that underlie deposit products. There are contracts, such as, *wakalah* and *ujr* that underlie many fee-based products. *Exhibit 1.1* provides a comprehensive list of Islamic financial products and services, which is by no means complete. *Exhibit 1.2* depicts the flow of funds within the Islamic financial system.

Islamic commercial banks play the role of intermediaries where the flow of funds is indirect. They buy funds by offering a variety of deposit products – *wadiah* and/or *qard*-based current account deposits, *mudaraba*-based savings account and investment account deposits and the like. They sell funds through a variety of financing products – equity based and debt-based. Islamic equity-based financing products comprise trustee partnership (*mudaraba*) facility, joint venture (*musharaka*) facility, declining partnership (*musharaka*) facility and the like. Islamic debt-based financing products comprise cost-plus sale (*murabaha*) with deferred payment (*bai-bithaman-ajil*) facility, leasing (*ijara*) facility, deferred delivery sale (*salam*) facility, manufacture-sale (*istisna*) facility, recurring sale (*istijrar*) facility, benevolent loan (*qard*) facility and the like. Islamic commercial banks have also been offering a few highly controversial financing products, such as, repurchase (*bai-al-einah*), bill discounting (*bai-al-dayn*), tripartite resale (*tawarruq*), short-term cash loan & credit card based on *tawarruq* and *bai-al-einah.* Islamic commercial banks also provide a range of fee-based services, such as, opening of letter of credit (*wakala) and* letter of guarantee (*kafala*)

The second type of intermediaries is, Islamic insurance companies, more commonly known as *takaful* or mutual-guarantee companies. These are contractual savings institutions that mobilize funds through a variety of *takaful* policies. The funds mobilized, in turn, are invested in *Shariah* compliant avenues.

Finally, Islamic mutual funds and unit trusts are the third type of intermediaries that mobilize funds by selling fund units that are similar to *mudaraba* certificates. These funds in turn, are invested in *Shariah* compliant avenues. Depending upon the nature of investment, funds are categorized as

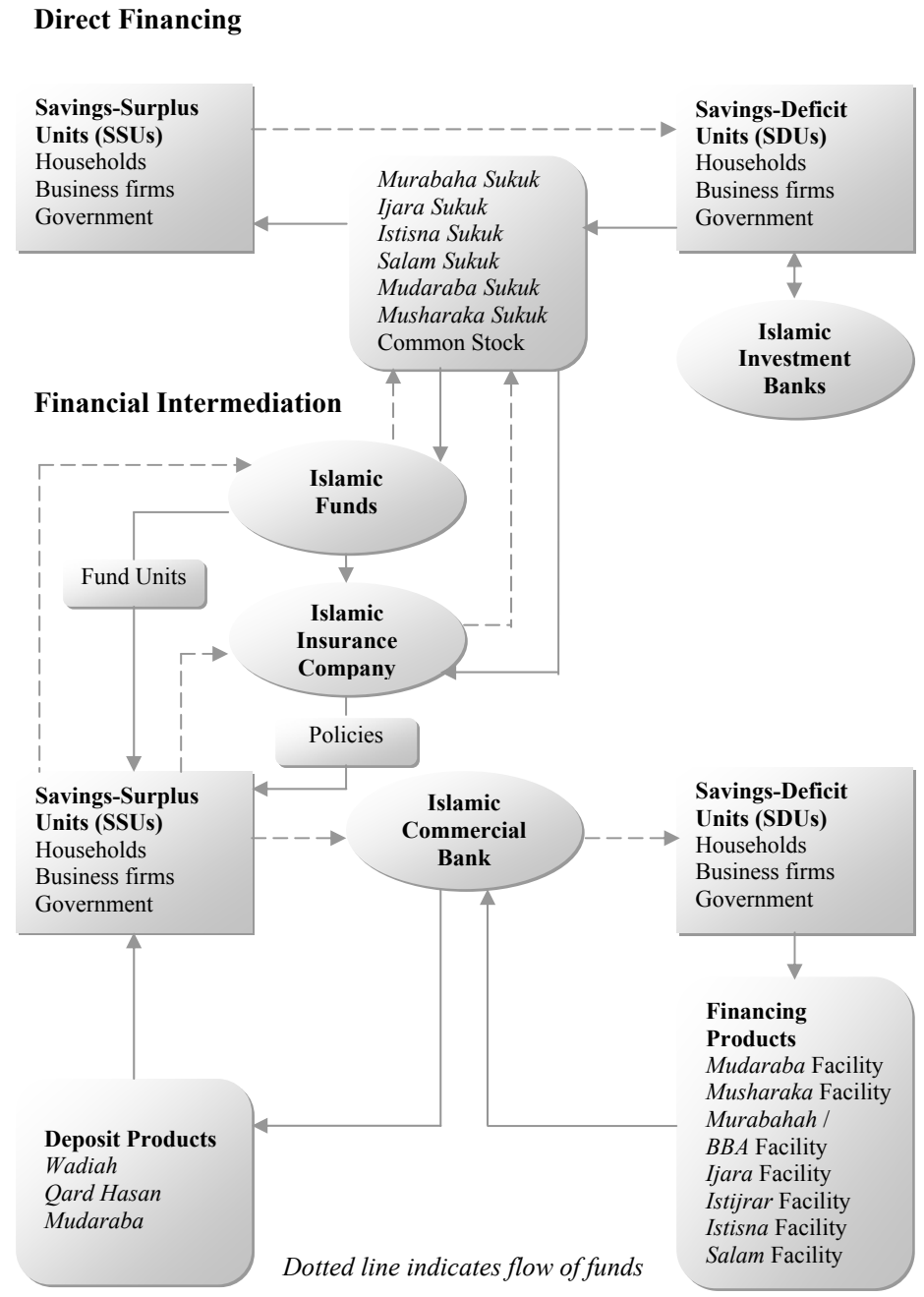


Exhibit 1.2 Blueprint of Islamic Financial System

murabaha funds or commodity funds, *ijara* funds, equity funds, real estate funds and the like.

Islamic investment banks play the role of facilitators where the flow of funds is direct. They help SDUs create and offer various Islamic securities called *sukuk* to the SSUs. These *sukuk* are based on and hence named after the underlying *Shariah*-nominate contracts. Islamic debt securities comprise *murabaha sukuk*, *ijara sukuk, salam sukum* and *istisna sukuk*. Islamic equity securities comprise *mudaraba* and *musharaka* certificates. Conventional stocks are also deemed Islamic subject to certain constraints. These banks also provide after-market services, such as, stock-broking and advisory services relating to project appraisal, mergers and acquisitions, corporate restructuring and the like. Another area of operation with great potential for Islamic investment banks is risk management and financial engineering.

Chapter 2

MAJOR NORMS OF ISLAMIC FINANCE

In an Islamic financial system, by definition, concerns about conformity to norms of Islamic ethics dominate all other concerns. All transactions in an Islamic system must be governed by norms of Islamic ethics as enunciated by the *Shariah*. At a fundamental level, an Islamic financial system may be described as a "fair" system and a "free" system. The objective of ensuring "fairness", however, is primary and it circumscribes the "freedom" of the participants in the system. While Islam provides a basic freedom to enter into transactions, this basic norm does not imply unbridled freedom to contract and is constrained by other norms, such as, the prohibition of *riba* and *gharar*. We have briefly touched upon these norms in the previous chapter. However, considering their overwhelming importance, we undertake a more elaborate discussion of the more important ones in this chapter. We begin with a discussion of norms pertaining to prohibition of *riba*, which is the cornerstone of an Islamic financial system.

Norms Relating to *Riba*

Prohibition of *riba* is central to Islamic financial ethics and law. All transactions and contracts must be free from elements of *riba*. The word *riba* literally means, "increase". Earlier we have quoted evidence from the primary sources: the *Quran* and the *Sunnah* on prohibition of *riba*. Let us now discuss the precise definition of *riba* as arrived at by scholars of Islamic law in the light of such evidence.

We reproduce the evidence on *riba* from the primary sources.

- O Muslims, Do not devour *riba*, doubling and redoubling it and fear (the punishment) of Allah that you may be successful. (3:130)

- Those who live on *riba* will not rise (at Resurrection) but like a man possessed of the devil and demented. This is because they say that trading is like *riba*. But Allah has permitted trade and forbidden *riba*. Those who after receiving the Direction from their Lord, desist, shall be pardoned for the past; their case is for Allah (to judge). But those who revert to it again are the residents of Hell where they will abide for ever". (2:275)

- Allah will deprive *riba* of all blessing, but will give increase for deeds of charity: and Allah does not love the ungrateful and unjust. (2:276)

- O believers, fear Allah and forgo the interest that is owing, if you really believe. (2:278)

- If you do not, beware of war on the part of Allah and His Apostle. But if you repent, you shall keep your principal. Oppress none and no one will oppress you. (2:279)

- What you provide with the prospect of an increase through the property of (other) people, will have no increase with Allah; yet what you give in alms and charity, seeking the countenance of Allah, (will increase): it is these who will get a recompense multiplied. (30:39).

The *Quran* declares sale to be lawful as opposed to *riba*, which is forbidden. This general principle has later been elaborated by the *Sunnah*, which expounded the detailed rules of *Shariah* concerning sale including its conditions, varieties, and sales, which might amount to *riba*. Let us now

consider some traditions of the Prophet (pbuh) or *ahadith* concerning *riba,* which reiterate the *Quran* or, are explanatory to the *Quran*, as provided below:

- "Zaid B. Aslam reported that interest in pagan times was of this nature: When a person owed money to another man for a certain period and the period expired, the creditor would say: You pay me the amount or pay the interest. If he paid the amount, it was well and good, otherwise the creditor increased the loan amount and extended the period for payment again." (Al-Muwatta, Imam Malik)

- The Prophet (pbuh), during his last sermon addressed his revered companions, "Every form of *riba* (interest) is cancelled; capital indeed is yours which you shall have; wrong not and you shall not be wronged. Allah has given His Commandment totally prohibiting *riba*. I start with the amount of interest, which people owe to Abbas and declare it all cancelled. He then, on behalf of his uncle, Abbas, cancelled the total amount of interest due on his loan capital from his debtor" (Tafsir Al-Khazin, vol.1, p.301)

- The Prophet (pbuh) is reported to have said "Sell gold for gold, silver for silver, wheat for wheat, barley for barley, date for date, salt for salt, in same quantities on the spot; and when the commodities are different, sell as it suits you, but on the spot" (Muslim)

- Bilal visited the Messenger of Allah (pbuh) with some high quality dates, and the Prophet (pbuh) inquired about their source. Bilal explained that he traded two volumes of lower quality dates for one volume of higher quality. The Messenger of Allah (pbuh) said: “this is precisely the forbidden *Riba*! Do not do this. Instead, sell the first type of dates, and use the proceeds to buy the other.” (Muslim)

It is important to note here that the first two traditions (*ahadith*) relate to prohibition of *riba* in loan contracts while the last two relate to prohibition of *riba* in sale or exchange contracts. The traditions (*ahadith*) attempt to explain and elaborate upon the *Quranic* prohibition of *riba* in loan contracts. In this sense, *riba* refers to usury or interest in loan transactions. The last two traditions (*ahadith*) however, assert the need to eliminate *riba* in exchange or sale contracts. As we would discuss later, the third tradition (*hadith*) forms the basis of elaborate *fiqh* rules on *riba* prohibition in sale contracts and all other contracts, which are modeled after the same.

In the following sections we first discuss *riba* in the *Quranic* context of loan contracts and then in the context of sale or exchange contracts based on the aforementioned traditions (*ahadith*).

Riba in Debt

The word “interest" by and large, is now understood as *riba*. In a legal sense, “interest” implies that excess amount which a creditor settles to receive or recover from his debtor in consideration of giving time to the debtor for re-payment of his loan. Various classical and contemporary Islamic scholars have defined *riba* as that “increase” which an owner of valuable property (*mal*) receives from his debtor for giving him time to repay his debt. *Riba* is the name of every increase in lieu of which there is no consideration. Conventionally, interest or the excess (increase) in loan is the consideration or compensation for the period of re-payment of loan. Since this period is not a valuable property (*mal*), its return has been declared as unlawful.

The form of *riba* falling under *Quranic* prohibition, according to some scholars, is *riba al-jahiliyya* or pre-Islamic *riba*. Such *riba* manifests when the lender asks the borrower at maturity date if he would settle the debt or swap it for another larger debt of longer maturity period. The difference between the maturity value of old and new debt amounts to *riba*. It may be noted that the conventional system of time-based compounding of debt clearly falls in this category.

Riba in Exchange

> "Sell gold for gold, silver for silver, wheat for wheat, barley for barley, date for date, salt for salt, in same quantities on the spot; and when the commodities are different, sell as it suits you, but on the spot" (Muslim)

The above *hadith* explains *riba* with regard to six defined things. Subsequent jurists have extended the scope of *riba* to other commodities based on *qiyas* or analogical reasoning. While all the six commodities may give rise to *riba*, what is important for financial contracting is the exchange of gold for gold and silver for silver. Most scholars agree that the major characteristic or efficient cause (*illah*) on the basis of which one may extend the rules of *riba* to other commodities by analogy is “their being in the nature of money” or *thamaniyya*. Thus, rules of *riba* would apply to anything that serves the functions of money, such as, paper currency or IOUs. There are now two conditions for exchanging money for money: hand-to-hand, and in equal quantity. This is known as a currency exchange contract (*‘aqd al-sarf*), where

money is traded at the current exchange rate. However, any violation of the *hadith* will result in one of two forms of forbidden *riba*: (a) *riba al-fadl:* where money is exchanged for money hand-to-hand, but in different quantities, or (b) *riba al-nasiah:* where money is exchanged for money with deferment. The latter form (*riba al-nasiah*) underlies most of conventional financial products and services. In the conventional financial system, as discussed in Chapter One, financial intermediation is effected through lending, and the time value of money is reflected in interest payments. This is unequivocally a case of prohibited *riba.*

Exchange/ Transfer of Debt

Debt originates with a loan. Debt also originates with a sale and other transactions wherever the payment of money is deferred to a future date. Going by the *Quranic* prohibition of *riba* in debt, no increment is permissible when the debt is repaid or settled. As highlighted in one of the above-cited *ahadith*, at times settlement of debt involved its replacement with a new increased debt. And this has been condemned as the worst form of *riba* or *riba al-jahiliyya*. Note that this form of charging *riba* corresponds to the compounding mechanism used in case of interest-based debt. Therefore, it follows; (i) when a debt is exchanged for money, it must be at par; and (ii) when a debt is exchanged for debt, it must also be at par. Some implications of these are as follows. In deferred payment sale, once the debt is established, it is repayable at par. Charging an increase for further deferment of the payment of such debts as a function of time (e.g. a late rental payment in a lease, or a late installment payment in a credit sale) would constitute *riba al-jahiliyya*. The opposite rule, in which the amount of the debt is reduced due to prepayment, is prohibited too. A minority view argues against this rule and asserts that the lender can always give a discount to the borrower at the time of repayment as a benevolent act. The majority view, however, is that compounding and discounting of debt are two sides of the same coin and both are prohibited. Such discounting with an objective to earn *riba* must be clearly distinguished from the benevolent act of "forgiving part of the loan". The act of "forgiving a part" is not "contractual" in nature and is not a part of the original contract of deferred sale (involving debt). Discounting of debt with a commercial motive makes the rate of discount dependent on time and is an explicit part of the contract.

When debt is sold or transferred to a third party for money, it must be sold at par. Conventional finance however, undertakes such debt resale at a discount to the par value, such as, in case of bills discounting, asset securitization. So do Islamic banks in Malaysia, which essentially treat debt as any other "asset" with a potential for income. Majority of jurists however, assert

that *bai-al-dayn* or sale of debt cannot be for a negotiable price. It is transferable, but only at par with nominal value. At times debt transfer takes place not in the form of *bai-al-dayn* involving a sale but in the form of *hawala-al-dayn* or a mere transfer of debt. In such case, adequate precautions need be taken to ensure that *riba* does not enter through the back door in the shape of fee or *ujr*. In fact, fee or service charge or *ujr* remains the single-most abused mechanism that can potentially permit *riba* through the back door unless adequate precautions are taken. For example, scholars insist that in all such cases where, there is a justification for payment of fee or service charge, such fee should not be linked in any way to the amount of debt involved and must be based on actual expenses incurred in the process.

At times, tangible assets and debt are combined together and sold. For example, a stock is an evidence of part-ownership in a company that owns physical assets as well as accounts receivables or debt. Contemporary jurists hold that in such cases, one has to determine whether debt or physical assets constitute the "significant" part. If physical assets constitute, say 51 percent of the total assets, then such a stock indicating part ownership in the combined assets may sell at a negotiable price. Or else, it would be treated as "being in the nature of debt or money" and hence, must sell at par value.

Another interesting possibility involves selling debt for another debt. This is considered forbidden and can take several forms, such as, compounding of debt, modern forward and future contracts, swaps etc. All these mechanisms involve exchange or linking of two debts.

Time Value of Money

Time value of money is an important cornerstone of modern finance. In simple terms, it means that money has a time value. SR1000 today is not same as SR1000 tomorrow. A rational individual would prefer the former to the latter. The reasons offered in favor of this contention are two-fold.

First, a cash flow of SR1000 now to an individual implies that he/ she can purchase and consume goods and services worth the amount now, while SR1000 tomorrow would mean that he has to wait till tomorrow before he may consume. This postponement of consumption involves sacrifice and hence, the individual needs to be compensated for "waiting". This argument is weak. Arguably, individuals are concerned about consumption in "future" just as they are concerned about consumption now. When an individual consciously saves for the "rainy day" or to finance specific needs in future, such future consumption is more important than present consumption.

A second argument in favor of time value of money perhaps has greater merit. It asserts that an individual would prefer SR1000 now over tomorrow, since he would now have the alternative of investing this amount for a day and earning a return on the same. Conventional finance conveniently uses the "rate of interest" as this rate of return. This has led to a mistaken notion in some quarters that *riba* prohibition rules out positive interest rate and therefore, implies zero time value of money. The notion is false. Time value of money indeed has a place in Islamic finance. The return available to the individual saver in the above example, need not relate to an interest or *riba*-based transaction. The return available on the next best "permissible" investment (from trade or otherwise) constitutes time value of money in Islamic finance.

An implication of "zero time value of money" is that the spot price in a trade must be same as the deferred price. This is wrong too. A trade (with or without deferment of payment of price) is a risky and permissible investment. It is different from pure *riba*-based risk-free debt. A seller in a trade, whether on spot or deferred payment basis, is free to charge any price and the profit that accrues to him is legitimate. There is thus, a possibility that his "spot" price may be lower than his "deferred" price. Such price differential is obviously due to deferment and is deemed to be the time value of money. Such time value of money is acceptable in the Islamic framework. What is not permissible is the time value of money in the context of debt. Needless to say, when the buyer in the above deferred-payment sale decides to defer his payment beyond the due date for payment, neither he nor the seller is allowed to increase the price. In the eyes of the *Shariah* the buyer and seller are now the borrower and lender respectively. The price, therefore, cannot be increased since it is now in the nature of debt and a debt cannot be replaced by a higher or lower debt. A higher debt replacing a lower debt results in *riba* on the old debt.

Indexation

A related issue is the issue of indexation of debt. In addition to the various justifications provided in favor of positive time value of money in the context of debt, one important argument relates to inflation and the consequent decrease in the value of money. It is argued that a debt when repaid at a later date has lower purchasing power due to persistent increases in the general prices of commodities. Hence, the creditor in a debt loses while the debtor gains. The latter in essence, repays less. The rate of interest on debt in fact, includes a premium or compensation for expected inflation, according to conventional economists. Arguably, it would be unfair, if the debtor is not compensated for the loss of purchasing power. A method that has been subjected to considerable debate among Islamic scholars involves linking a debt directly to purchasing

power of the currency or the unit of account as measured by a macro-economic commodity price index. Should the commodity prices increase resulting in decrease in real value of money, an offsetting increase in the nominal value of debt would follow. However, such indexation has found little favor on the ground that rules of *riba* or any other divine rule cannot be relaxed for man-made problems like inflation. What is needed is an effective check on inflation through rational macro-economic policies and not accept inflation as given.

Risk and Return

An important *Shariah* maxim that is related to prohibition of *riba* is

"*Al-Kharaj bid Daman*" or revenue goes with liability.

This is an important maxim governing financial contracting in Islam. In conventional parlance, it implies that no positive returns are to accompany conditions of zero risk. It underlies the concern shown by scholars in case of *murabaha* that the seller must "own" the asset (even if this is for a fleeting moment) before he sells it to the buyer. A logical reflection of this maxim is observed also in the inadmissibility of a *musharaka* contract where either partner agrees to share in profits only, and not in losses. Another example is the requirement that the lessor in an *ijara* contract, who is entitled to receive the rentals, must bear the losses arising out of destruction of the asset. Thus, a party in a financial contract is entitled to returns, only if it bears risk. We will discuss these issues in greater detail when we consider specific products based on the above mechanisms in the subsequent chapters.

You may note here that existing literature on Islamic financial contracting deals with the risk-return relationship in a broad sense and does not necessarily require a risk-return parity. This is because it supposedly deals with permissible contracts, which are not necessarily optimal though the importance of the latter is hardly ruled out. For example, *murabaha* transactions, though permissible, may contain an element of exploitation. The mark-up rate in some cases is seen to be quite high as compared to the minimal risk borne by the financiers. The Islamic system leaves the issue of parity to be handled under externally imposed constraints such as abolition of monopolistic tendencies in a market. Islamic markets are competitive markets and competition would ensure parity between risk and return.

Norms Relating to *Gharar*

The Arabic word *gharar* means risk, uncertainty, and hazard. Unlike *riba, gharar* is not precisely defined. *Gharar* is also considered to be of lesser significance than *riba*. While the prohibition of *riba* is absolute, some degree of *gharar* or uncertainty is acceptable in the Islamic framework. Only conditions of excessive *gharar* need be avoided.

The concept of *gharar* has been broadly defined by the Islamic scholars in two ways. First, *gharar* implies uncertainty. Second, it implies deceit. The *Quran* has clearly forbidden all business transactions, which cause injustice in any form to any of the parties. It may be in the form of hazard or peril leading to uncertainty in any business, or deceit or fraud or undue advantage. Apart from the above simplistic definition of *gharar*, some definitions of *gharar* seem to have a parallel in the concept of uncertainty in conventional finance. *Gharar* is defined by the Hanafi jurist al-Sarakhsi as any bargain in which the result of it is hidden. Ibn Juzay, the well-known Maliki jurist provides a list of ten cases, which constitute, in his view, cases of forbidden *gharar*. These cases are described as follows.

(a) Difficulty in putting the buyer in possession of the subject-matter; such as the sale of stray animal or the young still unborn when the mother is not part of the sale.
(b) Want of knowledge (*jahl*) with regard to the price or the subject matter, such as the vendor saying to the potential buyer: "I sell you what is in my sleeve."
(c) Want of knowledge (*jahl*) with regard to the characteristics of the price or of the subject-matter, such as the vendor saying to the potential buyer: "I sell you a piece of cloth which is in my home." or the sale of an article without the buyer inspecting or the seller describing it.
(d) Want of knowledge (*jahl*) with regard to the quantum of the price or the quantity of the subject-matter, such as an offer to sell "at today's price" or "at the market price."
(e) Want of knowledge (*jahl*) with regard to the date of future performance such as an offer to sell when a stated person enters the room or when a stated person dies.
(f) Two sales in one transaction, such as selling one article at two different prices, one for cash and one for credit, or selling two different articles at one price, one for immediate remittance and one for a deferred one.
(g) The sale of what is not expected to revive, such as the sale of a sick animal.

(h) *Bai al-hasah*, which is a type of sale whose outcome is determined by the throwing of stones.
(i) *Bai munabadha*, which is a sale performed by the vendor throwing a cloth at the buyer and achieving the sale transaction without giving the buyer the opportunity of properly examining the object of the sale.
(j) *Bai mulamasa*, where the bargain is struck by touching the object of the sale without examining.

From the above, it is clear that *gharar* does not have a single definition and is a fairly broad concept. Below we attempt to classify the various expositions of *gharar* into several categories.

Settlement Risk

Traditional explanations of *gharar* are often in terms of settlement risk (also called counterparty risk in conventional parlance). Such risk is seen to be present when the seller has no control over the subject matter. A typical example is a sale without taking possession. This follows from the following *hadith*.

> Ibn Abbas reported Allah's Messenger (pbuh) as saying: He who buys food grain should not sell it until he has taken possession of it. Ibn Abbas said: "I regard every thing as food (so far as this principle is concerned)."

Based on the above, some traditional authors defined *gharar* as arising due to non-existence of the subject matter of exchange. This line of reasoning was questioned by others who argued that *gharar* is present when the seller is not in a position to hand over the subject matter to the buyer, irrespective of whether this is in existence or not. The reason for the prohibition of *gharar* is the risk or uncertainty, which casts a shadow on the delivery of subject-matter and settlement of the contract, rather than the non-existence of the subject-matter. This definition of *gharar* is consistent with the permissibility of the contract of *salam* or advance sale by *Shariah*, which involves sale of a non-existence object. A *salam sale*, however, requires several conditions to be met that ensure timely delivery of the subject matter even if it is non-existent at the time of contracting.

Jurists have enumerated the following cases to highlight the existence of *gharar*.

Sale of fish in the water: The sale of fish in the water, which is not yet caught is null and void as it is not in a state of property. Also the sale of a fish which the vendor may have caught and afterwards thrown into a large pond from which it cannot be taken without difficulty is null and void, because here the delivery is impractical.

Sale of a bird in the air: The sale of a bird in the air or of one which after having been caught is again set at liberty is null, because in the one case it is not property and in the other the delivery is rendered impractical.

Sale of catch by a game catcher: It is not lawful for a game catcher to sell what he may catch at one pull of his nets, because the subject of the sale contains elements of *gharar*. He may or may not catch anything at all.

In all above cases, *gharar* is synonymous with settlement risk when the latter is excessive.

Inadequacy and Inaccuracy of Information

Uncertainty may be caused by lack of adequate value-relevant information (*jahl*). The *ahadith* of the Prophet (pbuh), which elaborate upon *gharar* owing to doubt and uncertainty due to lack of information, are as follows.

Sale of fetus in the womb: Ibn Umar reported that the people of pre-Islamic days used to practice *habal-al-habala,* which implies that a man would buy the unborn offspring of a she camel. Allah's Messenger (pbuh) forbade that transaction.

Bai al-mulamasah and *bai al-munabadhah*: Abu Hurayrah reported that two types of transactions had been forbidden by Prophet; *al-mulamasah* and *al-munabadhah*. As far as *mulamasah* transaction is concerned it is that when a man can feel a garment but is not allowed to unfold it or examine what is in it, or he buys by night and does not know what is in it and *munabadhah* is that a man throws his garment to another and the other throws his garments without either or them making any inspection.

Based on the above, scholars of *fiqh* have described *gharar* as involving want of knowledge (*jahl*) with regard to the price, the subject matter, or with

regard to the characteristics of the price or of the subject-matter, the date of settlement of contract etc.

Gharar also refers to possibility of deceit, fraud, which may be due to deliberate withholding of value-relevant information by either party in a contract. The *Quran* warns against possibility of fraud and deceit. It states:

- (He has enjoined on you) that you use full measure and a just balance. We charge every person only with a much responsibility as he can bear. (6:152).

- Woe to those who deal in fraud, who when they take their measure from others take it fully, and when they measure or weigh for them give less than what is due. (83: 1-3).

- (Shuayb said) "And O my people! Give just measure and weight, nor withhold from the people the things that are their due. Commit not evil in the land with intent to do mischief, that which is left for you by Allah is best for you if you are believers." (11: 85-86)

It is therefore, clear that a business transaction in which either of the parties has an intention to deceive is forbidden by the *Quran*. In conventional financial parlance, the parties to a contract must make accurate and adequate disclosure of all value-relevant information.

There are also clear prohibitory commandments by the Prophet (pbuh) with regard to fraud and deceit (*gharar*) in business transactions.

- The Prophet (pbuh) passed by a man who was selling grain. He asked him "How are you selling it?" The man then informed him. The Prophet (pbuh) then put his hand in the heap of grain and found it was wet inside. Then he said, "He who deceives other people is not one of us."

- The Prophet (pbuh) said, 'When you enter into a transaction, say 'there should be no attempt to deceive.'"

Examples of such sale mentioned in the *hadith* are as follows.

- Sale of Milk in the Udder: The Prophet (pbuh) said: "Do not retain milk in the udders of a camel or goat so as to exaggerate its yield. Anyone who buys a *musarrah* has the choice, after having milked it, to return it with a measure of dates."

- *Najash* Sale: The Prophet (pbuh) said, "Do not go in advance to meet the traveling grain dealers to buy their goods, nor should one of you sell over the head of another nor increase the price to excite another to buy *najash*."

The above situations and conditions indicating and explaining unacceptable forms and levels of *gharar*, thus, imply that *gharar* in a contract is essentially related to availability of information pertaining to its possible outcomes for both parties. All parties to the contract must be informed enough to make reasonable estimates of the outcomes. The absence of information for either party may be due to deliberate action of the counter-party. It may also be due to contracting under a situation of uncertainty with mutual consent. In both cases, the contract becomes susceptible to prohibition. Thus information is central to the Islamic system of contracting. Absence of adequate and accurate information (*jahl*) is a source of *gharar*. Islam emphasizes the need to protect the informationally weaker party. It is this concern that perhaps underlies the *hadith* that prohibits a sale whereby a townsman meets a tribesman outside the market place and buys the tribesman's goods at a price cheaper than the price prevailing in the market, thus taking advantage of the seller's ignorance of the market price; or the *hadith* under which the informationally disadvantaged party gets an option to rescind the contract subsequent to the time to contracting.

However, as stated earlier, the exact level of *gharar,* which comes under prohibition is open to interpretation. For instance, *gharar,* which is customarily practiced and tolerated by people is allowed, as there is no harm from the possibility of *gharar.* Its presence is immaterial, difficult to distinguish or to be specified. For instance, in the case of a paid public bath, the water used and the time spent in the bath is different from person to person. In such case there is no possibility of *gharar* therein, as people customarily tolerate such practice.

Complexity in Contracts

Gharar also refers to undue complexity in contracts. *Shariah* does not permit interdependent contracts. For instance, "combining two sales in one" is not permitted according to a number of authenticated *hadiths*.

As Siddiq Al-Darir ((1993) writes,

> "jurisprudents are agreed this is binding and they have accordingly judged that a person should not combine two sales in one. …" two sales in one" means that a single contract relates to two sales whether in the form that one of them is concluded by the seller saying "I sold you this item at a hundred in cash today and at a hundred and ten a year hence" and the buyer says "I accept" without

> specifying at which price he buys the item; with the two men going their separate ways on the understanding that the sale is binding on the buyer at either price. Alternatively, the two sales are concluded jointly as when the seller says, "I sell you my house at such a price if you sell me your car at such a price". Such a sale is forbidden because of *gharar* in the contract: the person who sells the item at a hundred in cash and at a hundred and ten a year hence does not know which of the two sales will take place and he who sells his house provided the other would sell him his car does not know whether this contract will be accomplished or not since the fulfillment of the first sale is conditional upon the fulfillment of the second. *Gharar* exists in both cases: in the first case, the sale price is not specified; in the second, the sale may or may not take place."

Jurists, therefore, require that in composite products, such as, *ijara-thumma-al-bai* or lease-purchase, parallel *salam* or parallel *istisna*, the multiple contracts must be independent of each other.

Pure Games of Chance (*Al-Qimar* & *Al-Maisir*)

The term *gharar* is also used in the context of pure games of chance. The following *Quranic* verses form the basis of prohibition of contracting under conditions of uncertainty or games of chance.

- ye who believe! intoxicants and gambling, sacrificing to stones, and (divination by arrows, are an abomination, - of Satan's handiwork: eschew such (abomination), that ye may prosper. (3:90)

- Satan's plan is (but) to excite enmity and hatred between you, with intoxicants and gambling, and hinder you from the remembrance of Allah, and from prayer: will ye not then abstain? (3:91)

- They ask thee concerning wine and gambling. Say: `In them is great sin and some profit, for men; but the sin is greater than the profit.' They ask thee how much they are to spend; say: `what is beyond your needs'. Thus doth Allah make clear to you His signs: in that ye may consider. (4:219)

From the above, it is clear that the *Quran* prohibits contracting under conditions of uncertainty and gambling (*qimar*). The two words, uncertainty and gambling are not synonymous, though related. Uncertainty is same as *gharar* and under such conditions, exchange or contracting is reduced to a gamble. It is interesting to note here that a major objection of contemporary scholars against forwards, futures and options contracts is that these are almost always settled in price differences only. Hence, these are used more as tools of gambling than as tools of risk management. The former two are also supposed to involve settlement risk. However, note that settlement risk is significant only in case of forwards. Modern futures and options markets involve little settlement risk.

Interestingly, the classical *istisna* contract is also a forward contract but is held permissible. The reason seems to be that this contract with the manufacturer of the product by a buyer involves insignificant settlement risk, as the contract is with the manufacturer himself. It cannot be used for gambling too.

Norms Relating to Mutual Cooperation (*Ta'awun*)

While the above norms relating to *riba* and *gharar* are in the nature of prohibition, the norms relating to mutual co-operation, solidarity and brotherhood are in the nature of exhortations to act in the desired manner. The fact remains however, that these are central to Islamic ethics. The second verse of *Surah Maida* in the holy *Quran* says:

- "Assist one another in the doing of good and righteousness. Assist not one another in sin and transgression, but keep your duty to Allah" (5:2)

The following *ahadith* by the Prophet (pbuh) reinforce this principle of cooperation and mutual assistance.

- “Believers are to other believers like parts of a structure that tighten and reinforce each other." (Al-Bukhari and Muslim)

- “The Believers, in their affection, mercy and sympathy towards each other, are like the body- if one of its organs suffers and complains, the entire body responds with insomnia and fever." (Muslim)

- "Whosoever removes a worldly hardship from a believer, Allah (*swt*) will remove from him one of the hardships of the Day of Judgment. Whosoever alleviates from one, Allah (*swt*) will alleviate his lot in this world and the next...." (Al-Bukhari)

Mutual cooperation among tribal members in the Arabian peninsula was practiced 14 centuries ago. These practices were accepted and validated by the Prophet (pbuh), and incorporated within the community of the first Islamic state. Examples of these early Islamic practices include the following:

- Merchants of Makkah formed funds to assist victims of natural disasters or hazards of trade journeys. Surety called *daman khatr al-tariq* was placed on traders against losses suffered during a journey due to hazards on trade routes.
- Assistance relating to “blood-money” or *diyah* was provided to captives and the families of murder victims through a grouping known as *a'qila*.

- Contracts, called *aqd muwalat*, were entered into for bringing about an end to mutual enmity or revenge.
- Confederations were brought about by means of a *hilf*, or an agreements for mutual assistance among people.

During the emergence of Islam the Prophet (pbuh) sanctioned some of these customs, including *a'qila.* These customs subsequently became part of the *Sunnah.* This is evident from the following *hadith.*

- "Allah's Apostle gave this verdict about two ladies of the Hudhail tribe who had fought each other and one of them had hit the other with a stone. The stone hit her abdomen and as she was pregnant, the blow killed the child in her womb. They both filed their case with the Prophet (pbuh) and he judged that the blood money was for what was in her womb. The guardian of the lady who was fined, said, "O Allah's apostle! Shall I be fined for a creature that has neither drunk nor eaten, neither spoke nor cried? A case like that should be nullified" On that the Prophet (pbuh) said, "This is one of the brothers of soothsayers." (Al-Bukhari)

Note that the above forms of cooperation and assistance essentially resulted in a form of social insurance. There were references directly to concepts of social insurance for the less fortunate in the first constitution of the Islamic state of Medina. The constitution contained three aspects directly relating to insurance:

- Provision for social insurance affecting the Jews, Ansar and the Christians.

- Statement that "the immigrants among the Quraish shall be responsible for their word and shall pay their blood money in mutual collaboration."

- Provision for *fidya* (ransom) whereby payment is made to rescue the life of a prisoner and the *a'qila* (relatives) could cooperate to free him.

As we shall see later, modern Islamic insurance is supposed to be designed as *takaful ta'wuni*, which incorporates this principle of mutual cooperation.

Part II

COMMERCIAL BANKING

Chapter 3

COMMERCIAL BANKING

The purpose of a financial system is to facilitate the flow of funds from savings-surplus-units (SSUs) to savings-deficit-units (SDUs) in the most efficient manner. Commercial banks play the role of an intermediary in the process. In the absence of intermediaries like commercial banks, the flow of funds would have to be direct from the lenders to the borrowers. Such direct financing has a few problems. One is the absence of double coincidence of needs in terms of the characteristics of the financial product. For example, the lender may prefer a longer time horizon, and larger denomination for the financing as compared to the borrower. Financial intermediaries like commercial banks seek to overcome such problems. They intervene between the fund-user and fund-provider. They purchase direct claims with one set of characteristics (e.g., term to maturity, denomination) from savers or fund-providers and transform them into indirect claims with a different set of characteristics, which they sell to the fund-users. This transformation process is called intermediation. Firms that specialize in intermediation are called financial intermediaries or more commonly, financial institutions. Commercial banks are the largest group of financial intermediaries.

Financial intermediaries, such as commercial banks enjoy several sources of comparative advantage, such as, economies of scale and economies of scope over others who may try to produce similar services. Financial intermediaries can achieve economies of scale leading to lower fixed cost per transaction because of their specialization and use of specialized equipments. Financial intermediaries can also reduce the transaction costs involved in searching for credit information. They may be able to obtain important but sensitive information about a borrower's financial condition, because they have a history of exercising discretion with this type of information. For the previously mentioned reasons, financial intermediaries are often able to produce financial commodities at a lower cost than individual consumers.

In producing financial commodities, intermediaries such as commercial banks perform four basic services: (i) They are able to produce a wide range of denominations by pooling the funds of many individuals and investing them in direct securities of varying sizes; (ii) They are able to create securities with a wide range of maturities; (iii) They are able to spread risk by investing in a wide range of assets; and (iv) They are able to provide liquidity by lowering the transaction costs associated with converting financial assets into money.

Conventional Commercial Banking

The most important task of conventional commercial banks may be described as mediating between lenders and borrowers who lend or borrow on the basis of interest. The borrowing and lending may take several forms however. In order to get a complete picture we may begin with a conventional commercial bank's balance sheet. The balance sheet lists what the business owns (assets), what the firm owes to others (liabilities), and what the owners have invested (capital) as of a given time. First we take a look at the liabilities as the source of funds. Essentially a conventional commercial bank borrows at interest in creating all these liabilities.

Deposits: The principal source of funds for most banks is deposit accounts—demand, savings, and time deposits. The *demand deposits* of individual corporations and state and local governments are held primarily for transaction purposes and no interest is paid on such deposits in most economies. Because these deposits are cost-less but provide banks with funds to lend and invest, banks compete for these funds by providing individual customers with "free" services or services sold for less than their cost. Such services include check writing, safekeeping, accounting, and the sale of traveler's checks. Such benefits constitute implicit interest payments to holders of demand deposits. *Savings accounts* are the traditional form of savings held by most individuals

and non-profit organizations. *Time deposits* are unlike demand deposits in that they are usually legally due as of a maturity date and funds cannot be transferred to another party by a written check. Apart from deposits, conventional commercial banks raise resources or buy funds in the following major ways:

Savings Certificates: These are bank liabilities issued in a designated amount, specifying a fixed rate of interest and maturity date.

Certificates of Deposit: These are very large, unsecured liabilities of commercial banks issued in very large denominations to business firms and individuals. They have a fixed maturity date, pay an explicit rate of interest, and are negotiable if they meet certain legal specifications. These are tradable in a secondary market.

Borrowed Funds: These are typically short-term borrowings by commercial banks from the wholesale money markets or a central bank.

Repurchase Agreements: Repurchase agreements are a form of loan in which the bank sells securities (usually government securities) to the lender but simultaneously contracts to repurchase the same securities either on call or on a specified date at a price that will produce an agreed yield.

Banker's Acceptance: A banker's acceptance is a draft drawn on a bank by a corporation to pay for merchandise. The draft promises payment of a certain sum of money to its holder at some future date. What makes such drafts unique is that a bank accepts them by prearrangement, thereby guaranteeing their payment at the stated time. In effect, the bank has substituted its credit standing for that of the issuer. Banker's acceptances can be held by the bank or sold in the secondary market as a source of funds.

Central Bank Loans: Banks can borrow funds from the central bank for short periods of time.

Now let us take a look at the assets of a conventional commercial bank showing use of the funds. Apart from cash assets, the earning assets of a bank are typically classified as either loans or investments. There are important differences between these two classes.

Investments: These are standardized contracts issued by large, well-known borrowers, and their purchase by the bank represents an impersonal or open market transaction. Bank investments consist primarily of government bonds, municipal securities, and bonds issued by agencies of the government.

Bank investment portfolios serve several important functions. First, they contain short-term, highly marketable securities that provide liquidity to the bank. These short-term securities are held in lieu of non-interest bearing reserves to the maximum extent possible. Second, the investment portfolio contains long-term securities that are purchased for their income potential. Finally, they provide the bank with tax benefits and diversification beyond that possible with only a loan portfolio.

Loans: Loans, on the other hand, usually represent an ongoing relationship between the bank and its borrowers. A loan is a highly personalized contract between the borrower and the bank and is tailor-made to the particular needs of the customer. Bank loans are the primary business activity of a commercial bank. They generate the bulk of a bank's profits and help attract valuable deposits. Although loans are very profitable to banks, they take time to arrange, are subject to greater default risk, and have less liquidity than most bank investments. Most bank loans consist of promissory notes. A promissory note is an unconditional promise made in writing by the borrower to pay the lender a specific amount of money, usually at some specified future date. Repayment can be made (1) periodically, in installments; (2) in total on a single date; or (3) in some cases, on demand. If the loan is due on demand, either the borrower or lender can end the contract at any time. Bank loans can have either a fixed rate of interest for the duration of the loan commitment or a floating-rate commitment. Bank loans may be secured or unsecured. The security, or collateral, may consist of merchandise, inventory, accounts receivable, plant and equipment, and, in some instances, even stocks or bonds. The purpose of collateral is to reduce the financial injury to the lender if the borrower defaults. An asset's value as collateral depends on its expected resale value. If a borrower fails to meet the terms and conditions of his or her promissory note, the bank may sell the collateralized assets to recover the loan loss.

There are three types of loan commitments that may be agreed upon by business borrowers and commercial banks: line of credit, term loan, and revolving credit. Consumers usually do not enter into these types of arrangements. A line of credit is an agreement under which a bank customer can borrow up to a predetermined limit on a short-term basis (less than one year). The line of credit is a moral obligation and not a legal commitment on the part of a bank. Thus, if a company's circumstances change, a bank may cancel or change the amount of the limit at any time. A term loan is a formal legal agreement under which a bank will lend a customer a certain amount for a period exceeding one year. The loan may be amortized over the life of the loan or paid in a lump sum at maturity. Revolving credit is a formal legal agreement under which a bank agrees to lend up to a certain limit for a period exceeding

one year. A company has the flexibility to borrow, repay, or re-borrow as it sees fit during the revolving credit period. At the end of the period, all outstanding loan balances are payable, or, if stipulated, they may be converted into a term loan. In a sense, revolving credit is a long-term, legally binding line of credit.

A bank also extends financing to companies through discounting of bills of exchange. Such discounting has great significance for trade and commerce as a vehicle of short-term working capital finance. It is also important from the standpoint of the health of the banking system, since it provides short-term self-liquidating investment opportunities for banks with temporary surplus funds. Further, given that a bank may in case of necessity rediscount such instruments with the central bank, this system facilitates a smooth flow of liquidity and credit within the system.

It may be noted that the above list is by no means complete. It covers only the fund-based activities of a commercial bank. There are many other activities that a commercial bank may be engaged in that are fee-based, such as, issuing a letter of guarantee, safe deposits, remittances, currency exchange and the like that generate a fee for the bank without application of funds.

Letter of Guarantee: Often the customer requires the bank to act as an intermediary in certain kinds of operations. This mediation is useful in that it provides for the customer and such other party with whom he wishes to enter into a contract, an atmosphere of security and confidence created by such a credible intermediary. In such mediation, the bank merely acts as a guarantor of its client's liability towards the latter's customer or counterparty. There is no cash outflow involved in the initial phase of the contract for the bank. However, in the event of subsequent default by the client, the liability may fall on the bank as the guarantor and the bank may be required to pay up the amount guaranteed. The outcome is a temporary loan by the bank to its client. The banks' revenues from such operations are in the form of commissions, in most cases, and interest, in a few other cases involving temporary loans. This is in contrast to what we discussed in the earlier section dealing with direct loans and credit facilities where interest is notably and largely predominant over commissions. The common forms of guarantees observed in banking operations include letters of guarantee, bank acceptance, and documentary credits.

Islamic Appraisal of Conventional Commercial Banking

Modern banking operations involve "debt-related *riba*" prohibited by the holy *Qur'an*, in that they borrow and lend against a certain specified - paid or received - revenue. These operations also involve "sales-related *riba*" prohibited by the well-known *ahadith* we discussed earlier in Chapter 2, in that they deal in money. We will examine the incidence of both kinds of *riba* - relating to sales and debts - in the following sections.

Riba exists in every debt, which carries a stipulation binding the debtor to pay to the creditor any sum of money in excess of the principal sum of the debt. When a conventional bank raises funds through deposits, the depositor is often entitled to fixed and predetermined return in the form of interest on the amount deposited. The return at times is not fixed, as in case of floating-rate deposits where the interest rate is linked to some other benchmark, such as, the London Inter Bank Offering Rate (LIBOR) and varies over time depending upon the value of the benchmark. But under both situations, the rate of return can never be negative, the nominal value of deposits is guaranteed and the depositor is entitled to an amount in excess of the amount deposited. Hence, the conventional deposits, which constitute the most important source of funds for a modern bank, involve debt-related *riba*. Banks also borrow from other sources, such as, the central bank or the inter-bank money market for raising funds. All such contracts requiring interest payments clearly involve *riba*. When banks invest, their investments are again primarily in the form of loans which involve interest payments over and above the loan amount and hence, clearly involve *riba*.

Deposits: Deposits in common parlance are backed by the motive of safekeeping. Islamic law also deals with the notion of deposits in the framework of *amana*. However, bank deposits cannot be put into this category, since a bank invites and seeks deposits for its own interests. The banks' intention while accepting currencies as deposits is not the safekeeping but the utilization thereof, and, on demand, to return it in full. The general consensus, therefore, is that where the deposit is a sum of money or something, which is perishable through use, shall be deemed to be a loan if the depository is permitted to utilize it. And if it is clear that a bank deposit is a loan, it means that any increase paid by the bank over the sum deposited constitutes *riba*. As discussed above, conventional banks broadly invite: current account deposits, time deposits, and savings deposits. To the extent that these do not involve interest payments, such as the current account deposits, these may be Islamically acceptable. The latter are for obvious reasons unIslamic and not permissible.

It may be noted here that Islamic deposits may be modeled after the classical contracts of *al-wadiah* and *qard*. These contracts do not allow any excess over and above the principal either as a stipulation in the contract or even as a unilateral gift by the bank that is not customary. If Islamic banks routinely announce a return as a "gift" for the account holder or offer other advantages in the form of services for attracting deposits, this would clearly permit entry of *riba* through the back door. Unfortunately, many Islamic banks seem to be doing precisely the same as part of their marketing strategy to attract deposits. We will discuss more about this in a subsequent section.

Loans: Direct loans may take the form of a simple loan of a definite amount repayable after a known maturity or time period. These loans involve payment of interest by the user of funds and hence, clearly involve *riba*. Loans may also take a different form as opening a credit or overdraft facility under which the user may draw an amount from the bank, which varies from time to time subject to an overall maximum limit. The opening of a credit facility, therefore, is represented in a contract concluded by a bank and a customer pursuant to which the bank undertakes to place a certain sum at the disposal of the customer during specified period of time. What is more important to note in this contract is that it is 'promise of a loan' and is binding. While there may be divergent views on whether a promise is binding on a promisor, the fact that the promise involves a stipulated return on the loan in future indicates presence of *riba* and hence, makes the product unIslamic.

Bill Discounting: In any bill discounting operation, as discussed above, the creditor may wait till maturity to receive the amount from the debtor, or get the instrument discounted at any bank and receive the discounted value from the bank anytime before the maturity period. The discounted value would be the nominal value less the discounts. The bank in turn, may now wait till maturity and recover the nominal value from the original debtor. The discount is nothing but the interest charged by the bank for the time beginning from the date of discounting till maturity.

A *fiqhi* evaluation of discounting operations would also reveal that the transaction satisfies neither the rules of the transfer of right nor the sale of a debt. You should not be surprised if you find some Islamic banks practicing discount operations in disguise. While a conventional banker may not find any difference between the rate of interest and rate of discount or between lending and discounting operations, some Islamic bankers, have found a legal roundabout or what is known in *fiqhi* terms as *hiyal*. We will discuss more about this in the chapter dealing with such controversial products.

Letters of Guarantee & Acceptances: Conventional letters of guarantees and acceptances have no clear parallels in *fiqh* and combine features of classical contracts of *kafala*, *wakala* and *qard*. Given this, the next important question is whether and how the bank may charge a fee for issuing the letter of guarantee and acceptance. Arguably, fees, commissions, service charges are earned for work done. In their present form however, there is a possibility that the bank may be earning *riba* in the guise of fees, commissions and service charge.

Currency Exchange: Apart from the main line of activities, which might involve debt-related *riba*, commercial banks also undertake operations, which may involve exchange-related *riba*. One such activity involves currency exchange. Currency exchange as practiced by conventional banks may be categorized into: (1) spot rate transactions, and (2) forward rate transactions. Banks may enter into these transactions on behalf of their client or on their own accounts. The two primary motives underlying such transactions are hedging and speculation. However, a majority of scholars are of the view that such transactions must be settled on a spot basis. The currencies must change hands on the spot at the mutually agreed exchange rate. Forward rate transactions, where settlement by both parties is deferred to a future date, are completely ruled out and there is total consensus on this view. A third type of transaction is where one party defers settlement of the transaction to a future date, while the other party settles the transaction on the spot. This is also called *salam* in currencies. Only a small number of scholars find it acceptable, while a large majority rejects the same. You may note here that forward contracting involves a mutual promise to exchange currencies on a future date at a definite exchange rate. Such mutual promising, by itself is not illegal, but lacks binding force. This implies that the parties may promise to buy or sell currencies at a definite rate on a definite date in future, but such promises cannot be legally enforced.

Islamic Alternative(s)

In the foregoing sections we examined some major commercial banking products and services and sought to evaluate these in the light of the norms of Islamic ethics; primarily focusing on the need to avoid *riba* and *gharar*. The areas more susceptible to *riba* naturally received greater emphasis and we also discussed how to prevent entry of *riba* through the backdoor.

In this section we attempt at developing the Islamic alternative. We build a blueprint for organizing modern commercial banking along Islamic lines. First, we deal with contracts, products and services of conventional commercial banks that fit into the Islamic framework. Next, we identify some

unique Islamic products and a unique Islamic model of banking that has been developed from the rich classical Islamic law of contracts.

As discussed in the previous section, modern commercial banking includes providing a wide array of services to the customers. In order to identify the banking products and services that an Islamic bank may possibly provide, it is useful to divide these into two categories: products and services that are fund-based and that are fee-based. Fee-based services may be enumerated as under: (i) opening of bank accounts, (ii) safe-keeping of negotiable instruments including shares and bonds and collection of payments, (iii) internal (domestic) and external transfer operations, (iv) hiring strong boxes (coffers), (v) administration of property, estates and wills and the like. In providing all these services the bank may act as the agent or *wakil* of the client and collect an agency fee or service charge. We will discuss these services in greater detail later. Thus a variety of services that are offered by conventional banks may also be supplied by Islamic banks without any need for modification in the nature of the product, as long as, there is no debtor-creditor relationship involved in the process. However, activities where such a relationship comes into existence in the beginning or at a later phase need close scrutiny for the possible existence of *riba*. As already indicated, services leading to creation of a debtor-creditor relationship often involve a mix-up of fees for service rendered and interest or *riba* for lending of money.

Where a loan is involved, it would be dangerous to allow the bank to receive revenues or fees based on a percentage of the loan value - to ward off suspicion of *riba*. But where there is no loan involved, the fee would be based on the benefit to the customer on one hand, and the efforts exerted by the bank or work done, on the other. Where both these elements are present, the fee may be determined as an absolute amount taking into account the benefit passed and costs incurred, and certainly not as a percentage of the value of loan.

While a bank may provide the above-mentioned services, the business of commercial banking is primarily about buying and selling of funds. For the bank to run its business, it must find ways to buy and sell funds without entering into transactions and contracts involving *riba* and *gharar*. The Islamic law of contracts fortunately offers a rich variety of contracts, which a commercial bank may consider for undertaking its financing and investment operations. The concept of Islamic banking is essentially based on the idea that Islam prohibits *riba*, but permits trade and profit-loss-sharing arrangements. The two forms of profit/loss sharing, which find frequent mention in *fiqh* literature, are *mudaraba* and *musharaka*. In *mudaraba*, one party provides the capital while the other party manages the business. Profit is shared in pre-agreed ratios and loss, if any,

unless caused by the negligence or violation of the terms of the agreement, is borne by the provider of capital. In *musharaka*, partners pool their capital to undertake business. All providers of capital are entitled to participate in management but are not necessarily required to do so. Profit is distributed among the partners in pre-agreed ratios while loss is borne by each partner strictly in proportion to the respective capital contribution. Early theoretical work therefore, concentrated on these two contracts for modeling financial intermediation and the two-tier *mudaraba* model of commercial banking was born. This simplistic model involved a two-tier *mudaraba* contract, the first among the depositors and the bank, and the second between the bank and the parties to whom finance is provided. The *mudaraba* contract formed the basis of mobilization of funds from depositors, with the bank as the *mudarib* and the depositor as the *rabb-al-maal*. It also formed the basis of utilization and investment of these funds with the bank now as the *rabb-al-maal* and the entrepreneur or user as the *mudarib*. The difference between the profit-share received from the entrepreneurs (*mudarib*) under the first contract and the profit-share paid to the depositors (*rabb-al-maal*) under the second contract constitute the source of profits for the Islamic commercial bank.

As theory was put into practice several alternative models emerged and a host of other *Shariah*-compliant sources and uses of funds became part of the model. In the subsequent chapters we develop further the blueprint for an Islamic bank that raises funds and invests them in a variety of Islamically approved ways. First, we trace the liability structure of an Islamic bank. If you take a look at the balance sheet of an Islamic commercial bank you would find that the liabilities or sources of funds (in addition to capital provided by shareholders and owners) are in the nature of current deposits, savings deposits, investment deposits and some other variants. We discuss these sources of funds in Chapter 4 on "deposit products". The following Chapters 5-8 are devoted to assets or possible uses of funds. We discuss them under the section "financing products". Since some of these "financing products" create debt or are debt-based while others involve participation or are equity-based, we discuss them in separate chapters. While tracing the blueprint, we avoid a detailed discussion on the judicial nature of these contracts, given that some modifications have been effected in the classical contracts while putting these into practice. We focus on the generally acceptable products first and relegate all the controversial products to a separate chapter (Chapter 8). Finally, we discuss fee-based commercial banking products in Chapter 9. These are off-balance-sheet products and services and involve minimal differences among conventional and Islamic products.

Chapter 4

DEPOSIT PRODUCTS

Mobilization of funds from savings-surplus units in the economy is an important task of a financial intermediary. As discussed before, a financial intermediary attempts to achieve this goal by creating and selling a variety of financial products that match the needs of the savings-surplus units. A Muslim saver is in some ways different. While needs related to returns, liquidity, maturity, safety, stability and the like are important for him/her, the Muslim saver has a unique concern - *Shariah* compliance. And while there is possibility of a trade-off between the other concerns, Islamic deposit products allow no trade-off in the matter of *Shariah*-compliance. Islamic banks are engaged in mobilizing savings from this unique group of savers by offering *Shariah* compliant products that also vary with respect to other dimensions of return, risk, liquidity, maturity, safety, stability and the like.

Current Account (*Wadiah/Qard*) Deposit

As with other banks, this account essentially provides for safekeeping of one's deposits. Withdrawals from this deposit account, including checks drawn for and against it, is guaranteed and honored by the bank. While the safe-keeping service is provided free of cost, banks also provide many additional features that ensure easy access to withdrawals whenever and wherever needed,

such as, checking facility, automated-teller-machine cards, charge cards, traveler's cheques, telephone banking, branch service, standing instructions, statement request facility, balance enquiry facility, remittances and the like.

The product is based on various alternative *Shariah* mechanisms. Some banks model these deposits on *wadiah-wad-dhamanah* or guaranteed deposits. Under this mechanism, the deposits are held as *amana* or in trust and utilized by the bank at its own risk. The depositor does not share in the risk or return in any form. Any profit or loss resulting from the investment of these funds accrues entirely to the bank. Another feature of such deposits is the absence of any condition with regard to deposits and withdrawals. The term "*wadiah* account" or "trust account" is used for such deposits.

Another view is to treat these deposits as *qard* or benevolent loan by the depositor. Accordingly the bank operates "*qard hasan* current account". As in above, the bank is free to utilize these funds at its own risk. The depositor in its role as the lender is not entitled to any return as the latter would constitute *riba*. In fact, any kind of benefit passed on to the depositor that is a part of the agreement, is deemed to be *riba*.

The *qard hasan* model is less popular than the *wadiah* model among bankers for the simple reason that marketing considerations demand providing additional benefits to the depositor. Under *qard hasan* framework, benefits to a lender (the depositor in this case) are rightly frowned upon as being against the spirit of this mechanism.

Debit and Charge Card

Based on such current account deposits, which are essentially free of risk and returns for the depositors, the Islamic alternative to a credit card has been designed. While several attempts have been made to design an Islamic credit card, none of these is free from controversy. As we shall find later these cards make use of mechanisms, such as, *bai-al-einah* and *tawarruq* that do not appear to be fully *Shariah* compliant. According to one view, the only Islamic alternative to a credit card is a debit card or a charge card that is essentially a mechanism of withdrawal of one's own funds deposited with an Islamic bank. These debit cards and charge cards cater to the fundamental need behind possession of a credit card, i.e. convenience by doing away with the need to carry cash to the point of purchase. Another reason behind possession of a credit card is simply the availability of credit that enables one to purchase beyond one's means (buy now, pay later). While a debit or charge cards does not take

care of this need, it perhaps serves as a tool of discipline in personal expenditure. Credit card, according to this view encourages wasteful consumption that does not fall within the ambit of desirable Islamic economic behavior.

Savings (*Wadiah/Mudaraba*) Deposit

This deposit account basically serves the need for the safekeeping of one's surplus funds while providing a modest return. The objective of a modest return is provided for using alternative models.

The first model is based on the *wadiah* mechanism as in case of current deposit. This model is quite popular in South East Asian countries. The principal amount of deposit is guaranteed. The bank guarantees the withdrawal of funds from this account anytime the customer may wish to do so. Savings bank deposit however, differs from current account deposit in that the bank now provides a return to the depositor, purely at its discretion as a gift. Such gift is not part of the contract. The following are the main features of this product. The product requires the Islamic bank

- To accept deposits from its clients looking for safe custody and a degree of convenience in the use of their funds;
- To request permission from such depositors to make use of their funds so long as the funds remain with the bank;
- To claim ownership over all profits derived from the use of such funds;
- To reward the customers by returning a portion of the profits, if any, from time to time, at its absolute discretion;
- To guarantee withdrawal or refund of a part or the whole of their balances wherever they so desire.
- To provide the depositors with withdrawal facilities such as, Savings Pass Books, ATMs and other related facilities.

Generally, the gift or reward on deposit is granted if the customer meets the minimum deposit required under this account. Such reward is variable in nature since it is profit-based and is discretionary on the part of the bank.

An alternative model is based on the mechanism of *mudaraba*. The bank now requires the depositors to authorize the bank (or appoint the bank as *mudarib*) for the purpose of investing the funds. Depositors however, have the right of withdrawal. Profits are calculated on the basis of the minimum balance maintained for a time period (say, a month). The minimum balance maintained

is deemed as the investment for that time period. A minimum balance is required to be maintained in order to qualify for a share in profits. The Pewani Savings Account offered by Bank Islam Malaysia is a case in point (*Concepts in Practice 4.1*) in which the sharing ratio varies with time. While the link between profitability of the investment (banking business) and time may not be correctly reflected in the sharing ratio that increases with time, the deposit product perhaps needs to be "simple". As stated, the purpose of this product is safe-custody with a moderate return.

Concepts in Practice 4.1

Pewani Savings Account at Bank Islam

Terms and Conditions: Minimum initial deposits of RM50.00; Open to women aged 18 years and above; Account holders can only perform withdrawal transaction once a month. Higher profit sharing ratio: 60:40 (Depositor: Bank) if the monthly average daily balance is RM5, 000.00 or more & 50:50 (Depositor: Bank) if the monthly average daily balance is less than RM5,000.00

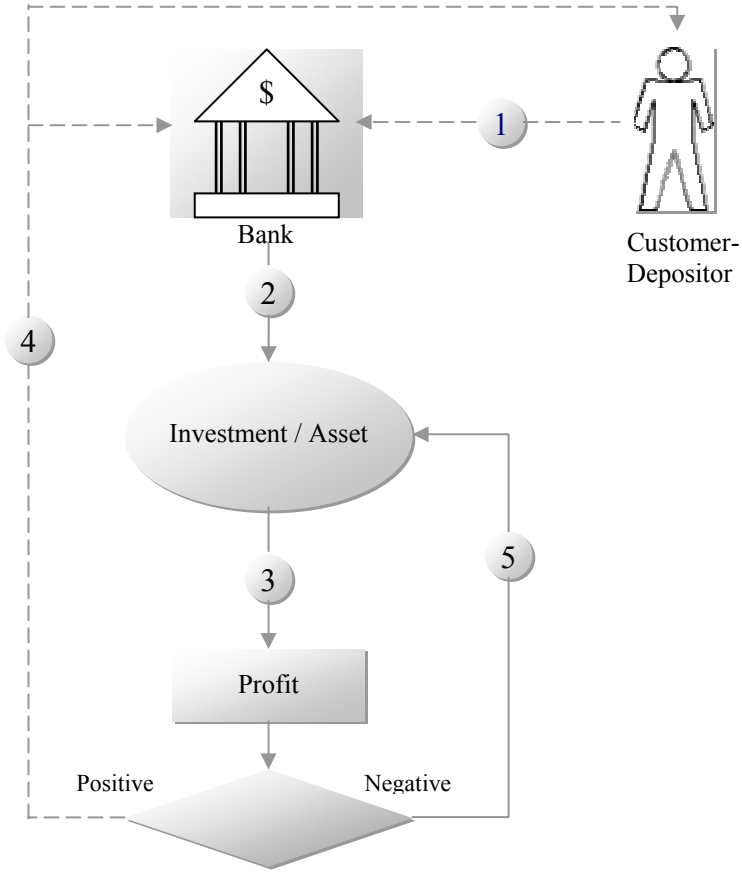
Takaful (insurance) coverage: Depositor are entitled to *Takaful* Hawa coverage of up to RM25,000.00, subject to the monthly average daily balance of RM50,000.00. Depositors are also entitled to receive benevolent endowment in the cases of death, hospitalisation, annual cancer check-ups etc**.**

Source: *www.bankislam.com.my*

A third model is based on the mechanism of *qard hasan* that is used primarily by Iranian banks. As in the case of current accounts, this model essentially views deposits as loans from savers to the banks. The functioning of such product is similar to *wadiah*-based products highlighted above. Although no dividends are payable to *qard hasan* depositors, banks provide a range of benefits including non-contractual gifts to their customers.

Investment (*Mudaraba*) Deposits

This is the core deposit product of an Islamic bank. The product is based on the concept of *mudaraba* and as such, is also known as profit-and-loss-sharing (PLS) deposit or participatory deposit. It is perhaps the Islamic counterpart of the conventional fixed deposit product that disallows withdrawal prior to a maturity period. At times such deposits allow withdrawal, but only at the cost of foregoing the profit share. The product is based on the concept of *mudaraba*. Depending upon the degree of freedom accorded to the bank as the *mudarib*, intended end-use of funds or eligibility of depositors, there are several types of investment deposits. All of these follow the basic structure as presented in *Exhibit 4.1*. There are several types of investment deposits:



Activity 1: Depositor and Bank discuss terms of *mudaraba*; Depositor provides funds to Bank;

2. Bank invests funds in assets and projects and manages its operations;
3. Business generates positive or negative profits;
4. Profits if positive, are shared between Depositor and Bank as per a pre-agreed ratio;
5. Profits if negative, are absorbed by Depositor; effectively bringing down the value of the asset created with its investments and the value of the deposit.

Exhibit 4.1 Structure of Deposits (Mudaraba Based)

General Investment Deposits

This is a popular deposit product of Islamic banks under which an investment pool is established. The pool includes investment deposits of different maturities. The funds are not tied to any specific investment project but are utilized in different and continuous financing operations of the bank. Profits are calculated and distributed at the end of the accounting period, which is either three months, six months or one year.

Special Investment Deposit

This deposit account is similar in all respects to General Investment Deposit except that the depositor should meet the required minimum to invest in this product. For instance, the bank may selectively accept deposits from the government and / or the corporate customer. The modes of investment of the funds and the ratio of profit distribution may usually be individually negotiated. The product provides the bank with specific authorization to invest in a particular project or trade and the profits of this particular project only are distributed between the bank and its customers according to mutually agreed terms and conditions.

Limited and Unlimited Period Investment Deposits

As the name suggests, investment deposits under the former are accepted for a specified period, which is mutually determined by the depositor and the bank. The contract terminates at the end of the specified period but profits are calculated and distributed at the end of the accounting period. In case of the latter, the period is not specified. Deposits are automatically renewable unless a notice of three months is given to terminate the contract. No withdrawals or further deposits are permitted in this kind of contract, but customers are allowed to open more than one account. The profits are calculated and distributed at the end of the accounting period.

Issues in Product Management

Gifts in *Wadiah* and *Qard*

When deposit products are modeled after *wadiah* or *qard*, the customer does not participate in any way in risk. The nominal value of deposits is not allowed to decline if the bank incurs losses instead of profits. As we have discussed above, banks invariably provide gifts or bonus – in cash and in kind

and various other benefits to the depositor. These constitute reward for the depositor. However, is such a reward Islamically admissible given that the depositor is not exposed to any risk? The answer to this question is somewhat tricky. On the one hand, the excess or expected return is not contractual in nature. The bank is under no obligation to provide a return and the return is purely in the nature of gift. Gifts, by definition, do not constitute *riba*.

At the same time, you may note that classical scholars have generally frowned upon gifts that accompany such deposits or loans. Even while the returns in the form of gifts are not part of the agreement, these may be recurring in nature. When the bank provides such gifts at a certain rate on deposits without fail, the customer would now have a clear expectation of returns. He/she would expect returns without bearing any risk. This comes dangerously close to devouring *riba*. As you may see in case of the HSBC Interest-Free Services (*Concepts in Practice 4.2*) the depositor receives a host of benefits that are contractual in nature and come with deposits or *qard*. Can these be justified simply as withdrawal mechanisms that provide for the right of the lender to seek partial or full redemption of his loan or that of the depositor to seek withdrawal of his/ her deposits any time?

Guaranteed Return in *Mudaraba*

Investment deposits are modeled after the classical contract of *mudaraba*. As such, the depositor as the *rabb-al-maal* is exposed to the possibility of both profits and losses and the possibility of guaranteeing the nominal value of deposits or guaranteeing a minimum rate of return does not exist. However, local law may mandate such a guarantee. Because of this practical requirement, the question of guarantee has been repeatedly subjected to scrutiny and as a result, one may observe a wide range of views in this matter. One view asserts that such a guarantee could be provided by the state as a third party. Another view calls for a radical departure from the classical *mudaraba* in the light of wide spread fraud in dealings. Still another view calls for a special "parental" treatment of "small depositors". There is yet to be a consensus on such concessions for a deposit modeled after *mudaraba*. A suggestion from this author is to offer special asset-linked deposits where the assets are debt (*murabaha* and *ijara*) based and yield a predetermined income. Deposits, which receive a known share of predetermined income can now be viewed as fixed-income or guaranteed-income deposits. This view fortunately has no detractors, but also no takers so far among the banking community. A general guarantee on all investment deposits on the other hand seems to be too susceptible to *riba* to gain acceptance.

Concepts in Practice 4.2

HSBC Interest-Free Services

HSBC Interest- Free Checking: With an HSBC Interest Free Checking account and a combined balance of $15,000 or more, one can enjoy (i) a free HSBC's MasterMoney debit card, (ii) no monthly maintenance fee, (iii) no ATM fees, (iv) free internet banking, (v) internet bill pay service, (vi) no issuance fee for money orders, official checks and travelers cheques, (vii) 50% discount on small safe deposit box annual fee.

The HSBC MasterMoney Debit Card: This card brings together the convenience and control of an ATM card with the flexibility of a credit card. Accepted everywhere MasterCard is - in over 21 million locations - it gives one extra purchasing power without extra charges. When one makes a purchase, the amount is deducted right from his/her checking account. Since this is not a credit or charge card, there are no payment dates and no bill at the end of the month. With the MasterMoneyTM Card, one not only enjoys all the benefits of Interest Free Checking, but also (i) no finance charges, (ii) no transaction fees when one uses MasterMoneyTM to make purchases, (iii) monthly statements with a detailed listing of checks, ATM transactions and debit card purchases (iv) no fees for obtaining cash and account balance information, making deposits, transferring funds and making purchases.

HSBC Interest Free Charge Card: Designed as an interest-free alternative to conventional products, the Interest Free Charge Card offers one the convenience of a regular credit or charge card but with the comfort of *Shariah* compliance. The benefits include: (i) optional overdraft protection for one's Interest Free checking account, (ii) payments at any of over 400 US branches, or online at any time with internet banking, (iii) worldwide acceptance at over 21 million locations, (iv) access to over 500,000 ATMs worldwide when one links the Charge Card to one's Interest-Free Checking account

Source: *www.amanahfinance.hsbc.com*

Chapter 5

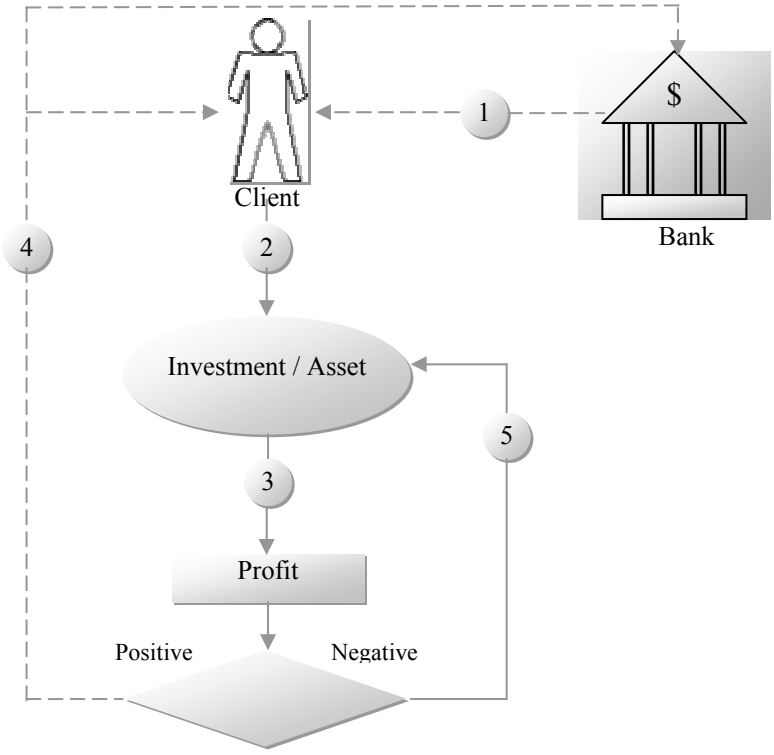
FINANCING PRODUCTS (EQUITY-BASED)

In this section we discuss various equity-based financing products, such as, *mudaraba* and *musharaka*. In banking parlance, these are referred to as trustee project finance and joint venture project finance respectively. The former involves a combination of entrepreneurship and capital while the latter involves a partnership in entrepreneurship and capital. We also discuss products based on a novel concept of declining *musharaka* leading to complete ownership of asset or project by the customer-entrepreneur. These equity-based products are unique to Islamic banking and in some sense, account for its superiority over conventional banking on grounds of ethics and efficiency. Arguably, because of their uniqueness, they are also less popular. The equity-based financing is what makes the business of Islamic banking more challenging.

Trustee Partnership (*Mudaraba*) Facility

Trustee partnership based on *mudaraba* is a mode of financing through which the bank provides capital finance for a specific venture indicated by the customer. The bank, called *rabb-al-mal* is the owner of the capital and the customer-entrepreneur, called *mudarib*, is responsible for the management of the business and provides professional, managerial and technical expertise for initiating and operating the business enterprise or project. Profit is shared according to a pre-agreed ratio. Losses if any, are entirely absorbed by the

capital provider – the bank. *Mudaraba* may be of two types – restricted or unrestricted. In a restricted *mudaraba* (*mudaraba* al-*muqayyada*) the bank or the financier may specify a particular business in which investments may be undertaken. *Mudaraba* may also be an unrestricted one (*mudaraba al-mutlaqa*); in which case the *mudarib* may invest the capital provided in any business he deems fit. A simple *mudaraba* financing structure is presented in *Exhibit 5.1*.



Dotted line indicates flow of funds

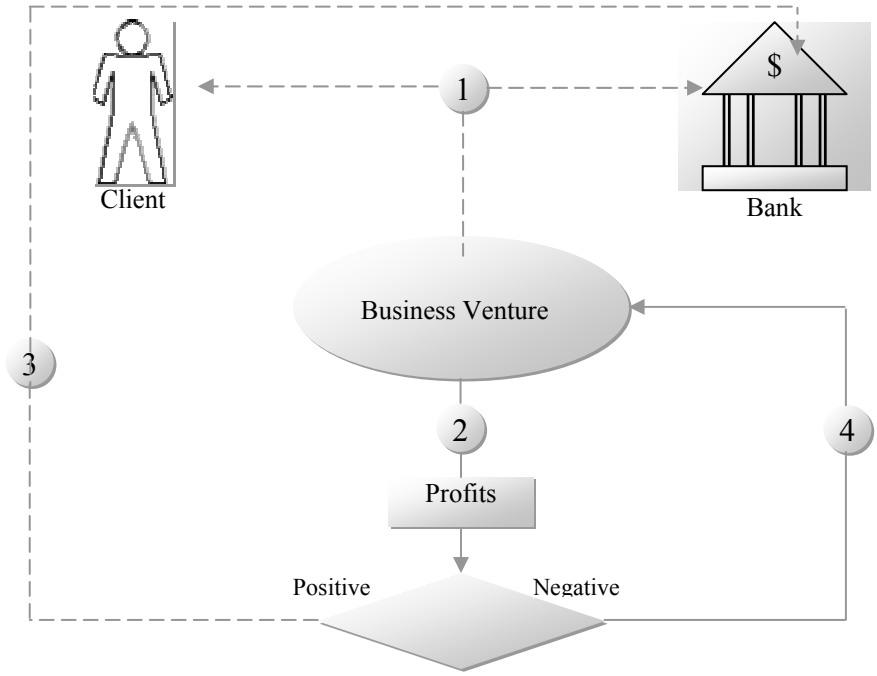
Activity 1: Bank and Client discuss business plan; Bank provides funds to client towards capital investment;

2. Client sets up the business and manages its operations;
3. Business generates positive or negative profits;
4. Profits if positive, are shared between Client and Bank as per a pre-agreed ratio;
5. Profits if negative, are absorbed by Bank; effectively bringing down the value of the asset created with its investments

Exhibit 5.1 Mudaraba Financing Structure

Joint Venture (*Musharaka*) Facility

A joint venture based on *musharaka* involves a partnership in which both the bank and its customer-client contribute to entrepreneurship and capital. It is an agreement whereby the customer and the bank agree to combine financial resources to undertake any type of business venture, and agree to manage the same according to the terms of the agreement. Profits are shared between the bank and the customer in the pre-agreed ratio. Losses are shared strictly in proportion to their respective capital contributions. A simple *musharaka* financing structure is presented in *Exhibit 5.2.*



Activity 1: Client and Bank discuss business plan and jointly contribute to capital of the venture;

2. Client and Bank jointly set up the business venture and manage its operations, sharing the responsibilities as per pre-agreed terms; Business generates positive or negative profits;
3. Profits if positive, are shared as per a pre-agreed ratio;
4. Profits if negative, are shared in proportion to capital contributions; effectively bringing down the asset value while keeping their respective shares in it unchanged.

Exhibit 5.2 Musharaka Financing Structure

Issues in Product Management

Risk and Return

Mudaraba and *musharaka* are equity-based products that involve sharing of returns and risks. Returns may accrue in the form of periodic profits and change in the value of the assets. An important feature of *mudaraba* is a pre-agreed ratio in which profits are to be distributed between the financier-bank and the entrepreneur-client. It rules out any allocation of profits in absolute terms other than as per the agreed ratio. The same holds good for *musharaka* as well.

Losses in a *mudaraba* are completely absorbed by the financier-bank. The client-entrepreneur is liable to bear losses, if such losses are the outcome of his managerial negligence or misconduct. In *musharaka* however, both the bank and the client share in the losses in the ratio of their investment in the project.

Mudaraba also provides for limited liability for the financier in line with the modern equity contract. The liability of the bank is limited to its investment in the project. This is quite rational and fair, since the bank does not participate in the managerial decision-making and cannot be held responsible for the risks created by the entrepreneur-client. *Musharaka* on the other hand, involves unlimited liability of the partners, as both the bank and its client are decision-makers in the business. Therefore, if the liabilities of the business exceed it's assets and the business goes into liquidation, all the exceeding liabilities shall be borne *pro rata* by the partners.

Regarding change in the value of assets created under *mudaraba*, the client-entrepreneur can neither benefit nor lose because of such change. Such gains or losses accrue solely to the financier-bank. In *musharaka*, however, such gains or losses in the value of assets financed by the joint pool of funds rightly accrue to both the bank-financier and client-entrepreneur.

Liquidation

A feature of the classical *mudaraba* and *musharaka* is that either of the parties to the agreement have an option to terminate the agreement or withdraw from the venture any time they deem fit. Liquidity of investments is thus ensured for the partners. On the date of termination, profits are determined as the excess of the liquidated value of all assets over investment. Once profits are so determined, these are distributed between the parties according to the agreed ratio.

This however, is somewhat problematic for projects that require a certain minimum time period before coming to fruition. It is also problematic in case of projects that are "going concerns". Withdrawal of a partner from the project may have material consequences for the project. At the same time, the partners need to be provided with liquidity of their investments in the project. Therefore, modern day scholars have devised the concept of "constructive liquidation" which may be practiced with the mutual consent of all parties. The concept implies that the Net Asset Value of the venture may be calculated at periodic intervals by subtracting all liabilities from the asset value. An investor or partner would now be allowed to liquidate its investment at this value.

Combination of Mudaraba-Musharaka

Often a *mudaraba* may be combined with *musharaka*. In such a facility the client-entrepreneur contributes to the capital of the venture, as does the bank-financier. Like any other *mudaraba* the client-entrepreneur is solely responsible for the management of the business and the bank is purely a sleeping partner. The catch here is: the ratio of profit share for a pure financier (who does not participate in the management and operations of the business) is capped at or cannot exceed the ratio of its contribution to capital of the venture.

Declining *Musharaka*

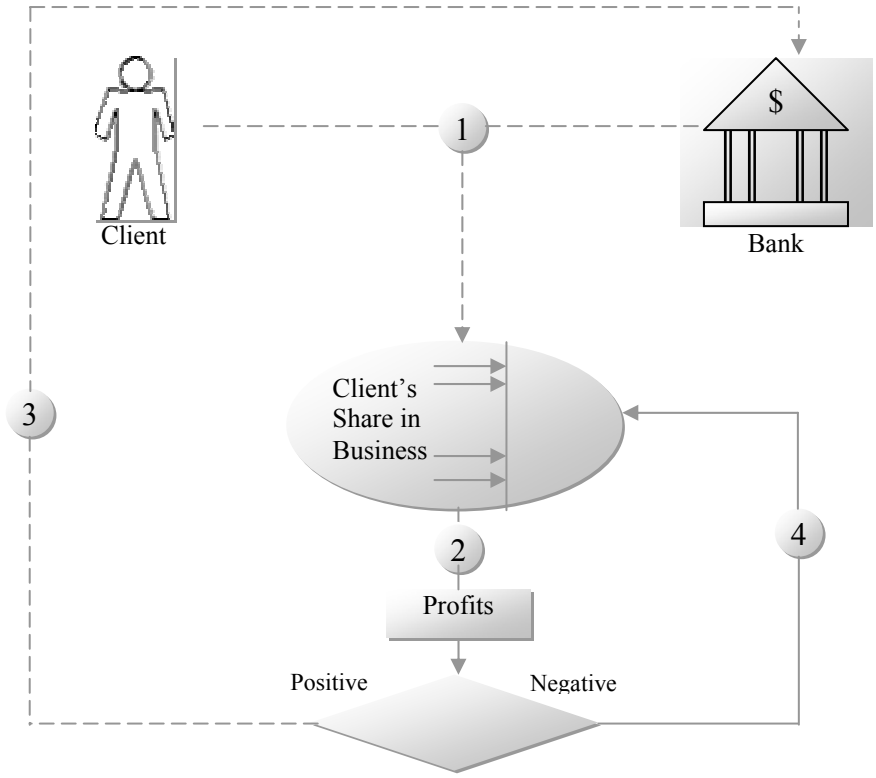
A declining *musharaka* is a recent innovation. Its popularity originates from the fact that classical *musharaka* aims to involve bank as a permanent partner in the venture. This may not be a desirable idea for a financial intermediary. A financial intermediary likes liquidity in its investments or at least a finite maturity of its investments. In a declining *musharaka*, the bank's share in the equity is diminished each year through partial return of capital. The bank receives periodic profits based on its reduced equity share that remains invested during the period. The share of the client in the capital steadily increases over time, ultimately resulting in complete ownership of the venture. A simple declining *musharaka* financing structure is presented in *Exhibit 5.3*.

Issues in Product Management

Forward Commitment

A major issue in design of products based on declining *musharaka* is related to the forward nature of some activities that are part of the mechanism. While a financier would prefer a forward "commitment" and certainty about the

price at which it could offload its share of investment, this may not be permissible in the framework of Islamic finance.



Activity 1. Client and Bank discuss business plan and jointly contribute to capital of the venture;
2. Client and Bank jointly set up the business venture and manage its operations, sharing the responsibilities as per pre-agreed terms; Business generates positive or negative profits;
3. Profits if positive, are shared between Client and Bank as per a pre-agreed ratio; the profit share of Client flows into Bank too, towards partial redemption of the latter's capital contribution;
4. Profits if negative, are shared between Client and Bank in proportion to their respective capital contributions; effectively bringing down the asset value while keeping their respective shares in it unchanged.

Exhibit 5.3 Declining Musharaka Financing Structure

It is not without reason that the housing sector has witnessed greater use of declining *musharaka* than any other sector, since the expected profits from this business would be sourced from rentals that are predictable to a considerable degree. Housing finance through declining *musharaka* involves joint purchase and ownership of the property by the bank and its client. Once the future rentals and hence, the respective profit shares of the parties are determined, the next step is to require the purchase or redemption of the bank's share in the asset in future time periods. The common view is that *Shariah* does not permit forward purchase or sale involving commitment from both parties, but allows a unilateral promise. As such, the client may make unilateral promise(s) to purchase or redeem the bank's share on specific dates in future. Such promise(s) may also be binding on the promisor.

Pricing of Redemption

Another related issue is the pricing or valuation of such shares. In this matter, the general view is that the redemption should be undertaken at the prevailing market price of the property. While the promise to redeem the shares at "known" or predetermined prices is more convenient, it is more controversial too. If prices are predetermined, this may involve a "certain" return for the financier or open the doors of *riba*. The counter view is that a promise to buy in future already involves uncertainty. A promise to buy at an unknown (market) price involves still greater levels of uncertainty. Hence, a predetermined price such as cost price may be desirable. In the property financing product by Abu Dhabi Islamic Bank (see *Concepts in Practice 5.1*), the bank would stand to gain if property prices appreciate in future, as they do in most cases. Instead it opts for sale of its stake at cost price. Clearly, there is a trade-off between risk and reward.

Concepts in Practice 5.1

Property Financing at Abu Dhabi Islamic Bank

The property is bought jointly by the Bank and customer. This structure is similar to *Ijara* in that the customer agrees to pay the cost price over a time period to the Bank, in return for acquiring the Bank's share in the property and paying rent in the meantime for living in the property. The rent element is determined by agreement between the parties based on market rent for similar properties. This structure assumes that, initially the property will be bought at cost price from the seller jointly by the Bank and the customer. The customer promises to purchase the Bank's share over a period of time. The Bank may authorize the customer to register title in his own name and safeguard its interests by holding the title deeds and registering a charge. Repayments are made up of the rent for the property and repayment of a part of the Bank's share of the cost price. As more of the property is being bought by the customer over time, the amount of rent payable is reduced progressively.

Source: *www.adib.co.ae*

Gharar in Contractual Structure

Standard texts of *Fiqh* mention about inadmissibility of "two contracts in one" on grounds of excessive *gharar*. This essentially stresses the need to avoid unduly complex contractual mechanisms and structures involving multiple interdependent and interrelated contracts. Combining several contracts, such as, adding sale contract(s) or promises to the original *musharaka* contract may cause such complexity. However, in a structure where the sale or option (promise) is in the nature of a separate or side agreement, not linked to the *musharaka* agreement, there is no room for *gharar* caused by interdependence.

Areas of Application

Project Finance: *Mudaraba* facility is observed to be a useful mode for financing projects, such as, real estate and housing development, construction of public roads, ports, markets, buildings, corporate plants, warehouses, and other infrastructural concerns. *Musharaka* is suitable all the above projects. In fact, it is suitable for financing any kind of business venture, manufacturing, trading, and others where the bank is willing to act as partner in the venture (see *Concepts in Practice 5.2*).

Concepts in Practice 5.2

Project Finance Schemes at *Al-Amanah* Philippines

Trustee Project Financing: This scheme is designed particularly for awarded projects that need full financing. Under this arrangement, the client utilizes the funds of the Islamic bank to bankroll the completion of a government or corporate project. In return a pre-arranged share of the profit derived from the project is assigned to the client. The ratio of profit sharing may be tilted in favor of the Islamic bank being the sole financier of the project cost and, in some instances, also the project sourcing party. Funds made available by the Islamic bank under this financing mode are usually used to defray the cost of the real estate and housing development, construction of public roads, ports, markets, buildings, corporate plants, warehouses, and other infrastructural concerns.

Joint-Venture Project Financing: This mode of financing serves the need of clients whose available funds are not sufficient to defray the cost of awarded projects. Under this scheme, both the Islamic bank and the client share the capital formation of the venture according to the pre-arranged ratio. Both partners to the venture also agree upon the ratio of profit sharing. This financing arrangement is also applicable to projects mentioned in trustee projects mentioned in Trustee Project Financing. The Islamic bank may or may not participate in the management of the project. The ratio of profit sharing in this case is usually titled in favor of the active or Managing Partner who is usually the client.

Source: *www.islamicbank.com.ph*

Letter of Credit: In addition to financing of projects, *musharaka* may also be undertaken to finance a single transaction. A useful application of *musharaka* financing is the Islamic letter of credit (see *Concepts in Practice 5.3*).

Concepts in Practice 5.3

Musharaka-Based Letter of Credit at *Al-Amanah* Philippines

An Islamic letter of credit at *Al-Amanah* involves the following steps:

- The customer informs the bank of his Letter of Credit requirements and negotiates the terms and conditions of joint-venture financing.
- The customer places a deposit with the bank under *al-wadiah* principle towards his share of the cost of goods to be purchased/imported as per *musharaka* agreement.
- The bank establishes the Letter of Credit and pays the proceeds to the negotiating bank utilizing the customer's deposit together with its own share of financing, and eventually releases the pertinent papers to the customer concerned.
- The customer takes possession of the goods and disposes these off in the manner agreed upon.
- The bank and customer share in the profit from the venture as provided for in the agreement.

Source: *www.islamicbank.com.ph*

Housing Finance: A survey of diminishing *musharaka* financing at various Islamic banks reveals that it is used primarily in the area of housing finance.

Microfinance: It is also observed to be potentially quite promising in the field of microfinance or financing of small and medium enterprises.

Chapter 6

FINANCING PRODUCTS (DEBT-BASED) – I

As you are aware by now, early models of Islamic banks are based on a two-tier *mudaraba* or partnership structure. Such equity-based banks are superior to conventional banks from the standpoint of robustness to external shocks. Equity-based banking is also perceived to be superior to conventional banking from the standpoint of ethics, fairness and social justice. Subsequent models of Islamic banks use an expanded framework and include debt-based mechanisms, such as, *murabaha, bai-bithaman-ajil* (*BBA*), *ijara, salam, istisna, istijrar* and *qard-hasan*. The list also includes debt-products that involve *bai-al-dayn, bai-al-einah*, and *tawarruq* that are either rejected or at best deemed controversial by mainstream Islamic scholars. All the above products are discussed in elaborate detail in the three subsequent chapters. Out of these various debt-based financing products, the most popular are: *murabaha, bai-bithaman-ajil* (*BBA*), and *ijara.* We therefore, devote the first of these three chapters to these popular products. In the next chapter we discuss all remaining debt-based but non-controversial products. In the last chapter the controversial products are listed. We now turn to the generally accepted and most popular of all financing products.

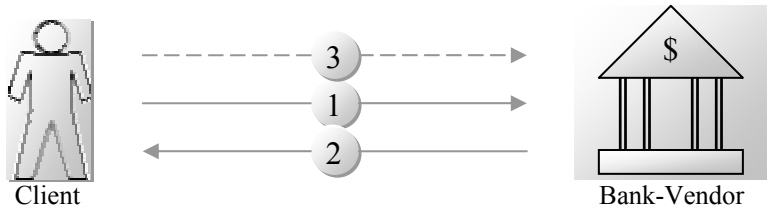
Deferred Payment Facility (*Bai Bithaman Ajil*) with Cost-Plus Sale (*Murabaha*)

Bai bithaman ajil (*BBA*) or simply *bai mu'ajjal* is a sale where payment of price is deferred to a future date. Often it includes features of a *murabaha*, which implies a sale on a cost-plus basis. As a financing product, *bai mu'ajjal-murabaha* is a very popular, and perhaps the most popular Islamic financing product. *Bai bithaman ajil* (*BBA*) is a *Shariah* approved mechanism. So is *murabaha*. The mechanism may be described as follows. Individual A is in need of commodity X. He approaches Bank B. Now, B buys X from the vendor/ supplier at price P. This price is also known to A. Next, B sells X to A at a marked-up price, say P+M, where M is the agreed profit or mark-up taken by B. The payment of price P+M is now deferred to a future date and is made in full or in parts.

Note here that *BBA* or *bai-mu'ajjal* simply implies deferment of payment of price irrespective of whether the cost and mark-up are known to parties or not. In a *murabaha*, both parties to the transaction must know the cost and the profit or mark-up. Where the seller does not disclose the cost and profit thereon, the transaction is called *musawama*. Note that *musawama* is also a valid transaction. *Bai mu'ajjal* and *murabaha* have been used in various debt-based banking products. In what follows we highlight some such products. Take a close look at the product details and you would find a *BBA* or *murabaha* concept at work with or without "full" *Shariah* compliance. Let us begin with some valid *BBA- murabaha* financing structures.

BBA-Murabaha Financing Structures

The simplest possible structure emerges when the transaction involves two parties only – the client and bank. The bank is also the vendor and sells the commodity to its client on a deferred payment basis. From a *Shariah* point of view, such a structure is the most ideal one. Its profits are fully justified by the risk it assumes as a vendor and there is no suspicion of *riba*. This structure is presented in *Exhibit 6.1.* This structure has recently been used in car financing products as will be discussed later. The bank in this case claims to have its own car show rooms from where its clients may purchase cars on a deferred payment basis. The financing structure comprising several activities may be presented as follows.



Dotted line indicates flow of funds.

Activity 1. Client approaches Bank-Vendor and identifies commodity, collects relevant information that includes base price and the mark-up;
2. Bank sells commodity, transfers ownership and possession to Client at marked-up price;
3. Client pays marked-up price in full or in parts over future (known) time period(s).

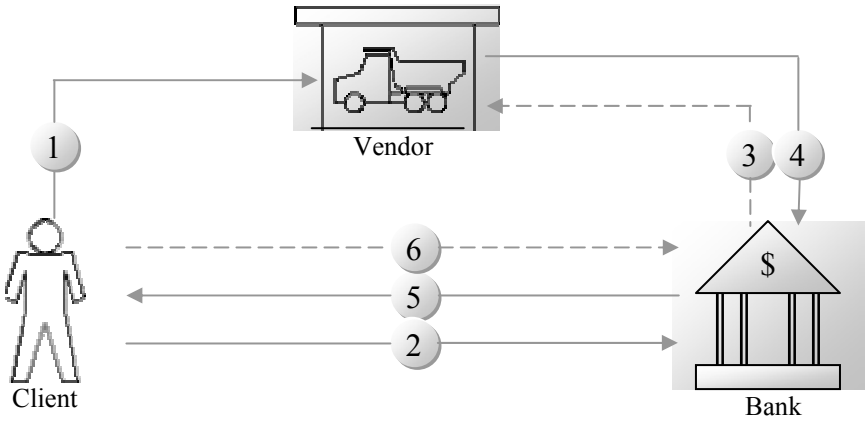
Exhibit 6.1 BBA-Murabaha Financing Structure I

In most cases however, the mechanism involves a third party – the vendor or supplier since the bank cannot be expected to engage in sale of a variety of products from multiple sectors. There are now two distinct sale contracts that occur at different points of time. The first contract is between the vendor and the bank and second contract is between the bank and its client. The sequence of activities under such financing is presented in *Exhibit 6.2*.

Another possible scenario is when the bank would not like to directly deal with the vendor in connection with the first purchase/sale of the commodity. The bank here appoints the client as its agent. The client in this capacity would deal with the vendor as far as the first purchase/sale of the commodity is concerned. The changed structure is presented in *Exhibit 6.3*.

This mechanism where the client acts as the agent of the bank for the first sale transaction, may be ideal when the client requires a specialized equipment and is better informed than the bank about the product(s) and source(s) of supply. As the bank deals with many clients from a variety of segments, there is a possibility that the bank may end up buying certain goods for resale to client(s), which do not meet client specifications. In order to eliminate this likelihood, the bank appoints the client as its agent for selecting the right goods. This arrangement may also be desirable for recurring trade-financing transactions or working capital financing. In this case, Activity 1 involves the bank setting up a *murabaha* facility under which the client and the bank sign a master agreement of mutual promise governing recurring transactions.

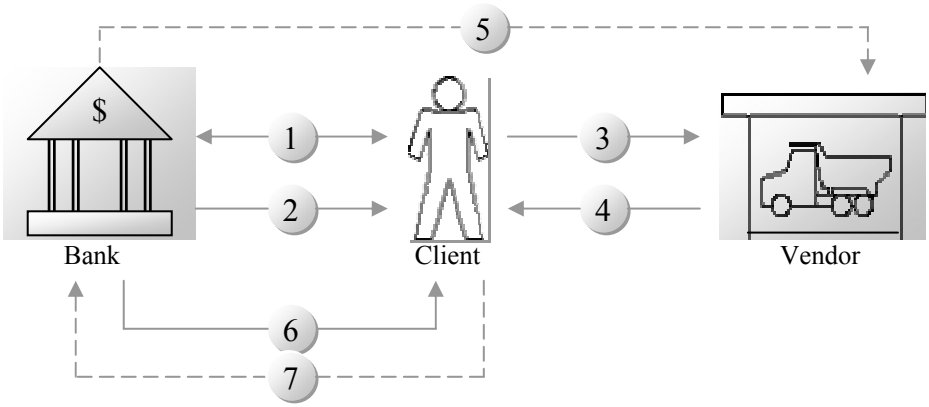
It is interesting to note in the structure how the relationship between the bank and its client changes from one phase to other. In the first phase, the relationship between them is that of a promisee and promisor. It then changes into a principal-agent relationship. In the third phase, it is between a seller and a buyer. And finally when the sale is on a deferred payment basis, it is a creditor-debtor relationship. Therefore, it is important that at each stage, their roles, rights, obligations and their implications are distinctly understood.



Dotted line indicates flow of funds.

Activity1. Client identifies and approaches Vendor or supplier of the commodity that he/ she needs, collects all relevant information;
2. Client approaches Bank for *BBA-murabaha* finance and promises to buy the commodity from the Bank upon resale at the marked-up price;
3. Bank makes payment of base price to Vendor;
4. Vendor transfers ownership of commodity to Bank;
5. Bank sells the commodity, transfers ownership to Client at marked-up price;
6. Client pays marked-up price in full or in parts over future (known) time period(s).

Exhibit 6.2 BBA-Murabaha Financing Structure II



Dotted line indicates flow of funds.

Activity 1. There is an agreement of mutual promise between Bank and Client whereby the Bank promises to sell and the Client promises to buy the commodity at the marked-up price; the promise covers agreed profit-rate or mark-up to be added to the cost, which is already known to the Client, and fixed date(s) of repayment;
2. Bank appoints Client as its Agent;
3. Client identifies the vendor, selects the goods on behalf of the bank and advises its particulars, including the vendor's name and its purchase price to the bank in writing;
4. Vendor makes physical delivery of commodity to Agent (Client) of Bank; trained staff from bank oversee the process of client taking physical possession of goods;
5. Bank makes arrangement for payment of purchase price to Vendor;
6. The agency contract comes to an end; Bank sells the commodity on the basis of the agreement of mutual promise, transfers ownership to Client at marked-up price;
7. Client pays marked-up price in full or in parts over future (known) time period(s).

Exhibit 6.3 BBA-Murabaha Financing Structure III

Issues in Product Management

A *BBA-murabaha* facility at times may appear similar to conventional bank financing. To them, it is merely a substitution of profit rate or mark-up for the rate of interest. Indeed the distinction between the two may disappear if proper care is not exercised in the practice of *murabaha*. *Shariah* therefore, imposes several constraints and prescribes certain norms in order that a *murabaha* facility is free from *riba*. There are also conditions and constraints in

place that aim to keep the product free from prohibited *gharar*. Since the number of such conditions and constraints is fairly large, we focus on the ones that are more important from the standpoint of preventing an abuse of the system.

Risk and Return

In line with the *Shariah* maxim of "*al-kharaj bi-al-daman"* or "revenue goes with liability" the Bank must bear a certain amount of risk associated with ownership, such as, price risk, risk of destruction of asset etc. in order to legitimize its returns. Note that conventional banks providing *riba*-based loans are also exposed to a kind of risk - the risk of default and delinquency. However, such risk exposure is not enough to legitimize gains. In order to ensure that the bank's gains are above all suspicions of *riba*, the sequence of activities highlighted in the above structures must be meticulously maintained. The subject of sale must exist in the ownership, physical or constructive possession of the seller at the time of sale. In other words, the second contract in the above financing structures must "follow" the first contract. The bank must have the ownership and possession of the commodity before it can sell the same to its client. Possession may be physical or constructive. The latter means a situation where the bank has not taken the physical delivery of the commodity, yet it is in control of the commodity with all the rights, liabilities and risks, including the risk of destruction. In modern day trade and commerce, physical possession may not matter in the presence of adequate documentation showing ownership and constructive possession. This risk bearing by the bank even if for a short or fleeting time period legitimizes bank's profits in the eyes of *Shariah* as distinct from prohibited *riba*.

Legal Nature of Promise

An actual buy or sale is different from a mere promise to buy or sell. In *murabaha* when the bank and/or its client make a promise, the same is a moral obligation. There is difference of opinion among scholars on whether it is also a legal obligation. If a promise is not enforceable in a court of law, this may create a difficult situation, especially where price of the commodity happens to be extremely volatile. Depending upon how price moves between the time of first contract (between the bank and the vendor) and the second contract (between the bank and the client) either of the parties would have an incentive to default. For instance, if the price plummets after the first contract, a buyer may decide not to buy the commodity from the bank (since it can now buy it from the market at a lower price). The converse would be true when the price shoots up after the first contract. In this case the bank would have an incentive

to sell the commodity to the market at a higher price. In both cases, there may be a breach of promise and the resultant exposure to price.

Whether a promise involves a moral or a legal obligation perhaps depends on the nature of the promise. A unilateral promise to make a gift cannot obviously be enforced through courts. It creates at best, a moral obligation. But in commercial dealings, where a party incurs a liability on the basis of a promise by another party, it is only fair that such a promise should be legally enforceable. This is the case with *murabaha*.

Subject of *BBA-Murabaha*

As indicated earlier, for a valid *murabaha* or *BBA*, the subject of sale must exist in the ownership, physical or constructive possession of the bank at the time of sale to its client. One may add to the list other conditions of a valid sale, such as, specifications of object of sale, terms of its delivery and the like. Sale attributed to a future date or a sale contingent on a future event or fulfillment of a condition (external to the transaction) is void. If a condition is part of the original sale, e.g. delivery at a specific place, this is permissible. A *murabaha* must not involve sale of forbidden commodities, such as liquor, pork and the like. The subject of sale should be something of value that is classified as property in *fiqh*. This may raise several important *fiqhi* issues, such as, whether "rights" qualify as property or not. We have in fact, not only witnessed *murabaha* financing of cars, trucks and buildings, but also some innovative and controversial *murabaha* products involving education, *umrah* packages and even foreign currencies! *Murabaha* financing of education (see *Concepts in Practice 6.1*) package simply means that the bank buys the "right to enroll in the university" and then resells to the student at a marked-up price. Can a university "sell the offer of enrollment" to a bank that would be resold to the student? Does a bank qualify to be a student of the university in the first instance? Can anyone transfer its right to enrollment in an academic institution as it is supposed to take place in the second instance? Can a right be the subject matter of a sale or *murabaha*?

Specification of Price

A requirement of a valid sale is knowledge and specification of price and payment terms. The price is fixed at the time of contracting, as is the exact mode of payment, e.g. frequency and quantum of installment payments. This is to avoid any *gharar* or uncertainty as a source of potential conflict between the parties.

Concepts in Practice 6.1

Education Financing Program of Bank Islam

This facility is based on the *bai bithaman ajil* contract; it is a method of sale with deferred payment, to ease the financial burden of the student while he/ she is still studying.

- Purpose of Financing: To finance a full-time or part-time course approved by the relevant authorities which is being offered by a local as well as overseas colleges/ universities/ other institutions of higher learning.
- Margin of Financing: Up to 100% inclusive of cost of purchasing computer and learning fees offered by the institution as a package.
- Profit Rate: Attractive fixed rate.

Source: *www.bankislam.com.my*

Spot and Deferred Prices

A *BBA- murabaha* contract admits the possibility of cash or spot payment of price as also its deferment over subsequent time periods. Does this mean that the deferred price in *BBA-murabaha* is the same as cash or spot price? According to majority of scholars, the deferred price may be more than the cash price, but it must be fixed at the time of sale. The reason for this permissibility perhaps lies in the fact that the seller can charge varying prices with an absolute freedom in the matter. Further, the price differential (between cash and deferred price) cannot be conclusively attributed to deferment or time value of money alone. While this may well be the reason in specific or most cases, no generalization about the same could be made. Therefore, the higher deferred price is deemed legitimate.

However, at the time of contracting, parties must clearly specify the nature of price and payment – spot or deferred. In case of deferred payment, the terms, such as, maturity, amount and timing of installments must be clearly specified. Once the price is fixed, it cannot be increased in case of default; nor can it be decreased in case of early payment.

Profit Rates and Benchmarks

In a *murabaha*, price includes a known profit or mark-up. It has been observed that the profit rate is often determined or expressed in relation to the market interest rate, such as, the LIBOR (London Inter Bank Offering Rate). This naturally leads to a suspicion that *murabaha* is no different from

conventional lending. After all, the same market forces determine the costs to the client-borrower under both. You may note that this method of pricing in a *murabaha* is legally admissible in *Shariah*, even though the outcome may not be a desirable one. It is natural for rates (on both Islamic and conventional products) to align with each other, especially in an integrated market comprising both types of products. It is natural and legal for a depositor in Islamic bank to benchmark his/her expected return against what is being offered by conventional banks. As a consequence, it is also natural and legal for an Islamic bank to benchmark its *murabaha* rates against lending rates charged by conventional banks. This is a natural, albeit undesirable outcome of a dual financial system where Islamic and conventional banks co-exist.

Fixed and Floating Profit Rates

A point of difference between *BBA-murabaha* and conventional lending that has major practical implications relates to volatility in rates. Interest rates are observed to be extremely volatile and many conventional banking products are floating-rate products. The rates on such loans are automatically adjusted upwards or downwards in line with changes in interest rates. *BBA-murabaha* financing products are, on the other hand, fixed-rate products. The rate, once determined for a given contract, is not allowed to float with changes in the interest rates or any other rate. You may note here that a fixed rate facility may be converted into a floating rate facility by making the debt roll-over at periodic intervals. At the end of a specific time period, a new fixed rate (reflecting current market conditions) replaces the old rate. While this is a possibility in case of conventional bank loans, *murabaha* does not permit a roll-over. A roll-over in *murabaha* would imply that another separate *murabaha* is booked on the same commodity. This practice needless to say, is not only counter-intuitive, but also inadmissible in *Shariah*.

Default Risk and Its Mitigation

A major problem associated with *BBA-murabaha* financing relates to a possibility of willful default by clients. It is believed that conventional lending has a built-in disincentive against defaults and delinquencies and incentive for early repayment. The borrower is penalized with additional interest, which is deemed as a compensation for the delay or time value of money. Similarly, if the client decides to pay earlier than the scheduled time, he is granted a discount or rebate. The quantum of discount or rebate is determined again with reference to the interest rate. Since such compensation or rebate is entirely due to time value of money and nothing else, this is deemed to be a case of prohibited *riba*.

Hence such practices are not allowed in case of *BBA-murabaha*. A *BBA-murabaha* does not admit the possibility of an increase or decrease in price once it is fixed.

Considering the case of discounts first, some scholars do not object to granting of rebate by a lender or the bank in case of early repayment or prepayment by its client (as an act of kindness and virtue!). However, the act of granting a discount or rebate in case of prepayment should entirely be voluntary and at the discretion of the lender. The rate of discount cannot be pre-specified in the contract. The contract per se, cannot contain a stipulation for subsequent increase or decrease in price. However, most of present day Islamic banks do provide for a rebate in case of early repayment. For instance, the car financing scheme at Al-Rajhi (See *Concepts in Practice 6.2*) allows "an early pay-off settlement for the contract, after one year has elapsed from the contract signing date; and it is calculated using the *Declining Profit Method*. As a result, the Customer will benefit from not paying the profit for the remaining period."

Concepts in Practice 6.2

Car Installment Program of Al Rajhi Banking & Investment Corporation

The Company sells all types of cars in all specifications. They are sold through the Company's showrooms in Riyadh, Jeddah, Dammam and Madinah. There is no down payment; the maximum financing period is 5 years; all cars must be new. A customer may be exempted from providing a guarantor, if a bank guarantee is brought to cover the full loan during the installment period, or a reservation is provided on invested amounts or accounts with the Corporation equivalent to the loan amount, or stocks from Saudi companies equivalent to 150% of the loan value are presented, signed to sell. The customer can sell the car before completing the installments, because the car is registered under his/ her name. However, he/she still needs to pay the remaining installments. It is possible to make an early pay-off settlement for the contract, only after one year has elapsed from the contract signing date; and it is calculated using the *Declining Profit Method*. As a result, the Customer will benefit from not paying the profit for the remaining period. Al-Rajhi Banking and Investment Corporation does not charge any interest. Instead the Corporation charges an agreed fixed profit margin added to the total financing amount of the car. The profit margin is 8% yearly.

Source: *www.alrajhibank.com.sa*

As far as dealing with the problem of delays and delinquencies is concerned various alternatives have been suggested.

i. One alternative is to require the client-in-default to donate a specified amount for a charitable purpose. The bank collects such donation and uses the same for a charitable purpose on behalf of the client. Needless to say, such a penalty does not form part of the income of the bank and hence, does not compensate the bank either partially or fully for its cash flow problems caused by delays and delinquencies. It merely acts as a disincentive.

ii. A minority view suggests a mechanism that would provide for penalty/disincentive as also compensate a bank for the actual loss it suffers due to delays and delinquencies. According to this view, clients who default in payment deliberately may be made liable to pay compensation to the bank for the loss at a rate equal to its profit rate on deposits. However, there should be additional safeguards to ensure that the default is indeed willful and deliberate. Further, the compensation is allowed only if the investment account of the Islamic bank has earned some profit to be distributed to the depositors. If the investment account of the bank has not earned profit during the period of default, no compensation shall be claimed from the client. This view has not found much favor on the ground that the idea of such compensation to the financier is alien to *fiqh*.

iii. A third alternative that is suggested is for the bank to stipulate a condition in the contract that in the event of payment default of a single installment that is due, the remaining installments will become due immediately. However, this alternative may cause undesirable hardships for the client and has a lesser acceptance among bankers.

iv. A fourth alternative to mitigate or minimize default risk is for the bank to seek a security from its client either in the form of a mortgage or in the form of a lien or a charge on any of his/her existing assets. The bank can also ask the client to furnish a guarantee from a third party. In case of default in the payment of price at the due date, the bank may have recourse to the guarantor, who will be liable to pay the amount guaranteed by him. Such mortgages and guarantees are subject to rules that are discussed at great length in the books of *fiqh*. The bank may also ask its client to sign a promissory note or a bill of exchange. However, you may note that such an instrument cannot be sold to a third party at a price different from its face value.

v. At times, rescheduling of installments is seen as a way out in the face of default. In conventional banking, loan rescheduling is accompanied by additional interest charge for the timing differences. *BBA-murabaha* does not allow such rescheduling as no additional amount can be charged for the same. The amount of the *murabaha* price remains unchanged. Some banks attempt to circumvent this by changing the unit of currency. Needless to say, this is not permissible.

A survey of various available *murabaha* and *BBA* based schemes shows that these are presently used to finance purchase of automobiles, houses, goods, equipments, furniture or any tangible items of value from a third party.

Working Capital Financing: BBA-*murabaha* is suitable for manufacturers who need working capital on a relatively short-term basis to finance acquisition of raw materials and consumables or for traders who need working capital for financing acquisition of merchandize. The Islamic bank buys certain commodities requested by clients who by presenting trade instruments such as purchase orders and other attendant proof of trading transactions establish the existence of a ready market for the goods requested. The eventual repayment of the financing exposure includes a prearranged mark-up for the Islamic bank. Such working capital financing caters to domestic transactions only. Working capital financing under *murabaha* principle is provided in the following manner:

- The customer requests the bank to provide financing for his working capital requirements by purchasing stocks and inventories, spares and replacements, raw materials or semi finished products under the principle *murabaha*.
- The bank purchases or appoints the customer as its agent to purchase the required goods utilizing its own funds.
- The bank subsequently sells the goods to the customer at an agreed price on a mark-up basis.
- The bank allows the customer to settle the sale price on a deferred term 30 days, 60 days, 90 days or any other period as may be agreed upon between the parties.

Working Capital Letter of Credit: This mode of trade financing is provided fully in the form of an LC instrument negotiated from foreign countries as requested by an eligible client. The total importation cost plus a pre-arranged mark-up is then repaid to the Islamic bank upon resale of the imported commodity. The Letter of Credit under *murabaha* is provided as follows:

- The client informs the bank of his Letter of Credit requirements and requests the bank to purchase/import the goods indicating thereby that he would purchase the goods from the bank on their arrival under the principle of *murabaha*.
- The bank establishes the Letter of Credit and pays the proceeds to the negotiating bank using its own funds.

- The bank sells the goods to the client at a price comprising its cost and profit margin for settlement by cash or on a deferred basis in accordance with *murabaha* principle.

BBA-murabaha is also suitable for financing purchase of fixed assets, such as, land, building, machinery and equipments, automobiles, computers, furniture and the like.

BBA-murabaha is also suitable for financing purchase of personal assets and consumer durables, such as, PCs, cars, houses etc.

Leasing (*Ijara*) Facility

Ijara in simple terms, implies leasing or hiring of a physical asset. It is a popular debt-based product in which the Islamic bank assumes the role of an *ajir* or *mujir* (lessor) and allows its client to use a particular asset that it owns. The client or *mustajir* (lessee) is in need of the asset. Through *ijara*, it receives the benefits associated with ownership of the asset against payment of pre-determined rentals (*ujrat*). *Ijara* is for a known time period called *ijara* period.

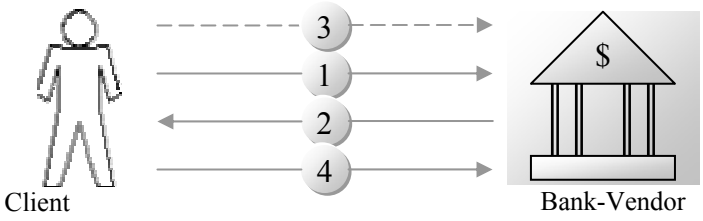
You may note here that *ijara*, like *BBA-murabaha* is a fund-based business for the Islamic bank. In both cases, the bank is not a natural owner of the asset (sold under *murabaha* or given in lease under *ijara*.) It acquires ownership upon receiving a request from its client. Similar to *BBA-murabaha*, the *ijara* rentals are also paid in installments over time, and are supposed to cover the cost of the asset or value of investment for the bank and to provide a fair return on investment. Both *BBA-murabaha* and *Ijara* are *Shariah*-nominate contracts that create debt. But as we shall see later, *ijara* has some unique characteristics that make it very different from *murabaha*.

In *ijara*, the bank continues to be the owner throughout the *ijara* period while the client receives the benefits of ownership or the benefits of using the asset. As such, risks associated with ownership of the asset remain with the bank and the asset is supposed to revert back to the bank at the end of the *ijara* period. In *BBA-murabaha* on the other hand, the benefits and risks of ownership of the asset are transferred to the client along with ownership. Another point of difference relates to cash flows associated with the products. Both the products involve cash outflows for client or cash inflows for the bank over a definite future time period. The cash flows are structured in a way that cover the cost of the asset and provide for a fair return on the same to the bank. However, these cash flows are predetermined in case of *BBA-murabaha* and no subsequent

increase or decrease is allowed in the same. In case of *ijara*, however, the rentals could be flexible and be made to reflect the changing economic and business conditions as we shall see later.

Ijara Financing Structures

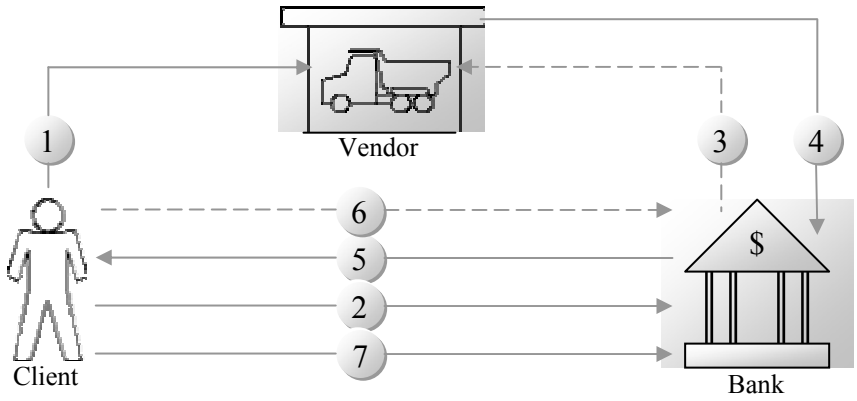
The simplest form of *ijara* involves the bank as the owner of an asset leasing out the same to its client against predetermined rentals for an agreed period of time. The identity of the bank is same as that of the vendor of the asset. From an Islamic point of view, Structure I presented in *Exhibit 6.4* is the most ideal type of *ijara* as it conforms entirely to features of the classical *ijara*. However, this is also the least common and the least popular structure. An Islamic bank usually does not deal in a variety of physical assets. Structure II presented in *Exhibit 6.5* shows involvement of a vendor in the process. In this structure, there are two distinct phases in the arrangement. In phase one, the bank purchases the asset needed by its client from the vendor. In phase two, the bank as owner of the asset leases out the same to its client against predetermined rentals for an agreed period of time.



Dotted line indicates flow of funds.

Activity 1. Client approaches Bank-Vendor and identifies asset, collects relevant information that include rental;
2. Bank leases out the asset to Client, allowing it to take possession and put into specified use;
3. Client pays known rentals over future (known) time period(s).
4. Asset reverts back to Bank

Exhibit 6.4 Ijara Financing Structure I

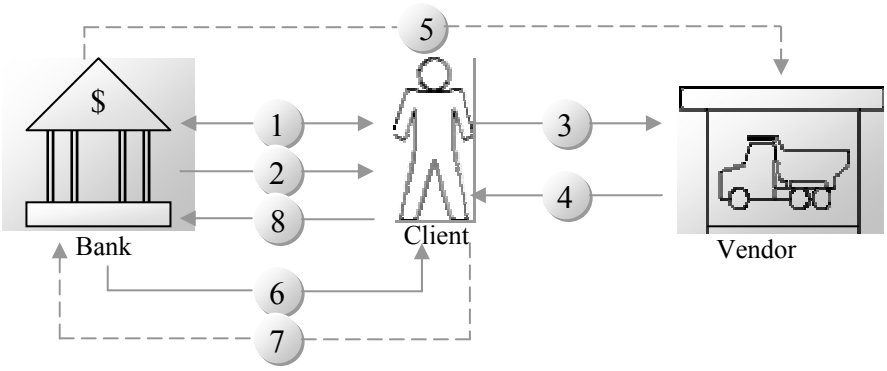


Dotted line indicates flow of funds.

Activity1. Client identifies and approaches Vendor or supplier of the asset that he/she needs, collects all relevant information;
2. Client approaches Bank for *ijara* of the asset and promises to take the asset on lease from the Bank upon purchase;
3. Bank makes payment of price to Vendor;
4. Vendor transfers ownership of asset to Bank;
5. Bank leases the asset, transfers possession and right of specified use to Client;
6. Client pays *ijara* rentals over future (known) time period(s).
7. Asset reverts back to Bank.

Exhibit 6.5 Ijara Financing Structure II

Another possible scenario is when the bank would not like to deal directly with the vendor in connection with the first purchase/sale of the commodity. The bank here appoints the client as its agent. The structure now changes to as presented in *Exhibit 6.6*. Note that there are two separate sets of relationships between the bank and its client. In the first instance, the client is an agent of the bank in respect of purchase of the asset on behalf of the bank. At this stage, the relation between the parties is nothing more than the relation of a principal and agent. The relation of lessor and lessee has not yet come into existence. The second stage begins from the date when the client takes delivery from the supplier. At this stage, the relation of lessor and lessee comes into existence. These two capacities of the parties should not be mixed up or confused with each other. During the first stage, the client cannot be held liable for the obligations of a lessee. In this period he is responsible to carry out the functions of an agent only. But when the asset is delivered to him, he is liable to discharge his obligations as a lessee.



Dotted line indicates flow of funds.

Activity 1. There is an agreement of mutual promise between Bank and Client whereby the Bank promises to lease and the Client promises to take on lease the asset against predetermined rentals for a definite time period;

2. Bank appoints Client as its Agent;
3. Client identifies the vendor, selects the asset on behalf of the bank and advises its particulars, including the vendor's name and its purchase price to the bank in writing;
4. Vendor makes physical delivery of asset to Agent (Client) of Bank; trained staff from bank oversee the process of client taking physical possession of asset;
5. Bank makes arrangement for payment of purchase price to Vendor;
6. The agency contract comes to an end; Bank leases the asset on the basis of the agreement of mutual promise, transfers possession and right of specified use to Client;
7. Client pays known rentals over future (known) time period(s).
8. Asset reverts back to Bank.

Exhibit 6.6 Ijara Financing Structure III

All the three structures highlighted above have one thing in common. Since in *ijara*, ownership of the asset remains with the bank, the asset reverts back to the bank at the end of the lease period. This is called “operating lease” in conventional parlance. The bank may then lease it out to another client if the asset is in good shape. Alternatively, the bank may sell the asset in the secondary market and receive the “salvage’ or residual value. Both however, are not very good alternatives if the asset in question is a specialized equipment

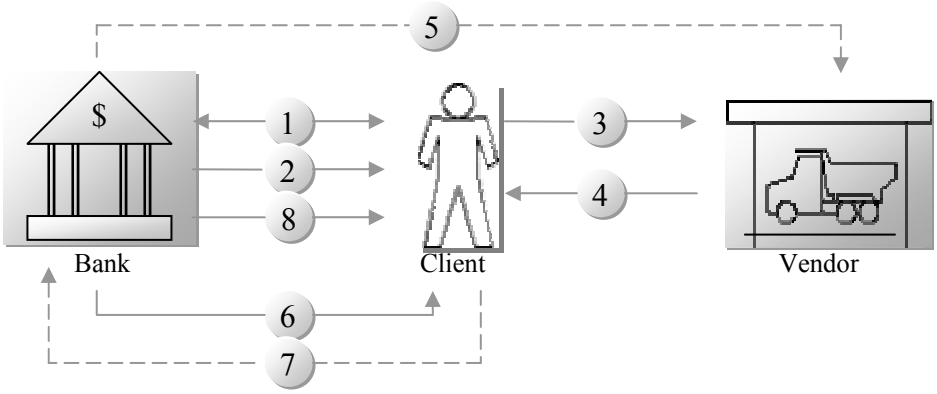
catering to the unique needs of the first client. In this case, it would be extremely difficult for the bank to find a second client willing to take the asset on lease. In the absence of a secondary market for the asset, it may also be difficult to sell the same.

The above problem would not arise if the *ijara* period were the same as or close to the economic life of the asset. As such, there would be little or insignificant residual value in the asset. The bank may therefore, simply make a gift of the asset to the client without any reciprocal consideration or simply abandon the asset. Note that the gift contract is an independent contract, independent of the *ijara* contract.

What happens when there is a significant residual value at end of the *ijara* period, since it is much shorter than the economic life of the asset? One alternative for the bank is to sell the asset to the client at the end of *ijara* period at a predetermined price. This structure is called lease-sale or *al-ijara-thummal-bai* (*AITAB*). Again note that the sale contract is an independent contract, independent of the *ijara* contract.

You may note that the bank may make a gift of the asset even when there is significant residual value at end of the *ijara* period. The purpose of the bank is to recover its investment and a fair return on investment. This may accrue to the bank either through the periodic lease rentals plus the sale price of the asset (as in lease-sale) or simply through the lease rentals adjusted upwards in case of a lease-gift structure. Under both structures, the asset would continue to remain with the client. These are called "financial lease" in conventional parlance. The modified structure for Structure III is presented in *Exhibit 6.7*.

Activity 8 in the following structure involves a unilateral promise by the bank to make a gift or to sell the asset to the client at a predetermined price. Such promises are made as additional agreements to the main *ijara* agreement. From the standpoint of the client, such promise may be seen as an option to purchase the asset at the end of the lease period. Since an option is a right without obligation, by implication, the unilateral promise must be binding on the bank. It is quite probable that the client would exercise the option where the asset meets a specialized need of the client or when the purchase price for the client stipulated in the agreement is grossly below the fair market price. The *ijara*-based property-financing scheme of Abu Dhabi Islamic Bank (see *Concepts in Practice 6.3*) in fact, provides the customer with multiple options, where the exercise price depends on the time of purchase.



Dotted line indicates flow of funds.

Activity 1-7. As in structure III;

8. Bank transfers ownership of asset to client at the end of *ijara* period either through a gift or sale.

Exhibit 6.7 Ijara Financing Structure IV

Concepts in Practice 6.3

Ijara Financing of Property at Abu Dhabi Islamic Bank

The Bank buys the property from the seller at cost price and leases it to the customer for a pre agreed term. The customer agrees to buy the property from the Bank in the future at a predetermined price. The Bank agrees to transfer the property to the customer when it has received the agreed payments. Each month, the customer pays rent plus a payment representing part of the outstanding principal. The rent is determined by applying a benchmark rate plus a margin to the unamortized original cost of the property.

The customer has an option to purchase the property from the Bank at any time at a predetermined price, which depends upon the time at which the customer exercises the purchase option.

***Source**: www.adib.com.ae*

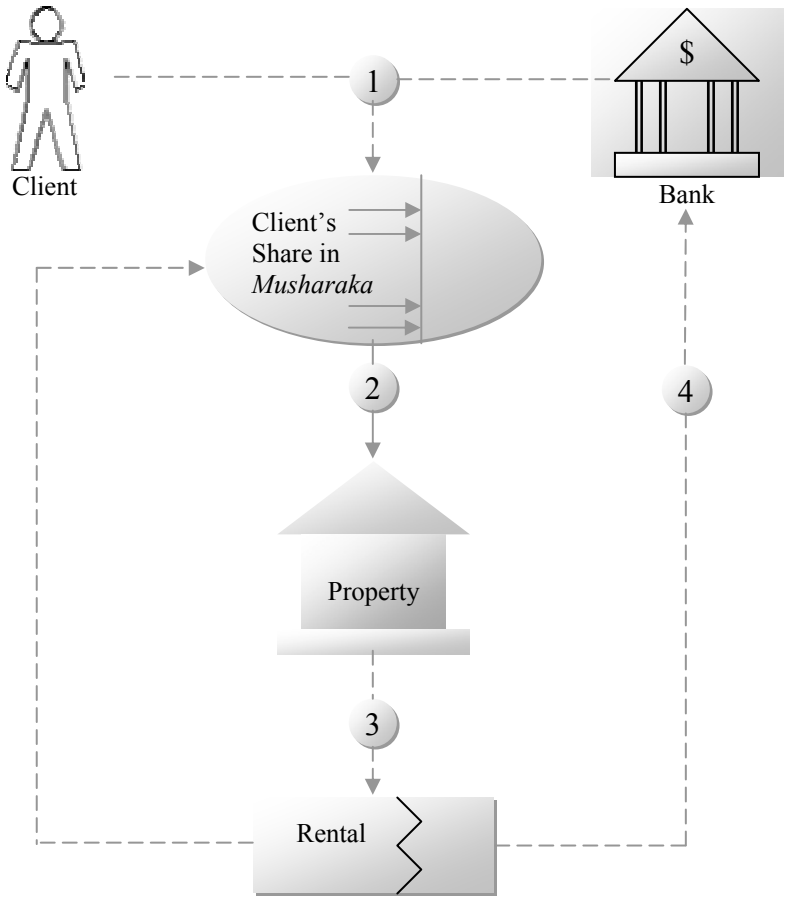
Another method of *ijara* ending with transfer of ownership to the client is provided by a combination of *ijara* with partnership (based on *musharaka* or *mudaraba*). This structure is quite common in housing finance. In this structure, the bank and its client enter into a partnership specifically formed to finance the acquisition of the property that the client is interested in. The bank and the client contribute to the equity of the partnership in a certain ratio. The bank acts as the

agent-manager of the partnership. The partnership then purchases the property and leases the same to the client against known periodic rentals. The proportion of rental accruing to client is used to redeem part of the bank's stake in the property. This results in a decrease in the bank's stake over time. Eventually, the bank's stake in the property reduces to zero and the client becomes the full owner of the property. The mechanism that uses diminishing *musharaka* or *mudaraba* as the case may be in combination with *ijara*, is a recent innovation in Islamic banking and finance. This is presented in *Exhibit 6.8.*

As mentioned earlier the above types of structures are quite popular with equipment and housing finance products.

Often the amount of financing needed may be fairly large and beyond the means of one single bank. The client may be in need of funding a large plant and machinery or a pool of physical assets. In such a case, the bank may enter into a co-*ijara* or a leveraged transaction with itself as Manager or Lead-Lessor. In case of co-*ijara*, the bank forms a Special Purpose Vehicle (SPV) or a master *ijara* agreement, by inviting other financial institutions to contribute equity to the pool of capital needed to finance the assets through Islamically permissible modes such as *musharaka* or *mudaraba*. Leveraged *ijara* is possible by use of debt in the total financing. Debt may be provided through *murabaha* and *ijara* of specific components of the "pool of assets" under the master *ijara* agreement. Note that sub-*ijara*, or *ijara* of a leased asset is permissible if it is provided in the *ijara* or an express permission is obtained from the lessor. The rental rates of the two *ijaras* are allowed to be different. Further, a lessor can sell some or all of the leased assets to a third person whereby the new party will step in the shoes of the lessor. The total stream of cash inflows to the SPV is distributed between all the co-lessors or investors according to the proportion of their respective shares in the leased assets. The bank or the lead-lessor may charge the other co-lessors or investors a management fee, which is deducted upfront before the rentals are distributed. The structure of this product is presented in *Exhibit 6.9*.

While discussing *Shariah* constraints relating to *BBA-murabaha* we observed that the identity of the vendor has to be different from that of the client. Or else, the *murabaha* involving *bai-al-einah* (repurchase) would amount to a mere creation of debt involving prohibited *riba*. This constraint is no longer relevant in the context of *ijara*. In a sale-and-lease-back arrangement the client may sell an asset that it owns, to the bank for a price and then take it back on lease. The asset remains in the possession of the client with a change in



Activity 1. Bank forms a partnership with the Client based on *musharaka*; Client promises to take on lease the property to be purchased by the *Musharaka* against predetermined rentals for a definite time period; Bank may appoint itself as agent-manager of the partnership; subsequent activities are undertaken in this capacity;

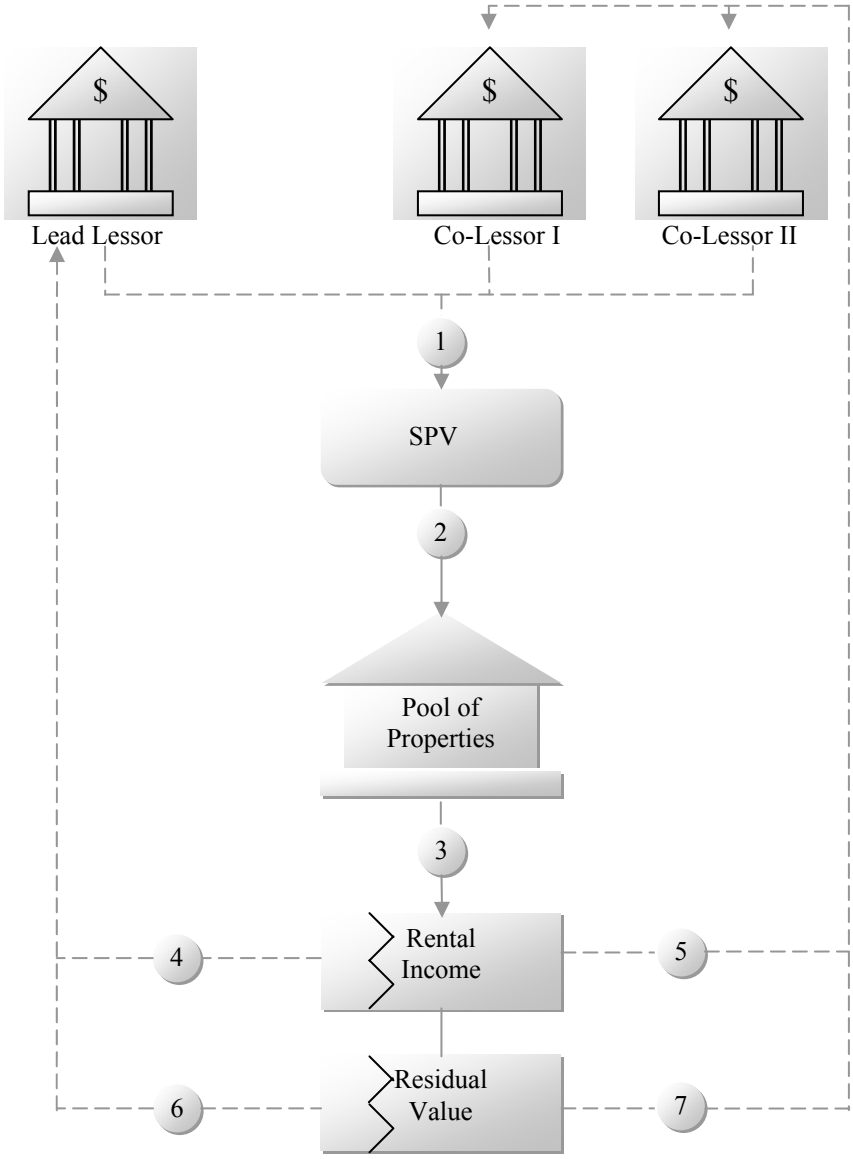
2. Bank on behalf of the *Musharaka* purchases the property;

3. Property is taken on lease by Client; generates rental income over future time periods;

4. Bank apportions the rentals among both parties, one portion flows back to bank as its share in rental income;

5. Another portion – the share of the Client in rental income is used to redeem part of Bank's stake in partnership; Bank transfers ownership of asset to Client when its stake is reduced to zero.

Exhibit 6.8 Ijara Financing Structure V

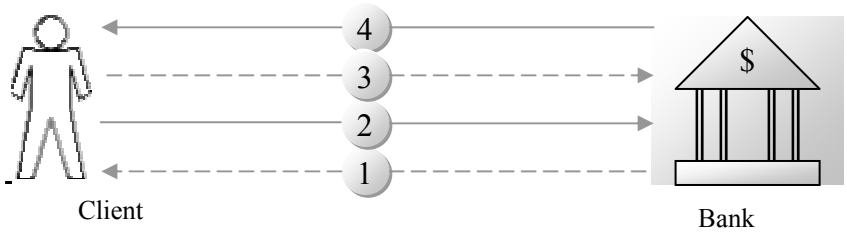


Activity 1. Bank forms a Special Purpose Vehicle (SPV), by inviting other financial institutions to contribute debt or equity to its capital with itself as Manager or Lead-Lessor. Debt and equity may be provided to the pool of financing through Islamically permissible modes such as *murabaha, ijara, musharaka* or *mudaraba;* Bank appoints itself as agent-manager of SPV; subsequent activities are undertaken in this capacity;

2. SPV purchases the asset;
3. SPV leases the asset on the basis of the agreement of mutual promise, transfers possession and right of specified use to Client; Client pays known rentals over future (known) time period(s);
4. Bank retains management fee and pro-rata share in rental;
5. Bank passes on the balance to all parties as per agreement;
6. Bank retains pro-rata share in residual value
7. Bank passes on the balance to all parties as per agreement;

Exhibit 6.9 Ijara Financing Structure VI

The result is an immediate cash inflow for the client (in the form of sale price of the asset). The client continues to use the asset in lieu of periodic *ijara* rentals paid to the bank, which now owns the asset. The structure of a sale-and-lease-back is presented in *Exhibit 6.10*.



Dotted line indicates flow of funds.

Activity 1. Client sells an asset it owns to Bank on cash basis; (Possession of the asset remains with the Client while ownership papers are transferred to the Bank)
2. Client enters into an *ijara* contract with Bank for the same asset;
3. Client pays known rentals over future (known) time period(s).
4. Bank transfers ownership of asset to client at the end of ijara period either through gift or sale.

Exhibit 6.10 Ijara Financing Structure VI

Issues in Product Management

Risk and Return

As discussed earlier in the context of *murabaha*, it is very important for the bank to bear a certain amount of asset risk in order that its profits are deemed legitimate in the eyes of *Shariah*. All the risk and liabilities emerging from the ownership of the asset are to be borne by the lessor-bank while the liabilities arising from the use of the leased assets are to be borne by the lessee-client. In a conventional financial lease, the lessor transfers substantially the risks and rewards incidental to the ownership of the leased assets to the lessee even while the title of the leased asset may or may not eventually be transferred to the lessee. The complete transfer of risk makes the finance lease unacceptable from the *Shariah* point of view.

In Islamic leasing or *ijara*, the leased asset remains as *amana* or in trust with the lessee. There is no compensation in *amana* in case of destruction of asset value, except when the loss is caused due to the deliberate negligence of the lessee. Thus, the leased asset remains in the risk of the lessor throughout the *ijara* period, in the sense that any loss, damage or loss caused by the factors beyond the control of the lessee shall be borne by the lessor. In this sense, Islamic *ijara* is different from conventional leasing. Agreements of conventional financial lease generally do not differentiate between the two situations. In an Islamic *ijara*, both situations are to be dealt with separately.

A lessor can, of course, mitigate his risk by making the lessee specifically liable for damages, theft and/or loss on destruction of assets except in the case of *force majeure*. Further, specific risks of the lessor relating to the physical damage, theft and/or loss on destruction of the leased asset may be covered by Islamic insurance or *takaful*. The lessor-bank may include the cost of *takaful* premium in the *ijara* rental. Any escalation in the *takaful* premium may also trigger rent adjustment if it is specified in the *ijara*. You may note here that some Islamic banks go for conventional insurance that involves complete transfer of risk to the insurance company and at the same time include the insurance costs in the *ijara* rentals. The result is risk-less cash flows for the lessor-bank. Needless to say, such whole-scale risk transfer is not permissible and brings its returns dangerously close to *riba*. Recourse to *takaful* is permissible as it involves risk sharing as opposed to risk transfer. You would learn more about this in a subsequent chapter on insurance.

Gharar in Contractual Structure

As discussed earlier, standard texts of *fiqh* mention about inadmissibility of "two contracts in one" on grounds of excessive *gharar*. This essentially stresses the need to avoid unduly complex contractual mechanisms and structures involving multiple interdependent and interrelated contracts. Combining several contracts, such as, adding a sale contract to the original *ijara* contract as in Structure IV above or stipulating options in the *ijara* contract, may cause the complexity. There are divergent views in this regard. Arguably, in a structure where the sale or gift or option (promise) is in the nature of a separate or side agreement, not linked to the *ijara* agreement, there is no room for *gharar* caused by interdependence.

It must be recognized however, that a sale contract that is now added to the original *ijara* as in *AITAB* transforms it into a highly controversial mechanism. The sale agreement is essentially a forward agreement, if it involves a mutual promise by both bank and its client to sell and buy respectively in future. Classical jurists have always frowned upon forward agreements on various *fiqhi* grounds including the involvement of excessive *gharar*. Unilateral promises as distinct from mutual promises, have more general acceptance. There is however, lesser agreement on whether the promise is binding on the promisor-bank. When it is binding, it takes the form of a financial option for the promisee-client.

Forward Ijara

A distinct feature of *ijara* is the acceptability of forward agreements. An *ijara* to be in force from a future date is admissible, and before the arrival of the time is irrevocable. Thus forward contracting is permissible in case of *ijara*. You may note here that the same is not true in case of sale/exchange contracts (the conventional forwards and futures). Note that in some conventional financial lease agreements, specifically where the lessee purchases the asset on behalf of the lessor who pays its price to the supplier, the lease commences on the very day on which the agreement is made or disbursement is made by the lessor, irrespective of whether the lessee has taken delivery of the asset or not. This is not permissible in *Shariah*. It amounts to charging rent on the money disbursed by the Bank, before the delivery of asset to the lessee. Thus, it involves prohibited *riba*. In a valid *ijara*, rent is charged only after the lessee has taken delivery of the asset.

Fixed and Floating Rates

In *ijara* the price or the leasing rate or the rental must be known at the time of contracting. The rates must be determined for the whole period of *ijara*. However, it is possible to divide the *ijara* period into several smaller intervals with varying but predetermined rates. Thus, a floating rate *ijara* is admissible provided such rates for each of the phases is specially agreed upon at the time of effecting an *ijara*. Floating rate *ijara* may be desirable considering the changing market and economic conditions, especially if the *ijara* period is relatively long. Floating rate *ijara* may be made possible by inserting a rent adjustment clause in the *ijara* contract. The rate adjustment may be in the nature of a specified rent escalation at the end of an interval of say, six months or one year; or may be indexed to a macroeconomic indicator, such as, consumer prince index (CPI) or even a benchmark interest rate, such as, the London Inter Bank Offering Rate (LIBOR). There is a certain degree of understandable discomfort in the use of base interest rates as benchmarks, (as we discussed in the context of *murabaha* rates). More important however, is the possible existence of prohibited excessive *gharar* in the contract due to indeterminateness of the leasing rate at the time of contracting, since the value of index cannot be predicted in advance. The equipment financing product at American Finance House (see *Concepts in Practice 6.4*) claims to use lease rates that need not reflect the market rates of interest, but productivity of the asset. This is an extremely desirable feature of the product. However, will the regulators accept implied interest rates that differ significantly from market interest rates?

Default Risk and its Mitigation

Ijara rental, like *murabaha* installment becomes a debt on the client after it becomes due. Therefore, it is subject to all the rules prescribed for defaults and delinquencies in repayment of debt. We have discussed the problem in the context of *murabaha* before. The solution is similar too. The bank is not allowed to charge an additional amount in case of delays in payment of the rentals. It may however, ask the client-lessee to undertake to contribute a certain sum to a charity fund maintained by itself, should there be a default or delinquency. The amount payable for charitable purposes may vary according to the period of default and may be calculated at per cent, per annum basis.

Concepts in Practice 6.4

Equipment Financing at American Finance House

The process of financing starts by determining the monthly rental/lease rate of a similar piece of equipment from the equipment dealer/ manufacturer or a rental agency. The client is requested to do the same. The client and company finance officer compare the results of the survey and agree on a monthly lease/rental rate. The process never starts from an interest rate on money in New York, Los Angeles or London, but from the utility value of the piece of equipment. This concept is called "Marking the item to the Market." Interest rates are the same throughout the USA regardless of the economic condition of the city, locality or state. Marking things to the market directly reflects the utility that is a function of the economy of an area. The model calls for the financing entity to purchase the equipment jointly with the client and in a back-to-back agreement, the client purchases the shares of the financing entity at cost. In doing so, there is no time-value of money. This structure also conforms to requirements of the banking regulators. The client agrees to buy back the company's portion over a period of time. It is called *Repayment of Capital* (R-of-C, pronounced 'ROFSEE') to the company.

Return on Capital (R-on-C, pronounced 'RONSEE'): It represents the property's lease value as explained in item 1 above and is calculated based on a declining equity model based on the property's economic value (utility). Using this model, we calculate market value of the car, not to a predetermined interest rate like LIBOR or Prime Rates.

The financing agreement consists of two parts. The first is a loan agreement in which the client returns the capital to the company (Return on Capital). The second is a lease agreement based on an agreed lease rate, calculated based on the declining equity stipulated by the Return-of-Capital pay back agreement. Based on the agreement detailed above, a promissory note is drawn. It details the monthly payments representing the Repayment OF Capital portion and the Return ON Capital (lease) portion. To comply with the U.S. regulatory requirements and U.S. banking system rules, the monthly payment streams are plugged into a traditional amortization program to calculate an *implied interest rate*. This allows LARIBA to satisfy the "Truth-In-Lending" and "Full and Complete Disclosure of Implied Interest Rate" laws as required by US Banking and lending requirements.

Source: *www.lariba.com*

Nature of Asset

It is important to note that *ijara* is permissible only in case of a certain category of assets. You may note that money and consumables are not leasable assets. If money or consumables are leased, such contract will be deemed to be a loan and subject to rules of *riba*. Further, the leased asset must be clearly specified and identified by the parties.

Termination of Ijara

If the lessee contravenes any term of the agreement, the lessor has a right to terminate the *ijara* contract unilaterally. However, if there is no contravention on the part of the lessee, the *ijara* cannot be terminated without mutual consent. Conventional financial leases at times provide for an option for the lessor to terminate the lease unilaterally. *Ijara* on the other hand, allows for stipulating an option for either or both the parties to confirm or rescind the contract. Such stipulated option is valid for a specified option period under the framework of *al-khiyar*. However, in a conventional lease, in case of termination of the lease, even at the option of the lessor, the rental for the remaining time periods becomes due on the lessee. This is not permissible in case of *ijara*. A logical consequence of termination of *ijara* is that the asset reverts back to the lessor. The lessee is required to pay rental as due up to the date of termination. If the termination has been affected due to the misuse or negligence on the part of the lessee, he may also be asked to compensate the lessor for the loss caused by such misuse or negligence.

Areas of Application

As discussed above, *BBA-murabaha* is used in corporate finance for financing working capital requirement.

BBA-murabaha is suitable for financing purchase of fixed assets, such as, land, building, machinery and equipments, automobiles, computers, furniture and the like.

BBA-murabaha is also used for financing purchase of personal assets and consumer durables, such as, PCs, cars, houses etc.

Simple *ijara* that is not tied with a purchase agreement is more commonly known as operating lease. Such transactions are suitable for expensive assets such as ships, aircraft, and heavy-duty industrial and agricultural equipment.

Ijara tied with purchase or gift is more commonly known as financial lease. Such transactions are widely used in real estate, computers, machinery and equipment.

Chapter 7

FINANCING PRODUCTS (DEBT-BASED) - II

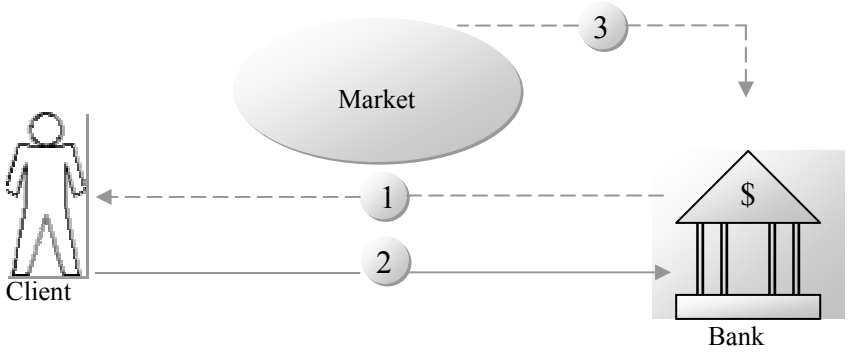
In the previous chapter we covered the debt-based financing products, such as *murabaha*-BBA and *ijara* that account for a major chunk of total financing activities of Islamic banks. These are easily understood because of their proximity to conventional financing techniques, such as, installment sales and leasing. There are other debt-based financing techniques however, that are slowly making their appearance on the Islamic finance scene. Let us now turn to these "less popular" products.

Deferred Delivery Sale (*Salam*) Facility

A *salam* is deferred delivery contract. It is essentially a forward agreement where delivery occurs at a future date in exchange for spot payment of price. Unlike earlier mechanisms of *murabaha* and *ijara*, *salam* or *salaf* was originally designed as a financing mechanism for small farmers and traders. Under a *salam* agreement, a trader in need of short-term funds sells merchandize to the bank on a deferred delivery basis. It receives full price of the merchandize on the spot that serves its financing need at present. At a pre-

agreed future date, it delivers the merchandize to the bank. The bank sells the merchandize in the market at the prevailing price. Since the spot price that the bank pays is pegged lower than the expected future price, the transaction should result in a profit for the bank. A simple *bai-salam* structure is presented in *Exhibit 7.1*.

Since "selling what one does not have" is generally frowned upon on grounds of *gharar*, the above structure does not permit the bank to sell X before taking delivery of the same. Thus, the bank would need to wait till time of actual delivery before it can get back its investment and profits. This at times may not be very desirable, given the financial position of the bank. If the bank does not want to commit its funds for the given time period, it may enter into a parallel or back-to-back *salam* contract with a third party.



Dotted line indicates flow of funds.

Activity: 1. Client sells commodity X to Bank on forward basis and receives price P in time period 0;

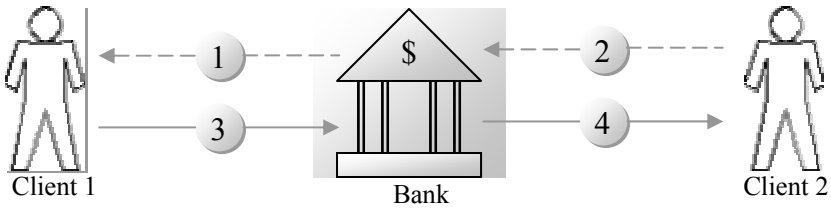
2. At time period t, Client delivers X to Bank;

3. Bank sells X in the market at time period t or later and realizes S.

The amount S-P constitutes profit for the bank.

Exhibit 7.1 Salam Financing Structure I

Another problem with the simplified structure is the price risk that the bank is now exposed to. It is quite possible that price of the commodity declines during time period t to a level below P resulting in losses to the bank. This risk is mitigated in a parallel *salam*, as the bank need not participate in the market at all. The changed structure under parallel or back-to-back *salam* as appears in *Exhibit 7.2.*



Dotted line indicates flow of funds.

Activity: 1. Client1 sells commodity X to Bank on forward basis and receives price P in time period 0;

2. Bank sells commodity X to Client2 on forward basis and receives price S in time period 0;

3. At time period t, Client1 delivers X to Bank;

4. At time period t, Bank delivers X to Client2.

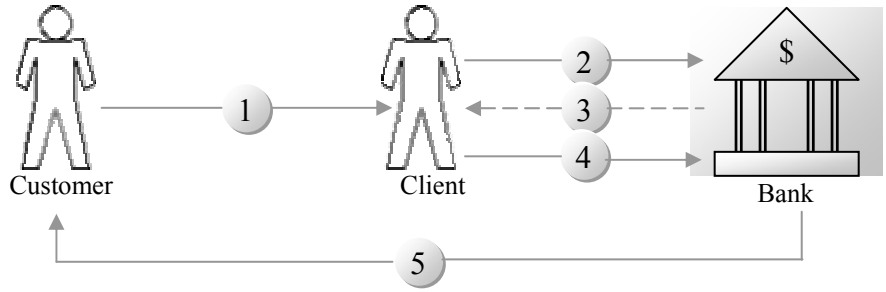
The amount S-P constitutes profit for the bank.

Exhibit 7.2 Salam Financing Structure II

The price risk for the bank can also be mitigated in another way. If a third party makes a unilateral promise to buy the commodity at a predetermined price at time period t, then the bank need not participate in the market. Thus, it would be insulated from price risk. This third party may be one of the prospective customers of the bank's client. The unilateral promise is binding on this customer. Once the rights resulting from the promise are transferred to the bank, it assumes the role of seller to the third party customer at time period t. The bank is able to realize a higher predetermined price without participating in the market. The modified structure would appear as in *Exhibit 7.3*.

In order for the *salam* mechanism to function smoothly without any uncertainty or *gharar* it is important that the commodity is freely available and tradable in the market. This is true for fungible commodities. This is not true for "specific and identifiable" commodities, such as, a building, a piece of land, a specialized equipment and the like. In case of the latter, both the client and the bank would experience difficulties during activities 2 and 3 as they need to purchase from or sell in the market the commodity. The seller in *salam* is not allowed to sell a "particular" good or one from a "particular" source. He sells a "well-described" standard one. The scope of *salam* application includes most of the industrial and agricultural products as well as services. The description of the commodity in the *salam* agreement should include all value-relevant characteristics or characteristics that affect its price. Further, *salam* is not allowed in commodities that are in the nature of foodstuffs and currencies or

commodities that are susceptible to *riba*. Deferment in exchange of such commodities is not permissible.



Dotted line indicates flow of funds.

Activity: 1. Customer makes unilateral promise to Client in time period 0 to purchase commodity X at time period t at a price S;

2. Client transfers this right to sell in favor of Bank
3. Client sells commodity X to Bank on forward basis and receives price P in time period 0;
4. At time period t, Client delivers X to Bank;
5. At time period t, Bank exercises its right to sell X to Customer at price S.

Again the amount S-P constitutes profit for the bank.

Exhibit 7.3 Salam Financing Structure III

A condition for validity of *salam* is full payment of price at the time of contracting. If a bank wishes to release *salam* funds to a borrower according to the latter's production schedule, the bank should sign more than one separate *salam* contracts with the borrower, one for each stage of ending. The principal of each contract will be paid at the exact time of its conclusion. While *salam* may be used (as it was originally used in early days) for financing agriculture, there are more recent applications of *salam.*

Pre-shipment Export Finance: This is undertaken in the following steps.

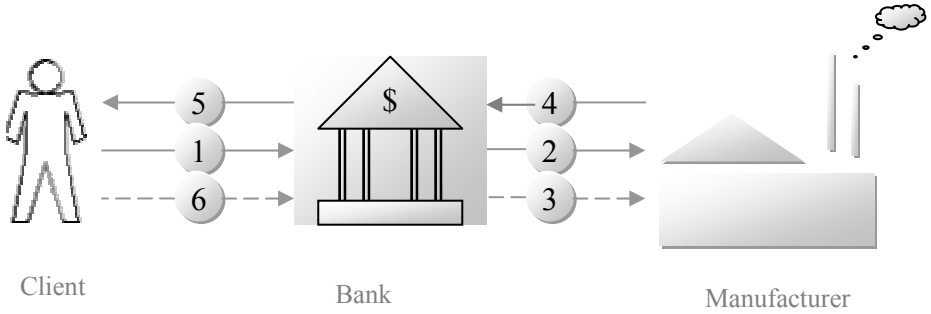
1. Bank receives an export letter of credit (LC) in favor of its client, covering certain goods; Client gives the letter of credit under bank's lien. Thus, allowing the bank to assume the role of seller to the foreign buyer.

2. To comply with the LC requirement, bank agrees to buy the goods from its client under a *salam* contract and makes upfront payment to him. *Salam* contract devised for this purpose should include specific delivery date and place. Delivery date should be reasonably ahead of the latest shipment date stated in the letter of credit.
3. As for the place, it should be the port of destination mentioned in the LC. Submission of in-order shipping documents (viz. bill of lading and certificate of origin) by the client may be deemed equivalent to the satisfactory delivery.
4. The agreed payment (pre-shipment finance) made by the bank to its client will be lower than the amount of the export LC, difference being bank's profit.

Manufacture-Sale (*Istisna*) Facility

An *istisna* is a contract of manufacture. A seller under an *istisna* agreement undertakes to develop or manufacture a commodity with clear specifications for an agreed price and deliver after an agreed period of time. The unique feature of *istisna* is that nothing is exchanged on spot or at the time of contracting. It is a pure and perhaps the only forward contract where the obligations of both parties relate to the future. The buyer makes payment of price in parts over the agreed time period or in full at the end of the time period. In an *istisna*, the seller and the manufacturer may be different entities. This allows financiers or intermediaries like Islamic banks to engage in *istisna* by assigning the job of development, manufacture or construction to a third party under a parallel *istisna* arrangement. *Istisna* thus, is now transformed into a financing product. The simplified structure of *istisna* is presented in *Exhibit 7.4.* The difference between the price received from the client and the price paid to the manufacturer constitutes profit for the bank. *Istisna* facility is suitable for commercial or residential buildings, industries, roads, aircraft, vessels, etc. (See *Concepts in Practice 7.1*)

Istisna involves various construction-related risks and risk of non-conformity to specifications. In order to mitigate such risks (save for cases of *force majeure*) the agreement may contain a penalty clause. Another alternative for the bank is to nominate the client as an agent to oversee satisfactory completion of the job. If considered necessary, the bank may hire the services of an independent surveyor to monitor the progress of the project. Like other financing mechanisms, *istisna* involves risk of default and delinquencies and a bank can take various measures such as mortgage on land on which the asset is being built, any other property or personal or third party guarantee to mitigate such risk.



Dotted line indicates flow of funds.

Activity:
1. Client asks Bank to develop or construct or manufacture an asset X with clear specifications;
2. Bank asks Manufacturer to develop or construct or manufacture asset X with same specifications
3. Manufacturer develops or constructs or manufactures asset X, receives progress payments from Bank as per agreed terms during different stages of manufacturing;
4. Manufacturer gives delivery of asset to Bank;
5. Bank gives delivery of asset to Client;
6. Client pays in full or in parts over agreed period of time

Exhibit 7.4 Istisna Financing Structure

Concepts in Practice 7.1

Istisna Financing of Property at Abu Dhabi Islamic Bank

ADIB's *Istisna* facility arranges to finance your specific requirements over a period of time, giving you easy payment options that can be made immediately or on a deferred basis. In an *Istisna* contract, if a customer requires a building or other capital asset to be constructed, then the Bank will ask him to provide a full specification of the project and estimated completion time required. The Bank will undertake cost and project time estimates independently and after agreement with the relevant parties, will commence construction. The Bank will choose the contractor to whom it awards the project and to whom it directly pays construction costs incurred. In the initial stages, before construction commences, the customer will only pay a down payment to the Bank. Upon completion, the Bank hands over the building at the specified time and the client pays in installments as per his agreement with the Bank.

Source: *www.adib.co.ae*

Recurring Sale (*Istijrar*) Facility

Under *istijrar*, the buyer purchases different quantities of a given commodity from a single seller over a period of time. In other words, the seller delivers the total quantity of commodity purchased in installments. There is some divergence of views regarding timing of fixation and payment of price. Since *istijrar* involves repeat purchases from a single seller, some scholars see a room for flexibility in the matter of fixation and payment of price. According to this view, the payment of price may be deferred to a future date and may indeed be based on a normal price or average price prevailing in the market.

Benevolent Loan (*Qard*) Facility

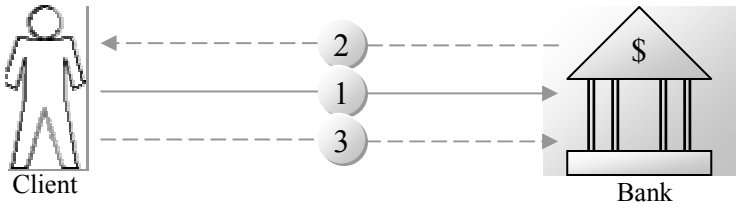
This is the simplest of all financing schemes. Under this scheme, a borrower in need of a specific amount of funds borrows the same from a lender as *qard hasan* with or without a clear stipulation regarding the maturity date. The loan is repaid on maturity without an increment or interest. When no maturity is stipulated, the loan is repaid when asked by the lender, again without any increment. The early loan schemes introduced by many interest-free credit societies when the modern Islamic bank was yet to come into existence were based on this concept. The lender is allowed to ask for an asset as collateral that is governed by the *fiqhi* rules of *al-rihn* (See *Concepts in Practice 7.2*). The lender is allowed to charge the borrower actual administrative expenses incurred in operation of the mechanism. The simple *qard* financing structure is presented in *Exhibit 7.5*.

Concepts in Practice 7.2

***Ar-Rahnu* Short Term Easy Loan of Bank Islam Malaysia**

This attractive scheme provides an attraction option to obtain immediate cash. Gold bar or gold jewellery without precious stones are accepted as collateral. Loan amount is restricted to a maximum loan of RM5,000.00 or up to 60% of the market value of the gold, whichever is lower. Total loan limit is up to RM25,000.00. Financing period is up to 6 months; extension period of 3 months subject to approval. The contract adopted for the *Ar-Rahnu* Scheme is as follows: The Bank grants a benevolent loan (*Qardhul Hassan*) to the applicant. The applicant provides collateral (gold) as security for the loan. The Bank safeguards the collateral based on the *Wadiah Yad Dhamanah* contract. The Bank charges a fee for the custody of the collateral.

Source: *: www.bankislam.com.my*



Dotted line indicates flow of funds.

Activity:	1.	Client approaches Bank for loan of L and offers collateral X whose market value exceeds L by the specified margin;
	2.	Bank lends an amount L to Client now;
	3.	Client repays L plus expenses to Bank; in part or in full over future.

Exhibit 7.5 Qard Financing Structure

Areas of Application

As we have discussed above, *salam* may be used (as it was originally used in early days) for financing agriculture. A recent novel application of *salam* is to finance pre-shipment export finance. *Istisna* is used to finance the construction of houses and development of properties, construction of factories, roads and other capital assets or to finance the manufacture of a specific product. *Istijrar* is used to finance working capital involving repeat purchases from suppliers. *Qard* is used to extend short-term personal finance against collateral. It is also used in conjunction with other contracts in meeting temporary short-fall, such as, in credit cards.

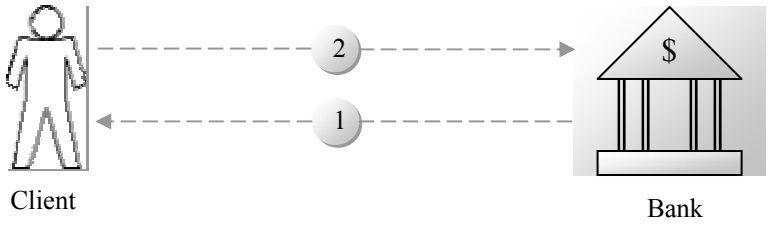
Chapter 8

FINANCING PRODUCTS (DEBT-BASED) – III

The Islamic financial services industry has witnessed the introduction of some mechanisms recently that are either forbidden or at best controversial. These products have been the subject of intense debate. Some mechanisms permit *riba* through the back door. Others appear permissible in form only; and not in substance. In *fiqh* literature these are documented as cases of legal stratagems (*hiyal*).

Repurchase (*Bai-al-Einah*)

The first and a very popular mechanism used by Islamic banks in South East Asian countries is based on repurchase or *bai-al-einah*. A *murabaha* can change into *bai-al-einah* if the identity of the vendor is not different from its client; when the bank purchases a commodity from its client on a spot basis and sells it back to the client at a cost-plus price and on a deferred basis. The rate of profit in this case is indistinguishable from prohibited *riba* on a conventional loan. This is illustrated in *Exhibits 8.1 and 8.2*.

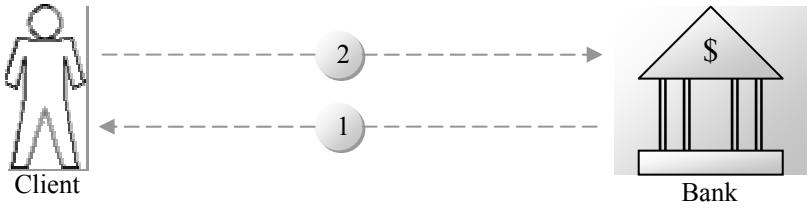


Dotted line indicates flow of funds.

Activity: 1. Client in need of an amount C sells commodity X to Bank for a price of C on a cash basis. Client buys commodity X back at an inflated price C+I on a deferred payment basis.

2. Client pays C+I on maturity to Bank.

Exhibit 8.1 Structure of Repurchase



Dotted line indicates flow of funds.

Activity 1: Client borrows an amount C now from Bank

2. Client pays C+I on maturity to bank.

Exhibit 8.2 Structure of Interest-Based Loan

The amount I constitutes *riba* under both structures. You may note that activity 1 in *Exhibit 8.1* involves a mere debt creation exercise; there is no sale in the real sense, as the commodity does not move from the client to the bank or vice versa. The net result of the above two activities are similar to the conventional loan transaction:

You may further note that under *bai-al-einah*, the market price of the commodity need not bear any relationship with the amount effectively borrowed. There is no genuine trade and exchange in *bai-al-einah*. The values C or C+I need bear no relationship with the market price - cash or deferred of commodity X. On the contrary, the cash sale in *bai-al-einah* may be for the

amount that the client needs to borrow. The deferred repurchase may be for the loan amount plus interest.

Islamic banks in South East Asia have liberally used the mechanism of *bai-al-einah* for their financing activities. The mechanism allows banks to extend a loan similar to conventional loan without any kind of constraints. Interestingly, such financing is possible even when the client does not own any asset. A piece of land with the bank could form the basis of unlimited and unconstrained lending. And when *BBA* + *Bai-al-Einah* mechanisms may be renewed any number of times and may be executed without any reference to the fair market value of the underlying asset, the effect is similar to conventional loans with "compounding of interest"! Needless to say, there is no difference between conventional credit line and the Cash Line Facility of Bank Muamalat (See *Concepts in Practice 8.1*).

Concepts in Practice 8.1

Muamalat* Cash Line Facility (MCASH) at Bank *Muamalat

MCASH is a facility based on the contract of *Al-Bai' Bithaman Ajil* or *Bai' Al-Inah.* Under *BBA* contract, the Bank purchases customers' fixed assets at a cost price and the proceed shall be utilised for the purpose of working capital requirements. The Bank subsequently sells back that asset to the customer at a selling price (cost plus profit) on deferred terms.

- Under *Bai' Al-Inah* contract, asset for the purpose of *aqad* may originate from the customer or the Bank.
- Tenure, selling price and terms of the deferred payment must be agreed upon by the Bank and the customer.
- The *BBA* purchase price shall be disbursed as a limit to the designated Current Account.
- The *BBA* profit shall be serviced monthly whilst principal is settled in one lump sum at the end of the tenure or in other manner acceptable to the Bank.
- Negative Book balance in the designated Current Account shall represent utilization.
- *Ibra'* (Rebate) shall be granted for the unutilized financing amount at the Bank's discretion.
- MCASH may be renewed via executing new *BBA*/*Bai' Al-Inah* contract prior to expiry.

Source: *www.muamalat.com.my*

A Credit Card Based on Bai-al-Einah

The mechanism of *bai-al-einah* as discussed above allows for total flexibility in financing any specific amount for any maturity that would provide a definite and certain profit to the bank. It is no wonder therefore, that the same mechanism is extended to design a credit card (*Concepts in Practice 8.2*). It is

interesting to note how Bank Islam can engage in repeat buy and sale of land with each individual customer. Some questions that naturally arise are: How large is the portfolio of plots of land owned by Bank Islam? Is it a separate plot of land for each customer? Does the sale value of land hold any relationship with fair market value or with the credit card limit sanctioned to the customer? Are stamp duties and other levies usually associated with land deals levied here?

Concepts in Practice 8.2

Bank Islam Card

In the operations of Bank Islam Card (BIC), there are 3 main *Shariah* contracts being used, namely: *bai inah, wadiah* and *qardhul hassan*. *Bai Inah* comprises two agreements (*akad*). In the first agreement, the bank sells a piece of land to the customer at an agreed price. While in the second agreement, the Bank re-purchases the land from the customer at a lower price. The difference in the price is therefore the Bank's maximum profit, which is determined in advance, unlike the conventional credit card whereby the interest charged is undetermined and it may further increase. The Bank will then disburse the cash proceeds of the second agreement into the customer's *Wadiah* BIC account created and maintained by the bank. Then after, the customer can use his BIC for retail purchases and cash withdrawals just like a conventional credit card, except that each transaction will be backed by the cash held in his *Wadiah* BIC account. *Qardhul Hassan* is a facility by which the Bank may, at its own discretion, allow the customer to use more than the available balance in his *Wadiah* BIC account. The cardholder will not be levied with extra charges or fees but will be required to repay the over limit amount used.

Difference between a conventional credit card and Bank Islam Card:

Profit Calculation: For BIC, the monthly profit is calculated on monthly basis based on outstanding due or total transaction made for that particular month. This profit is not compounded as compared to conventional card where the interest is compounded. The total monthly profit could not be more than the total profit earned by the end of the contract, as it was determined upfront during the "*akad*". The cardholder will be able to know the maximum profits which will be imposed within the contract period while the conventional credit card interest charged is undetermined.

Cash Withdrawal Fee at Bank Islam ATM Machines: Cash Withdrawal Fee for BIC is RM12 for every RM1000 or below for withdrawal made at Bank Islam ATM, while conventional credit card is 3% or RM50 (whichever lower) of the withdrawal amount.

Renewal of Card: For BIC, cardholder will have to perform new "*Akad*" /Contract while conventional credit card is solely based on the MCI/ Visa agreement.

Transfer Balance Facility: Transfer Balance is treated as retail transactions where customer is given 20 days grace period to pay back the minimum repayment.

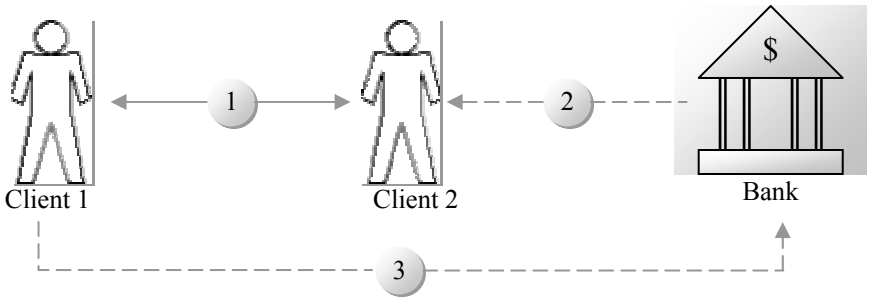
Source: *www.bankislam.com.my*

Bill Discounting/ Factoring (*Bai-al-Dayn*)

Discounting bills of exchange is quite commonplace in conventional banking. A bill of exchange originates with a sale or purchase. The seller draws a bill of exchange asking the buyer to pay a certain amount (value of purchase plus interest) after a certain time period called maturity. When the buyer "accepts" the bill of exchange, it becomes a valid financial instrument that can be traded in the market. The seller now has two options. One, he may wait till maturity and realize the full maturity value – value of his sale plus interest for the maturity period. In this case the seller finances the working capital requirement of the buyer as presented in *Exhibit 8.3*. Two, he may go to the market - a commercial bank and sell the instrument at a discount to the maturity value. The discount is determined by the rate of interest and the time between date of purchase of the instrument by the bank and the date of maturity. When the bank buys the instrument, it effectively engages in lending at interest. Mainstream Islamic scholars have put a plug on the possibility of earning interest by insisting that any sale of debt (*bai-al-dayn*) or transfer of debt (*hawalat-al-dayn*) must be at par. This means in the above case, when the bank buys the instrument of debt (*shahada-al-dayn*) from the original buyer, it is not entitled to any discount. Doors of *riba* are closed shut by disallowing any difference between what it pays (purchase price of the instrument) and what it receives on maturity (its maturity value). Notwithstanding the clear verdict against such transaction, some Islamic banks have been offering Islamic bill discounting products. They essentially treat debt as any other physical asset that can be traded at a negotiated price (See *Concepts in Practice 8.3*).

The amount M-N constitutes profit to the bank(s) that is in the nature of *riba*.

Another similar financial product that involves *bai-al-dayn* is factoring in which a company transfers its selected accounts receivables to a bank (factor). The bank is now assigned the accounts receivables and entrusted with the task of collecting the receivables. Against these receivables, the bank provides financing. While an Islamic bank may legitimately charge a fee for its collection activities, it cannot accept interest on the loan extended. With *bai-al-dayn*, of course, selling the receivables to the factor at a price other than the face value of debt becomes a possibility.



Dotted line indicates flow of funds

Activity 1: Supplier draws a bill of exchange on Customer for a specific maturity value, say M, maturing after time period t; which the latter accepts

2. Supplier sells the bill to Bank now for a discounted value, say N

3. Bank presents the bill to Customer at time period t and receives M. (The bank may resell or rediscount the bill before maturity to another bank at a discounted price that is higher than N, but lower than M).

Exhibit 8.3 Structure of Bill Discounting

Concepts in Practice 8.3

Islamic Accepted Bills (IAB) at Bank Islam

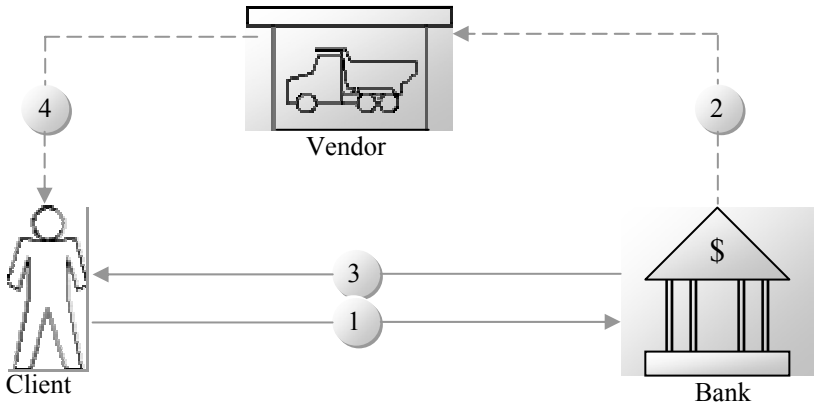
IAB (Imports): *Murabahah* working capital financing gives rise to *Dayn* i.e. debt. This debt may be securitized. The Bank draws a Bill of Exchange on and to be accepted by the customer. This Bill of Exchange will be drawn for the full amount of the Bank's selling price. It is payable by the customer to the Bank on maturity date of the financing. This Bill of Exchange referred to as Islamic Accepted Bills (IAB) can be traded in the secondary market.

IAB (Export): The Bank finances export and sales under the contract of *Bai Dayn. Bai Dayn* or debt trading is a short-term financing facility whereby the Bank purchases the customer's right to the debt, which is normally securitized in the form of a Bill of Exchange. An exporter, who wishes to avail him of this facility, prepares export documents as required under the sale contract / letter of credit. He presents these documents to the Bank to be purchased. As the export documents have to be sent to the buyer overseas, the Bank requests the exporter to draw another Bill of Exchange drawn on the Bank. The IAB-Export may be subsequently sold in the secondary market.

***Source**: www.bankislam.com.my*

Tripartite Sale *(Tawarruq)* Facility

Tawarruq is another financing product that is cited as a classic case of *hiyal*, or legal stratagem, but has been permitted by mainstream scholars under certain conditions. *Tawarruq* becomes a source of funds by combining two separate sale and purchase transactions. An individual in need of funds purchases a commodity on a deferred payment basis from a seller and then sells the same in the market in order to realize cash. This is considered a *hiyal*, since the individual concerned has no real intention of buying or selling the commodity. He engages in these purchase and sale transactions for realization of cash. *Tawarruq* as a financing product involves the following steps outlined in *Exhibit 8.4*.



Dotted line indicates flow of funds.

Activity: 1. Client approaches Bank with a specific need for cash;

2. Bank purchases commodity X of value equivalent to the Client's need, (say P) from Vendor

3. Bank sells X to Client on a deferred basis for P+I.

4. Bank as Agent of Client sells X back to Vendor for P* on cash basis

Exhibit 8.4 Structure of Tawarruq

Note that P* may be different from P if prices are fluctuating in the market and there is a time gap between the various activities. The client receives P* - an amount that closely matches its financing need.

Issues in Product Management

Risk Exposure

Scholars have permitted *tawarruq* since it fulfills a genuine need – the need for funds. It is permitted as long as it does not violate the norms of *Shariah*. Hence, all care should be taken to ensure that it does not involve *riba*. The first and foremost requirement is the involvement of a third party in the transactions. The client must sell the commodity in the market place to a third party (activity 4). Otherwise, it would be a case of *bai-al-einah*. More important than this however, is the requirement that there must be a time gap between activities 3 and 4, i.e. between the sale by the bank to client and sale by the client in the market. This is in addition to the time gap between activities 2 and 3, i.e. between the purchase by the bank and its sale to client as in case of all permissible *murabaha*. This time gap is essential to expose the parties to price risk and ensure that the gains from the transaction(s) are a reward for risk borne and hence, free from *riba*.

It is quite possible to visualize a scenario under which all the three activities cited above or any two of them occur together. Consider the following:

1. Client approaches Bank with a specific need for cash.
2. Bank purchases commodity X of value equivalent to the Client's need, (say P) from Vendor.
3. Bank sells X to Client on a deferred basis for P+I.
4. Bank as Agent of Client sells X back to Vendor for P on cash basis

Note that bank would be able to sell back X to vendor at P if price of the commodity X is unchanged between activities 2 and 4. If there is no time-gap between the activities and all are undertaken during the same session, the transactions would result in risk-free profits equivalent to I – a clear case of *riba*.

Prior-Arrangement between Parties

Another condition of a valid and permissible *tawarruq* is the absence of any pre-arrangement between the three parties. You may recall here that under *bai-al-einah*, the market price of the commodity need not bear any relationship with the amount effectively borrowed. In *tawarruq* too, the three parties

involved – bank, client and vendor may enter into a prior agreement under which the values P or P* or P+I need bear no relationship with the market price - cash or deferred of commodity X. On the contrary, the deferred sale to client (activity 3) may be for the loan amount plus interest, while the cash purchase from vendor (activity 1) and cash sale to vendor (activity 4), may be for the amount that the client needs to borrow. Indeed, in an arrangement in which all parties connive, the sequence of activities does not matter.

In *tawarruq*, therefore, one needs to exercise extra care and subject the product to an additional dose of investigation before accepting it as *Shariah*-compatible. More so, when the bank asserts that the terms of the *tawarruq*-based product are same as the credit terms of other conventional financing products. (see *Concepts in Practice 8.4*) How can a product that is exposed to market risk offer same terms as are available on other products that are not?

Concepts in Practice 8.4

***Tayseer Al-Ahli* by National Commercial Bank**

Tayseer Al-Ahli is a new Islamic financial instrument introduced by The National Commercial Bank for its customers that are in need for cash finance. The product involves buying a commodity from the International Market that is known for its non-fluctuated price and selling it to the customer (*on a deferred payment basis and*) then reselling it back to the International Market. This product is to cover the need of cash for a segment of The National Commercial Bank customers through an Islamic mechanism based on *Al-Tawarruq* (approved by the Convention of Islamic *Fiqh* in its fifth meeting at Makkah Al Mukarramah.) The terms of *Tayseer Al-Ahli* are the same credit terms of the different segments of the personal finance programs at The National Commercial Bank.

Source: *www.alahli.com.sa*

A Tawarruq-Based Credit Card

Following from the above mechanism, which allows short-term funding of an amount that closely matches the need of the customer, a credit card has recently been designed by an Islamic bank that uses the concept of *tawarruq*.

The mechanism begins with the bank advancing a certain amount of funds to the customer under *tawarruq*. The bank then creates under *wadiah* principle a guaranteed deposit account for the customer for the safe custody of the amount. Now the customer can use his card for retail purchases and cash withdrawals just like a conventional credit card except that the cash held in his *wadiah* account now backs each transaction.

At the end of every month, the value of total transactions by the customer is computed. A fresh *tawarruq* for this value is undertaken to replenish the deposit account. Needless to say, this card is essentially similar to the Bank Islam Card with the replacement of *bai-al-einah* by *tawarruq*.

Areas of Application

A survey of the above controversial mechanisms in use at various Islamic banks across the globe reveals the following major areas of application.

1. *Bai-al-einah* is being used to provide short-term working capital financing and short-term personal finance.
2. *Bai-al-einah* is being used in structuring credit cards.
3. *Bai-al-dayn* is being used for discounting bills of exchange as a means of working capital finance, for factoring and financing of imports and exports.
4. *Tawarruq* is being used to provide short-term finance to meet working capital and other short-term requirements.
5. *Tawarruq* is being used in structuring credit cards.

Chapter 9
FEE-BASED PRODUCTS

As discussed earlier, modern commercial banking involves a wide array of services to the customers, many of which are fee-based. These are distinct from products and services that are fund-based. Since these do not require an employment of funds, but still contribute significantly to the bottom line, their importance can be hardly overemphasized. Fee-based products also involve a lesser degree of divergence between Islamic and conventional practices. While Islamic banks are currently offering a wide range of such products and services, we discuss a few that are more popular and commonplace.

Letter of Credit

A letter of credit is a major tool of trade finance and clients look forward to their banker to extend this facility. While a conventional letter of credit may involve a temporary loan based on interest, an Islamic bank may extend such a facility in the following manner using the mechanism of *wakala* (agency). The bank acts under this arrangement as the agent or *wakil* of its client as follows:

- The Client informs the Bank of his Letter of Credit requirements and requests the Bank to provide the facility.
- The Client appoints the Bank as its agent or *wakil* for the purpose of executing the transaction.
- The Bank requires the Client to place a deposit to the full amount of the price of goods to be purchased/ imported, which it accepts under the principle of *al-wadiah*.
- The Bank establishes the Letter of Credit and makes payment to the negotiating Bank representing the counterpart, utilizing the Client's deposit. Subsequently the pertinent documents are released to the Client.
- The Bank charges the Client fees and commissions for its services under the principle of agency fee or *ujr*.

Letter of Guarantee

As discussed earlier a customer often requires the bank to act as an intermediary in certain kinds of transactions in order to ensure an atmosphere of security and confidence for both parties. In such mediation, the bank merely acts as a guarantor of its client's liability towards the latter's customer or counterparty. There is no cash outflow involved in the initial phase of the contract for the bank. However, in the event of subsequent default by the client, the liability may fall on the bank as the guarantor and the bank may be required to pay up the amount guaranteed. The outcome is a temporary loan by the bank to its client. The banks' revenues from such operations are represented as being commissions, in most cases, and interest, in a few other cases involving temporary loans. An Islamic letter of guarantee would, needless to say, be free from the interest-based temporary loan. Islamic banks using the *Shariah*-nominate mechanism of *kafalah* provide such a facility. The facility may involve the following steps.

- The Letter of Guarantee may be provided in respect of the performance of a task, settlement of a loan, etc.
- The Client may be required to place a certain amount of deposit for this facility, which the Bank accepts under the principle of *wadiah wad dhamanah*.
- The Bank charges the Client a fee for the services it provides.

Islamic banks have been providing such facility in the areas of trade finance, construction, project related finance, shipping and other activities. You may note that guarantee or *kafala* is a well-known contract in *fiqh* and classical

texts of *fiqh* report a complete consensus that *kafala* is a voluntary service and no fee can be charged for the same. At best, the guarantor may recover or claim back the actual expenses incurred in offering the service. The guarantee itself is a free service. The reasoning runs like this. A person in the Islamic scheme of things is not allowed to charge a fee or remuneration for advancing a loan. A guarantor does not even advance any loan and merely undertakes to pay a certain amount on behalf of the original debtor in case he defaults in payment. If the person who actually pays money cannot charge a fee, no fee can obviously be charged for the latter activity.

However, some contemporary scholars feel that since the *Qur'an* or the *Sunnah* does not explicitly prohibit the charging of guarantee fee, it may be permitted on the grounds of necessity or *darura*. Needless to say, guarantee has become a necessity, especially in international trade where the sellers and the buyers do not know each other, and the payment of the price by the purchaser cannot be simultaneous with the supply of the goods. Therefore, an Islamic bank can charge or pay a fee to cover expenses incurred in the process of issuing a guarantee.

Other Fee-Based Services

As discussed in Chapter 3, Islamic banks, like their conventional counterparts, provide fee-based services, such as,

(i) safe-keeping of negotiable instruments including shares and bonds and collection of payments (based on an agreement of *wakala* under which the Islamic bank acts as the *wakil* or agent of its client);
(ii) internal (domestic) and external transfer operations; (based on an agreement of *wakala* under which the Islamic bank acts as the *wakil* or agent of its client),
(iii) hiring strong boxes (coffers) (based on an agreement of *amana or ijara;*
(iv) administration of property, estates and wills etc. (based on an agreement of *wakala* under which the Islamic bank acts as the *wakil* or agent of its client)

Of late Islamic banks have started offering various services related to real estate, property and project management. These are fee (*ujr*)-based services that are offered to customers irrespective of whether they avail financing or not (see *Concepts in Practice 9.1*). These are natural extensions of an Islamic

bank's financing activities. Since the financing activities are concentrated in the property finance and/or project finance, the bank benefits from the synergy that such fee-based activities provide.

Concepts in Practice 9.1

Property & Project Management Services at ADIB

Property management services may include

1. Marketing of properties in order to create and maximize demand i.e. through advertising on a regular basis or as required.
2. Ensuring full occupancy in order to maximize revenue to the owner.
3. Collecting rents in order to make things easy for the owner.
4. General and preventive maintenance in order to optimize customer satisfaction and maintain the value of the property.
5. Feasibility, valuation, assessment and surveying services for clients requiring an independent and objective service in order to estimate the value of a property they are interested in purchasing, selling or renting. Valuation can also provide a suitable reference when financing against property is required.
6. Location advisory, site and plot assessment as well as advice on the suitability of a particular type of construction

Project management services may include:

The range of activities that make up the pre-development stage of construction, such as project planning, cost planning and contract procurement. This stage is significant because many important aspects are arranged, such as dealing with regulations, as well as purchasing equipment and materials to complete a building project. This activity also includes coordinating the multiple elements such as construction management and monitoring, project scheduling and property development.

Source: *www.adib.co.ae*

To sum up, a variety of services that are offered by conventional banks may be supplied by Islamic banks without any need for modification in the nature of the product, as long as, there is no debtor-creditor relationship involved in the process. Activities where such a relationship comes into existence at the beginning or at a later stage, however, need close scrutiny for the possible existence of *riba*. These often involve a mix-up of fees for service rendered and interest or *riba* for lending of money. Where a loan is involved, it would be dangerous to allow the bank to receive revenues or fees based on a percentage of the loan value - to ward off suspicion of *riba*. But where there is no loan involved, the fee would be based on the benefit to the customer on one hand, and the efforts exerted by the bank or work done, on the other. Where both these elements are present, the fee may be determined as an absolute amount taking into account the benefit passed and costs incurred, and certainly not as a percentage of the value of loan.

Part III

INSURANCE

Chapter 10

INSURANCE

Insurance is a risk-sharing arrangement. In this arrangement between two parties, one party (the insurer) agrees to indemnify another party (the insured) against certain losses specified by a contract (the policy). Insurance is an economic device by which individuals and organizations can transfer pure risks (that is, uncertainty about financial losses) to others. Thus, economic units may now choose the risks that they would like to bear and that they are comfortable with. The "unwanted" risks may be transferred to others in exchange for a fee or a premium.

Insurance facilitates transfer of pure risks and not speculative risks. Pure risks are different from speculative risks. With pure risk the outcome can only be a loss or no loss; there is no possibility for gain. In contrast, speculative risk means that uncertainty about an event could result in either a gain or a loss. Pure risks arise from events over which one has little or no control. Examples of pure risk include the risk of one's meeting with a fatal accident, the risk of one's house getting burgled, the risk to a business that goods being shipped would be destroyed in transit, the risk to a business that the warehouse would catch fire, and the like.

One may argue that society does not need insurance, since pure risks may be self-insured. For example, one may seek to accumulate a liquid emergency fund to pay for losses should they occur. However, self-insuring risk (as opposed to transferring risk to an insurer) is costly and burdensome. Society also bears costs from self-insurance. Since we each must have an emergency fund, funds are diverted from more productive, but less liquid, investments. Further, a society without any insurance mechanism in place may be deprived of goods or services that were not produced because the risks were too great. For example, traders may not set up businesses in crime-prone localities; importers may avoid importing goods from distant regions, if the possibility of goods being lost in transit is high; physicians in certain high-risk specialties may not practice, if the cost of a liability suit could bring financial ruin.

Insurance reduces society's cost of bearing risk. When individuals transfer risk to insurers, the burden of risk in the aggregate decreases. Individuals and organizations exchange their uncertainty for a premium that is known for certain. After risk is transferred to the insurer, the insured no longer has to establish an emergency fund, and anxiety decreases. Insurers accept the risk in exchange for a premium and place the insured units in a pool with others who have transferred similar loss exposures to the insurer. The risk that insurers face once they have accepted the pure risk of their insured units is termed objective risk. An insurer's objective risk is the deviation of actual losses from expected losses and can be measured statistically. Because insurers accept many loss exposures, the mathematical “law of large numbers” applies to them. The larger the number of loss exposures, the more predictable the average losses become. Of course, for the “law of large numbers” to work, the exposure units used to predict losses must be homogeneous, and the losses that occur must be fortuitous, meaning that the loss is unexpected and happens as a result of chance. Once the average losses are reasonably predictable, the pricing and determination of premium for the insurance product becomes possible.

While the benefits of insurance or risk management for an Islamic financial system can be hardly overemphasized, several misconceptions exist. For example, an often-repeated misconception is that seeking insurance or protection from risk is unbecoming of a Muslim who should live in a state of *tawakkul* or total dependence upon Allah (*swt*). Thus, insurance has no place in an Islamic system. This is a misconception, because an insured person does not seek to change the Will of Allah (*swt*). A Muslim is fully aware of the fact that he/ she has no control on future events with or without insurance. A Muslim is instructed to take precautions and then fully trust and depend upon Almighty Allah (*swt*). Seeking to minimize risk is very much in conformity with Islamic rationality.

Conventional Insurance

The process of conventional insurance may be described in the following steps:

Identify insurable risks:

Conventionally insurance companies insure pure risks. They do not insure speculative risks. Further there are some pure risks that private insurers do not insure. A loss exposure must meet certain criteria in order to be considered insurable by private insurance operators.

- There must be a large number of homogeneous exposure units so that losses can be predicted based on the Law of Large Numbers.
- The losses that occur should happen accidentally and unintentionally. Since the Law of Large Numbers is based on random events, this is an important requirement.
- The circumstances of the loss should be easily identifiable.
- The probability of a loss must be calculable.
- The loss should not be catastrophic to the insurer.
- The company must be able to develop a premium that is economically feasible.

Estimate expected losses:

It is important for the profitability of insurance companies that actual losses paid are close to expected losses. The goal of the insurer when developing an insurance premium rate (price of the insurance product) is to charge enough to cover claims and administrative expenses and still make a profit. It seeks to estimate expected or probable losses with the help of actuarial tables and statistics. For example, in the life and health insurance industry, to determine the probable number of persons in a group who will die or become disabled at any age, statistics on large numbers of lives are collected and developed into mortality and morbidity tables.

Estimate investment income:

When pricing insurance, the insurer also takes into consideration the investment income that will be earned on the premium paid, Thus if interest rates are expected to be high and investment income is expected to be large, a

lower insurance rate will be charged. If interest rates are expected to drop, investment income is expected to be less and rates will be higher.

Conventional insurance companies are generally organized as either a stock company or a mutual insurer. The stock company is a corporation owned by shareholders. The objective of the stock insurer is to produce a profit for the holders of the capital stock. Management of the stock company rests with the shareholders, who elect a board of directors that then elects the company's executive officers. Mutual Insurers in contrast, are owned by the policyholders. The objective of this type of organization is to minimize the cost of the insurance product to the policyholders. Mutuals pay their policyholders dividends based on the company's performance, so their policies are participating in nature. This implies that if the cost of providing insurance declines, policyholder dividends will increase.

Islamic Appraisal of Conventional Insurance

A majority of *Shariah* scholars find conventional insurance inadmissible in the Islamic framework. They have several objections against conventional insurance in general, and against conventional insurance for profit in particular.

Maisir

Gambling (*qimar* and *maisir*) is clearly forbidden to Muslims. As far as insurance for profit is concerned, it is argued that the insurer effectively "bets" that the contingencies insured against will not occur. The fact that such “betting” is done scientifically with the use of statistical tables and probability distributions does not alter the situation. Most forms of modern day gambling do in fact make use of scientific tools of analysis. However, there are major differences between a game of gambling and insurance.

One, in a game of gambling, there is a conflict of interest between the players. Gambling games are zero-sum games. If a particular team wins a basket ball game, a gambler betting on its win will gain; but only at the cost of another gambler who bets on a defeat. Hence, such gambling has the potential of bringing major conflicts, social discords in addition to bringing financial ruin to some parties. In insurance on the other hand, both parties – the insurer and the insured hope that the contingencies insured against will not occur. Two, gambling generates risk that does not exist before one enters gambling, while the sole purpose of insurance is to reduce, minimize or eliminate risks that are inherently present. Therefore, the analogy between insurance and gambling may

not be sound and indeed, insurance may be the opposite of gambling rather than being similar to it.

Conventional insurance seeks to draw a line of distinction between gambling and insurance with the requirement of "insurable interest". This implies that the beneficiary in insurance (with the exception of life insurance), must have an insurable interest in the subject matter, or at least an expectation of acquiring such interest. While this avoids the possibility of using insurance as a device for gambling in the conventional sense, the scope of *maisir* and *qimar* in *Shariah* is much broader and includes any form of unjust enrichment of one party at the cost of another. Note here that, the problem of unjust enrichment is very significant when the insurance business is organized as a stock corporation. The stockholders gain by maximizing the insurance surplus. The problem is considerably reduced in a mutual insurance company where policyholders themselves own the organization. There is however, still a possibility of unjust enrichment within the group of policyholders, which needs to be carefully avoided or minimized.

Gharar & Jahala

As discussed in Chapter 1, a contract must be free from excessive *gharar* or uncertainty. A major source of *gharar* is lack of knowledge or absence of adequate, and accurate information. In the context of insurance, it is pointed out that at the time of contracting, the insurer does not know whether he will ever be called upon to pay claims under the policy, nor the size of such claims, if any. Similarly the insured pays a premium (price) but does not know if he is going to receive any financial benefit in future, nor the size of such benefit. The contrary view is that these arguments are misplaced since what the insured is purchasing is insurance against the possibility of loss or "peace of mind". The insurer's obligation under the contract is not limited to paying claims, but includes holding the assured covered, which commences when the policy period begins or when the subject matter comes on risk. While these arguments sound reasonable, it needs to be noted that there is no basis in *fiqh* for buying and selling "peace of mind".

The crux of the problem in fact, lies in viewing insurance as a buy and sale contract between two parties – the insurer and the insured. The insurer has an identity distinct from the insured or policyholders. The objection loses some of its edge when one considers mutual insurance as the form of organization in which policyholders are the owners of the organization.

Riba

An insurance agreement in which the policyholder expects to receive a predetermined amount that is greater than that invested clearly contravenes the prohibition of *riba*. The problem of *riba* could, however, be avoided where the contract provides for profit shares rather than fixed interest. While the act of investment in *riba*-based avenues by the insurer does not affect the contract of insurance per se, the nature of investment needs to be *Shariah* compliant too.

The debate over the legality of insurance has occupied Islamic scholars for a long time, but international consensus was reached only at the First International Conference on Islamic Economics held at Makkah, in 1976, which decided that insurance for profits is contrary to *Shariah*. The *Fiqh* Council of the Muslim World League ruled in favor of what it called the "cooperative insurance", which visualizes a group of people working in the same type of business establishing a joint fund, to which everyone of them contributes. The purpose of the fund is to compensate any one of them who suffers specific losses, due to unforeseen circumstances. There is no element of profit in this type of insurance. If the fund is established for a specific period of time, then when that time lapses, the money still available in the fund is given back to the members in the same percentage as of their contribution. It is fairly clear that the chief objection to insurance for profit rests on the *maisir* element.

Islamic Alternative(s)

Insurance is permissible in Islam when undertaken in the framework of *takaful* or mutual guarantee and *ta'awun* or mutual cooperation. *Takaful ta'awuni* or Islamic cooperative insurance is not a contract of buying and selling where a party offers and sells protection and the other party accepts and buys the service at a certain cost or price. Rather, it is an arrangement by a group of people with common interests to guarantee or protect each other from a certain defined misfortune or mishap through the creation of a defined pool contributed out of their common resources. It, therefore, portrays the sincerity and willingness of the group to help and assist any one among them in times of need. Essentially, the concept of *takaful* is based on solidarity, responsibility and brotherhood among participants who have agreed to share defined losses to be paid out of defined assets.

Takaful involves each participant giving away as donation or *tabarru* a certain proportion of the full amount of his or her contribution. The financial assistance paid to a participant facing a loss or damage is from a fund that is

contributed by all participants by way of donation. After the *takaful* benefits are paid, the remaining surplus is paid back to the participants. Thus, there is no element of gambling or unjust enrichment in this arrangement. In view of the fact that the defined fund belongs to the participants, the practice does not aim at deriving undue advantage at the expense of other individuals. Further, the transaction is clear-cut and transparent and there is no element of uncertainty or *gharar* with respect to the contribution and financial assistance. Avoidance of *riba*-based and other unIslamic investment takes care of the remaining objections. *Takaful* is a form of insurance that is based on the system of co-operation, mutuality and shared responsibility as founded in the concept of *takaful* and *ta'awun*. Thus, it is a form of insurance that is acceptable in the Islamic financial system. The major points of difference between conventional and Islamic insurance may be enumerated in brief as under:

1. Conventional Insurance is based on profit-motive and aims to maximize returns to shareholders. The business of insurance is, in essence, "owned" by shareholders of the insurer company. Islamic insurance, on the other hand, is based on the motive of community welfare and protection. The business of insurance itself is non-profit. The insurer is now called the *takaful* operator who receives a fair compensation, either through a share in returns on investment of funds or through agency fees. The business of insurance is, in essence, "owned" by policyholders and the operator company acts as the agent-manager.

2. In case of conventional insurance, insurer's profits include underwriting surplus, which is the difference between total premium received from and total claims and benefits paid to policyholders. Essentially, profit comprises underwriting surplus plus investment income. The distribution of profits or surplus is a managerial decision taken by the management of the insurer. As a result there is a conflict of interest between shareholders of the insurer company and the policyholders. In case of Islamic insurance, on the other hand, the operator has no claims in underwriting surplus. Further, it is the *takaful* contract, not the management of the operator company that specifies in advance how and when profit will be distributed. There is little room for conflict between interests of shareholders of the operator company and the policyholders. This point is further elaborated in the subsequent chapter dealing with alternative models of Islamic insurance.

3. In case of conventional insurance, the sources of laws & regulations are set by state and are man-made. In case of Islamic insurance, the laws and regulations are based on divine revelations. A manifestation of this is in the right of insurable interest that is vested in the Nominee absolutely in

conventional life insurance. The same, however, is determined by Islamic principles of inheritance (*faraid)* in case of Islamic insurance.

4. Just as in case of the insurer, the insured or policyholders may or may not be governed by the profit motive. For instance, in conventional insurance, the insured or policyholder may decide between original cost or replacement cost as the basis of valuation and claim accordingly - whether or not they chose to rebuild property. In Islamic insurance, however, the insured may not "profit" from insurance and are entitled to compensation only for repair or rebuild or replacement.

5. In conventional insurance the investment of premiums is entirely at the discretion of the insurer with no involvement by policyholders. As such, investment usually involves prohibited elements of *riba* and *maisir*. In Islamic insurance, on the other hand, the *takaful* contract specifies how and where the premiums would be invested. By definition such investment would exclude prohibited areas.

6. In case of dissolution of the former, reserves and excess/surplus belong to the shareholders. In case of dissolution of the latter however, reserves and excess/surplus could be returned to participants, or donated to charity. Most scholars would prefer the latter course of action.

7. The Islamic insurance company has an additional obligation of annual payment of *zakat*.

To sum up, there are some major points of difference between conventional and Islamic insurance. We undertake a more elaborate discussion of alternative forms of Islamic insurance or *takaful ta'awuni* in the next chapter.

Chapter 11
INSURANCE PRODUCTS

From the operational standpoint, *takaful* implies an agreement among a group of members, known as participants, who collectively agree to guarantee each member against potential loss or damage. The nature of such potential loss or damage is clearly defined in the agreement. Under the arrangement, any participant who suffers such loss is compensated in the form of financial assistance from a common fund established for this purpose. The fund is created with contributions from participants that are invested in Islamically acceptable avenues. When invested prudently and profitably, the fund generates income and grows. There are different structures depending upon who promotes and manages the fund and what constitutes income for various parties involved in the process. Before we move to discuss the alternative financial structures, it is pertinent to note several facts.

The concept of *takaful* is based on the notion of mutual help and social solidarity. As such, *takaful* is originally seen as a non-profit activity. However, there is no reason why *takaful* cannot be undertaken as a commercial venture.

There are two major groups of stakeholders involved in a *takaful* venture. First is the group of policyholders or participants. In the context of non-profit *takaful*, this group is primarily responsible for organizing the venture. Such ventures are often in the nature of small self-help groups who may seek the help of a professional manager to oversee day-to-day operations of the venture. If organized on a larger scale, however, *takaful* needs entrepreneurial inputs and needs to be undertaken as a commercial venture. In the changed scenario, the initiative for organizing a *takaful* venture is now taken by a *takaful* company known as *takaful* operator. Such a company, of course, is usually owned by a group of shareholders who invest in the company and seek a fair return on their investment. From the way *takaful* is being practiced currently, one can observe and delineate several alternative models and financial structures. These are discussed below.

Tabarru-Based *Takaful*

The first financial structure or model of *takaful* assumes a non-profit nature of *takaful* business. Originally used in Sudan, this is also called the *tabarru* model of *takaful*. Under this model, there are no returns for the promoters, and for the policyholders. The initial contribution to organize the venture may come from the promoters as *qard-hasan*. Participants make donation or *tabarru* to the *takaful* fund, which is used to extend financial assistance to any member in the manner defined in the agreement. Temporary shortfalls are also met through *qard hasan* loans from promoters. In this arrangement policyholders are the managers of the fund and the ones with ultimate control. It may be noted that such an arrangement is closer to the ideal as compared to profit-oriented *takaful* business. However, this also precludes large-scale expansion of *takaful* business. In practice, such model can be seen in operation in social and government-owned enterprises and programs operated on a non-profit basis. The programs utilize a contribution that is 100% *tabarru* or donation from participants who willingly give to the less fortunate members of their community.

All the following *takaful* models view *takaful* as a profit-oriented commercial venture. However, at the same time, a clear demarcation is maintained between policyholders' fund and the shareholders' fund in all these models. Profits flow and expenses are charged to the two funds representing two parties – the policyholders and the *takaful* operator (or shareholders of the *takaful* company) according to set principles. Let us now discuss two such models that are based on: *mudaraba* and *wakala*.

Mudaraba-Based *Takaful*

In this model, a clear distinction is made between the business of *takaful* or insurance and the business of investing funds mobilized from policyholders and/or the shareholders. The *takaful* operator seeks no returns from managing the *takaful* business in line with the spirit of *takaful*. It seeks returns from the business of investing the *takaful* funds under a *mudaraba* agreement with the policyholders for managing their funds. The policyholders assume the role of fund provider or *rabb-al-maal*. As a *mudarib* the *takaful* company receives its share of profits generated on investments. This model is presented in *Exhibit 11.1.*

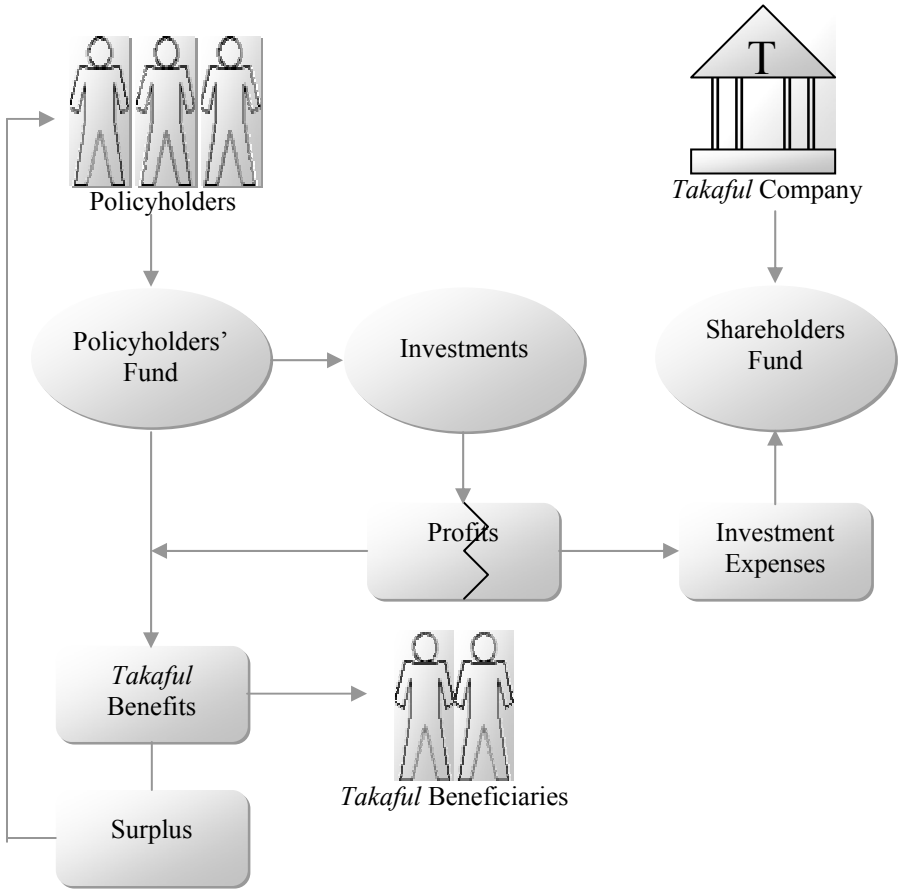


Exhibit 11.1: Flowchart for Mudaraba-Based Takaful

The major steps in this arrangement may be discussed as under:

1. Policyholders pay premium that is credited to a policyholders' fund.
2. The *takaful* operator company's shareholders contribute to a fund called shareholder's fund that is distinct from the policyholders' fund. This activity is the same as formation of a *takaful* company.
3. The *takaful* operator invests the policyholders' fund in *Shariah* compatible assets and investments in its capacity as *mudarib*.
4. Profits generated from investing the policyholders' fund are shared between the policyholders (*rabb-al-maal*) and the operator (*mudarib*) in an agreed ratio. The policyholders' fund and the shareholders' fund are credited with their respective profit shares from investments. Losses if any, are charged to the policyholders' fund.
5. In line with the rules of *mudaraba*, operational expenses relating to the investments are charged to the *mudarib*, the *takaful* operator company, and hence to the shareholders' fund. The expenses charged are the general and administrative expenses of the investment department only, as distinct from general and administrative expenses for the entire business.
6. General and administrative expenses in managing the operations other than relating to investments are charged to the policyholders' fund.
7. *Takaful* benefits are paid to beneficiaries as and when valid claims are made depending upon occurrence of actual losses and damages.
8. At periodic intervals, the net insurance or *takaful* surplus, that is the difference between premium received and claims paid is computed; policyholders receive full refund of insurance surplus if any; and are required to make additional payment of deficit if any.

Thus, the above arrangement ensures that the business of *takaful* remains a non-profit one. The policyholders in a collective capacity receive what they pay for. There are no profits to be made due to overpricing of the *takaful* product. Profits are made out of investments only. Return for the *takaful* company comprises the profit share as *mudarib*.

Wakala-Based *Takaful*

In the *wakala*-based model, the *takaful* operator acts as the *wakil* or agent of the policyholders. As such it is entitled to a known remuneration. It incurs all the operational expenses on behalf of its principal. This model is presented in *Exhibit 11.2*.

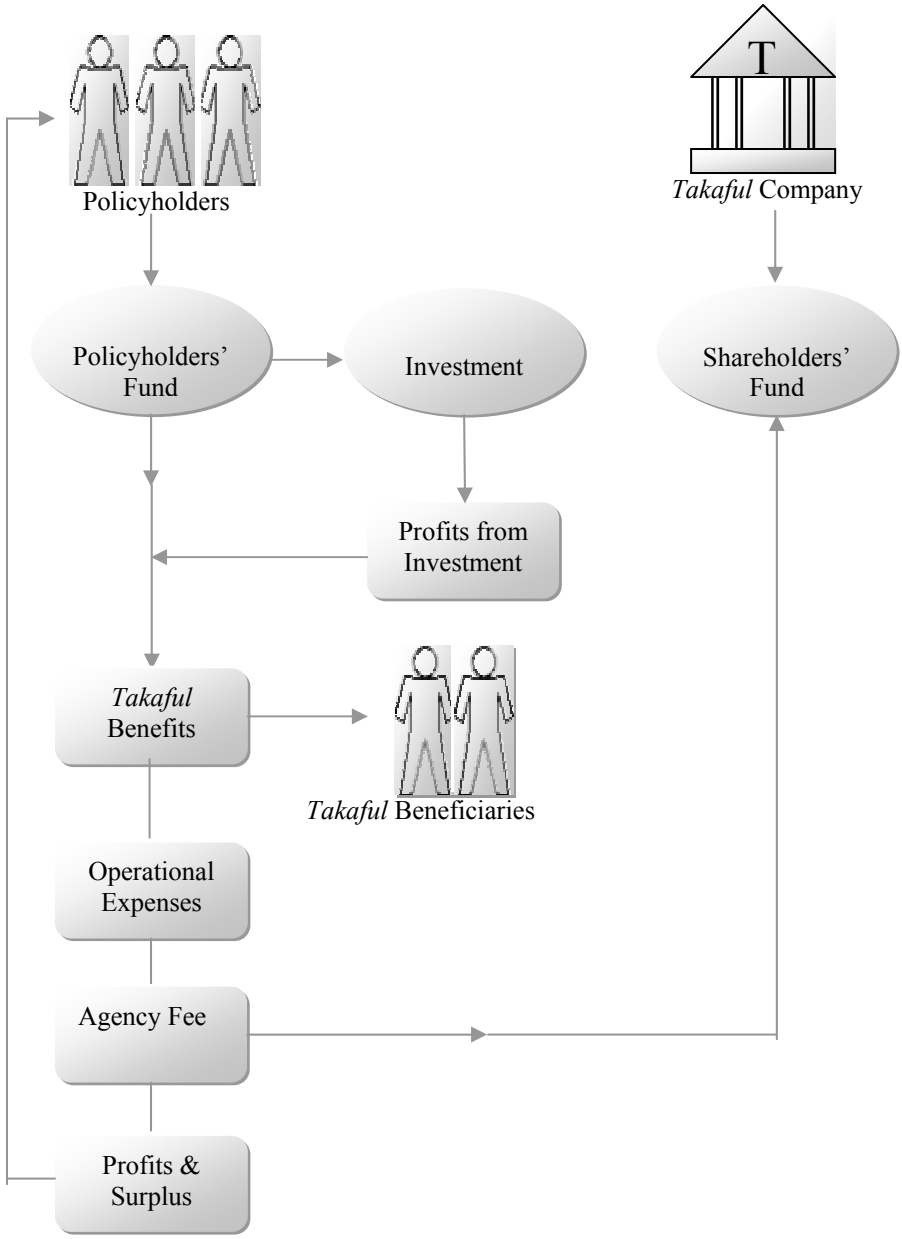


Exhibit 11.2: Flowchart for Wakala-Based Takaful

The distinct features of this model are:

1. Policyholders pay premium that is credited to a policyholders' fund.
2. The *takaful* operator company assumes the role of an agent or *wakil* of the policyholders; its shareholders contribute to a fund called shareholder's fund that is maintained separately from the policyholders' fund.
3. The *takaful* operator invests the policyholders' fund in *Shariah* compatible assets and investments in its capacity as agent or *wakil*. Profits generated from investing add to the policyholders' fund.
4. All operational general and administrative expenses are charged to the policyholders' fund, since the *takaful* operator incurs the expenditure on behalf of the policyholders in its capacity as agent or *wakil*;
5. The *takaful* operator receives a known remuneration that may be an absolute amount or a percentage of the gross premium received.
6. *Takaful* benefits are paid to beneficiaries as and when valid claims are made depending upon occurrence of actual losses and damages.
7. At periodic intervals, the insurance or *takaful* surplus, that is the difference between premium received and claims paid is computed; policyholders receive full refund of insurance surplus if any; and are required to make additional payment of deficit if any.

Issues in Product Management

Profits vs. Surplus

It must be emphasized that *takaful* (even when organized as a profit-seeking venture) is not the same as conventional insurance. The points of distinction are sharp. The differences lie in the source of returns. Returns for a conventional insurance company come from two sources. First, the company generates return by investing the insurance premiums. Note that premium is the conventional name for participant's or policyholder's contribution. Second, return is sourced from underwriting surplus, which is the difference between what the policyholders contribute through premiums and what is paid as insurance claims, benefits and compensation. Such surplus, needless to say, depends on how the insurance product is priced or the level insurance premium. An insurance company can improve its bottom line by pricing too high. However, it is constrained by industry practices. To the extent there is mispricing in the industry, all insurance companies would benefit. The insurance company, of course, incurs expenses in organizing and operating the business of insurance. The expenses when accounted for bring down returns. If you add up the first two and deduct the third there from, you should arrive at net

return for the shareholders of the insurance company. Note however, that we are not seeking accuracy in the accounting sense here. The purpose here is to identify the factors contributing to bottom line of a conventional insurance company.

For a *takaful* company, the first source of returns remains. Of course, a *takaful* company must invest its funds only in the Islamically permissible assets and avenues. In contrast to a conventional insurance company, insurance surplus is not supposed to be a source of return. Any surplus that is a result of over-pricing or over-charging is required to be returned back to policyholders. Similarly, in case of under-pricing, policyholders may be asked to meet any deficit or negative difference between the policyholders' contribution and the actual claims, benefits and compensation. As a matter of principle, the *takaful* company or operator has no rights or obligations relating to such surplus or deficit.

One may observe that the *mudaraba* model that is currently being used by Malaysian *takaful* companies, specifically for general *takaful* (see *Concepts in Practice 11.1*) involves a departure from the above principle. In this scheme the premiums are determined by *urf* or custom (market). This means the rate of premium is comparable to that charged by conventional insurance companies. Profit is defined as underwriting surplus plus returns on the investment of the general *takaful* fund, which is then subject to profit sharing between the participants and the operator under the *mudaraba* contract. Though apparently a modified version of *mudaraba*, the distinct feature of this arrangement is that it transforms *takaful* entirely into a profit-seeking commercial venture. The *takaful* operator company is now the *mudarib* for managing the entire business of *takaful*, not just the policyholders' fund. As such it also shares in the underwriting surplus/ deficit. This arrangement has now come to be known as the Malaysian modified *mudaraba* model. Proponents of this model assert that this allows *takaful* to withstand competition in the market place. Should the original *mudaraba* model be used, the *takaful* company would have to charge an exorbitantly high premium to cover its expenses. This would not permit the business of *takaful* to compete with conventional insurance.

Concepts in Practice 11.1

General *Takaful* Schemes at MNI *Takaful* & *Syarikat Takaful*

Structure: General *takaful* schemes are "risk-only" contracts of joint-guarantee as compared to investment-oriented nature of family *takaful* plans. These agreements are essentially short-term in nature (normally one year), between groups of participants to provide mutual compensation in the event of a defined loss. The schemes are designed to meet the needs for protection of individuals and corporate bodies in relation to material loss or damage resulting from a catastrophe or disaster inflicted upon properties, assets or belongings of participants.

Investment of Funds: Participants of a general *takaful* scheme enter into a contract with the company on the basis of the contract of *mudaraba*. The participants pay the *takaful* contributions as *tabarru*. The company manages the general *takaful* business including managing the investment of the general *takaful* fund assets as *mudarib*. Investments are made in a *Shariah* compliant manner and all profits on the investments are pooled back to the fund.

Benefits: In line with the virtues of cooperation, shared responsibilities and mutual help as embodied in the concepts of *takaful*, the participants agree that the company shall pay from the general *takaful* fund, compensation or indemnity to fellow participants who have suffered a defined loss upon the occurrence of a catastrophe or disaster.

Expenses: The fund shall also pay for other operational costs of general *takaful* business such as for the *retakaful* arrangements and the setting up of technical reserves.

Sharing of Profits/ Surplus: Profit is defined as balance of the total aggregate of *takaful* contributions paid by participants to the general *takaful* fund, less payment of claims paid and incurred, the cost of *retakaful* and the provision of appropriate reserves. In insurance jargon this is generally termed as underwriting surplus. Together with the overall returns on the investment of the general *takaful* fund, the surplus is declared as the profit of the general business, which is then subject to profit sharing between the participants and the operator under the *mudaraba* contract.

Source: *www.takaful-malaysia.com and www.takaful.com.my*

The *wakala* model that is currently in use at Bank Al-Jazira (see *Concepts in Practice 11.2*) is not entirely free from above controversy - of sharing the underwriting surplus. The agency fee charged by Bank Al-Jazira has two components: a percentage of contribution that will cover the operating cost in running the *takaful* program; and a performance related commission that is in the form of a percentage of underwriting surplus. Proponents of such surplus sharing seek to defend this on the ground that this would reduce the moral hazard problem associated with *wakala* or agency. The performance fee would act as an incentive for the *takaful* operator to perform all its *takaful* related responsibilities efficiently as also price its product in a competitive manner.

Concepts in Practice 11.2

***Al-Wakala* at Bank Al Jazira**

In the context of a *takaful* model for Bank Aljazira, *takaful* members, through the contract they enter voluntarily, give consent in the form of absolute authority to Bank Aljazira to act on their behalf as an agent to run the *takaful* program under the *ta'awun*. The *Al-wakala* model

- Consists of contribution by participants that includes payments of fees and charges and a portion for donation to a community *takaful* fund. All risks are borne by the *takaful* fund and the annual operating results (surplus/loss) belong solely to the participants. The *takaful* operator (*wakil*) does not share directly in either the risk, deficit or Surplus.
- All installment contributions flow into an Individual Investment Reserve Account (IIRA) where a specified portion is "dripped" out monthly as a donation (*tabarru*) into the *takaful* pool for mutual benefit of all other participants.
- Participants agree to pay specified direct expenses (such as *retakaful* costs, medical expenses, legal fees, etc.) and to pay the *takaful* operator a set fee (*wakala* fees) to manage the operations on their behalf, which may include a performance fee as incentive that is charged to the surplus, if any. If the *takaful* operator is to generate a profit from its efforts, it must manage the operations (including salaries, overhead, selling commissions, sales and marketing expenses, etc.) entirely within the disclosed *wakala* fees.
- The *Al Wakala* model can be viewed as transparent as fees are clearly related to operator's operational costs.

Bank Aljazira is compensated via agency fees in the form of:
A percentage of contribution: This percentage will cover the operating cost of Bank Aljazira in running the *takaful* program
A performance related commission: This is in the form of a percentage of underwriting surplus in general. The surplus is defined as the excess of contributions over claims. This additional fee will provide an incentive for Bank Aljazira to:

- Ensure that prudent underwriting is carried out at all times;
- Optimize investment performance of the *takaful* funds
- Minimize direct expenses related to the *takaful* fund such as issue cost, stamp duty, legal fees, reinsurance cost etc
- Minimize claims amount payable (i.e. control fraud) without sacrificing the objectives of *takaful*

Ensure that contributions for participation in *takaful* is set at a reasonable level to ensure adequacy, equity and fairness among participants.

Source: *www.baj.com.sa*

Sharing of Expenses

The norms of *mudaraba* require that the expenses need to be borne by the *mudarib* or the *takaful* operator. In other words, expenses need to be charged to the shareholders' fund only after the profits or surplus have been distributed in the agreed ratio. In the theoretical *mudaraba* model highlighted earlier, the *mudaraba* agreement pertains to management of investments only. The *takaful*

business is essentially non-profit. Hence, by implication, all investment-related expenses need to be absorbed by the *mudarib* or the *takaful* operator company. Such expenses would, therefore, be charged to the shareholders' fund. The *takaful*-related direct expenses would be charged to the policyholders' fund. The above model is said to be in use for family *takaful* programs in Malaysia (see *Concepts in Practice 11.3*). The two major *takaful* operators in Malaysia follow different methods of charging expense. In case of MNI *Takaful*, the policyholders' fund is debited with all the expenses incurred in managing the family *takaful* account with the exception of the expenses relating to investment of the family *takaful* account. In case of another operator, *Syarikat Takaful*, however, all expenses including investment related expenses are charged to the shareholders' fund.

Concepts in Practice 11.3

Family *Takaful* Plan at MNI *Takaful* & *Syarikat Takaful*

Family *takaful* plans have the triple objectives of facilitating long-term savings, investment of savings for *Shariah*-compliant wealth creation and provision of *takaful* benefits to heirs of participants in case of death or disablement.

Structure: A participant in a family *takaful* plan is required to pay regularly the *takaful* premium or installments for a defined period of participation. The *takaful* company or operator and the participant enter into a long-term *takaful* contract, which is based on the principle of *mudaraba* (profit-sharing). The participant decides the amount of *takaful* installments that he/she wishes to pay, subject to a minimum sum as determined by the company. Each *takaful* installment paid by the participant is divided and credited by the *takaful* company into two separate accounts, namely the participant's account and the participant's special account. A substantial proportion is credited into his participant's account solely for the purpose of his savings and investment. The remaining proportion is credited into the participant's special account as *tabarru* or donation. *Takaful* benefits are paid out of such *tabarru* in the participant's special account. The ratio of *tabarru* to total premium is determined based on sound actuarial principles.

Pooling & Investment of Funds: The *takaful* installment credited into these two accounts is then pooled as a single fund for the purpose of investment in a *Shariah* compatible manner. Profits generated from such investment are shared between the participant and the company in the pre-agreed ratio as defined in the *mudaraba* contract. For example, the ratio for MNI *Takaful* is 20:80 and 30:70 for *Syarikat Takaful*. This means both the participants' account and participants' special account (together they constitute policyholders' fund) are credited with 80% of profits in case of MNI *Takaful* (70% of profits in case of *Syarikat Takaful*). The balance is credited to the company as *mudarib*. Hence, MNI *Takaful* shareholders' fund is credited with 20% of profits (30% in case of *Syarikat Takaful* shareholders' fund). Losses if any, are entirely borne by participants.

Thus both the participants' account and participants' special account share in losses on a pro rata basis.

Cont.

Benefits: In the event that a participant should die before the maturity of his family *takaful* plan, the following *takaful* benefits shall be paid to him:

i. The total amount of the *takaful* installments paid by the participant from the date of inception of his *takaful* plan to the due date of the installment payment prior to his death and his share of profits from the investment of the installments which have been credited into his participant's account;
ii. The outstanding *takaful* installments which would have been paid by the deceased participant should he survive. This outstanding amount is calculated from the date of his death to the date of maturity of his *takaful* plan which shall be paid from the participant's special account as agreed upon by all the participants in accordance with the *takaful* contract.

If a participant survives until the date of maturity of his *takaful* plan, the following *takaful* benefits shall be paid to him:

i. The total amount of *takaful* installments paid by the participant during the period of his participation plus his share of profits from the investment of the *takaful* installments credited into his participant's accounts.
ii. The net surplus allocated to his participant's special account as shown in the last valuation of the participant's special accounts.

In the event that a participant is compelled to surrender or withdraw from the *takaful* plan before the maturity of his *takaful* plan, he is required to surrender the benefits. The participant is entitled to receive the proportion of his *takaful* installments that have been credited into the participant's account including his share of investment profits. However, the amount that has been relinquished as *tabarru'* is not refunded to him.

If the balance in the participant's special account is insufficient to cover the *takaful* obligations, the *takaful* operator arranges for interest free loan from other family *takaful* accounts, refundable in the future.

Expenses: The two major *takaful* operators in Malaysia follow different methods of charging expense. In case of MNI *Takaful*, the Participant's Special Account is debited with all the expenses incurred in managing the family *takaful* account with the exception of the expenses relating to investment of the family *takaful* account. The investment related expenses are entirely borne by MNI *Takaful* and therefore, debited to the shareholders' fund. In case of another operator, *Syarikat Takaful*, all expenses are charged to the shareholders fund. In other words, the operator as *mudarib* bears all expenses.

***Source**: www.takaful-malaysia.com and www.takaful.com.my*

If the *mudaraba* agreement pertains to the entire business of *takaful* (assuming this is permissible), as in case of the so-called modified *mudaraba* model for general *takaful* in Malaysia, then by definition, all expenses relating

to *takaful* must be charged to the *takaful* operator as the *mudarib*. All expenses, direct and indirect, investment-related and administrative, need to be charged to the shareholders' fund only after the profits or surplus have been distributed in the agreed ratio. However, in practice, one observes that expenses are charged to the policyholders' fund prior to any distribution of profits or surplus (see *Concepts in Practice* 11.2). A justification provided for this unacceptable practice is that expenses, when passed on entirely to the policyholders would make the *takaful* premium more competitive.

In case of *wakala*-based model, this problem does not exist, since the *takaful* operator essentially acts as an agent of and therefore, on behalf of the policyholders. All expenses relating to a particular *takaful* program, therefore, are chargeable to policyholders' fund for that program. The general administrative and operational expenses of the *takaful* operator company, needless to say, are charged to the shareholders' fund. These cannot be charged to the policyholders' fund.

A specific issue relates to treatment of commission paid to marketing agents. Conventional insurance companies usually seek the help of marketing agents who are paid a share of the gross premium as their remuneration. One view is that it is not correct for a *takaful* operator functioning as *mudarib* to use the services of marketing agents while charging the remuneration paid to policyholders' fund. To be fair to the policyholders, none of the expenses, including agents' commission should be charged to policyholders' fund. Again, this problem does not exist in case of the *wakala*-based model. An agent with the permission of principal can always appoint additional or sub-agents with the permission of participants/principal. Therefore, all the commission either to the main agent or subordinate(s) agent could be paid directly from the *takaful* fund. In this case, as in line with the *Shari'ah* legal maxim, the agent appointed by the main agent has now become the *de facto* agent for the participants.

Sharing of Surplus

The sharing of surplus may take the form of cash outflow and payment to each policyholder on a pro rata basis. It may also take the form of a waiver or reduction in premium payable for future time period(s).

There are two different approaches taken by the *takaful* companies in this matter. For some, the *takaful* participants would be eligible to participate in the distributable surplus, provided that they have not made any claims or received any *takaful* benefits from the *takaful* companies or if the participant has

terminated/ surrendered his/her *takaful* certificates before expiry. For others, the participant is still eligible to the share of surplus if the claim is less than the contribution.

It is important that shareholders have no share in the profits generated by policyholders' funds. Further, the Board of Directors has the discretion to allocate all such surpluses to special and other suitable reserves, which need not be distributed among the policyholders, because the premiums paid by them are treated as donations. The General Assembly of the insurance company may, on the recommendation of the Board, allocate the whole or a part of the surplus to policyholders' reserves. The surplus may also be carried forward to the next year as an undistributed profit or even used for social welfare or charitable purposes or national development schemes and project.

Commingling of Funds

It is pertinent to note here that a *mudarib* or *wakil* can commingle its own funds with policyholders' funds for investment purposes. In this case however, the distinct identities of the two funds attributable to policyholders and shareholders are maintained. Expenses and overheads relating to joint investment operations are charged to both the funds on a pro rata basis.

It is important to highlight that the involvement of the *takaful* operator as *mudarib* or *wakil* is not merely restricted to operating or managing the *takaful* funds. It has the following additional responsibilities even though the same is not mandated by *Shariah*. For instance, the operator has the financial obligation to ascertain that all initial or start-up costs, which usually are substantial at the beginning, under modern operating conditions, are met. Further, in the event of a deficit of the *takaful* fund (defined in general as claims exceeding contributions), the operator has the additional responsibility to manage the same through *qard-hasan* (benevolent loan) on a voluntary basis.

Policyholders as Owners

The policyholders essentially own a *takaful* business. An important condition that is often ignored in practice is that the policyholders must be provided adequate representation on the Board of Directors of the company and a right to scrutinize its transactions and accounts.

Combination of Mudaraba and Wakala

Though currently not in practice, the combination of *mudaraba* and *wakala* as a model of *takaful* is a distinct possibility. Proponents of this model argue that a *mudaraba* arrangement is better suited for managing the investment of policyholders' fund, since a *wakala* model provides no incentive to the agent or *wakil* (the *takaful* operator in this case) to act in the best interest of its principal and optimize returns on investment. The *wakala* model is perhaps better suited than the *mudaraba* for managing the *takaful* business as the agency fee (cost of insurance) is more transparent and is free from the controversial charging of expenses (including marketing commissions) to the policyholders' fund. The suggestion perhaps needs to be seen as part of a search for an optimal model of *takaful*.

Reinsurance

Reinsurance or *retakaful* involves a second arrangement between a *takaful* operator and a larger operator as the former may not have the capacity to absorb all possible losses out of its own resources, given the large sums that are insured. *Retakaful* must be undertaken following the same principles as are applicable for *takaful*. It must be recognized however, that there are not enough *retakaful* companies around. *Takaful* companies therefore, are permitted to reinsure with larger reinsurance companies even if the latter are run along conventional lines. Some contemporary jurists on the grounds of "pressing social need" have temporarily permitted this.

According to traditional reinsurance practice, the insurance company passes the premiums it receives from the insured to the reinsurance company and, in return, receives a commission from the reinsurer towards its management expenses. The insurance company is also paid a profit commission as a reward for careful and sound underwriting. Such commission is not held permissible as this would imply that the *takaful* company is a mere agent of the reinsurer. What is permitted however, is that the insurer must deal with the reinsurer on a net (risk) premium basis only or may enter into a profit-sharing arrangement with it.

Areas of Application

Family *Takaful* Products

Basically, family *takaful* plans can be divided into: Individual Plans, Group Plans, Mortgage Plans and Credit Plans

Individual Plan: These are essentially long-term financial programs to facilitate the creation of one's personal savings fund that can

- Serve as a family endowment in case of untimely death of participant before the maturity period.
- Help the participant through with any financial tide in case of mishap such as accident, permanent disability
- Finance hospitalization bills.
- Cover funeral expenses for immediate family members and parents of the participant.
- Finance child's education upon entry into institute of higher education
- Help plan one's holiday or to perform *umrah*.
- Guarantee regular income after retirement of the participant
- Help accumulate a fund which may be left as donation under the *waqf* system.

Mortgage Plan: Proceeds from the mortgaged plan could be used to redeem the participant's mortgage in the event of his/her untimely death or permanent disablement. Therefore the plan covers the outstanding of the participant's house finance or loan facility either with financial institutions, employer or co-operative society.

Group Plan: Group *takaful* plans invite participation from groups and organizations such as mosques, Islamic centers, employers, clubs etc. and cover natural death, accidental death, permanent total disability (due to accidental or natural causes), funeral expenses, hospitalization and the like.

Credit Plan: Credit plans are similar to mortgage plans but with a smaller sum covered and short term financing. Proceeds from the plan are used to redeem the participant's outstanding balance in the event of his/her untimely death or permanent disablement. Therefore the plan covers the outstanding of his/her finance or loan facility either with financial institutions, employer or co-operative society.

General *Takaful* Products

Motor Takaful: There are *takaful* covers for three types of motor vehicles available in the market - private car, private motorcycle and commercial vehicles.

Fire takaful: Under this *takaful*, the basic cover provided by the *takaful* companies is loss or damage by fire or lightning to the property concern.

Fire consequential loss takaful: The standard fire *takaful* provides cover for material damage to the property covered.

Burglary takaful: This covers loss, destruction or damage by burglary or housebreaking or any attempt thereat.

Workmen' compensation takaful: It provides cover for liabilities of an employer who is legally required to compensate an employee in case of personal injury by accident or disease to the employee in the participant's immediate service arising out of and in the course of his employment.

Personal accident takaful: This *takaful* covers bodily injury caused by violent, accidental, external and visible means which injury shall solely and independently of any other cause result in (i) death (ii) permanent disablement (iii) temporary disablement (iv) medical expenses.

Fidelity guarantee takaful: This *takaful* covers loss of monies or goods belonging to the participant or for which he is responsible as the result of any act of fraud or dishonesty committed by any employee.

Money takaful: This *takaful* covers loss, destruction or damage of money by any cause while in transit or in the charge of the participant's messenger and/or employee or burglary from locked safe or strong-room or by hold-up while in the premises.

Plate glass takaful: This *takaful* covers breakage of any of the glass in the premises.

Public liability takaful: This *takaful* covers accidental bodily injury to any person and / or accidental loss of or damage to property caused in the course of the business within the territorial limits.

Part IV

INVESTMENT BANKING AND FINANCIAL ENGINEERING

Chapter 12
INVESTMENT BANKING

The flow of funds within a financial system from savings-surplus units to savings-deficit units may be indirect or direct. We have discussed in great detail how commercial banks play a vital role in indirect flows – through the process of intermediation. When the flow of funds is direct, it is the investment bank that plays a major role. Investment banks play the role, not of intermediaries, but of facilitators. Investment banks are firms that specialize in helping businesses and governments sell their new security issues (debt or equity) in the primary markets to raise funds. In addition, after the securities are sold, investment bankers make secondary markets for the securities as brokers and dealers. At times, the role of the investment banker begins much earlier. The investment banker puts on the hat of a financial engineer; designs and structures the security or instrument that is ideal or optimal for raising funds considering the client's needs.

In order to correctly appreciate the role of an investment banker as a provider of a range of services, it is important to appreciate the factors that govern the needs of its clients. An important consideration is whether the client-company is private or, public. Private companies are, as the name implies, privately held. A private company has a small number of shareholders and owners need to disclose very little information about the company. Most small

businesses are privately held. Of course, there are also many large private companies. It is usually not possible to buy shares in a private company. A public company, on the other hand, is one that has sold at least a portion of itself to the public and trades on a Stock Exchange. The first sale of stock by a company to the public is called an initial public offering (IPO) and doing an IPO is referred to as "going public." Public companies have thousands of shareholders and are subject to strict rules and regulations. The stock of a public company is traded in the open market like any other commodity and no investor can be prevented from buying such a stock. A major reason why companies go public, needless to say, is their enhanced ability to raise funds. However, only private companies with strong fundamentals may qualify for an IPO. The average investor or public is not interested in small and start-up companies that are yet to have a track record of sound performance. When a company is in the initial stages of its life cycle, it must remain private. Its needs are met through what is known as venture capital (VC) financing.

While an investment bank provides a range of services both before and at the time of IPO of a company, its role does not end there. In the after-market (that is, after the company's stocks are freely and publicly traded on Stock Exchanges) an investment banker provides services of a broker, arbitrageur and various corporate advisory services, such as, relating to mergers and acquisition (M&A) activities, corporate restructuring and the like.

We, therefore, discuss the services provided by investment bankers in two broad classes – (i) services rendered during initial stages of formation of a company that is still private and when the company goes public; (iii) services rendered in the after-market.

Conventional Investment Banking

First we take a look at services rendered relating to venture capital (VC) and private placement and initial public offering (IPO).

Private Placement and Venture Capital (VC)

As explained above, a sale of securities by public sale may not be feasible for small and start-up companies. For such companies, the investment banker may facilitate raising of funds from venture capitalists. It may advise the issuer to go for a private placement. A private placement is a method of issuing securities in which the issuer sells the securities directly to the ultimate investors. The investment banker's role is to bring buyer and seller together, to help determine a fair price for the securities, and to execute the transaction. At

times, the investment banker itself assumes the role of a venture financier or a venture capitalist. Providing venture financing could be a very sophisticated exercise. The process of providing venture capital is explained below.

The term "venture capital" refers to money and resources made available to startup firms and small businesses with exceptional growth potential. Venture capital often includes managerial and technical expertise in addition to financial capital. Most venture capital money comes from an organized group of wealthy investors. This form of raising capital has become increasingly popular among new companies that, because of a limited operating history, cannot raise money through a debt or public equity issue. The downside for entrepreneurs is that venture capitalists usually receive a say in the major decisions of the company in addition to a portion of the equity.

Venture capitalists (VCs) are generally observed to focus on technology-heavy companies, such as, relating to computer and network technology, telecommunications technology, biotechnology and the like. There are broadly three types of VCs - Angel Investors; Financial VCs and Strategic VCs. An **Angel Investor** is typically a wealthy individual, often with a tech industry background and hence, in a position to judge high-risk projects. The investment is usually small and made in a very early-stage company with a view to earning a dramatic return on investment. A VC, by definition has no intention of holding equity for a long term and liquidates its investment at a high price when the company turns out to be profitable. The exit route is an important component of a VC strategy. The most common type of VC is a Financial VC – an investment firm that is often organized as a formal VC fund, with limits on size, lifetime and exits. It is sometimes organized as a holding company. A **Financial VC** usually waits till the company has a track record of profitability and goes for an IPO. It liquidates its investment with the IPO and in the after market. A **Strategic VC** on the other hand is typically a (small) division of a large technology company that is set up with the objective of helping and financing companies whose success may spur revenue growth of the parent. It is not exclusively or primarily concerned with return on investment and usually provides investees with valuable connections and partnerships.

When an investment bank dons the hat of a venture capitalist, it gets compensated through selling at high IPO or after-market price of the equity it holds. If the client-company turns out to be profitable the IPO or after-market price is usually far higher than the price paid for the private equity. The investment bank may also play a role that is purely advisory or that involves bringing the buyer (venture capitalist) and seller (company) of private equity together. Such service is rendered for a fee.

Initial Public Offerings (IPOs)

When companies reach a stage where they have a track record of profitability and are in further need of funds to finance their expansion plans, they may decide to "go public" with an IPO. An investment banker has an important role to play in the process of IPO. Companies and organizations often do not know what type of financial instrument is ideal for them for the purpose of raising funds. The instrument could be debt-based or equity-based or one of the many hybrid forms. An investment banker may play an advisory role here and structures the appropriate financial instrument considering the unique needs of the client. The investment banker also helps the client company to correctly price the instrument. If a firm is selling stock and a new issue is priced too low, more shares are sold than necessary to raise the needed funds. This would dilute the firm's earnings. Similarly, if the price is too high, selling the instrument may be quite difficult. In bringing securities to market, investment bankers take clients through three steps: origination, underwriting (risk bearing), and sales and distribution. Depending on the method of sale and the client's needs, an investment banker may provide all or a few of these services.

***Origination*:** During this phase, the investment banker can help the issuer analyze the feasibility of the project and determine the amount and type of financing needed, design the characteristics of securities to be issued, such as maturity, coupon rate, and the presence of additional features, such as call or put or convertibility options. The investment banker advises on the timing of the issue and takes care of all the procedural and documentation requirements.

***Underwriting*:** Underwriting is a kind of insurance against under-subscription. Should there be inadequate public interest in buying the new shares, the company would have to alter its capital expenditure plans or look for alternative sources of financing. An investment banker guarantees the sale of securities by purchasing them first from the issuing company and then reselling them to the public. In the process it is exposed to a kind of inventory risk in the form of a possibility that the securities may be sold at a price less than the underwriter purchased them for. To decrease the risk of any one primary issue, underwriters form syndicates comprising other investment banking firms.

***Sales and Distribution*:** Subsequent to underwriting or purchase of securities the investment banker(s) resale them to investors. The sales function is divided into institutional sales and retail sales. Retail sales involve selling the securities to individual investors and firms that purchase in small quantities. Institutional sales involve the sale of a large block of securities to institutional

purchasers, such as pension funds, insurance companies, endowment trusts, or mutual funds.

Now we turn to **services provided by investment bankers in the after-market.**

Brokerage

An important function of an investment bank is to provide services as a broker or as a dealer for existing securities in the aftermarket or secondary market. Simple brokerage means bringing buyer and seller together. At times the investment bank performs the role of a market-maker in the securities and carries an inventory of securities from which it executes buy and sell orders and trades for its own account. The market maker is willing to buy the security at one price, known as the bid price, and sells it at a higher price, the ask price. The market maker makes a profit based on the difference between the bid and the ask prices.

Often a broker provides a range of related services to the investors in addition to trading in them. These services include (i) providing investment advice and a host of relevant information to the investor, (ii) storage of securities, (iii) margin credit, which allows the investor to borrow part of the money from the brokerage firm to pay for the security purchased, (iv) cash management services, for instance, one that allows investors to write checks against credit balances and the value of securities they hold in their brokerage account.

Arbitrage

Closely associated with the market-making activities of investment banking firms are arbitrage activities. The essential feature of arbitrage is that it is risk-free. Such a risk-free arbitrage transaction involves the simultaneous buying and selling of a security to take advantage of a price anomaly that may exist between two markets.

Mergers and Acquisitions

There are many economic and non-economic reasons why companies decide to merge, acquire other companies both in a hostile and friendly manner. The primary economic motive for most mergers is to increase the value of the combined firms through realization of, what is known as, economic synergy. Investment banks provide a range of services to business firms related to

mergers and acquisitions, such as, valuation of synergies or of the individual and combined firms, negotiation between companies involved or providing advice to the acquiring or target firm to choose appropriate offensive or defensive strategies, and the like.

Other Activities

You may note that investment banks are extremely flexible organizations and may provide virtually any financial service for a fee. The activities may include financial consulting in the areas of capital restructuring, financial planning, determining a firm's optimal financial structure or dividend policy, and preparing feasibility studies for new projects.

Islamic Appraisal of Conventional Investment Banking

In this section we undertake an assessment of the various investment banking services highlighted above from an Islamic point of view. The evaluation follows the same sequence as above. First, we examine services rendered during initial stages of formation of a company that is still private and then we examine services rendered when the company goes public.

Pre-Market Services

The first and foremost task of an investment banker is to bring new securities to the market. However, not all types of securities are permissible in an Islamic market.

Conventional Debt Securities: The conventional debt securities – whether fixed or floating rate, whether coupon or zero, with or without options are not permissible as they involve *riba*. An Islamic investment banker is not permitted to extend any kind of help in bringing such securities to the market. Similarly it is not allowed to deal with such securities in the aftermarket or secondary market.

Derivatives: Besides interest-based debt securities, there are other types of instruments that are prohibited too. The Islamic investment banker is not permitted to deal in conventional derivatives, such as, options, futures, swaps or more complex products that have these features. A more detailed discussion of relevant issues is undertaken in Chapter 14.

Common Stocks: With respect to conventional common stock, you may note that it has no parallel in *Shariah*. Nevertheless, majority opinion

among jurists seems to tilt in favor of granting permissibility to the modern stock. There are some additional concerns however, that need to be addressed. For example, the most important requirement is that since stocks represent *pro rata* ownership interests in companies, the company itself must be engaged in Islamically permissible activities. Second, ownership interest relates to ownership in real assets and not in debts or money. Another *Shariah* requirement that naturally follows from the above is that the company neither borrows money on interest nor keeps its surplus in an interest bearing account. However, a company that fulfils this criterion is very rare in contemporary stock markets. Hence, contemporary jurists have developed some "more liberal" criteria for identifying permissible stocks. We will discuss these criteria and the underlying justification in a subsequent section. To sum up, dealing in common stocks in general is permitted though dealing in specific stocks may be forbidden.

Conventional Preference Stocks: Conventional preference stocks have no parallel in the *Shariah*. The scheme of preference for one group of shareholders (owners of preferred stock) over another (owners of common stock) in the matter of payment of dividend or in sharing of residual value upon liquidation of a company (that is inherent to preference stocks), is considered unacceptable in an Islamic framework.

There is nothing inherently unethical about the involvement of investment bankers in the process of raising funds through venture capital and private placement or an IPO as long as the securities that are created in the process are *Shariah*-compliant. In fact, the process of resource generation and allocation becomes more efficient as the investment bankers bring in their expertise in pricing, timing, and marketing the stocks (unless of course, the expenditure in the form of fees and commissions outweigh the benefits).

Venture financing in which an investment bank buys private equity in start-up companies is Islamically permissible and desirable too. It adds to the efficiency of the system. Due to the presence of gross information asymmetry between the investors and promoters in case of early-stage companies, investment may involve *jahl* and *gharar* on the part of the uninformed investors. The information asymmetry, however, does not exist with respect to the investment bankers who are supposed to undertake a very careful scrutiny of the future prospects in light of information made available to them, often by the promoters. In the second phase these investment bankers off-load stocks when the company has already built up a track record. Thus, at this stage information asymmetry is far less and an average investor is in a position to take an informed decision that could be relatively free from *jahl* and *gharar*.

Now let us turn to the process of IPO. One method of offer and sale of securities in an IPO is the "tender method" under which different investors bid for the securities. The process is permissible and quite desirable too, provided adequate safeguards are in place against the forbidden practice called *najash*. In case of *najash*, while a transaction is in the process of being concluded between two parties, the seller and the buyer, a third party interferes with the intention of increasing the price of the buyer. The second buyer in *najash* is not a genuine buyer but he is there only to bid up the price for the buyer without any intention of purchase. In the tender method, therefore, it should be ensured that all the bidders are genuine.

Another method of offer and sale is underwriting of securities in which the investment banker i) makes a wholesale purchase of all the securities to resell them to retail investors at a later date at a profit or; ii) brings together the potential buyers and sellers together in consideration for a fee or commission, also called best-efforts underwriting or; iii) bears the risk of under-subscription by the investors. The first method in case of existing and sound companies is unnecessary and may be used in certain cases when the investment banker has enormous monopoly power. This is undoubtedly unhealthy both from the standpoint of Islamic ethics and efficiency. The second method is obviously Islamically permissible and also enhances efficiency in general. The third method is a form of insurance against under-subscription. The underwriting commission in this case is similar to insurance premium. The obligation on the part of underwriter arises only when there are not enough buyers in the market. This kind of contract obviously involves a lot of uncertainty and raises issues of permissibility.

After-Market Services

Market participants in the after-market or secondary market broadly fall into two groups. The first and often the more dominant group comprises speculators who are generally defined as having a short time horizon and an intention to benefit from short-term price fluctuations. The second group comprises value-investors who are generally defined as having longer time horizon and an intention to benefit from long-term capital appreciation due to a genuine increase in value of the stocks. The presence of speculators in the market is tolerated and often encouraged by regulators, because their presence is supposed to increase volume of transactions, liquidity, and bring down transaction costs. The market microstructure is often designed to facilitate such speculation, such as, through margin regulations. Islamic scholars have however, always been uncomfortable with the possibility of speculation on stock markets. Some have conveniently compared stock markets with gambling

casinos and are of the view that these have no place in an Islamic system, notwithstanding the level of discomfort with a complete prohibition. *Activities of investment bankers or fund managers, to the extent these are speculative or encourage speculation, have no place in an Islamic system.* Brokerage services should therefore, not permit borrowing and/or lending on interest or margin trading and trading activities must not involve borrowing and/or lending on interest or margin trading. And as noted in the context of primary market, investment bankers must avoid brokerage services for stocks that are not permissible. However, note that scholars are not in favor of pronouncing the entire game as forbidden. A large chunk of the activities of the investment banker, such as, informational services to investors may indeed encourage value investing.

Most of the other activities of investment bankers that are in the nature of rendering value-adding expert service for a fee do not transgress the norms of Islamic ethics and at the same time enhance the efficiency of the system. An activity that often raises ethical concerns relates to mergers and acquisitions, specifically hostile takeovers that are value-destroying.

Islamic Alternative(s)

Islamic investment banking is supposed to take care of the issues and concerns highlighted above. It avoids having any linkage with prohibited and unlawful activities. Islamic investment bankers offer their services to all projects except those involving manufacture of or dealing with forbidden products and services, such as, alcohol, pork, entertainment, conventional financial services and the like.

Venture capital financing of small and technology-heavy companies in the information technology sector, telecom sector etc. are therefore, the preferred domain of operation for Islamic VC providers. An Islamic VC differs from a conventional VC in the matter of charging interest to client-companies and use of specific financial instruments. Most other activities of an Islamic VC are similar to those of a conventional VC, as we shall discuss in the subsequent chapter. We would also examine any additional alternative that the Islamic framework has to offer.

For an Islamic investment banker, the securities that are unacceptable in *Shariah* are eliminated from the domain of choice. As we noted above, from out of the conventional alternatives, only common stocks (with some additional constraints) are acceptable. The Islamic framework offers a few additional alternatives based on the *Shariah*-nominate contracts. An Islamic investment

bank can create Islamic debt securities that are backed by *murabahah*, *BBA*, *ijara*, *salam* and *istisna* contracts. It can also create Islamic equity securities backed by *mudaraba* and *musharakah* contracts. These securities can be created either through direct structuring or through a process of securitization. We would discuss these possibilities in the following chapter.

An Islamic investment banker is supposed to take into account the *Shariah* prohibition on specific securities while offering after-market services as a broker.

In the matter of offering corporate advisory services, such as, relating to mergers and acquisitions, Islamic investment banking offers exciting possibilities that take into consideration ethical concerns in hostile takeovers.

Chapter 13
INVESTMENT BANKING PRODUCTS

In Chapter 12 we discussed in detail the role of an investment banker in the resource generating process as also in the after market. We also undertook an assessment of the services provided by a conventional investment banker from an Islamic point of view. We highlighted the practices that have no place in an Islamic framework and finally, we outlined specific Islamic alternatives. In this chapter we elaborate upon the Islamic investment products and services. We begin with the process of an Islamic model of venture capital finance and then move on to creation of Islamic securities.

Venture Finance

To many contemporary scholars, of all modern financial products, venture capital finance is closest to classical Islamic finance, conforming to the Islamic ideals of cooperation, partnership, mutual help and social solidarity. It is also closest to the classical mechanisms of *mudaraba* and *musharaka* partnerships. Unlike Islamic equity funds that mostly result in flow of funds from developing and underdeveloped Muslim societies to developed financial markets, Islamic venture funds can potentially channel funds into small, start-up businesses, transform people with technical expertise into first generation

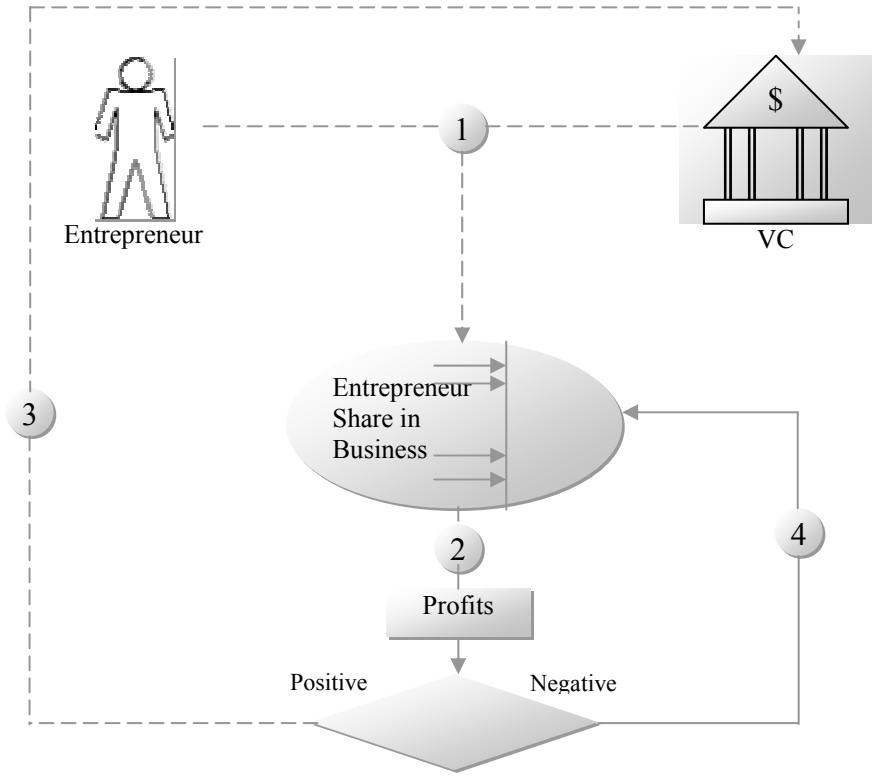
entrepreneurs and thereby, create wealth and add fillip to the process of development of the Muslim societies. As indicated before, venture capital financing is mostly targeted at small and technology-heavy sectors that are "pure" from an Islamic point of view, unlike Islamic equity funds that have to screen out a large number of companies because of their being engaged in manufacture of forbidden products and activities. Venture capital financing also mostly takes the form of equity and therefore, can be easily purged of *riba*-based lending and borrowing. The unique feature of venture capital is that it often includes managerial and technical expertise in addition to financial capital.

Let us first take a look at an Islamic model of VC financing that is based on *declining musharaka*.

The structure presented in *Exhibit 13.1* can make use of a range of securities. Like conventional VCs, Islamic VCs can buy private equity that is in the form of ordinary shares or common stock. There are alternative forms of securities that may be used in the structure. One suggestion is to issue what is called Islamic preferred stocks. This security may be designed like a pure preference share with predetermined varying profit ratios. There can be neither any accumulation of profits; nor any preference to one investor over another in case of a sale or liquidation. Thus, this is more like common stock with predetermined profit ratios.

While the declining *musharaka* structure appears too simplistic, a more complex structure could be developed incorporating the following. It needs to be recognized at the outset that venture financing usually involves multiple rounds of financing. A single round of financing would involve the following steps:

i. Company and interested VCs find each other.
ii. Company makes a presentation to multiple VCs providing detailed business plan, executive summary, financial projections with assumptions, competitive analysis and other relevant details.
iii. Interested VCs engage in due diligence that involves assessment of several factors - technological, market, competitive, business development, legal and accounting,
iv. A lead investor is identified, rest are follow-on
v. The following are negotiated: (i) company valuation; (ii) size of round; (iii) lead investor share of round; and (iv) terms of investment



Activity 1. Entrepreneur and VC discuss business plan and jointly contribute to capital of the venture;
2. Entrepreneur and VC jointly set up the business venture and manage its operations, sharing the responsibilities as per pre-agreed terms; Business generates positive or negative profits;
3. Profits if positive, are shared between Entrepreneur and VC as per a pre-agreed ratio; the profit share of Entrepreneur flows into VC too, towards partial redemption of the latter's capital contribution;
4. Profits if negative, are shared between Entrepreneur and VC in proportion to their respective capital contributions; effectively bringing down the asset value while keeping their respective shares in it unchanged.

Exhibit 13.1 Venture Financing through Declining Musharaka

This process is repeated several times, each subsequent round building on the previous rounds. While an Islamic VC differs from a conventional VC in the matter of charging interest to client-companies and use of specific financial instruments, most other activities of an Islamic VC would be similar to a

conventional VC. (see *Concepts in Practice 13.1*) For instance, the valuation process that is undertaken at multiple points in time would be similar too. It is some times erroneously pointed out that Islamic VCs cannot use discount-rate-approach to valuation since money has no time value in Islam. This contention is simply incorrect, as we have already discussed in Chapter 2. The controversy surrounding "benchmark" rates such as LIBOR is also largely irrelevant, as we have discussed earlier in the context of setting *murabaha* rates in Chapter 4. Further, many VCs tend to value a company based on (a) returns on a project of a similar risk profile, (b) the average return on a well diversified equity portfolio. Both techniques are free from any controversy regarding their being Islamic.

Concepts in Practice 13.1

Islamic Structured Finance at The International Investor (TII)

TII provides specialist Islamic structured finance services and advice to a variety of regional and international clients. The services can be grouped under the following main areas of activity:

Corporate finance: It is through our corporate finance capability that TII is able to meet the needs of clients seeking to raise various innovative forms of Islamic debt and equity for a wide range of issuers based in the region and beyond.

Project finance: TII's project finance services include helping to identify viable projects, assisting in the project appraisal process, such as the collection and analysis of data, developing criteria for allocating investment resources within the business segments, providing risk assessment and management techniques specific to the industry, and advising on options for financing new projects.

Venture capital: TII has built up an extensive network which, through strategic alliances with renowned financial institutions and institutional investors, will assist new and growth oriented companies raise venture capital by means of private placements or initial public offerings.

Mergers and acquisitions: TII can assist with all aspects or merger and acquisition deals, including identification of possible targets, preparing acquisition or defence strategies, conducting negotiations and concluding deals.

Additional areas of activity: Activities also include a number of additional specialist services, such as creative funding solutions, which combine Islamic and conventional structuring, corporate restructuring, syndication and placements, leasing, and *Shariah* consultancy.

Source: *www.tii.com*

The process of VC financing also involves granting of specific rights through covenants and agreements. Some of these rights have a clear parallel in *Shariah* and it is always possible for an Islamic VC to use such covenants as long as these are "fair and just." For example, some typical rights demanded by VCs in order to protect their investment, such as, the right of first refusal on sale of shares, tag-along rights (follow founder sale on pro rata basis) are quite similar in essence to the right to *shufa* granted by *Shariah* to co-owner of a joint property. The right embodies the *Shariah* norm of freedom from *darar* or detriment.

Creation of Islamic Securities

A major role of an investment banker relates to creation of securities. We have already discussed how a conventional investment banker brings into existence new securities and how the process could be rendered Islamic by elimination of some undesirable practices. In this section, we focus on the process of creation of Islamic securities by an Islamic investment banker. The process may take two forms – through (i) direct structuring of securities and (ii) a process of asset-securitization. The former is a process under which securities are issued first; funds raised through the issue are then invested in creation of specific types of assets/ projects with the client-company and subsequently the income generated from the assets/ projects is distributed among security-holders. The latter is essentially a reverse process under which existing assets with client-company (in need of funds) are identified, pooled and then securities are issued against them. Let us first turn to direct structuring of securities.

Direct Structuring of Securities

An investment bank may structure securities keeping in mind the nature of financing requirement of the client-company. The choice is broadly between participatory or equity securities and debt securities. While equity securities are smaller in variety, such as, *mudaraba*, *musharaka* or diminishing *musharaka*, debt securities come in larger variety. Essentially, almost all financing mechanisms discussed so far in the context of commercial banking are also relevant for the investment banker. The difference however, is that the client-company, instead of approaching an intermediary, now directly issues and sells instruments to the investor community. For instance, instead of availing a *murabaha* credit facility/ *ijara* facility from an Islamic commercial bank, the company now issues *murabaha*/ *ijara* securities (*sukuk*) to the investor community.

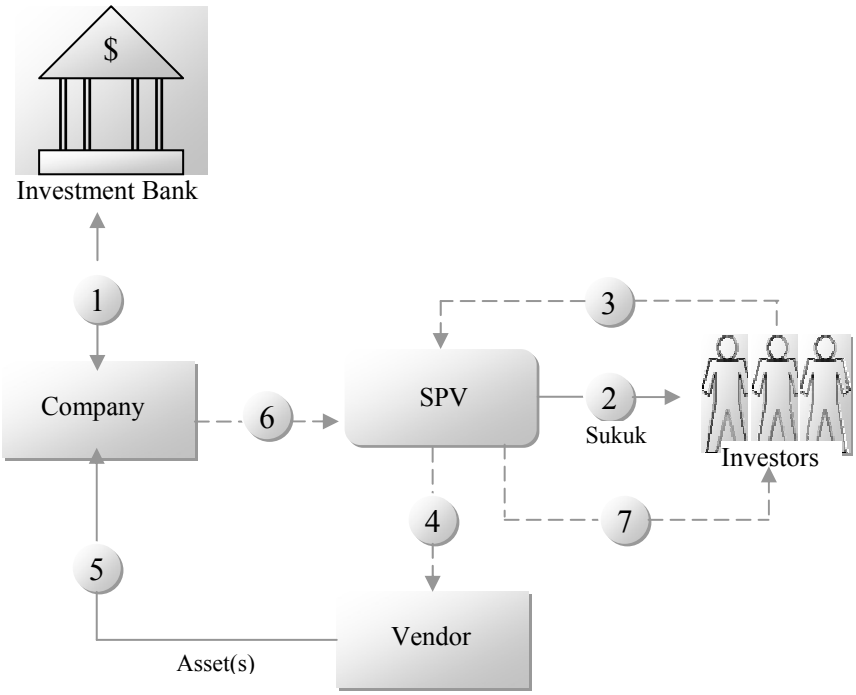
The process involves creation of a special purpose vehicle (SPV) or a special purpose *mudaraba* (with a distinct identity) by the company in consultation with its investment bank for this purpose. The investment bank or the company may act as a *mudarib* of this SPV-*Mudaraba*. The SPV-*Mudaraba* is entrusted with the task of issuing securities to the investing public, raising funds and investing the same in specific types of assets/ projects in order to meet the requirements of the company. The SPV-*Mudaraba* now "owns" the assets/ projects and the income from the assets/ projects are "passed through" to the holders of the instruments after deducting the *mudarib's* share in it.

An alternative method may be the appointment of the investment bank as an agent or *wakil* of the prospective investors in securities under a *wakala* arrangement. The bank as the agent of all investors undertakes to invest the funds in specific types of assets/ projects and then to pass on all future income from the assets/ projects to investors after deducting its fee.

Sukuk-Al-Murabaha

Exhibit 13.2 shows the process of direct structuring of securities in the context of *sukuk-al-murabaha* wherein the SPV-*Mudaraba* invests the funds raised through sale of *sukuk* in *murabaha-BBA* operations. In this exhibit, the company purchases the asset from SPV on a *murabaha-BBA* basis. The periodic installments paid by the company in future to SPV account for the repayment of the cost and a profit component. Since these future cash flows that are passed on to the investors can be predicted with reasonable degree of certainty and accuracy, the instrument yields a predetermined return on investment like the conventional debt instrument. The major point of difference however, is the asset-backed nature of the *murabaha* instrument.

For example, the company needs an asset that costs $X in the market. Under the above arrangement, the SPV would now issue (say, n number of) securities worth $X, use the proceeds to purchase the asset from the vendor. The company as the agent of the SPV takes delivery directly from the vendor. The agency contract comes to an end and there is a second sale of the asset – sold by the SPV to the company on a deferred payment basis. The profit rate is predetermined. If the total profits amount to $P then the company has to repay $X+P over a period of say, t months. Now each *murabaha* instrument would involve an initial cash outflow of $(X/n); would have a maturity of t months and periodic cash inflows of $(X+P)/tn over a period of t months. Needless to say, the yield on this instrument is predetermined like any other debt instrument.



Dotted line indicates the flow of funds

Activity:
1. Company seeks advice from Investment Bank regarding issue of securities; an SPV is created for the purpose;
2. SPV issues securities to investors;
3. SPV collects funds from investors;
4. SPV pays to Vendor for purchase of Assets;
5. Company as agent of SPV takes delivery of Assets;
6. Company purchases Assets from SPV on deferred payment basis and makes payment of installments to SPV;
7. SPV passes them on to investors after deducting *mudarib* share/ *wakala* fee for itself.

Exhibit 13.2. Direct Structuring of Sukuk-Al-Murabaha

A potential problem with *sukuk-al-murabaha* is that these cannot be traded in the secondary market at a negotiated price and hence, are not liquid. *Murabaha* receivables ($X+P in the above example) are in the nature of pure debt and hence the instrument that is an evidence of such debt (*shahada-al-dayn*) can be transferred only at its face value. *Sukuk-al-murabaha* have, however, been extensively used in the recent past by Malaysian companies for raising funds. The market for such private-debt-securities (PDS) has witnessed a lot of activity because of a more liberal interpretation of *fiqh* by Malaysian

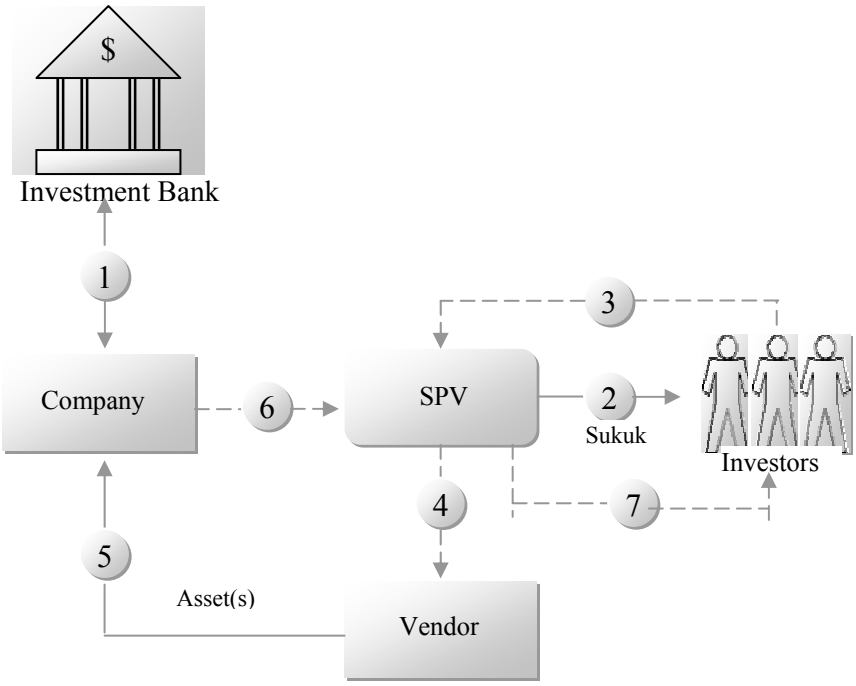
jurists permitting sale of debt (*bai-al-dayn*) at a negotiated price. Fondly called *al-murabahah* notes issuance facility (MuNif) and *al-bai-bithaman ajil* Islamic debt securities (ABBA) these so-called Islamic securities have effectively blurred the distinction between *murabaha* instruments and conventional debt instruments. For example, each one of the above *murabaha* instruments can now be traded before maturity at a discounted price. The Malaysian investment bankers have gone several steps further and disaggregated the instrument into zero-coupon bonds – separating the principal amount from the profit component (coupon). In both MuNif and ABBA, primary notes representing capital component and secondary notes representing profit portions were issued.

The practice, however, has been found to be totally unacceptable in the Middle East and other parts of the globe. It has been rightly asserted that sale of debt at a negotiated price (price that is different from the face value of debt) or at a discount opens the floodgates of *riba*-based transactions. Only if investors hold on to the instruments till maturity, the yield on the instrument would constitute legitimate profit and not *riba*. The impermissibility of secondary market trading however, severely limits the liquidity and therefore, attractiveness of the instrument from investor's standpoint. One should therefore, look for better alternatives that are free from controversy regarding their permissibility and at the same time, are liquid.

Sukuk-Al-Ijara

Ijara has been suggested as an ideal alternative for structuring debt securities. *Sukuk-al-ijara,* sometimes referred to as *ijara* bonds or *ijara* certificates are created when the funds raised by the SPV-*Mudaraba* are invested in *ijara* operations. The SPV-*Mudaraba* issues *sukuk-al-ijara* to investors; raises funds and utilizes the same for purchase of the assets (required for use by the company). The assets are then given on lease to the company in exchange for periodic rentals. The *ijara* rentals when received by SPV-*Mudaraba* from the company (as per the terms) are passed through to the holders of the instruments. This mechanism is presented in *Exhibit 13.3*. Unlike *murabaha*, the *ijara* instrument is not evidence of debt, but of a pro-rata ownership of the asset(s) that is on *ijara*. As such, the instrument can be freely priced in the secondary market and can change hands at any negotiated price.

The *ijara* instrument, however, functions like any other debt instrument, since the periodic *ijara* rentals can be predicted with a reasonable degree of certainty. The yield on some forms of *ijara* instruments may not be predetermined, since there might be some maintenance and insurance expenses that are not perfectly predictable in advance. Consequently, in such cases, the



Dotted line indicates the flow of funds

Activity:
1. Company seeks advice from Investment Bank regarding issue of securities; an SPV is created for the purpose;
2. SPV issues securities to investors;
3. SPV collects funds from investors;
4. SPV pays to Vendor for purchase of Assets;
5. Company as agent of SPV takes delivery of Assets;
6. Company takes Assets from SPV on *ijara* and makes payment of *ijara* rentals to SPV;
7. SPV passes them on to investors after deducting *mudarib* share/ *wakala* fee for itself.

Exhibit 13.3. Direct Structuring of Sukuk-Al-Ijara

amount of rent given in the contractual relationship represented by the instrument represents a maximum return subject to deduction of this kind of maintenance and insurance expenditure.

You may note here that holders of *ijara sukuk* are part-owners of underlying assets and as such, are exposed to risks associated with ownership of the assets. They are also required to maintain the asset in a manner that the lessee is able to derive the expected benefits from it.

Sukuk Al-Salam

Salam-based securities may be created and sold by an SPV under which the funds mobilized from investors are paid as an advance to the company SPV in lieu of a promise to deliver a commodity at a future date. All standard *Shariah* requirements that apply to *bai-salam* also apply to *sukuk al-salam*, such as, full payment by the buyer at the time of effecting the sale, fungibility or standardized nature of underlying asset, clear enumeration of quantity, quality, date and place of delivery of the asset and the like. At the same time the SPV can appoint an agent to market the promised quantity at the time of delivery perhaps at a higher price. The difference between the purchase price and the sale price is the profit to the SPV and hence, to the holders of *sukuk*. Such *sukuk* obviously involve market risk as the price of the underlying asset may go down instead of moving up in future.

The market risk or price risk for the investors can be mitigated if a third party makes a unilateral promise to buy the commodity at a predetermined price at a future time period. Since the SPV representing investors need not participate in the market, it would be insulated from price risk. This third party may be one of the prospective customers of the company. The unilateral promise is binding on this customer. Once the rights resulting from the promise are transferred to the SPV, it assumes the role of seller to the third party customer at the specified future date. The SPV is able to realize a higher predetermined price without participating in the market. The risk mitigation can some times come through sovereign guarantees, as is the case with recent issue of *sukuk-al-salam* by the Bahrain Monetary Agency (see *Concepts in Practice 13.2*).

One of the *Shariah* conditions relating to *bai-salam* that is quite relevant for creation of *sukuk* is the requirement that the purchased goods are not supposed to be sold before actual possession at maturity. Prior to delivery, the *sukuk* holder is not allowed to dispose of his instruments by sale as this amounts to selling the underlying commodity before actual possession. This constraint renders the *salam* instrument illiquid and hence, somewhat less attractive to investors.

Concepts in Practice 13.2

BMA *Al-Salam Sukuk*

Aluminum has been designated as the underlying asset of the Bahrain government *Al Salam* contract. The government of Bahrain will sell aluminum to the buyer. One bank, namely the Bahrain Islamic Bank (BIB), has been nominated to represent the other banks wishing to participate in the *Al Salam* contract. BIB has been delegated to sign the contracts and all other necessary documents on behalf of the other banks in the syndicate.

As consideration for this advance payment the Government of Bahrain undertakes to supply a specified amount of aluminum at a future date. At the same time, the buyer appoints the Government of Bahrain as an agent to market the appropriate quantity at the time of delivery through its channels of distribution. The Government of Bahrain provides an additional undertaking to the representative (BIB) to market the aluminum at a price, which will provide a return to *Al Salam* security holders equivalent returns to those available through other conventional short-term money market instruments. This means that the securities have the characteristics of short-term government treasury bills.

The investors in *Sukuk* will bear counterparty as well as market risks. The counterparty risk would arise with regard to the possibility of the Government being unable to deliver the goods. The market risk would result from the Government being unable to market the aluminum at the time of delivery, or selling it at a sale price lower than cost. These risks are mitigated by the structure of the deal. It should be noted that the risk essentially translates into a sovereign risk on the Government of Bahrain.

***Source**: www.bma.gov.bh*

Sukuk-Al-Istisna

Istisna-based instruments or *sukuk* may be created in a similar fashion. Under such a scheme the SPV representing investors becomes seller-contractor-manufacturer of an asset to a buyer (say, the government) and uses back-to-back *istisna* for creation of the facility. In other words, the SPV takes upon itself the legal responsibility of getting the facilities constructed, and sub-contracts the work to manufacturers/contractors. The deferred price that the buyer will pay may be in the form of *sukuk* that are an evidence of indebtedness (*shahadah al-dayn*) whose total face-value exactly equals the total deferred price. These *sukuk* may have different maturities to match the installment plan that has been agreed upon by the two parties. They represent buyer's debt and hence, *Shariah* precludes sale of these debt certificates to a third party at any price other than the face value of such certificates.

We have reviewed various methods of creating fixed income debt securities based on the classical Islamic contracts of *BBA, murabaha, ijara, salam* and *istisna* that are free from *riba*. Of all these, *salam*-based instruments seem to be too restrictive in scope. *Istisna*-based instruments are quite useful for

financing large infrastructure projects, while *murabaha* and *BBA* based instruments are useful for financing trade. Both however, involve sale of debt or receivables and hence suffer from the restrictions on their negotiability. A secondary market in these instruments is almost ruled out. Compared to these, *ijara*-based instruments are free from all these constraints. *Ijara* seems to offer maximum flexibility in terms of negotiability, management of price risk etc. and hence *sukuk-al-ijara* are expected to play a significant role in development of an Islamic debt market.

There have been some useful suggestions regarding the possibility of secondary market trading in debt-based instruments like *murabaha* and *istisna.* The instruments represent debt that cannot be sold except at par value and not at a negotiated price. However, it is permissible to sell these instruments if mixed with other assets such as commodities, services and cash provided that real assets and services overwhelm debt and cash. In other words, the *murabaha sukuk* could be negotiable if they are the smaller part of a package or a portfolio, the larger part of which comprises other freely negotiable instruments such as *sukuk* based on *mudaraba*, *musharaka* or *ijara*. Another suggestion is as follows. Although a debt may not be exchanged at a price different from its face value, it may be transferred at face value to a third party in exchange for real goods and services. The SPV on behalf of the *sukuk* holders may acquire against them property or merchandise for a deferred price. Once acquired, such property or merchandise may be disposed of in any manner. This may help in providing limited liquidity to the instrument. The fact remains however, that investment bankers have not yet tried these suggestions.

We now turn to **Islamic variable income securities**.

Sukuk-Al-Mudaraba

Sukuk al-mudaraba, commonly referred to as *muqarada* bonds are the most basic instruments for raising equity capital. In all our previous discussions we have referred to the formation of SPV-*Mudaraba* and issuance of securities. Such securities are to be known as *muqarada* bonds unless the use of the funds is known before hand, such as, in *murabaha*, *ijara*, *salam* or *istisna* operations, in which case the *sukuk* are known by the nature of investment. When the funds are invested in any project with a fixed rate of profit, the return on *muqarada* bonds become fixed. And when the funds are invested in any project with a variable rate of profit, the return on *muqarada* bonds becomes variable. We reproduce below an English translation of the Resolution of the Council of the Islamic Fiqh Academy of Organization of Islamic Countries (OIC) regarding *muqarada* bonds:

"The *Muqarada* bond is a financial instrument for raising equity capital. To the capital-provider, the *Muqarada* bond is one form of investment. Unit price is determined by dividing of *Muqarada* capital by the number of units issued. It registers under bondholder name (recorded bonds) all of which represent the common asset in *Muqarada* capital. This financial instrument is called the *Muqarada Sukuk* Bonds (MSB.) A *Muqarada* Bond has the following main elements:

A *Muqarada Sukuk* Bond (MSB) represents a common ownership and entitle their holders shares in the specific project which the bonds have been issued for financing purposes. Duration of this ownership will be limited to the duration of the specific project or business on which the *Muqarada* was based. On the ownership of the *Muqarada* bonds, a bondholder is entitled to all rights specified by *Shari'ah* in matter of sale, gift, mortgage, succession and other as *Muqarada Sukuk* Bonds (MSB) which represent *Muqarada* capital.

The contract (*aqd)* in *Muqarada sukuk* is based on the official notice of bonds sale, namely the Prospectus. Subscriptions in these bonds (sukuk) are considered as offer from the investors, approval of the issuer is then regarded as acceptance to the contract. Official notice of sale must contain all the conditions which is required by *Shari'ah* in the *Muqarada (mudaraba*) *aqd* and the clear information concerning acknowledge of the capital, the proportion and the distribution of profits which are in conformity with *Shari'ah* rules.

Muqarada sukuk (bonds) on the expiry of the specified time period of the subscription the bondholder is given the right to transfer the ownership by sale or trade, the bonds in the securities market at his discretion, considering that this right has been agreed by the *mudarib* while the investor entering into the contract of *Muqarada* bonds.

The disposal or sale of the bonds must follow the rules stated below:

i. If the *Muqarada* capital after the subscription period is over and before the operation of the specific project still in the form of money, therefore, the trading of bonds would be based on the exchange of money for money and it must satisfy the rules of *sarf.*
ii. If such capital is still in the form of debt, it must be based on the principle of Islamic debt trading or exchange: debt for debt.
iii. If such capital is in the form of money, debt, assets and benefits, trade must be based on the market price evolved by mutual consent.

In the distribution of profits, the following rules must be observed:

i. The *mudarib,* the person who has received the fund and also been charged with the duty to run the affairs of the specific project or business, profits realized from investment in *Muqarada* bonds will be distributed between the *mudarib* and investor according to the agreement.
ii. *Mudarib's* share with the investor, the ownership of the assets in accordance with his participation to the total value of the company/project assets.
iii. It is not permissible to guarantee him a fixed lump sum amount of profits.
iv. The issuer has the right to purchase bonds offered for sale by others according to the prices declared from time to time by the issuer.
v. The *mudarib* is considered as the depositary of the common fund and the project assets entrusted to him. If he is negligent or has committed dishonesty leading to losses, he shall be liable for the losses.

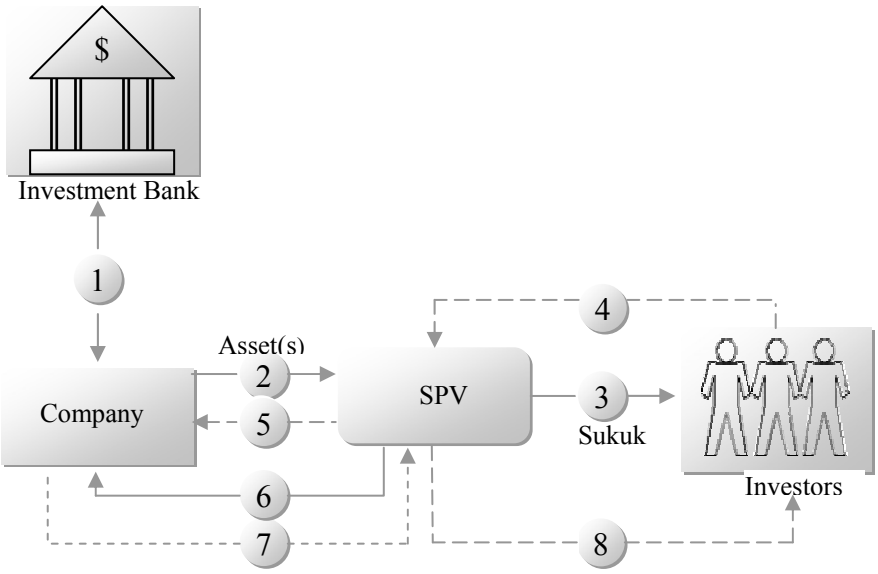
In matters concerning the Guarantee of *Muqarada* bonds, the following points must be observed:

i. It is permissible for the third party (the government) to promise to compensate any losses sustained in the specific project. However, this guarantee should be concluded in a separate contract and not included in the main contract of the *Muqarada* bond between the issuer and the investor.
ii. It is not permissible for the issuer to guarantee the capital of the *Mudaraba* (the investor would not bear any loss in the value of the bonds) or to guarantee the investor a fixed amount paid as profit.
iii. It is permissible for the *Mudarib* and the investor to agree to put aside a specific or certain portion of the profit as reserves to provide for protection or to meet any losses arising during the implementation of the project."

Asset Securitization

Investment bankers may also create securities through a process called asset securitization. This process is reverse and involves pooling of existing assets of a company and then issuing of securities against these assets. The process begins with identifying income-generating assets of a company and estimating the nature and quantum of expected cash inflows from these assets. The assets are then transferred into the hands of a special purpose vehicle (SPV) organized as a *mudaraba* that is specifically created for this purpose. The investment banker may perform the role of *mudarib* in the SPV-*Mudaraba*. Against these assets and expected income from assets, which can be estimated with reasonable degree of accuracy, the SPV-*Mudaraba* issues securities that are sold to investors. The income stream in future is passed on to the security-holders after deducting a certain percentage for the *mudarib*. Securitization is attempted mostly for creation of fixed-income securities. We therefore discuss the process in the context of *murabaha* and *ijara* alone. An issue that is of utmost significance in the process of securitization involves sale and buy-back (*bai-al-einah*) as compared to sale and lease-back. Another controversial issue relates to sale or transfer of receivables or debt (*bai-al-dayn*). First we discuss the controversial case of securitization of *murabaha* and *BBA* as being practiced in Malaysia. *Exhibit 13.4* demonstrates the process.

What is to be noted in the above process is the use of sale and buy back (*bai-al-einah*) which effectively amounts to *riba*-based borrowing. We have already demonstrated the equivalence in Chapter 8. Sale and buy-back of asset enables delinking of the financing from the underlying asset. The mechanism therefore, is not acceptable in the Islamic framework. Nevertheless, it has been widely used by investment bankers in Malaysia. Another forbidden mechanism is used to impart liquidity to the instruments – sale of debt at a discount or at a negotiated price (*bai-al-dayn*). The *sukuk-al-murabaha* created through the aforesaid mechanism can now be traded freely at any mutually negotiated price



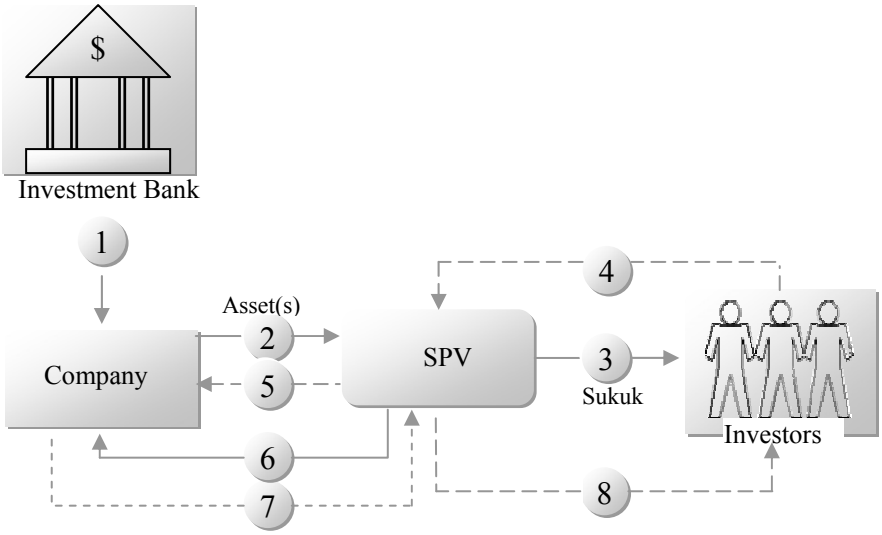
Dotted line indicates the flow of funds

Activity:
1. Company seeks advice from Investment Bank regarding securitization; assets are identified and pooled together;
2. Company creates SPV; sells existing assets to SPV
3. SPV issues securities to investors against these assets;
4. SPV collects funds from investors;
5. SPV pays to Company the sale price of Assets;
6. Company buys back Assets on deferred payment basis;
7. SPV receives payments by company in future;.
8. SPV passes on payments by company to investors after deducting *mudarib* share.

Exhibit 13.4 Murabaha–based Securitization

(that is invariably lower due to discounting of debt). The end outcome of such practice is the emergence of a vibrant market in bonds that is Islamic in name, but conventional in every other sense.

The above problems are taken care of in *ijara*-based securitization. It should be noted that while sale-and-buy-back frees the financing from any linkage with the underlying assets, a sale-and-lease-back does not. The former is adjudged equivalent to *riba*-based borrowing and lending while the latter is not. The process of *ijara*-based securitization is highlighted in *Exhibit 13.5*. It involves transfer of ownership and consequently, all risks and rewards of ownership of existing assets of the company to the SPV representing investors.



Activity 1: Company seeks advice from Investment Bank regarding securitization; assets are identified and pooled together;
2. Company creates SPV; sells existing assets to SPV
3. SPV issues securities to investors against these assets;
4. SPV collects funds from investors;
5. SPV pays to Company the sale price of Assets;
6. Company takes Assets on *ijara*;
7. SPV receives *ijara* rentals by company in future;.
8. SPV passes on *ijara* rentals to investors after deducting *mudarib* share.

Exhibit 13.5 Ijara–based Securitization

Each investor now becomes a part-owner of the group of assets. The assets are then given on *ijara* against future rental payments. What makes this mechanism different from the earlier one is that the investors continue as owners of the assets. The investors are exposed to risk associated with ownership of assets and also to risks associated with rental payments. At times, a third party is willing to bear or share in such risks, as is the case with the *sukuk-al-ijara* issued by the Bahrain Monetary Agency. (see *Concepts in Practice 13.3*)

Concepts in Practice 13.3

BMA *Ijara* Certificates (Leasing) Issue

Ijara securities can be issued in the capital markets to mobilize short-term deposits for the development of long-term infrastructure projects. This mobilization can be effected through the securitization of Government tangible assets, such as airports, roads, buildings, factories, schools, hospitals, power stations, refineries, or alternatively a pool of such assets, which are then offered in the market in order to attract long-term capital investment. Once these tangible assets are identified and specified, participation certificates / *sukuk* are issued and sold to the public. Rental payments are guaranteed by the government providing security and returns. Because the yield is predetermined (rental income) and the underlying assets are tangible and secured, the *Ijara* certificates can then be traded in the secondary market.

The BMA issued, on September 3rd 2001, Islamic Leasing Certificates with a five years maturity to the value of $100 million. This issue, with bond like characteristics is the first of its kind by a Central Bank in the world. The securities will mature on September 4, 2006 and have a rental return of 5.25 percent per annum. All commercial banks and Islamic Financial Institutions (IFF s) operating in Bahrain were invited to subscribe. The issue was fully subscribed.

***Source**: www.bma.gov.bh*

Stock Broking

Most Islamic banks provide this service. Often this service is provided online through the website of the bank (See *Concepts in Practice 13.4*). The customer may log into the website of the bank and keep himself abreast of the latest stock quotations. The website also provides up-to-minute information about market and industry prospects and company-specific information for the benefit of its customers. Such value-relevant economic and financial information helps the customer to take right investment decisions. The customer is also provided with support analytical tools online in order to analyze information. Finally the Islamic bank through its website executes orders placed by its customer. Such stock broking is undertaken using the *Shariah*-nominate mechanism of *murabaha* or cost-plus sale. Since all commodities, which may be subject matter of sale with profit can be subject matter of *murabaha*, the shares of a lawful company may be sold or purchased on *murabaha* basis, because shares of a company represent the holder's proportionate ownership in the assets of the company and the assets of a company can be sold with profit. However, certain conditions have to be taken care of. One, the seller must first acquire the possession of the shares with all their rights and obligations, and only then sell the same to his client. A buy back arrangement or selling the shares without taking their possession is not allowed.

Concepts in Practice 13.4

Share Trading & Shareholder's Affairs Unit at Al-Rajhi

Al-Rajhi Banking & Investment Corporation is distinguished by its geographical presence, its large network of branches in the Kingdom of Saudi Arabia making it popular for providing a wide range of services to its clients. This quality and quantity of services has enabled it to further expand its activities. As a result, Local Shares Trading Centers have been developed offering not only best but also unique services to its clients in order to meet their growing demand for local shares trading. Branches that offer local shares activities are highly standardized with new services such as cash deposit and electronic banking system, handled by qualified and professional staff. Local Shares Trading Centers are located at conveniently located branches throughout the Kingdom. For those customers who are interested, the Bank provides them the opportunity to buy or sell Saudi stocks quickly and flexibly in its well-equipped lounges. Continuously-updated stock prices are displayed, so that customers can keep in touch with the movements of the market. Transactions can be executed in accordance with investors' instructions, through the screens that are connected with the Electronic Securities Information System (ESIS) available in most Al Rajhi branches throughout the Kingdom.

Al-Rajhi Banking & Investment Corporation's strategic aim is to provide its customers with a unique service. To meet this objective, a special and dedicated department is in place, fully equipped with modern office equipments and trained staff, to provide the following services:

- Maintaining and updating shareholder records enabling the companies to contact their investors on a timely basis.
- Arrangement of bulk mailing to investors for Annual General Meetings.
- Distribution of share certificates after stock splits and/or increases in capital.

Al Rajhi Banking & Investment Corporation is one of the leading banks in the Kingdom of Saudi Arabia entrusted by several Saudi joint stock companies to pay dividends to their shareholders. The Bank has set up a modernized system to disburse the dividends in an automated way where investors receive their payments wherever they want. The system promptly and automatically effects the payment to investors' accounts with any branch of Al-Rajhi Banking & Investment Corporation or any other bank within the Kingdom of Saudi Arabia as per standing instructions. The system is fully compliant to SAMA Banking Regulations and is enabled to act as per the specific requirements of each company. In order to satisfy the company and to ensure that proper records are maintained at both levels, Al-Rajhi provides a copy of transactions together with shareholders records on a magnetic disk to the company.

Source: *www.alrajhibank.com.sa*

Chapter 14
FINANCIAL ENGINEERING

Global markets in commodities, currencies, stocks and bonds have witnessed large-scale volatility during the past two decades. As a result, companies are often exposed to risks that they may not be comfortable with. Risk management products that are an outcome of a sophisticated process of financial engineering enable companies to share, transfer and avoid partially or fully "unwanted" risks. These products using derivatives allow market participants at a micro-level to avoid undesirable risks. They make it possible to transfer risks to other participants who would like to bear them. Designing and dealing in such products has become an important activity for financial services providers.

Conventional Financial Engineering

Financial engineering products can often be quite complex, engineered specifically to meet the risk management requirements of a particular market participant. At a basic level, however, these products can be discussed in the category of forwards, futures and options. Often the more complex products include features of these basic contracts.

In a forward contract two parties undertake to complete a transaction at a future date but at a price determined today. The two parties could be a

producer who promises to supply the product (underlying asset) and a consumer who needs the product on a future date. If the price of the product is highly volatile, then both are exposed to a risk. The producer is exposed to the risk of a price decline, while the consumer is exposed to the risk of a price increase. Both parties can now hedge against their respective risks by entering into a forward contract. It may be noted that in the process, they also lose the potential for making a gain due to price change. There is a second benefit to this. Since both parties have "locked-in" their price/cost, they would be in a much better position to plan their business activities.

Forward contracts, when standardized - with respect to contract size, maturity product quality, place of delivery etc., backed by the intermediation of an organized exchange, are known as futures. Futures are believed to add more to the efficiency of the system by getting rid of the problem of double-coincidence of needs and counterparty default risk. Further, with exchange trading, another problem with forward contracts, that of being possibly locked into unfair price would not exist. This is because each party is a price taker with the futures price being that which prevails in the market at the time of contract initiation.

Another popular risk management product is the swap. A swap is a series of forward contracts.

Another basic derivative product, which facilitates risk management is option. While a future contract enables easy hedging by locking in the price at which one could buy or sell, it also implies that one could not benefit from subsequent favorable price movements. Further, futures (and forwards) are unsuited for the management of contingent liabilities or contingent claims. These are liabilities or claims on a business entity that could arise depending on an uncertain outcome. An option contract, which provides a right to buy or sell without any obligation can handle such uncertainties.

All exchange-traded options come in two types - call options and put options. A call option entitles the holder the right but not the obligation to buy the underlying asset at a predetermined exercise price at or anytime before maturity. A put option on the other hand entitles the holder the right but not the obligation to sell the underlying asset at a predetermined exercise price at or before maturity. Since options provide the right but impose no obligation, the holder exercises its option, only if it is favorable for him to do so. This absence of obligation to exercise provides increased flexibility and is the key advantage of options over forwards or futures. The buyer of the options pays for this privilege by paying the seller a non-refundable premium. The maximum

possible loss to a buyer of an option is therefore limited to the premium he pays. This loss occurs if he chooses not to exercise the option. In most other respects, trading methods, contract specification etc., the exchange trading of options is similar to that of futures.

Islamic Appraisal of Conventional Financial Engineering

Products of financial engineering and derivatives such as, futures (and forwards), option and swaps provide certain benefits to market participants exposed to certain kinds of risky situations. And given the complexity of modern business requiring advance planning, and the many risks arising out of fluctuations in prices and rates in markets for commodities, currencies, and other financial assets, the *maslahah* seems to be real and substantial.

However, in forming the basis of legislation, *maslahah* such as above is to be accorded a lower priority than the *Quran*, or the *Sunnah*, or *Ijma*. Among the various *Shariah* norms the ones that are the most important are freedom from *riba, gharar* and *qimar* or *maysir*. Prohibition of *riba, gharar* and *qimar* are central to Islamic law of contracts in view of the strong *Quranic* condemnation of these elements. While a small amount of *gharar* is even tolerable, the prohibition is the strongest on the issue of *riba* and *qimar*. The so-called risk management products would be admissible in the Islamic framework, only if they are free from these elements. Clearly, fulfilling certain social needs or providing certain *maslahah* does not, by itself constitute a strong enough ground for permissive legislation.

The most significant objection against futures and options is that these are invariably settled in price differences only and never result in actual delivery of the object of exchange. How does one use derivatives for gambling, or speculation of a variety akin to a game of chance? Let us consider the case of simple options, such as, a call option. For example a call option on stock X provides a right to individual A to purchase the stock at a price of $50 three months from now. The call itself is purchased at a price of say $5. If as per his expectations the price of X increases to $60 on the maturity date, then the buyer of the call has a net gain of $5 (on an investment of $5). This is what the seller or the writer of the call would lose. If the buyer had purchased the stock itself (say at a price of $50) instead of the call on the stock in order to benefit from expected price rise, then he would have made a profit of $10 on an investment of $50. Thus a call option enables the buyer to magnify his returns if his expectations materialize. Now contrary to his expectations, if the price of the

stock falls below $50 on the maturity date, say to $40, the buyer would allow the option to expire without exercising it since he can buy from the market at a lower price. His losses would amount to $5 or hundred percent with the call. This $5 would be what the seller of the call would gain on zero investment. It may be noted that losses for individual A are also magnified with options. (losses would have been $10 on the investment of $50 or twenty percent with purchase of the underlying stock). In the game the buyer and seller must have diametrically opposite expectations. The possibility of risk and returns are magnified, the gains of the buyer being equal to the losses of the seller and vice versa. Thus, the purchase and sale of options is a risky zero-sum game. It can be demonstrated in a similar fashion how a buyer or seller in a forward or future can speculate on the direction of prices with no intention of giving or taking delivery of the object of exchange. Invariably, the transactions are reversed on or before the date of maturity and the game boils down to playing in price differences. The possibility of such gains encourages economic units to speculate on the future direction of the price of the underlying asset. Since prices of such assets fluctuate randomly, gains and losses are random too and the game is reduced to a game of chance. There is a vast body of literature on the forecastability of stock prices, currency exchange rates etc. Prices and rates are volatile and remain unpredictable at least for the large majority of market participants. Needless to say, any attempt to speculate in the hope of the theoretically infinite gains is, in all likelihood, a game of chance for such participants. While the gains, if they materialize, are in the nature of *maisir* or unearned gains, the possibility of equally massive losses perhaps indicate a possibility of default by the loser and hence, *gharar*.

The presence of large-scale speculation is tolerated in conventional financial markets on the grounds of providing liquidity and ensuring vibrant and active markets. The speculators are seen to provide for the "other" end of the transaction whenever a hedger wants to hedge. Their presence is seen to improve operational efficiency of the market by bringing down transaction costs. However, in the Islamic framework, the provision of hedging facility is hardly an adequate rationale for tolerating *qimar* and *maysir*. The *Shariah* does not disapprove of hedging, since it brings in some *maslahah*. It is the zero-sum nature of the game that the *Shariah* finds objectionable, as in it, lie the roots of social disharmony and discord. Clearly, solutions to risk management problem need to be found elsewhere, and not through derivatives trading. Even from a conventional efficiency point of view, large-scale speculation may indeed threaten the stability and allocational efficiency of the system, though this line of argument may not easily find favor due to lack of empirical academic support.

Solutions to risk management therefore, have to be found elsewhere. Does the rich literature on Islamic theory of contracting offer any solutions? An ideal beginning point in this search would be to search for parallels of the derivative contracts in the literature. We begin with futures and forwards.

Futures and Forwards

The unique feature of a future or forward contract is that the settlement of the transaction is entirely deferred to a future date. Since, both the buyer and seller enter into an obligation to deliver the price and object of exchange respectively on a future date, the transaction essentially boils down to exchange of a debt for another debt or *bai-al-dayn-bi-al-dayn* or *bai-al-kali-bi-al-kali*. Such *bai* is expressly forbidden according to almost all Islamic schools of jurisprudence and scholars.

A future contract also clearly violates the *Shariah* prohibition of sale of the non-existent or sale of what one does not have on grounds of *gharar*. It may be noted here that scholars, on grounds of public necessity, have yielded some flexibility in the matter of *gharar* in settlement of contracts. For generic products, scholars have permitted *salam* sale, that is, sale of what one does not have, but what one is reasonably sure of bringing into existence. Even in this case, the scholars have insisted that one end of the contract must be settled on the spot, that is, the buyer must give delivery of the *thaman* or price at the time of contracting to the seller. It is the seller's obligation that is deferred to a future date.

Contemporary scholars have also permitted several forms of *bai* where settlement from both ends can be deferred to a future date. The first is the case of *bai-istisna* or a contract to manufacture. In this specific case, the buyer and seller-manufacturer are under no constraint to settle the transaction at least from one end at the time of contracting, unlike *salam*. The second is the case of *bai-istijrar*, or repeated purchases from a single seller. Here too, the scholars provide much more flexibility, such as, deferment of both payment of price and delivery of object of exchange to a future date and fixation of price on the basis of average market prices etc.

It is interesting to note the reasons for such flexibility. *Bai-istisna* and *bai-istijrar*, like *bai-salam* have been permitted on grounds of public need. But the unique characteristic of *salam* is that it involves a generic fungible commodity which can be easily found in the market place and hence, *gharar* in the sense of settlement risk is not substantial. The same is true of *bai-istisna* and *bai-istijrar*. Risk of a manufacturer or a repeat-seller being able to deliver the

product is obviously minimal. When we consider the possibility of speculation however, the case of *bai-salam* is different from the other two. *Salam* involves a generic fungible commodity, which can be easily found in the market place. As such, if deferment of settlement by both the parties is permitted, it can be easily used for large-scale speculation on price differences. Such permissibility in case of *bai-istisna* or *bai-istijrar* cannot be abused for speculation on price differences. This perhaps explains why scholars insist on full payment of price at the time of contracting in case of *bai-salam* and not in case of *bai-istisna* or *bai-istijrar*.

Currency Forwards and Futures

It is generally believed by conventional thinkers in mainstream finance that futures and forwards are tools for risk management or hedging. Hedging adds to planning and managerial efficiency. In the context of currency markets, which are characterized by volatile rates, such contracts are believed to enable the parties to transfer and eliminate risk arising out of such fluctuations. To demonstrate this possibility with an example let us assume that individual A is an exporter from India to US who has already sold some commodities to B, the US importer and anticipates a cash flow of $50 (which at the current market rate of 1:22 mean Rs 1100 to him) after one month. There is a possibility that US dollar may depreciate against Indian rupee during this one month, in which case A would realize less amount of rupees for his $50 (if the new rate is 1:20, A would realize only Rs1000). Now individual A may enter into a forward or future contract to sell $50 at the rate of 1:21.5 at the end of one month (and thereby, realize Rs1075) with any counterparty having diametrically opposite expectations regarding future direction of exchange rates. In this case, A is able to hedge his position and at the same time, forgoes the opportunity of making a gain if his expectations do not materialize and US dollar appreciates against Indian rupee (say, to 1:23 which implies that he would have realized Rs1150, and not Rs1075 which he would realize now.)

While hedging tools improve planning and hence, performance, it should be noted that the intention of the contracting party - whether to hedge or to speculate, can never be ascertained. There is little empirical data to prove or disprove any hypothesis relating to the intention of the contracting parties. There may indeed be an element of circular reasoning in the hedging argument and a confusion between micro-level and macro-level concerns. In volatile markets, firms or individuals at a micro level may justifiably have recourse to some tools of risk reduction. However, permissibility to forwards and futures by enabling speculative transactions, may actually lead to greater volatility in exchange rates, thus, aggravating the problem at a macro level. The consequent

instability brought into the system may at times prove to be too costly for the economy as has been demonstrated in the case of the South East Asian economies. This is perhaps the economic justification why hedging with futures and forwards is not permissible in the Islamic framework.

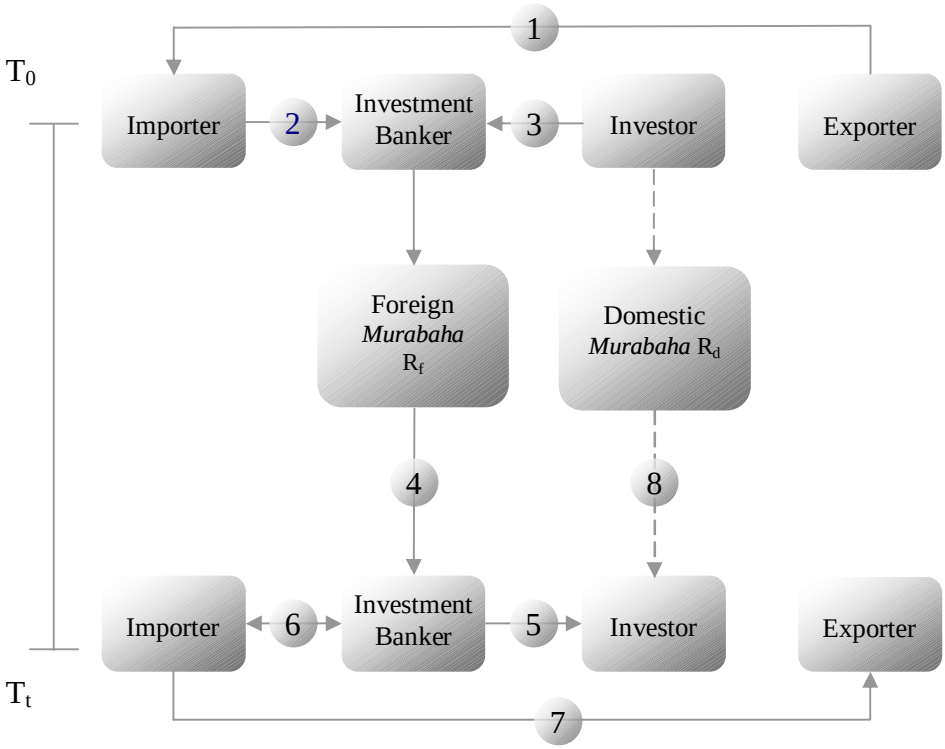
Bai-Salam

It may be noted that hedging can also be accomplished with *bai salam* in currencies. As in the above example, exporter A anticipating a cash inflow of $50 after one month and expecting a depreciation of dollar may go for a *salam* sale of $50 (with his obligation to pay $50 deferred by one month.) Since he is expecting a dollar depreciation, he may agree to sell $50 at the rate of 1: 21.5. There would be an immediate cash inflow in Rs 1075 for him. The question may be, why should the counterparty pay him rupees now in lieu of a promise to be repaid in dollars after one month. As in the case of futures, the counterparty would do so for profit, if its expectations are diametrically opposite, that is, it expects dollar to appreciate. For example, if dollar appreciates to 1: 23 during the one month period, then it would receive Rs1150 for Rs 1075 it invested in the purchase of $50. Thus, while A is able to hedge its position, the counterparty is able to earn a profit on trading of currencies. The difference from the earlier scenario is that the counterparty would be more restrained in trading because of the investment required, and such trading is unlikely to take the shape of rampant speculation.

Bai Salam is, thus, a useful Islamic forward that can potentially be used for hedging. However, application of *bai salam* to foreign currency is not allowed according to a majority of contemporary scholars. There seems to be no other *Shariah*-compatible mechanism that allows hedging against future volatility of exchange rates. Innovative financial engineering however seems to have an answer to such problems. For example, a currency forward can be developed "synthetically" from some basic *Shariah*-nominate contracts.

Islamic Alternative(s): Synthetic Currency Forward

Conventional risk management products mostly make use of synthetic contracts developed with innovative financial engineering. Similar creative financial engineering tools may be employed in order to design synthetic contracts that do not violate the *Shariah*. The following example presented in *Exhibit 14.1* demonstrates how a synthetic currency forward contract may be designed without using any conventional currency forward or futures contract.



Activity: 1. Importer imports from Exporter worth F_t in foreign currency on deferred payment basis

2. Importer approaches Investment Banker (IB) for managing currency risk

3. IB raises $\frac{F_t}{(1+R_f)} * SF_x$ from Investor in domestic currency

4. IB invests $\frac{F_t}{(1+R_f)}$ in Foreign *Murabaha*

5. IB pays Investor $\frac{F_t}{(1+R_f)} * SF_x * (1+R_d)$ (a return on investment of R_d)

6. IB receives $\frac{F_t}{(1+R_f)} * SF_x (1+R_d)$ from and pays F_t to Importer

7. Importer pays F_t to Exporter

Note : $FF_x = SF_x * \frac{(1+R_d)}{(1+R_f)}$; Activity 8 is notional only.

Exhibit 14.1. Designing a Synthetic Currency Forward

Let us consider the case of an importer in an Islamic country who is supposed to pay an amount F (say, US$5000) in foreign currency after time period t (say 6 months). In the absence of a currency forward contract, the importer will be exposed to risk due to appreciation of foreign currency. His currency risk can now be hedged with a synthetic currency forward contract that is based on standard *murabaha* contracts. What makes *murabaha* compatible with *Shariah* is its linkage with a real asset. What makes *murabaha*–based financial engineering possible is the predetermined nature of profit or mark-up. Let us assume that the spot exchange rate between local currency (Indian Rupees) and foreign currency (US$) is 50:1. The importer in association with an investment bank can take the following positions. The synthetic forward contract should essentially enable the importer to lock in a forward exchange rate. Let us use the following notations.

F_t : amount in foreign currency that needs to be hedged
T_0 : now; T_t : specific future date
$SF_{x:}$ Spot Exchange Rate and $FF_{x:}$ Forward Exchange Rate
F_0 : amount in foreign currency required at T_0 to hedge a future amount in foreign currency $F_{t;}$ L_0 : F_0 in local currency
R_f : *murabaha* rate in foreign market; R_d : rate in domestic market

The key to developing the synthetic forward is as follows: F_0 or the amount in foreign currency required at T_0 to hedge F_t should be equal to the value of a *murabaha* at time T_0 such that the terminal value of the *murabaha* in foreign market is equal to F_t. If *murabaha* rate in foreign market (R_f) is at 10 percent then F_0 is equal to US$5000/(1.1). Now translating F_0 into local currency L_0 the amount needed at time T_0 will be equal to F_0 * spot exchange rate between domestic and foreign currency. In terms of our example, this would be equal to US$5000/(1.1)*50

The investment banker may now identify an investor (or invest itself) for an amount of L_0 in a *murabaha* in the local market. Note that the expected return for the domestic investor is R_d and he would expect to receive an amount $L_0(1+ R_d)$. If R_d is also 10 percent then he should receive US$5000*50; the importer would have to pay this amount after six months. This works out to be a forward rate (R_f) of 50:1 for the importer. Thus, there is no forward premium and the spot and forward rates coincide. However, if R_d is different from R_f then the spot and forward rates would be different. For example, if R_d is at 20 percent, then the importer would have to arrange for an amount in domestic currency equal to (US$5000*50)(1.2)/(1.1). This implies a forward rate for an amount of US$5000 equal to 50(1.2)/(1.1). Using notations, Forward rate = spot rate $(1+ R_d)/(1+ R_f)$

Thus the forward exchange rate is determined such that forward discount/premium on currency is equal to differential of expected rates of return on *murabah* contracts of equal risk in domestic and foreign financial markets. The importer can now lock in to this forward rate that is synthetically determined from *Shariah*-compliant contracts.

Options

Options, as independent financial contracts that are traded for a price, have no clear-cut parallel in the classical Islamic theory of contracting. Some contemporary scholars, who have attempted an evaluation of such contracts, have used a generic term, *al-ikhtiyarat*, a variant of the term *al-khiyar,* which is the *fiqhi* concept for various kinds of embedded options. Some key issues involved in an evaluation of conventional options are discussed below.

Options as Independent Contracts

The majority view of *Shariah* scholars is that an option is a promise to sell or purchase a thing at a specific price within a stipulated time and such a promise cannot be the subject matter of a sale or purchase. As the resolution of the Islamic Fiqh Academy, Jeddah asserts "Option contracts as currently applied in the world financial markets are a new type of contracts which do not come under any one of the *Shariah* nominate contracts. Since the subject of the contract is neither a sum of money nor a utility or a financial right which may be waived, the contract is not permissible in *Shariah*." A minority view prevalent in Malaysia prefers to include any kind of benefit or *manfaa* in the definition of *maal*. Since options involve a benefit (a right without obligation) for the purchaser, trading of such benefit is deemed to be permissible.

Some scholars have also attempted to justify permissibility to options by drawing a parallel with *bai al-urbun. Urbun* refers to a sale in which the buyer deposits earnest money with the seller as a part payment of the price in advance but agrees that if he fails to ratify the contract he will forfeit the deposit money, which the seller can keep. A call option is similar to *bai al-urbun* in the sense that the seller does not return the premium or advance payment to the buyer in case the latter does not exercise the purchase option and does not confirm the contract. However, in case of a call option, the buyer loses the option premium even if the option is exercised and the contract is confirmed. In case of *bai al-urbun*, however, the option premium is adjusted in sale price when the contract is confirmed. Permissibility to *bai al-urbun* is granted by the Hanbali school that is also found acceptable by most contemporary scholars. The counter viewpoint is that the retention of earnest money or premium by the

seller is akin to misappropriation of the property of others and hence is not permissible.

Currency Options

Currency options provide a right without obligation to the purchaser of the option to exchange currency with a counter-party at a predetermined exchange rate within or at the end of a stipulated time period. As a simple illustration of how currency option may enable a party to hedge against currency risk, we may reconsider the earlier example with some modifications. Assume that individual A is an exporter from India to US who has already sold some commodities to B, the US importer and anticipates a cash flow of $50 (which at the current market rate of 1:22 mean Rs 1100 to him) after one month. There is a possibility that US dollar may depreciate against Indian rupee during these one month, in which case A would realize less amount of rupees for his $50 (if the new rate is 1:20, A would realize only Rs1000). Hence, A may purchase an option to exchange $50 for equivalent rupees at the rate of (say)1:21.5 at the end of one month (and thereby, is certain to realize Rs1075). In this case, A is able to hedge his position and at the same time, does not forgo the opportunity of making a gain if his fears do not materialize and US dollar appreciates against Indian rupee (say, to 1:23 which implies that he would now realize Rs1150. He would obviously prefer not to exercise his option. The premium paid for purchasing the option is akin to cost of insurance against currency risk. In this exchange, the counterparty, in all probability, would have diametrically opposite expectations regarding future direction of exchange rates and would sell this option with the hope of gaining the option premium.

Conventional options as independent contracts – involving currencies or otherwise are not admissible in the Islamic framework and there is a near consensus among Islamic scholars on this issue. So far, we have discussed options as independent contracts. Options can however, be in the nature of embedded features in exchange contracts. The option-like features make risk management possible. In the context of currency exchange this possibility has been ruled out with the overwhelming view in favor of spot settlement and binding nature of the currency exchange contracts. For others, the Islamic theory of contracting does provide for the possibility of options as embedded features in exchange contracts within the framework of *al-khiyar*. We turn to this in the following section.

Islamic Alternative(s): The Framework of *Al-Khiyar*

The notion of options in the framework of *al-khiyar* in Islamic law is essentially ethical. While options in mainstream finance encompass all kinds of rights without obligations that have financial implications, *al-khiyar* generally refers to a specific type of right of either or both parties to the contract to confirm or rescind the contract. Of the various types of options, some are created by mutual consent of the parties to the contract, while others are in the nature of rights existing for either or both parties because of the very operation of the law. Contrary to conventional thinking, the framework of *al-khiyar* asserts that mutual consent or agreement may not be the most essential element of the Islamic contract. What is of utmost importance is the equity of a contract and fulfillment of proper and reasonable expectations of the parties to the contract. The parties to the contract must be reasonably certain and informed about the counter-values being exchanged, and the implications or outcomes of contracting. The presence of uncertainty or absence of relevant information is termed as *gharar* and avoidance of excessive *gharar* or uncertainty is an important requirement for a valid contract. A valid contract may still be entered into under conditions of *gharar* relating to the article of exchange, price etc., but with a provision of options for the parties to be affected by the same. The provision of options in the *al-khiyar* framework helps reduce *gharar* and brings it within Islamically acceptable limits. It helps undo any possibility of wrong committed on a party deliberately or unintentionally. Islamic options are also justified on grounds of several larger benefits to the society. Through options, the parties to the contract are granted a `reassessment' or `cooling off' period over which they can rationalize their decisions or reverse the same. Thus, the possibility of conflicts between the parties because of their abrupt, irrational and wrong decisions is minimized.

Broadly, the classical *fiqh* literature classifies options into the following categories, though minor variations in the classification scheme have been reported by some scholars: *khiyar al-shart* (option by stipulation); *khiyar al-tayeen* (option of determination or choice); *khiyar al-ayb* (option for defect); *khiyar al-ruyat (*option after inspection); and *khiyar al-majlis (*option of session). Some scholars view *khiyar al-tayeen* only as a specific form of *khiyar al-shart*. Some authors discuss about two other options - *khiyar al-wasf (*option by misrepresentation) and *khiyar al-tadlis (*option by fraud); while others prefer to discuss these under the broad category of *khiyar al-ayb*. Of the various options, the ones that are potentially promising for designing new financial instruments for risk management are *khiyar al-shart (*option by stipulation or option as a condition) and *khiyar al-tayeen*. We seek to demonstrate the

possibility of designing risk-management products using these two types of options.

Option by Stipulation (*Khiyar Al-Shart*)

Khiyar al-shart is an option that is in the nature of a condition stipulated in the contract. It provides a right to either of the parties, or both, or even to a third party to confirm or to cancel the contract within a stipulated time period. In essence, this implies that the concerned party gets some time period for reassessment of the benefits and costs involved, before giving final assent or ratification to the contract. Such option is also termed as *khiyar al-tarawwi* (option of reflection) by some scholars.

There is a consensus among jurists belonging to all major schools regarding the permissibility of *khiyar al-shart*. However there is some divergence of opinion among jurists on whether options and other contractual stipulations are valid as a matter of principle, or these are merely tolerated by way of exception. There is a consensus among jurists that such conditions providing options to either or both the parties are Islamically valid. There is also a general agreement on the question of granting this right to a third party when, for instance, individual A purchases a commodity from individual B subject to the condition of ratification of the purchase by individual C. There is however, some difference regarding the modalities of stipulating the condition providing the option to a third party.

All such contracts involving exchange of counter values either from one end or both, and which are inherently cancelable at any later date, may contain these options. Deposits (*wadiah*) do not fall in this category, as these are not in the nature of exchange contracts. It may be noted that such contracts always provide the option to the depositors to call back their deposits at any time. Hence, providing any further option makes no sense. Options are permissible in leasing (*ijara*) and guarantee (*kafala*). In debt transfer (*hawala*), there is a difference of opinion regarding the permissibility of such options. In a pledge (*rihn*) contract, the pledgee always holds the right to annul the contract and there is no need for any additional stipulation for him. An option may however, be stipulated for the pledgor. The contracts, which cannot contain such options include currency exchange (*bai-sarf)*, and advance sale (*bai-salam)*. The Malikis however, allow options in *bai-salam* if the period is very limited. What is clear from the discussion undertaken in a large body of literature devoted to the subject is that the primary considerations underlying the prescriptions of various jurists are: benefit of both parties to the contract and avoidance of any potential conflict or litigation between them. The following points that are found

acceptable by at least some of the four major schools of *fiqh* are worth mentioning. First, options may have maturities of any duration as long as the option period is definite and known at the time of contracting. Second, the buyer can have possession of the goods during the option period. Similarly, the seller can have possession of the contracted price during the option period. Third, the settlement price may differ from the contracted price under certain conditions. As we shall see later, this last feature opens up the possibility of managing risk arising out of price volatility, so common in modern markets.

It would be pertinent to mention at the outset that a complete discussion of risk management possibilities for an Islamic economic unit is beyond the scope of this chapter. We only attempt to analyze and demonstrate certain uses and applications of *khiyar al-shart* for managing various risk factors in activities that Islamic economic units normally engage in.

A. Under *murabaha* financing an Islamic bank purchases an asset as per the specification of its client from the supplier and resells the same to the client at a higher price, often on a deferred basis. *Murabaha* financing is extensively used by Islamic banks for financing commodity trade and acquisition of long-term assets. The process involves a risk that subsequent to purchase by the Islamic bank from the original supplier, it may not be in the interest of the client any longer to buy the same from the bank. Often this would be so for commodities with volatile prices, where price of the asset declines after the first purchase by the bank. It can be easily shown that management of the above risk is possible in the *khiyar al-shart* framework. In this case, a simple alternative for the Islamic bank would be to retain an option for itself at the time of purchase from the original supplier. Subsequently, if the client buys the same as promised, the option would automatically expire and the earlier contract would become binding. However, if the client fails to honor its commitment, then the Islamic bank would be in a position to exercise its option and rescind the purchase contract. Thus, option enables the Islamic bank to shift the above risk to its original supplier. It is also quite realistic that the Islamic bank may have to forgo a part of its profits since the original supplier may charge a higher price in case of the sale with option as compared to a sale without option. This is ethically justifiable since, the original supplier is now exposed to greater risk, and also Islamically valid as long as price is inclusive of the compensation for risk.

B. *Ijara* seems to be a popular mode of financing with Islamic banks for financing of long-term assets, such as, land, building, plant and machinery. In case of *ijara* financing some risk factors can be easily shifted or shared with stipulations of options.

A major source of risk for Islamic banks as lessors and their clients as lessees is due to the fixed nature of the rentals. In a dynamic economy rates of returns undergo continuous shifts. If in future, the rates of returns are expected to increase, driving up the cost of funds for the lessor, then the Islamic banks would be clearly at a disadvantage. Similarly if rates are expected to fall, the lessee would be reluctant to go for a fixed commitment of lease rentals. A fixed rent *ijara* can of course be converted into a floating rate ijara by entering into several short-term parallel fixed rent *ijara* contracts. To consider a simple two-period case, let us assume that the Islamic bank expects the rentals to increase from `x' percent during current period to `x+y' percent during the next period. Instead of committing itself for an *ijara* with two-period maturity at the current `x' percent and be exposed to risk of loss, it may opt for two one-period *ijara* contracts: the first for *ijara* at `x' percent beginning from now but with a maturity of one period only; and the second beginning from one period hence, through the second period at `x+y' percent. The forward commitment to lease involved in such contracting is permissible.

However, in such an arrangement the issue is only partially resolved since the bank would still have to specify the rental (as per its expectations at `x+y' percent). What if the rates turn out to be different from `x+y' percent? Another problem could be due to the fact that the expectations of the lessee may be diametrically opposite to that of the lessor (i.e. if the lessee expects rates to go down in the second period) in which case, no contracting is perhaps feasible. A possible solution can however be found in the framework of *khiyar al-shart*. Both the Islamic bank as lessor and its client-lessee may enter into the contract for the second period and stipulate options for either or both of them. The bank may stipulate that if the rate increases beyond x percent or any other definite upper bound, it would have an option to confirm or rescind the contract. Similarly the lessee may stipulate that if the rate decreases beyond x percent or any other definite lower bound, it would have the option. They can stipulate according to the risk they are willing to bear and the way they decide to share risk.

It may be noted that conventional floating rate leases take care of this problem by linking the rentals to a benchmark index such as the LIBOR. The rentals for future are made dependent on the future level of the interest rates as captured in LIBOR. For Islamic scholars not comfortable with use of a benchmark interest rate, such as, LIBOR, this may be substituted with another Islamic benchmark rate. There is however considerable divergence of opinion on this possibility as many Islamic scholars do not seem to be in favor of leaving the rental unknown on grounds of *gharar*.

C. *Ijara* implies higher leverage for the client and increases its financial risk. If the leverage is already too high (as in case of the aviation industry for example), the client may be reluctant to increase its financial risk further. An alternative may be to link the *ijara* rentals to the actual utilization of the object of leasing, (say, flying hours in case of an aircraft *ijara*). However, this arrangement also exposes the Islamic bank to greater risk as its revenues in the form of *ijara* rentals would now be susceptible to the business risk of its client. Stipulations of *khiyar al-shart* can offer various possibilities of risk sharing between the bank and its client. The bank may for instance, stipulate that rentals would be linked to actual utilization (flying hours) of the object of *ijara* (aircraft) subject to a minimum utilization. In other words, if the actual utilization falls below a lower bound, it would have an option to rescind the contract. A similar option may also be provided for the client.

D. *Khiyar al-shart* may also be useful for managing risk in financial markets, such as, the stock market, characterized by volatile prices. The economic rationale of conventional options is believed to be their potential use as a hedging or risk management device. For instance, an Islamic equity fund plans to buy (sell) stock X after a time period of three months. It may be adversely affected if price moves up (down) during this time period. Conventional funds can hedge against such adverse price movement by purchasing a call (put) with a given exercise price. At the end of three months, even if price moves up (down), the fund is not affected since it can buy (sell) at the predetermined exercise price. While this is true, the fact remains that this contract may not be admissible in the Islamic framework on various grounds as discussed earlier. Let us now consider an alternative scenario in the *khiyar al-shart* framework. The fund can now enter into a purchase (sale) contract and stipulate a condition of option for itself for a period of three months. The delivery of price (stock X) can now be deferred till expiry of three months. At the end of three months if price of stock X moves up (down) then it can confirm the contract of purchase (sale) at the known contractual price and thus be immune from price risk. However, if the price of stock X moves down (up) then the fund can rescind the contract and purchase (sell) in the market, thereby not losing the profit potential. Thus, the *khiyar al-shart* may provide a benefit for the party holding the option at the cost of the counterparty. However, the disadvantage caused to the counterparty can be compensated in the form of higher contractual price. This compensation must form part of the contractual price or *thaman* and cannot be paid separately upfront to the counterparty. It is this feature that differentiates Islamic options from conventional ones.

E. It is possible that when an Islamic bank or fund wants to sell some stocks about which the buyer response is not very encouraging primarily

because of lack of adequate value-relevant information about the stocks. In the presence of such uncertainty about the future prospects and expected price performance of the financials, the bank may sell the shares along with options for the buyer to rescind the contract in case the expectations do not materialize.

F. In a long-term banking relationship, an Islamic bank is supposed to finance not only the acquisition or leasing of fixed assets, but also the recurring working capital requirements. One alternative for financing working capital, such as, purchase of raw materials and merchandise is through *murabaha*. The Islamic bank in this case would procure raw materials on a recurring basis and supply the same to the client-company. For sale of each consignment to the client-company, a separate *murabaha* contract may be entered. Under this arrangement, volatile prices of the raw materials would not constitute a source of risk for the bank, though the client-company would be exposed to such risk as its cash outflows due to raw material purchases would now be volatile. An alternative financing mechanism for repeated purchases from a single supplier in the Islamic framework is known as *bai-istijrar*. The difference between *bai-istijrar* and *bai-salam* relates to whether purchases are made from a single and regular seller or not. In the former case, it is considered as *bai* or *bai-ajil* where payment of price (*thaman*) can be deferred. In the latter case, the buyer must pay the price (*thaman*) at the time of contracting. With *bai-istijrar*, however, the Islamic bank is exposed to price risk, since the contractual price (*thaman*) is set at the time of entering into the contract or beginning of the financing period. If market price of the commodity to be supplied increases subsequently, then the Islamic bank would clearly be at a disadvantage. While its cash inflows due to sales to the client-company would remain fixed, the outflows in the form of payments to the original supplier would increase. The client company in this case bears no price risk, its outflows being fixed for the entire financing period. However, it may still be at a disadvantage if prices decline subsequently during the financing period, as its outflows would have been smaller under *murabaha*. What is clear is that in extremely volatile markets, entrepreneurial activity would be badly affected in the absence of any mechanism for the parties to manage their risk.

The admissibility of options in case of *bai-istijrar* follows from its being different from *bai-salam* as discussed above. We may now consider the case of *istijrar* with options for either or both parties. Since the client-bank would take possession of the raw materials and perhaps put the same to use in stages, it would be required to pay the value of the raw materials in case the contract is rescinded eventually. In case the contract is confirmed later, then the settlement price would be the same as the contractual price (*thaman*). Since the contract would be rescinded if either of them rescinds even if the other party

confirms the same, it is expected that the parties would be able to protect themselves against extreme adverse price movements. For example, if the seller holds the option, then it would not rescind the contract if it expects the contractual price to be higher than value, which would perhaps closely approximate the average of daily market prices (assuming that the client-company goes for daily purchases and possession of the raw materials from the Islamic bank).

One can also see a possible scenario where the stipulation of options in the *istijrar* contract is designed to take care of only extreme movements, that is, the options get activated only when the market price pierces a bound. The bank's option would get activated if price pierces an upper bound and the client's option would get activated if the price pierces a lower bound. The contract would thus be a case of *bai* with options for both the buyer and seller, which are activated if the market price pierces an upper or lower bound respectively, during the financing period. The option provides a right to a party to fix the sale price at the average of the market prices prevailing during the financing period. Note that average of market price reflects the "normal price" of the commodity. If the options do not get activated or are not exercised, then the price is settled at the predetermined contractual price. Both the client-firm and the bank agree on a public undisputed source of price information and also a sampling interval for observing prices. The average price is calculated from these observations. *Istijrar* with *khiyar al-shart* for both parties, as described above, becomes a complex instrument, which has some similarities with certain traditional financial engineering products, such as, the average price (Asian) option, and barrier options.

A typical *istijrar* transaction may be structured as follows: an entrepreneur in need of short term working capital to finance procurement of raw materials approaches the bank. The bank purchases specific units of the raw material at a current price (P_0), and resells the same to the entrepreneur for payment to be made at a mutually agreed upon date in the future – for example at the end of four months. The price at which settlement occurs on maturity is contingent on how the prices move between the date of contracting (t_0) and the maturity day (t_{120}).

There are some important points of difference between *istijrar* and *murabaha*. In case of the latter the settlement price would simply be a predetermined price; P* where $P^* = P_0 (I + r)$, with 'r' being the agreed profit rate. On the other hand, the price at which the *istijrar* is settled on maturity date could either be P* or an average price (P) of the commodity between the period t_0 to t_{120}. As to which of the two prices will be used for settlement will depend

on how prices have behaved and which party chooses to 'fix' the settlement price. (see *Concepts in Practice 14.1*)

Concepts in Practice 14.1

***Istijrar* Financing by Muslim Commercial Bank (MCB)**

Istijrar is an Islamic mode of financing for transactions relating to various commodities, raw materials and goods such as cotton, edible oils, pharmaceuticals, including a range of other products, which does not charge a profit on the basis of time. Instead, the sale price, payable to the Bank, is determined by market forces.

Istijrar financing enables buyers to conveniently obtain commodities, goods and raw materials, required by them in their trading, supply and manufacturing operations. *Istijrar* is an instrument, with built-in options, aimed at reducing the inherent risks, in case of volatile market price fluctuations.

The sale price is taken as the average of the market prices, during the financing period, relating to the particular commodities/goods involved in the transaction, determined by authentic and undisputed sources. The *istijrar* Agreement provides an option to the buyer to fix sale price at any time on or before the due date, provided that the market prices exceed the defined upper limit. The price would then be payable by the buyer to MCB on the due date.

Similarly the MCB has the option to close the deal under volatile price fluctuations, provided that the market price falls below the defined lower limit. In such case, MCB will declare the pre-determined provisional price to be the sale price, to be paid on the due date.

Source: *New Horizon, www.islamic-banking.com*

The MCB instrument contains embedded options, which is the right to fix the price at which settlement will occur at anytime before contract maturity. At the time of contracting t_0 both parties agree on (i) a provisional settlement price P* and (ii) an upper and lower bound around the P_0. (bank's purchase price at t_0).

For better elucidation, the different prices are shown in *Exhibit 14.2* in a continuum as one goes up. Prices increase as one goes higher. If

P_0 = The price that bank pays to purchase underlying commodity;
P* = provisional settlement price;
P* = P_0 (l+r); P_{LB} = lower bound price;
P_{UB} = upper bound price; P_{AVG}= average price;

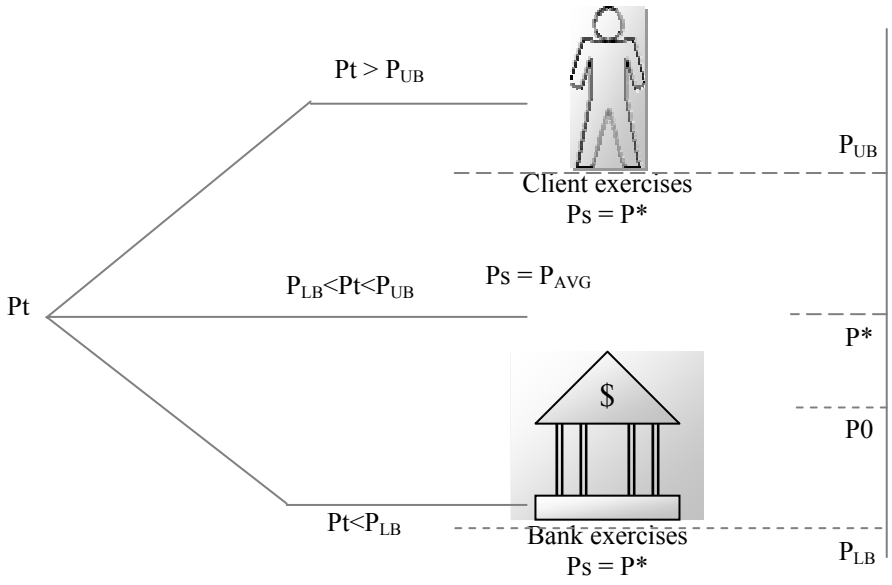


Exhibit 14.2 Price Fixation under Istijrar

The actual settlement price (P_S) at t_{120} would be as follows:

(i) $P_S = P_{AVG}$; if the underlying asset price remained within the bounds; or
(ii) $P_S = P^*$; if the underlying asset exceeds the bounds and one of the parties chooses to exercise its options and use P* as the price at which to settle at maturity.

Note that these options enable the parties to guard themselves against extreme volatilities in price. It allows them to choose between average price and a provisional price. When spot price keeps increasing and even breaks through the upper bound it would be wise on the part of the client-buyer to consider exercising his option and choose the provisional price instead of average price. Whether he exercises the option or not would depend on how he expects spot price to move over the remaining period of the contract. If he believes that price would continue to increase and hence, the actual settlement price (average) would be higher than the provisional price, it will be in his interest to exercise his right and fix the settlement price at P*. The converse would happen should spot prices fall and break the lower bound. The seller-bank would now have the option to fix the settlement price at P*.

Khiyar-al-Tayeen (Option of Determination)

Khiyar al-tayeen is similar to *khiyar al-shart* in many respects. It implies an option to choose the object of sale from out of multiple varieties of a given article. As in *khiyar al-shart*, such an option may be stipulated in the contract and continue for a specified time period. This option has the benefit of widening the domain of choice for the parties to the contract and may be stipulated and held by the seller or the buyer. For instance, a buyer may purchase one out of three varieties of a commodity of different qualities - excellent, average, and poor, without specifying which particular variety would be purchased (the three varieties would have different prices). The buyer in this case holds an option to determine on or before the maturity of the option period, the object of exchange. Similarly the seller may also stipulate an option for itself. The option cannot however be exercised by a third party. Some scholars have held the view that such an option can only be stipulated for the buyer. It is the buyer and not the seller who needs to choose what is suitable for him. However, according to others, this option can be given to the seller by analogy to the *khiyar al-shart*, and also to enable him to be more certain about the goods he should sell.

The flexibility offered through this option helps the parties to be more certain and informed about whether the countervalues being exchanged match with their expectations. Thus, the option is meant to reduce *gharar* due to lack of information about the object of exchange.

A. *Khiyar al-tayeen* may be stipulated in transactions pertaining to exchange of commodities and hence, may prove useful for Islamic banks in their *Murabaha* transactions as discussed earlier. An Islamic bank by stipulating *khiyar al-shart* in its purchase contract with the supplier can easily manage the risk that its client might fail to honor its commitment to purchase the specified article. By combining *khiyar al-shart* with *khiyar al-tayeen* for itself in the purchase contract with its supplier, the Islamic bank can now make an offer of option to its client to choose from among three varieties of the article. This would greatly reduce the risk of default.

B. Similarly *khiyar al-tayeen* may be stipulated in *ijara* contracts. The Islamic bank can now offer multiple *ijara* proposals with varying rental structures with or without the lessee taking possession of the assets. This would greatly enhance the flexibility to either or both parties.

C. In portfolio management *khiyar al-tayeen* can offer exciting possibilities. Given the widely varying and dynamic nature of investor needs

and their ability to bear risk, Islamic funds can now offer double-option or triple- option portfolios to the investor community. Investors may be offered to subscribe to an equity fund concentrating on a geographic region or market or sector, but with an option to switch between a growth, growth-cum-income, and income portfolio. The option could also be to switch between an actively-managed and a passive portfolio or between funds concentrating on cyclical and defensive industries.

Other Applications of Options

So far we have discussed the notion of options explicitly discussed in the Islamic theory of contracts as *al-khiyar*. Options in mainstream finance however have a more generalized definition and refer to any right without obligation that has a financial implication. These are embedded in complex products of financial engineering and also traded as independent contracts. In this section we examine the compatibility of some specific *Shariah*-based contracts outside the framework of *al-khiyar* with some financial instruments with embedded options (in a conventional sense).

Below we enumerate some specific Islamic contracts containing rights for either of both parties to the contract and demonstrate how these are equivalent to or can be developed into useful financial instruments with embedded options. Some of the rights inherent in the contracts are not termed as options from a strictly *fiqhi* point of view, but nevertheless fall under the definition of options in a conventional sense. The list of such possibilities discussed below is by no means exhaustive.

1. *Bai bil-wafa* is a composite contract that combines the features of *bai* (sale) and *rihn* (pledge). Under this contract one party sells an asset to another for a price on condition that the asset would revert back to the seller when he returns the price on a future date. It has the effect of *rihn* (pledge) in that the buyer cannot resell the asset to a third party. This contract is similar to the conventional Repo with the difference that in case of *bai bil-wafa*, the repurchase price is same as the initial sale price. In case of the former, the repurchase price is set higher than the initial price, which reduces the transaction to *riba*-based borrowing. As in case of a Repo, the buyer is free to derive benefits from ownership of the asset. The additional feature with *bai bil-wafa* is that the contract can be revoked by either party any time. Hence, though the rights to revoke are not strictly classified as options from a *fiqhi* point of view, *bai bil-wafa* may be seen as equivalent to a conventional Repo with a call and a put option.

2. A variation of *bai bil-wafa* may in fact be found to be quite useful in modern financial markets. The ownership of the asset passes to the buyer during the financing period and hence it can now lease back the asset to the seller. Such a combination of *bai bil-wafa* and *ijara*, termed as *bai bil-istighlal* is not only permissible in the Islamic framework, but also being extensively used in modern markets for project finance. For example, a liquidity-starved power producer under this arrangement can now receive cash by transferring ownership of some of its assets to the Islamic bank. At the same time its business operations would not be adversely affected, since it would continue to use the assets. The fact that *bai bil-wafa* contains the option for either party to revoke the contract anytime does not pose a problem for the subsequent *ijara* contract since, the *ijara* contract can also contain matching stipulation of options for both parties.

3. One common risk factor associated with *ijara* financing for the lessor is the risk of finding an alternative use of the asset, of locating a new client, where the lease period is shorter than the economic life of the asset. There is also the risk of the asset becoming obsolete and the uncertainty about realization of salvage value in the absence of an active secondary market for assets. The risk is higher in case of *ijara* of specialized plant and machinery in the context of project finance. The lessee also faces the risk of identifying an alternative source and supplier for its specialized requirements at the end of the lease period. This risk can be managed by going for *ijara wa-iktina* or hire-purchase, under which the lessee has an option to purchase the equipment at the end of the lease period. The effective reduction of risk for both parties has made this form of financing quite popular among Islamic financial institutions.

4. Islamic banks face a major risk in their financing business in the form of risk of default. This risk factor is more severe for Islamic banks as compared to their conventional counterparts, since the penalty in the form of accumulating interest liabilities acts as a deterrent against default in *riba*-based financing. Another significant deterrent is often in the form of convertibility option with the financier. The bank in case of defaults may retain the option of converting its loan to equity.

5. The convertibility option is also provided in securities, which enables the holder of a bond representing debt capital to convert the same into equity. This is considered attractive for an investor who is not too sure of the success of a venture or its ability to generate adequate earnings and pay dividends in the initial years. And after a given time period (after the initial gestation period when the company starts generating profits) the convertibility option gets activated and he has now the option of becoming an equity holder or continue as a lender. Further, in a zero-convertible, there are no interest payments involved

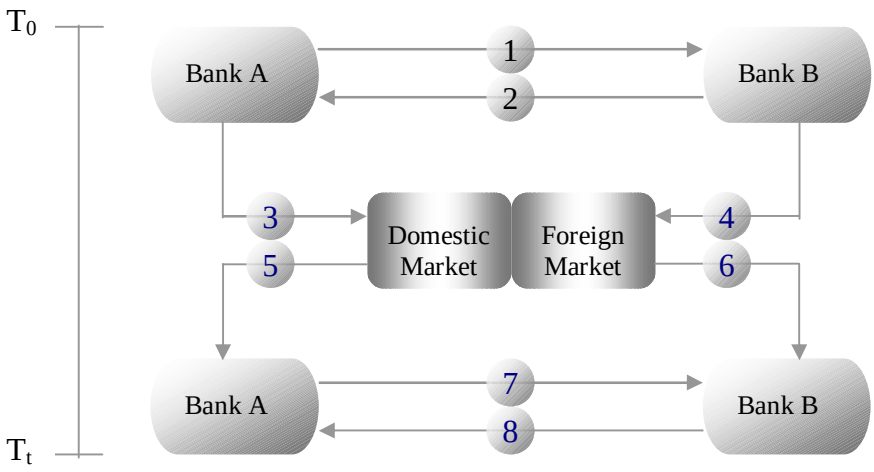
before the debt gets converted into equity. The convertibility option is not alien to the Islamic framework. It may take the form of an option for the debt-provider or owner to be able to convert the debt into equity. This debt may broadly include all kinds receivables arising out of *ijara, murabaha* and the like.

Swaps

One of the most popular risk management products is the currency swap. A currency swap is a series of forward contracts and hence, is found unacceptable in the Islamic framework. However, the need for swaps as tools of risk management is real and there is a need to design swaps that are *Shariah*-compliant. This of course, requires sophisticated financial engineering (as in the previous example of designing a synthetic currency forward from *murabaha* contracts) and some recent attempts at such development are note worthy.

Islamic Alternative(s)

An Islamic currency swap may be described as follows. A makes a payment of Rs1000 to and receives US$50 from B today at the given rate 1:20. Both A and B use and invest the money so received at their own risk. At the end of a stipulated time period, say six months, the transaction is reversed. A repays US$50 to and receives Rs1000 from B. This form of contracting can also be viewed as an exchange of or swapping of interest-free loans between A and B. This is in contrast to conventional swaps, which are generally interest-based and involve swapping of principal (often notional) and interest payments. Conventional swaps clearly have no place in the Islamic system. The conventional swaps have been generally observed to be unIslamic as they clearly involve interest payments. Islamic swaps (*al-muragaha al-Islamiyah*) are in use by several Islamic banks. A close look at the nature of contracting reveals that the same essentially involves an exchange of two interest-free loans (*qard*) in different currencies, which are repaid by both parties at the end of a stipulated time period. It is easy to see that such swaps partially enable the parties to hedge their currency risk. For example, bank A in India has liquid funds denominated in US dollars and currently it expects the US dollar to weaken against Indian rupee over the next six months. Bank B in US with its liquidity in Indian rupees has diametrically opposite expectations. It expects the Indian rupee to weaken against the US dollar over the next six months. Thus, both the banks are exposed to and perceive currency risk. An Islamic swap between the two banks may help both banks to partially reduce their risk. An example of an Islamic swap between two banks can occur as in *Exhibit 14.3*



Activity 1. Domestic Bank A lends X amount of foreign currency to Foreign Bank B at time period T_0;
2. Foreign Bank B lends $X*SF_x$ amount of domestic currency to Domestic Bank A at time period T_0;
3. Domestic Bank A invests $X*SF_x$ in domestic market offering R_d rate of return;
4. Foreign Bank B invests X in foreign market offering R_f rate of return;
5. Domestic Bank A receives $X* SF_x (1+ R_d)$ at time period T_t
6. Foreign Bank B receives $X(1+ R_f)$ at time period T_t
7. Domestic Bank A pays back $X* SF_x$ in domestic currency to Foreign Bank B at time period T_t
8. Foreign Bank B pays back X in foreign currency to Domestic Bank A at time period T_t

Exhibit 14.3. An Islamic Swap Structure

Note that SF_x is the spot exchange rate. Such a swap structure allows the banks to hedge the principal amount only. We may now consider an example:

Today: A lends - 1 million US dollars - B borrows
and A borrows - 20 million Indian rupees - B lends
After six months A repays - 20 million Indian rupees - to B
and A is repaid - 1 million US dollars - by B

In the absence of the swap, bank A would have continued with its dollar liquidity or generated some dollar income by investing the same. With rupee being the reporting currency and with continued fall in the value of dollar against rupee, the bank would have faced a loss due to the currency rate changes. With the swap now, the bank would be able to make rupee investments for the time period and generate rupee income. At the end of the time period, the bank reverses the transaction and gets back its dollar liquidity. A similar situation exists with respect to bank B, which can now hedge its rupee resources against the fall in the value of rupee against dollar (dollar being the reporting currency). The major difference of this type of swap from its conventional counterpart is that in case of the latter, the interest payments along with the principal is swapped. In case of the above Islamic swap, only the principal is being swapped since the incomes to be generated on the investments are not predetermined. Note however, that in case the incomes are pre-determined as in case of *ijara*, these could be swapped too.

Islamic swaps can also be explained using the earlier example with some modifications. Assume now that individual A is an exporter from India to US who has already sold some commodities to a US importer and anticipates a cash flow of $50 (which at the current market rate of 1:22 mean Rs 1100 to him) after one month. There is a possibility that US dollar may depreciate against Indian rupee during this one month, in which case A would realize less amount of rupees for his $50 (if the new rate is 1:21, A would realize only Rs1050). Let us also assume that B is another exporter from US who anticipates a cash flow of Rs1100 after one month and has diametrically opposite expectations regarding future direction of exchange rates. He is worried about a possible fall in the value of rupee against dollar, which would mean a reduced dollar realization. Now A and B may agree to enter into an Islamic swap under which A lends Rs1100 to B now and borrows US$50 from him. (A and B are neither gaining nor losing with this exchange and can always find the rupees and dollars to exchange, since the current exchange rate is 1:22). At the end of the one month A and B receive their respective dollars and rupees from the counterparties. When they reverse the earlier transaction and repay to each other it would imply an exchange rate of 1:22 again. Thus, A and B would be able to ensure that their future receipts are hedged against adverse currency rate movements.

Islamic swaps may perform many other useful functions besides serving as a tool of risk management, such as, reducing cost of raising resources, identifying appropriate investment opportunities, better asset-liability management and the like. These are also the benefits with conventional swaps. Islamic swaps are different in that they do not involve interest-related cash

flows. However, Islamic swaps are not free from controversies and there is no consensus regarding their acceptability as would be discussed below.

Any contract where the settlement by both parties is deferred to a future date is a clear case of exchange of debt for debt. The same is the case with currency forwards and futures. When A and B contract to exchange Rs1000 and $50 at the rate of 1:20 at a future date, say 3 months, then it can be easily seen that A's debt of Rs1000 payable to B after 3 months is being exchanged for B's debt of US$50 payable to A after 3 months. Thus, according to a majority of scholars who consider such exchange of debts as a type of *bai al kali bi al kali,* which is forbidden in *Shariah*. Forwards and futures are both unacceptable in the Islamic framework on this ground.

Contemporary juristic opinion seems to reject Islamic swaps on different grounds. According to one prominent view, it is one of the principles of *Shariah* that two financial transactions cannot be tied together in the sense that entering into one transaction is made a precondition to entering into the second. Keeping this principle in view, the swap transaction is not permissible because the loan of US$50 is made a precondition for accepting the loan of Rs1100.

The above objections, however, become irrelevant with another type of Islamic swap that is developed using *ijara* contracts. Two *Ijara* (leasing) contracts are used to construct a currency swap agreement. *Ijara* contract as we have discussed earlier could be fixed or floating rate and this structure is used to design a fixed-to-floating swap. An investment bank arranges swap between two holders of *Ijara* security in two different currencies such that each party's exposure to a particular currency or type of return (fixed or floating) is reduced as desired. Swapping *ijara* receivables would not come under the *Shariah* prohibition of swapping debt (in case of *murabaha* for instance or simple loans or deposits as in above case). It would amount to swapping "ownership" claims in the underlying physical assets and hence, should not invite prohibition.

When markets are characterized by violent swings in prices, the entire resource generating process may be adversely affected. Present day markets in commodities, currencies, stocks, bonds etc. are indeed characterized by a high degree of volatility. As such, derivative products (options and futures as independent contracts), which enable market participants have become quite commonplace in global financial markets. Investment bankers have found dealing in derivative products, offering innovative solutions to risk management problems of clients to be a significant area of operation. For Islamic investment bankers, the challenge is greater as, many of the conventional solutions do not

have a place in the Islamic framework. It is therefore, extremely important to appreciate what is permissible and how to design new products for risk management within their limited domain of permissibility.

This chapter shows that hedging is quite in conformity with Islamic rationality, but hedging with derivatives is fraught with grave dangers since large-scale speculation is now made possible with derivatives. Whether such speculation brings in some inherent instability to the system is not really the investigated issue in this paper and financial economist would continue to debate on this. In the context of Islamic finance, conventional derivatives (options and futures as independent contracts) are not quite acceptable, since the so-called public benefits or *maslahah* appear to be trivial in view of the strong *Quranic* condemnation of *al-qimar* and *al-maysir*.

It should be noted however, that the Islamic financial system is essentially asset-backed that links each financial claim to an underlying asset. Each financial claim in an Islamic financial system can be considered as a contingent claim whose return/performance depends on return/performance of underlying real asset. Therefore, financial engineering may be applied with a set of asset-backed financial claims to develop instruments synthetically from *Shariah*-nominate basic contracts like *murabaha* and *ijara* that function as tools of hedging.

Part V

FUND MANAGEMENT
AND
PROJECT FINANCE

Chapter 15
FUND MANAGEMENT

Investment fund management involves creating long-term investment Funds. It provides investors with risk intermediation by investing in a diversified portfolio of assets. They issue instruments called units in a wide variety of denominations, and they provide marketability by either issuing units for which a ready market exists or repurchasing the units at their current asset value. In addition, investment funds offer economies of scale in investment management and transaction costs by spreading the costs of security evaluation over a large number of investors and by taking advantage of reduced rates on large-scale transactions.

Conventional Fund Management

Investment fund management companies have proliferated in recent years and account for most of secondary market investments. They bring two major economic benefits – possibility of large-scale risk reduction through diversification by making pooled investment possible; and the benefits of professional management of investments for an affordable fee. The nature of assets in which such companies invest may differ considerably. Investment companies generally invest in equity, bonds, commodities and various hybrid

and derivative products. There are also companies that focus entirely on the real estate sector. These are called Real Estate Investment Trusts or REITS.

Mutual Funds

The commonest form of investment product is a mutual fund. It is a single portfolio of stocks, bonds, and/or cash managed by an investment company on behalf of many investors. The investment company is responsible for the management of the fund, and it sells shares in the fund to individual investors. When an investor invests in a mutual fund, it becomes a part owner of a large investment portfolio, along with all the other shareholders of the fund. When he/ she purchases shares, the fund manager invests his/ her funds, along with the money contributed by the other shareholders. The fund manager, also called an investment adviser, directs the fund's investments according to the fund's objective, such as long-term growth, high current income, or stability of principal. Depending on its objective, a fund may invest in stocks, bonds, cash investments, or a combination of these financial assets. Mutual funds have become popular because they offer several advantages.

- **Diversification:** A single mutual fund can hold securities from a large number of issuers, far more than most investors could afford on their own. This diversification sharply reduces the risk of a serious loss due to problems in a particular company or industry.

- **Professional management:** Few investors have the time or expertise to manage their personal investments every day, to efficiently reinvest interest or dividend income, or to investigate the thousands of securities available in the financial markets. They prefer to rely on a mutual fund's investment adviser. With access to extensive research, market information, and skilled securities traders, the adviser decides which securities to buy and sell for the fund.

- **Liquidity:** Shares in a mutual fund can be bought and sold any business day, so investors have easy access to their money. While many individual securities can also be bought and sold readily, others aren't widely traded. In those situations, it could take several days or even longer to build or sell a position.

- **Convenience:** Mutual funds offer services that make investing easier. Fund shares can be bought or sold by mail, telephone, or the Internet. Thus, an investor can easily move his money from one fund to another as his financial needs change. One can even schedule automatic investments

into a fund from its bank account, or one can arrange automatic transfers from a fund to its bank account to meet expenses. Most major fund companies offer extensive recordkeeping services to help track one's transactions, complete tax returns, and follow funds' performance.

Mutual Fund Structures

Mutual funds may differ considerably with respect to their organization, investment strategies, fees charged to investors, and methods of buying and selling fund shares.

***Open-end and Closed-end Funds*:** The commonest form of mutual fund is the open-end investment fund. Open-end investment funds stand ready to buy or sell their shares at the current market price (*pro rata*) at any time. When an investor buys shares in an open-end fund, the fund fills the purchase order by issuing new shares of stock. There is no limit to the number of shares, other than the market demand for the shares. Both buy and sell transactions are carried out at a price based on the current market value of all securities held in the fund's portfolio. This price is known as the net asset value (NAV). NAV is calculated at least once a day and represents the market value of a share of stock in the mutual fund. A closed-end fund, on the other hand, is a different animal. Like a company, it issues a set number of shares in an initial public offering and they trade on an exchange just like any other stock. Its share price is determined not by the total value of the assets it holds, but by investor demand for the fund.

***Load and No Load Funds*:** Load funds charge a commission while no-load funds are commission-free. The structure of load funds can be (1) front-end with the commission varying from 3 to 6.25 percent of the investment, or (2) back-end, also known as redemption, with the commission usually at 3 percent of asset value when sold. In addition, practically all load funds charge annual distribution fees, which are used to pay for promotional costs.

Based on the composition of assets or portfolios of mutual funds, they may be classified into the following types.

Mutual Fund Types

Debt Funds

In a conventional debt fund, the portfolio comprises mostly bonds or fixed income securities. It is targeted at an average investor who is not quite comfortable with the volatilities and uncertainties associated with stock markets.

Bond funds seek to provide convenience to the individual bond investor by making him free from the hassles of buying or selling bonds.

All bonds are structured so as to provide the investor with the principal after a set amount of time called maturity. Just as bonds can have varying maturities, similarly bond funds can be short, intermediate or long term, depending on the number of years until they mature. A typical *short-term bond fund* buys a mixture of corporate and government bonds with durations between one to three and half years. *Intermediate bond funds* generally range between three and half to ten years, while *long-term bond funds* typically invest in bonds with durations greater than six years. It follows from the arithmetic of bonds that the longer the duration of a bond, the higher the risk and reward.

Municipal Bond Funds or Muni-bond funds invest in bonds issued by state municipalities. What makes these funds quite attractive is the tax break available to an investor in such funds. However, the lower taxes generally come with lower returns. Therefore, these are popular with investors in high tax brackets only.

Bond funds invest in different grades of corporate bonds. *High-yield, or "junk-bond," funds* are better-known as they offer the highest returns. Unfortunately, since these funds invest in low-grade corporate issues, they also entail the greatest risk. *Money-market funds* are at the other extreme of the continuum of risk and return. They involve minimal default risk and also provide very low returns - often in the range of four to six percent. Money-market funds are most useful for parking cash for a short term. These funds invest in ultra short-term securities like those issued by banks, the federal government or big companies with Grade A credit ratings, and hence, are quite stable. The return to the investor comes in the form of a dividend. The advantage of a money fund is that it is completely liquid. There are also various types of money-market funds based on the type of securities they buy, but the most important distinction is whether the dividends to the investor are taxable or tax-free.

Equity Funds

Most mutual funds invest in stocks, and these are called equity funds. Within this broad category, one may further classify equity funds based on the type of equity or stocks that dominate the portfolio. Some funds specialize in investing in large-cap stocks, others in small-cap stocks, and still others invest in what's left - mid-cap stocks. Cap is shorthand for capitalization, and is one way of measuring the size of a company - how well it's capitalized.

One may also classify equity funds based on the fund manager's style of stock-picking. Some fund managers use a *value* approach to stocks, searching for stocks that are undervalued when compared to their prices or when compared in a relative sense to other, similar companies. Such funds are known as *value funds*. Another approach to picking is to look primarily at *growth*, trying to find stocks that are growing faster than their competitors, or the market as a whole. Such funds are known as *growth funds*. Some managers buy both kinds of stocks, building a portfolio of both growth and value stocks. This is known as the *blend* approach and such funds are known as *blend funds*.

Still another type of fund is an *index fund*. An index fund mimics a market index and seeks to reproduce the performance of the index. An index fund builds its portfolio by simply buying all the stocks in a particular index. The stocks carry similar weights in the fund portfolio as they do in the index. It is thus distinct from "actively managed" mutual funds. The manager of a stock index fund doesn't have to worry about which stocks to buy or sell -- he or she only has to buy the stocks that are included in the fund's chosen index. A stock index fund has no need for a team of highly-paid stock analysts and expensive computer equipment that goes into picking stocks for the fund's portfolio thus leading to cost reduction.

Sector Funds restrict investments to a particular segment - or sector - of the economy. For instance a telecom fund may include in its portfolio stocks of companies in the telecommunications sector only. Sector funds naturally are riskier than general funds as the degree of diversification is lesser. However, the fund manager hopes to achieve superior returns by focusing on a sector with higher potential than the average company. Some funds seek to provide overseas exposure by including stocks from several national markets. Such funds are called foreign stocks funds. Since the economies of the world's different regions tend to boom and bust in cycles that offset each other, international stocks can provide excellent diversification benefits. Accordingly one finds funds, such as, Emerging Market funds, Asia-Pacific funds and the like. One also finds country-specific funds.

Hedge Funds

Like mutual funds, hedge funds are simply investment pools managed by a portfolio manager. Hedge funds trade frequently and take big bets on financial derivatives. The distinct feature of a hedge fund however, is that it enjoys tremendous flexibility in how it can allocate its assets. Hedge funds can invest in almost anything. They can sell short, use options and futures, and even take positions in illiquid securities like real estate and collectables.

Hedge funds are also totally unregulated even in world's most developed markets. For this reason, these are deliberately kept out of reach of the average investor. For instance, the Securities and Exchange Commission in USA restricts investment in hedge funds to investors with a minimum net worth of US$1 million. Further, while mutual funds and brokers spend billions a year on advertising, hedge funds are not allowed to advertise. The regulator assumes the role of a concerned parent and seeks to protect the average investor from committing costly mistakes. The underlying assumption is that instruments like options or techniques like selling short are too advanced for the average individual investor.

To sum up, hedge funds are private investment vehicles for high-networth and supposedly "sophisticated" investor. And while they can follow different types of investment strategies, they generally aim to outperform traditional mutual funds through the use of short-selling, derivative investing and arbitrage.

Real Estate Investment Trusts (REITs)

Real Estate Investment Trusts (REITs) are an efficient way for many investors to invest in commercial and residential real estate businesses. As an investment, REITs combine the best features of real estate and stocks. They give an investor a practical and effective means to include professionally managed real estate in a diversified investment portfolio. A REIT is a company that owns, and in most cases, operates income-producing real estate such as apartments, shopping centers, offices, hotels and warehouses. Some REITs also engage in financing real estate. The shares of most REITs are freely traded, usually on a major stock exchange.

A company that qualifies as a REIT is permitted to deduct dividends paid to its shareholders from its corporate taxable income. As a result, most REITs remit at least 100 percent of their taxable income to their shareholders and therefore owe no corporate tax. Shareholders on the dividends received and any capital gains pay taxes. To qualify as a REIT, a company must distribute at least 90 percent of its taxable income to its shareholders annually. However, like other businesses, but unlike partnerships, a REIT cannot pass any tax losses through to its investors. Its board of directors or trustees determines a REIT's investments. Like other publicly traded companies, REIT's directors are elected by, and responsible to, the shareholders. In turn, the directors appoint the management personnel. REITs invest in a variety of property types: shopping centers, apartments, warehouses, office buildings, hotels, and others. Some REITs specialize in one property type only, such as shopping malls, self-storage

facilities or factory outlet stores. Health care REITs specialize in health care facilities, including acute care, rehabilitation and psychiatric hospitals, medical office buildings, nursing homes and assisted living centers. Some REITs invest throughout the country or in certain other countries. Others specialize in one region only, or even in a single metropolitan area.

Types of REITs

- **Equity REITs** own and operate income-producing real estate. Equity REITs engage in a wide range of real estate activities, including leasing, development of real property and tenant services. One major distinction between REITs and other real estate companies is that the former must acquire and develop its properties primarily to operate them as part of its own portfolio rather than to resell them once they are developed.

- **Mortgage REITs** lend money directly to real estate owners and operators or extend credit indirectly through the acquisition of loans or mortgage-backed securities.

- **Hybrid REITs** both owns properties and makes loans to real estate owners and operators.

Although most REITs trade on an established securities market, there is no requirement that REITs be publicly traded companies. REITs that are not listed on an exchange or traded over-the-counter are called "private" REITs. There are three typical types of private REITs: (1) REITs targeted to institutional investors that take large financial positions; (2) REITs that are syndicated to investors as part of a package of services offered by a financial consultant and (3) "incubator" REITs that are funded by venture capitalists with the expectation that the REIT will develop a sufficient track record to launch a public offering in the future.

Structure of REITs

REITs are typically structured in one of three ways: Traditional, UpREIT and DownREIT. A traditional REIT is one that owns its assets directly rather than through an operating partnership. In the typical UpREIT, the partners of an Existing Partnership and a REIT become partners in a new partnership termed the Operating Partnership. For their respective interests in the Operating Partnership ("Units"), the partners contribute the properties from the Existing Partnership and the REIT contributes the cash. The REIT typically is the general partner and the majority owner of the Operating Partnership Units.

After a period of time (often one year), the partners may enjoy the same liquidity of the REIT shareholders by tendering their Units for either cash or REIT shares (at the option of the REIT or Operating Partnership). A DownREIT is structured much like an UpREIT, but the REIT owns and operates properties other than its interest in a controlled partnership that owns and operates separate properties.

Islamic Appraisal of Conventional Fund Management

The first and foremost task of a fund manager is to create an optimal portfolio of existing securities. However, not all types of securities are *Shariah*-compliant. Accordingly, not all types of funds are acceptable in an Islamic market.

Debt Funds: Conventional debt securities – whether fixed or floating rate, whether coupon or zero, with or without options are not permissible as they involve *riba*. An Islamic fund manager is not permitted to create a portfolio of conventional debt securities. All types of debt funds – bond funds (short term, intermediate term or long term); money market funds, muni-bond funds, junk bond funds and the like are excluded from the domain of the Islamic fund manager.

Equity Funds: As discussed earlier, common stocks have no parallel in *Shariah*. Nevertheless, majority opinion among jurists seems to tilt in favor of granting permissibility to the modern stock with some additional constraints and conditions. First, since stocks represent pro rata ownership interests in companies, the company itself must be engaged in Islamically permissible activities. Second, ownership interest relates to ownership in real assets and not in debts or money. Third, the company neither borrows money on interest nor keeps its surplus in an interest bearing account. However, a company that fulfils this criterion is very rare in contemporary stock markets. Hence, contemporary jurists have developed some "more liberal" criteria for identifying permissible stocks. We will discuss these criteria and the underlying justification in a subsequent section.

Hedge Funds: Hedge funds, by definition, are free-for-all funds. They trade frequently and take big bets on financial derivatives. As indicated earlier, an Islamic fund manager is not permitted to deal in conventional derivatives, such as, options, futures, swaps or more complex products that have these features. While hedge funds can follow different types of investment strategies (some of these may be acceptable in the Islamic framework), they generally aim

to outperform traditional mutual funds through the use of short-selling, derivative investing and arbitrage.

REITs: As indicated above, REITs combine the best features of real estate and stocks and hence, are acceptable in the Islamic framework, to the extent they do not engage in *riba*-based borrowing or lending. Therefore, out of the three categories of REITs mentioned above, only Equity REITS may qualify as acceptable while the Mortgage REITS and Hybrid REITs invite prohibition.

Islamic Alternative(s)

The Islamic framework offers a range of alternatives to a fund manager. An Investment Portfolio or Fund may be created on the basis of a *mudaraba* contract. It invites capital by issuing and selling certificates or instruments and then the capital is invested in *Shariah* compliant avenues. Islamic funds enable indirect investment. Islamic debt funds are created when the capital of the *mudaraba*-based Fund is invested in fixed-income yielding operations, such as, *murabaha*, and *ijara* that involve debt and also involve a fixed income for the intermediary. Islamic equity funds are created when the capital is invested in variable-income yielding operations, such as, *mudaraba*, *musharaka* and *Shariah*-approved common stocks. We turn to Islamic debt funds first.

Islamic Debt Funds

The process of creation of Islamic debt funds involves the following steps. A fund may be created on the basis of a special-purpose *mudaraba* or *musharaka* contract. The *mudaraba* raises funds by issuing and selling certificates or instruments and then the funds are invested in *murabaha*, and *ijara* operations that involve debt and also involve a fixed income for the intermediary (See *Concepts in Practice 15.1*). The revenues due to these activities are predetermined or can be estimated with reasonable accuracy. After deducting a certain portion as fee for the *mudarib* towards covering management-related expenses, the net income for the fund can be estimated with a reasonable degree of certainty and hence, the units or certificates of investments can promise an assured return to the investor(s). In this way, the income to be received by the certificate holders becomes predetermined similar to a conventional debt instrument. The income however, is now free from *riba* since there is an element of risk for the certificate holder, though minimal and the income is generated by a real transaction involving physical assets. Depending on the nature and maturity of the underlying assets, a range of debt funds may be created.

Concepts in Practice 15.1

Meezan Bank *Musharika* Certificates

Meezan Bank's Monthly *Musharika* Certificate is a flexible investment product, which has been designed to give the investor a monthly return, which is *halal*. The investor participates as a partner with the Bank in a pool of investments, which is comprised of *murabaha* and *ijarah* transactions. The minimum investment required is only Rs. 100,000 and investor receives profit for each complete month of investment with the Bank.

How is profit calculated and distributed? The total earning of the *Murabaha* and *Ijarah* pool is calculated at the end of each month and shared between the investors and the Bank on the basis of a profit sharing ratio determined through weightages. The profit rate, so calculated, is applied to all investments, which mature between the period starting from the 1st day of each month to the last day of the month. Profit to be distributed is net of proportionate administration cost at actual and administration fee up to 1/5th of the profit of the pool.

The investor can withdraw its investment at any time during the course of its investment. However, profit shall be paid only after completion of one month of investment. Additional benefits to investors in the Certificates include: personalized cheque books, no restriction on withdrawals, call center facilities, monthly profit payment to investor's current or saving account with Meezan, free bank balance certificates, personal financial consultancy services and access to priority desk

Source: *www.meezanbank.com*

Commodity (*Murabaha*) Fund

A possible type of Islamic fund may be a commodity fund going for *BBA* or *murabaha* operations. In the fund of this type the subscription amounts are used in purchasing different commodities for the purpose of the resale. The profits generated by the sale are the income of the fund, which is distributed *pro rated* among the subscribers. In order to make this fund acceptable to *Shariah*, it is necessary that all the rules governing the transactions are fully complied with. If a fund is created to undertake this kind of sale, it should be a closed-end fund and its units cannot be negotiable in a secondary market. The reason is that in the in the case of *BBA* or *murabahah* as undertaken by the present financial institutions, the commodities are sold to the clients immediately after their purchase from the original supplier, while the price being on deferred payment basis becomes a debt payable by the client. Therefore, the portfolio of *murabahah* does not own any tangible assets, rather it comprises either cash or the receivable debts, and both these things are not negotiable, as explained earlier. If they are exchanged for money, it must be at par value.

Lease (*Ijara*) Fund

In an *ijarah* fund the subscription amounts are used to purchase assets like real estate, motor vehicles, or other equipment for the purpose of leasing them out to their ultimate users. The ownership of these assets remains with the Fund and the rentals are charged from the users. These rentals are the source of income for the fund, which is distributed *pro rated* to the subscribers. Each subscriber is given a certificate to evidence his subscription and to ensure his entitlement to the *pro rated* share in the income. These certificates may be preferably called "*sukuk*", a term recognized in the traditional Islamic jurisprudence. Since these *sukuk* represent the pro rated ownership of their holders in the tangible assets of the fund, and not the liquid amounts or debts, they are fully negotiable and can be sold and purchased in the secondary market. Anyone who purchases these *sukuk* replaces the sellers in the *pro rated* ownership of the relevant assets and all the rights and obligations of the original subscriber are passed on to him. The price of these *sukuk* will be determined on the basis of market forces, and are normally based on their profitability. The management fee may be a fixed amount or a proportion of the rentals received.

Islamic Equity Funds

The process of creation of Islamic equity funds involves the following steps. A fund may be created on the basis of a special-purpose *mudaraba* contract. The *mudaraba* raises funds by issuing and selling certificates or instruments and then the funds are invested in variable-income yielding operations, such as, *mudaraba*, *musharaka* and *Shariah*-approved common stocks. The establishment of such Funds brings into existence units or *sukuk* that now yield variable income for the investor. Of all the variable-income securities, fund managers prefer equities, as these are more liquid and there is a large universe of equity stocks to choose from.

Contemporary jurists have developed some criteria for identifying permissible stocks to be included in the portfolio. A majority of scholars opine that a joint stock company is basically different from a simple partnership in the classical Islamic legal sense. While in a partnership, all the actions of a partnership are rightfully attributed to each partner, the policy decisions in a joint stock company are taken by the majority. Therefore, each and every action taken by the company *cannot* be attributed to every shareholder in his individual capacity. By implication, if a company is engaged in a *halal* business, however, it keeps its surplus money in an interest-bearing account, wherefrom a small incidental income of interest is received, it does not render all the business of the company unlawful. As regards the issue of the company borrowing on the

basis of interest, here again the same principle is relevant. If a shareholder is not personally agreeable to such borrowings, but has been overruled by the majority, these borrowing transactions cannot be attributed to him. Jurists have provided the following conditions relating to investments in stocks.

1. The main business of the company is not in violation of *Shariah*. Therefore, equity of companies that manufacture, sell or offer liquor, pork, *haram* meat, or that are involved in gambling, night club activities, pornography or that are engaged in riba-based banking and financial services fall outside the permissible domain.
2. If a company's main line of activity is permissible but it invests/ lends/ deposits its surplus funds in interest-bearing assets or borrows money on interest, the Islamic fund manager must express his disapproval against such dealings, preferably by raising its voice against such activities in the annual general meeting of the company.
3. If some income from interest-bearing accounts is included in the income of the company, the proportion of such income in the dividend earned by the Fund must be given in charity, and must not be retained.
4. Stocks of a company are negotiable only if the company owns some (preferably at least 51 percent) non-liquid assets. If all the assets of a company are in liquid form, i.e. in the form of money that cannot be purchased or sold, except on par value, because in this case the share represents money only and the money cannot be traded in except at par.

Islamic equity funds have been the most popular with Islamic fund managers. We devote a major part of the subsequent chapter to equity funds.

Islamic Hedge Funds

As discussed before, hedge funds may be acceptable in the Islamic framework, only if they are free from forbidden activities, such as, dealing in conventional options, futures and other derivatives having these features. They must not engage in purely speculative activities, such as, short-selling. Though it is widely believed that Islamic hedge funds are not a possibility, some recent attempts at developing such a product are note-worthy.

For instance, the Saudi Economic Development Company (SEDCO) is in the process of developing an Islamic hedge fund product that would basically use the *bai-salam* contract to synthesize forwards and futures based on stocks where the price of the shares is determined and paid up-front, and the shares are to be delivered at an agreed future date. It is also examining the possibility of using *bai-al-urbun* as an alternative to prohibited conventional options. We

have already discussed the possibility of developing Islamic derivative products in chapter 13. Another new aspirant is Shariah Fund Inc. that claims to have developed innovative risk management tools that replicate options trading, short sales, and balance sheet leverage with *Shariah* compliant equivalents. Shariah Funds, Inc. also claims to have designed a proprietary software engine that screens transactions for *Shariah* compliance and allows real time, web interface portfolio access for monitoring purposes.

To what extent *Shariah* compliance could be synthetically created and maintained is an open question and one needs to wait till the funds actually appear on the scene. The fact however remains that highly engineered finance is not necessarily sound finance. Skeptics note that Islamic financiers must be aware of the dangers of creative accounting, creative structuring and of over-engineering contracts for the sake of raising margins rather than efficiency gains. Innovation must be a genuine response to investor needs that reaches *Shariah* compliance and not simply unnecessary layering of products.

Islamic Equity REITs

Stocks of Equity REITs are like stocks of any other "permissible" company. Equity REITs own and operate income-producing real estate that is essentially a permissible activity (as long as they do not engage in financing). All the conditions of investment that apply to Islamic equity funds as indicated above, also apply to Islamic Equity REITs. Equity REITs are particularly attractive for Islamic fund managers as compared to investment in real estate companies, since the former acquires and develops its properties primarily to operate them as part of its own portfolio rather than to resell them once they are developed.

Chapter 16
FUND MANAGEMENT PRODUCTS

Next only to Islamic commercial banks, Islamic investment funds have become extremely popular as alternative financial institutions that conform to norms of Islamic financial ethics. Compared to Islamic commercial banks, the Islamic investment funds are more focused in their operations and have a more simplified asset and liability structure. The funds are organized as *mudarabas* with the fund manager acting as the *mudarib* or agent, and the various subscribers as *rabb-al-maal*. The funds pooled together are then invested in specific types of activities or contracts, such as, equity, *ijara*, *murabaha* etc. There is greater transparency not only about the types of contracts and products, but also about the specific sectors (utilities, or housing, or metals etc) and markets (domestic, or international etc) where the investments would be made. Islamic equity funds have been most popular among all investment funds. Much of the following discussion is devoted to equity funds.

Issues in Product Management

Investment Objective(s)

All equity funds are required to state their investment objectives in clear terms. Most of the Islamic funds state that their fund objective is to provide medium to long-term capital appreciation through investment in Islamically acceptable or *Shariah* compliant equities. There are a few exceptions though. Some funds, specifically from Malaysia seek to provide a balanced mix of income and capital growth. The reasons for such divergence in fund objectives are not too far to seek. It perhaps originates in the divergence of views that *Shariah* scholars have regarding the permissibility of *bai al-einah* and *bay al-dayn*. Permissibility accorded to these mechanisms by scholars in Malaysia has led to a high-growth Private Debt Securities (PDS) market that is deemed Islamic and hence eligible for investment by the Malaysian funds.

The only Islamic fund to focus on risk management in its objective is the Alkhawarizmi Fund by The International Investor (TII) that seeks "to achieve long-term capital growth from securities and other financial instruments while managing risk through hedging and efficient portfolio management techniques, using for example, short-selling. The fund aims to maintain a market-neutral strategy."

One notably different objective is that of the Amanah Saham Wanita (ASNITA) that seeks "to invest in a portfolio of equities and debt securities which comply with *Shariah* in order to preserve and enhance capital. The fund has the ultimate objective of facilitating the development of Malaysian women as informed savers and investors as well as achieving their financial independence."

Criteria for Screening

Criteria for screening of stocks to be included in the universe could be positive or negative. Use of positive criteria implies that a company may be given greater weight in portfolio construction for factors, such as, a good record for quality products, safety, staff management and customer relations; involvement in environment improvement, pollution control, sustainable woodland management and energy conservation. Use of negative criteria implies the exclusion of companies from the universe based on certain criteria. Islamic funds have generally used negative criteria and exclude producers of alcohol and pork-related products, providers of conventional financial services

(banking, insurance, etc.) and providers of entertainment services (hotels, casinos /gambling, cinema, pornography, music, etc.). Tobacco manufacturers and defense and weapons companies although not strictly forbidden for investment under Islamic Law are at times excluded as well. Apart from the main line of activity that must not be forbidden in the eyes of *Shariah*, Islamic funds have also been using a financial screen to exclude company that rely on excessive interest-based debt and derive a significant portion of their income from interest. However, the nature of such screens has also undergone changes over time and the criteria used in such screens are often not free from controversy.

Let us take the example of the DOW-JONES Islamic Market Index screen. The screen in its current form appears as follows:

> Exclude companies that have unacceptable lines of business;
> Exclude companies if;
>
> - Total Debt divided by Trailing 12-Month Average Market Capitalization is greater than or equal to 33%. (Note: Total Debt = Short-Term Debt + Current Portion of Long-Term Debt + Long-Term Debt)
> - The sum of Cash and Interest Bearing Securities divided by Trailing 12-Month Average Market Capitalization is greater than or equal to 33%.
> - Accounts Receivables divided by Total Assets is greater than or equal to 45%. (Note: Accounts Receivables = Current Receivables + Long-Term Receivables)

Major changes have taken place in the screen over recent past. One of the financial criteria initially was:

> "Exclude a company if interest income is more than 9% of their operating income";

This was subsequently changed to

> "Exclude a company if non-operating interest income / revenue = or > 5%"

Apparently, this was called for considering the anomaly that if a company has non-operating interest income but the net income is negative, it is excluded. However, a company with negative net income while there is no non-

operating interest income may still be included. This anomaly was due to the use of "income" in the denominator that could easily turn negative. Compared to income, revenue is a more stable number.

This criterion was again replaced subsequently with

> "Exclude a company if the sum of Cash and Interest Bearing Securities divided by Trailing 12-Month Average Market Capitalization is greater than or equal to 33%."

This naturally implies that the DJIM screen or the DJIM criteria or other similar ones are a subject matter of continuous change in the light of new insights and that these should not be taken as "divine" rules of Shariah compliance. To cite an example, proponents of the one-third in the financial screen rule cite the following *hadith*:

> The Prophet PBUH advised Abu Bakr RAA not to donate more than One-Third of his wealth, and commented that "One Third is too much (*Al Thuluth Katheer*)".

The following *fiqhi* rule is also cited in its support

> "Whether a commodity that is part gold and part brass qualifies as gold for purposes of applying the rules of *riba* is resolved by the percentage of gold in the commodity, i.e., if greater than a third, it is "gold."

Critics of the one-third rule assert that it involves an out-of-context use of the above *hadith* and also an out-of-context use of the above *fiqhi* rule.

Arguably, the one-third rule could be applied to other ratios as well. There is indeed an element of arbitrariness over applying the one-third rule (even if it is a correct application) to a specific ratio. It may also be argued that replacement value of assets, and not market capitalization may be a better denominator to determine the nature of a mix. Another point that needs to be emphasized is that practical implications of the DJIM ratios may not be very ideal for Muslim investors.

A blind application of the rule would provide the following trading strategy:

> Buy High as Share Prices Rise
> Sell Low as Share Prices Fall

This obviously would not be very healthy. Rules must therefore, be different for good times and bad times. Some *Shariah* scholars would like to offer these as "interim" solutions. We would like to add a qualifier to these. The "interim" solutions must not be "arbitrary" solutions involving a great degree of "subjectivity." For example, consider the subjectivity involved in the screen prescribed the Malaysian Securities Commission *Shariah* Council. The screen uses criteria such as "good public perception or the image of the company"; "importance and *maslahah* of the company's core activities to the Muslim *Ummah* and the country; "very small *haram* element"; "*uruf* or customs" and "the rights of the non-Muslim community" (see *Concepts in practice 16.1*).

Concepts in Practice 16.1

Criteria set by the *Shariah* Advisory Council (SAC) of Malaysian Securities Commission for Approved List of Securities

The Council excluded stocks from the approved list based on the following criteria.

1. operations based on *riba* such as activities of commercial and merchant banks and financial institutions
2. operations involving gambling
3. activities involving the manufacture and/ or sale of *haram* products such as liquor, non-*halal* meats and pork; and
4. operations containing element of *gharar* (uncertainty) such as conventional insurance business.

As for companies whose activities comprise both permissible and non-permissible elements, the SAC applied several additional criteria, i.e.

5. the core activities of the company must be activities which are not against the *Shariah* as outlined in the four criteria above. Furthermore, the *haram* element must be very small compared to the core activities
6. public perception or the image of the company must be good; and
7. the core activities of the company have importance and *maslahah* to the Muslim *Ummah* and the country, and the *haram* element is very small and involves matters such as *umum balwa*, *uruf* and the rights of the non-Muslim community which are accepted by Islam.

Source: *www.sc.gov.my*

Purification of Earnings

The next important question relates to purification of earnings. Profits can accrue either through dividends distributed by the relevant companies or through the appreciation in the prices of the shares. In the first case i.e. where the profits are earned through dividends, a certain proportion of the dividend,

which corresponds to the proportion of interest earned by the company, must be given in charity. The *Shariah* scholars have different views about whether the "purification" is necessary where the profits are made through capital gains (i.e. by purchasing the shares at a lower price and selling them at a higher price). Some scholars are of the view that even in the case of capital gains the process of "purification" is necessary, because the market price of the share may reflect an element of interest included in the assets of the company. The other view is that no purification is required if the share is sold, even if it results in a capital gain. The reason is that no specific amount of price can be allocated for the interest received by the company. It is obvious if all the above requirements of the *halal* shares are observed, then most of the assets of the company are *halal*, and a very small proportion of its assets may have been created by the income of interest. This small proportion is not only unknown, but also negligible as compared to the bulk of the assets of the company. Therefore, the price of the share, in fact, is against the bulk of the assets, and not against such a small proportion. The whole price of the share therefore, may be taken as the price of the *halal* assets only.

Shariah scholars associated with many of the funds suggest that it is impossible to identify a stock where the company has zero leverage or (pays or receives) zero interest. Therefore, they suggest that a fund can invest in companies with less than one-third leverage-related ratios and purify its income by donating the interest income received to a charity. An issue related to this suggestion is that such donations to charity do not fall in the category of *zakah* or *sadaqa*. Therefore, a question arises as to whether this is a "convenient" solution to a major *fiqhi* problem? Needless to say, there must be no interest income "by intention."

Strategic Alliances and Partnerships

Islamic fund as a product requires multiple parties to come together. As a result, this industry has witnessed large-scale use of strategic alliances and partnerships in seeking to achieve their long-term objectives. These alliances have taken different forms, such as, joint ventures, co-branding, franchising, outsourcing, and the like.

***Joint Ventures*:** When two or more capable firms lack a necessary component for success in a particular competitive environment, the solution is a joint venture, which are commercial companies (children) created and operated for the benefit of the co-owners (parents). A good example of such co-operative arrangement is between American Express Bank and Faisal Finance to offer

Islamic Multi-Investment Funds. While the former is an international banking institution with over 80 offices in 36 countries, the latter is part of one of the largest financial groups in the world, the Dar Al-Maal Al-Islami (DMI) group. Another example is that of joint venture between Al Tawfeek Company for Investment Funds Ltd and Nomura of Japan to launch Al-Nukhba Asia Equity Fund targeting the South East Asian companies in which both the parties have invested an equal amount of 10% of the subscribed capital.

***Strategic Alliances*:** Strategic Alliances are distinguished from joint ventures because the companies involved do not take an equity position in one another. In a few instances, strategic alliances are synonymous with licensing and franchising arrangements.

***Franchising*:** A major proponent of franchises is the Kuwait-based The International Investor (TII) that used this strategy to expand operations into countries in the Gulf, such as, Bahrain, Qatar and the UAE. TII views franchising as a way of combining the Islamic expertise and brand name with its partners' knowledge of their own domestic markets. It goes beyond merely delivering products; it entails channeling Islamic expertise, technologies and a brand name with a proven track record to the franchisees. When successfully implemented, it results in an effective low-cost and low-risk entry into this interesting growing niche market. The franchising arrangement is targeted at conventional players for whom establishing the in-house capabilities in order to reach the Islamic market effectively is both high cost and high risk. In order to gain full access to the Islamic market, conventional players would need to employ specialized personnel in view of the uniqueness of Islamic finance. Conventional players may also have to overcome certain market perceptions and may not be recognized as possessing sufficient Islamic expertise to achieve *Shari'ah* compliance.

TII entered into its first franchise relationship with Gulf Bank, a significant player in the Kuwait market with the Al Deema range of products. Al Deema provides investors with a choice of five portfolios containing Islamic products developed by TII catering to a wide range of investors aiming at income, growth or income-cum-growth. While the Gulf Bank is entrusted with distribution and administrative functions i.e. sales, collection of investment amounts, investing those monies with TII, maintaining an investor register and processing redemption requests, TII assumes all managerial responsibilities regarding Al Deema and has authority over the asset allocation of the products in each portfolio. Of course, this is done in cooperation with Gulf Bank who are supposed to have a greater insight into customer needs.

***Outsourcing*:** Outsourcing is another approach to strategic alliance that enables firms to gain a competitive advantage. Islamic funds have made widespread use of this strategy to procure fund management expertise – a key ingredient of their success. Al Tawfeek Company for Investment Funds Ltd, a subsidiary of the Dallah Al Baraka Group provides an excellent example of outsourcing and strategic alliances. Its Al-Safwa International Equity Fund is managed by the well-known Roll and Ross Asset Management. Roll and Ross Asset Management who are the Fund Manager as well as Investment Advisor to the Fund, use their proprietary Arbitrage Pricing Technique (APT) risk control screens in addition to the *Shariah* screen. Strategic alliances with parties as Investment Advisors are much more common.

Investment Exposure

On the issue of investment exposure, Islamic funds can be seen to broadly follow two types of strategies. Some funds have been designed and marketed as global funds having exposure mostly to the developed markets, such as, US, Japan, and other developed markets in Europe. Others have targeted markets in specific countries and regions and have 100% exposure to these markets alone. The various funds of The International Investor (TII) have different types of exposures. Its Ibn Majid Emerging Markets Fund, as the name suggests, has exposure to emerging markets from around the globe, while its Al-Dar Eastern European Fund has exposure to Eastern European markets in Russia, Czech Republic, Poland, Croatia, Hungary and others. Others have exposure to developed markets. An issue that often invites some skepticism regarding the functioning of Islamic funds relates to flight of capital from Muslim countries to developed markets. It is contended, perhaps rightly, that most of the global funds are instrumental in this unhealthy development whereby savings mobilized from Muslim countries is used to fuel developed economies. Proponents argue that the least that global funds have achieved, is to provide a *Shariah*-compatible alternative to Muslim investors.

Besides variation in exposure to specific markets, Islamic funds also vary with respect to sectoral exposure. While most funds target the full universe (after due *Shariah* screening) there are Islamic funds that have their exposure to specific sectors. For instance, Al Rajhi Small Companies Fund, TII Small Caps Fund, Zad Growth Fund (small capitalization of less than $1 billion) all have exposure to small and medium companies.

Complexity of Product(s)

Complexity of a product in terms of financial characteristics and how well it is understood may, at times, be a deciding factor for the future success or failure of a fund. Most funds, specifically the equity funds have a highly simplified structure and their risk-return-*Shariah* compliance dimensions are easily understood, even though there are exceptions.

An example of a product that scores high on complexity in terms of financial characteristics is the Islamic Multi-Investment Fund by AMEX-Faisal Finance, which consists of five portfolios: 1. Islamic Market Opportunities (investment in Islamically acceptable options, futures and forward contracts, 2. Emerging Markets Equity, 3. Global Equities, 4. Trade Finance, and 5. Parallel Purchase and Sale of Currencies and Commodities. Investors may invest in the entire portfolio through a predetermined asset allocation formula or choose to invest in an individual portfolio or develop unique portfolio allocation. The issue of Islamically acceptable options, futures and forwards is not fully comprehensible even by Islamic scholars, not to speak of the Muslim investor community. It is one of the most controversial issues in Islamic finance. The additional feature of stipulation of an option of determination or *khiyar al-tayeen* in *Shariah* parlance only adds to its complexity.

Another example is the Al-Khwarizimi Fund by TII that is supposed to be the only hedge fund. While the fund objectives include use of short-selling and other Islamically acceptable hedging mechanisms, this is hardly acceptable to the average Muslim as a *Shariah*-compliant product.

Development of Proprietary Benchmarks

Development of proprietary benchmarks indexes has been the cornerstone of some funds' strategies. For example, the Dow Jones Islamic Index Fund, as the name suggests, is the only Islamic index fund that mimics the Dow Jones Islamic Market Index. Other funds have also set up proprietary indexes to serve as a benchmark for themselves and for the market as a whole. In Malaysia, the RHB Unit Trust Management Berhad has been a pioneer in developing Islamic indices for the Malaysian and Indonesian markets – the RHB Islamic Index (RHBII) launched in 1996 and the RHB Indonesian Islamic Index (RHBIIN) launched in 1999. This index is widely reported and used in Malaysia. In US, the Saturna Corporation, US which is behind the two *amana* Funds has also developed two Islamic indices. The first one is based on S&P 500 called the Islamic 500 Index, and the second is based on the Russel 2000,

called the Islamic 1500 Index. The latest in the series of global indices are the five TII-FTSE indices launched by the Kuwait-based The International Investor (TII) with FTSE international - FTSE Global, FTSE Americas, FTSE Asia Pacific, FTSE Europe, and FTSE South Africa. Another instance has been the collaboration of Parsoli (UK) with IBF Net, India to launch an Islamic index for Indian markets.

Product Enhancement

Some funds seek product enhancement by providing some "extra" benefits. For instance, Amanah Saham Wanita offers value-added benefits like insurance ration of one to one up to RM200,000 without medical check up, scholarship for eligible children of unit holders after a year in operation, and direct investment for petty traders after a year in operation, funeral expenses up to RM1000.

Liquidity

Liquidity is an important dimension for any financial product. Though listing in a secondary market is not a pre-requisite for liquidity for Islamic funds, specifically, the open-ended ones, it certainly is desirable as improved liquidity always reduces risk. However, a large majority of Islamic funds is not listed in any Stock Exchange.

Offshore vs. Onshore

An offshore fund is a fund organized in a jurisdiction other than the home country of the investor. Many Islamic funds have followed the off-shore route, such as, GAM AlKawther by Al Baraka, Al-Safwa International Equity Fund by Al Tawafeek, Citi Islamic Portfolios and the like. These are offshore funds, for instance, for a Middle Eastern investor as these are organized under regulatory framework of, say, Cayman Islands, Bahamas, the British Virgin Islands, or Luxembourg. Offshore funds primarily hope to benefit from a lax regulatory framework. The benefits of a lax regulatory environment are many, including savings in costs. When a fund is required to comply with a complex array of regulatory requirements, costs can increase dramatically. Many offshore funds have minimal regulatory requirements that must be met. Further, an investor may consider the local jurisdiction less stable than an alternative jurisdiction for purposes of protecting his or her investment. Since many investors may be precluded from investing in funds domiciled in locations such

as the United Sates and the United Kingdom due to compliance considerations, an offshore fund may seem to be an ideal alternative.

While offshore jurisdictions try to provide reliable infrastructures along with varying degrees of regulatory oversight, and lower taxes, possibly leading to superior returns, the lax regulatory regime may have its own pitfalls. It requires an additional element of vigilance on the part of the investor. Some funds targeting the Middle Eastern investors have preferred to remain onshore. A notable example is the Al Rajhi group of funds. Besides, there are the onshore Malaysian funds like Tabung Ittikal Fund, Amanah Saham Bank Islam and the US-based funds like Amana Funds by Saturna.

Chapter 17
PROJECT FINANCE

Project finance or financing of large infrastructure projects is a desirable investment product for Islamic financial institutions. It is in line with the mission of Islamic banking and finance. Investments in highways, airports, power generation and distribution, telecommunications networks, oil and gas pipelines in developing Muslim economies is believed to accelerate the process of economic development; and to create value and wealth in these societies. Such desirable outcome is directly in contrast to that of the Islamic equity funds, which generally involve an outflow of capital from these resource-starved economies into the developed ones.

The last decade has witnessed a surge in private financing of infrastructure development leading to major opportunities for Islamic banks and financial institutions. Private participation has received approval and encouragement from policy makers all over the globe, largely because of a reduced capital and investment demands on the governments for provision of the goods and services. This has been a major reason why many developed and developing nations unable to mobilize the required resources through taxation, borrowing and other means have sought private participation in the development process. Some other benefits flowing from private participation in infrastructure area as compared to government provision may be: (i) quicker planning and

implementation of privately designed and developed projects, since there is an incentive to generate revenues as early as possible; (ii) lower project costs because of a quicker schedule in an inflationary environment ; (iii) greater efficiency in responding to the demands of the market because of availability of price signals leading to introduction of innovative products and services ; and (iv) economies of scale, scope, experience and benefits of diversification with involvement of multinational companies in the process.

Conventional Project Finance

An increasing number of infrastructure projects all over the globe are being established on a Build-Operate-Transfer (BOT) structure. Under this model a government or government entity enters into an agreement with a private sector company under which the company agrees to finance, design and build a facility at its own cost, and is given a concession, usually for a fixed period to operate that facility and collect revenues from its operation before transferring the facility back to the government at the end of the concession period. There are a number of variants of the BOT, such as Build-Own-Operate (BOO) with no eventual transfer to the government; Build -Transfer-Operate (BTO), Build-Own-Lease-Transfer (BOLT), and a range of such other structures. The difference between these structures primarily relates to the allocation of risk and rewards among various parties involved in the process. History has shown that the success of such programs largely depends on the extent to which risk and rewards are shared equitably between the parties. Arguably, the required link between risk and return may not be easily intelligible and explicit in the above composite structures used in infrastructure finance. Such structures often incorporate a large number of elements, which need to be combined and integrated and require an extensive network of interrelated and often inter-conditional contracts.

In general terms, under the BOT structure, a government or government entity enters into an agreement with a private sector company under which the company agrees to finance, design and build a facility at its own cost, and is given a concession, usually for a fixed period, to operate that facility and collect tolls or other revenues from its operation before transferring the facility back to the government at the end of the concession period. The intention is that the company is to receive sufficient revenues during the operational phase to service its debt incurred in designing and building the facility; to cover its working capital and maintenance costs; to repay its equity investors; and, hopefully, also provide a reasonable profit for its investors.

BOT structures involve multiple parties, and a multitude of risk factors.

Government: The government grants the concession for the construction and operation of the facility. This is achieved through enabling legislation, specific for the project in question. The government is expected to monitor the progress and operation of the project. Since the government would resume possession and operation of the facility after the expiry of the fixed concession period, it seeks to ensure that the quality of the facility is such that the facility has a long usable life with low maintenance costs.

Project Company: The project company is usually a single purpose company and is the grantee of the concession. It is responsible for securing finance, procuring the design and construction of the project, the operation of the project during the concession period and the eventual transfer back to government. The project company is also responsible for servicing debt incurred in the implementation of the project.

Investors: There are generally two types of investors in the project company. One type is project sponsors whose participation in the project is not restricted to their role as investor, such as, a construction company that intends to undertake or participate in the construction of the project; an operating company that intends to operate the completed project; a bank providing debt for the project; and the host government. The second type are long term investors whose only interest in the project is as an investment and who will often take little role in the management of the project company. Such investors are normally institutional investors or other long term investors.

Lenders: The lenders usually comprise banks and certain other financial institutions, who are empowered to lend money or extend credit under relevant legislation. Project loans are usually on a non-recourse or limited recourse basis. There are certain special considerations for the lenders financing BOT, as opposed to other, more conventional, projects. BOT projects have a complex risk profile due to several factors including the length of the term of the loan, the susceptibility to political and economic risk, the low market value of the security package and the limitations on enforcing security.

Contractor: The main contractor for the project is often the principal sponsor of the project. One of the greatest elements of risk in a BOT project is completion risk and lenders will often wish to place this risk on the project sponsors, e.g. by completion guarantees. Where the contractor is the principal sponsor, the project company normally passes on these risks to the contractor through time, cost and quality warranties to be given by the contractor to the

project company and with the project lenders taking assignments of the benefit of these warranties.

Consultants: A wide variety of consultants will be involved in BOT projects including financial consultants, engineers and technical consultants, insurance advisers and legal advisers. Merchant banks acting as financial advisers play a large part in structuring BOT projects. In a BOT project, independent technical consultants are often employed to monitor the works. Often the independent consultants will be employed by the project company but will owe their primary duties to the government.

***Operator*:** Where the operation of the privatized facility is complex, it is preferable to sub-contract the work to an operator with previous experience in the particular area of operation. The government, lenders and investors may prefer the operator to be one of the project sponsors and to be committed as a shareholder to the project for a certain minimum time period. Alternatively, the project company may itself undertake the operation of the facility.

Users: Users supply the revenue for the project and in the case of bridges, tunnels and highways are often the toll paying public. Where the facility has a product, e.g. a power station, the users may be the host government, utility companies or other product purchasers. In these cases, off-take agreements are often negotiated as an essential element of the contractual structure of the overall project. These off-take agreements will often be on a "take-and-pay" or "take-or-pay" basis.

Islamic Appraisal of Conventional Project Finance

Private financing of infrastructure raises some ethical concerns. Public-private partnerships substitute government investments in infrastructure with private capital; these also replace taxation with privately collected user fees or other forms of remuneration to pay for use of infrastructure. It is also possible that privatized projects may ultimately involve higher project cost because of tendering costs, higher private financing costs, and of course, the profits for various private parties. There is also the possibility of imperfect project selection because the private parties would be more interested in financial profitability rather than economic profitability and tend to ignore various externalities and intangible effects of the investment alternatives. The projects may involve costs in the form of environmental degradation which is not properly accounted for in financial profitability estimates. The projects may also involve a disproportionate incidence on the poor or the disadvantaged. For instance, an individual living near and, hence, being forced to use, a private-

financed highway may feel genuinely discriminated against when roads in other parts of the locality not frequented by him may continue to be free for public use. Another major cause for concern is related to monopoly behavior of the private parties. The large initial outlays involved in infrastructure projects combined with low marginal costs associated with operation of the facility create ideal conditions for monopolistic tendencies to emerge with all its undesirable consequences. Obviously, some cost factors clearly have potential ethical consequences, and hence are of legitimate concern to Muslims. Though there is generally a consensus among scholars regarding the permissibility of the basic idea of "private" participation in the process of infrastructure development, a comparison of the macro-level benefits and costs needs to be undertaken in the *fiqhi* framework of *Maslahah Mursalah* before a particular project is found acceptable.

Further, the contractual mechanism used to achieve the same should conform to the established principles of Islamic law and be free from *riba, gharar, maysir, darar*, and the like. Conventional project finance invariably involves conventional financiers and therefore, *riba*-based borrowing and lending. This needless to say, is not permissible in the Islamic framework.

As indicated earlier, project finance structures often incorporate a large number of elements, which need to be combined and integrated and require an extensive network of interrelated and often inter-conditional contracts. *Shariah* requires that the various agreements and contracts or components of the financial structure need to be independent (though these may be executed in parallel fashion) in spite of their interrelated nature in order to avoid the possibility of *gharar*. A well-known principle of *fiqh* asserts that there cannot be two contracts within one. With multiple interdependent contracts forming part of one contract, the possibility that the rights and obligations of the parties to the contract would not be honored in future greatly increases, since default in one component of the structure may lead to defaults in others.

Islamic Alternative(s)

Given this background, we now turn to various *Shariah*-based contractual choices that may be designed for the various parties in various phases of the project.

The Concession Agreement

This is an agreement between the government authority and a project company. This is the cornerstone of the structure as it effectively gives the

project company the right to carry out the project. Various parties that come together to form the project company may include the project sponsors, such as, the contractor or construction company, the operation or utility company, banks as lenders, the host government and also other long-term investors.

The initial transfer of land rights in favor of the project company followed by the eventual transfer of the facility back to the government on a future date without any consideration or fee does not seem to have a parallel in *Shariah*-nominate contracts. One possibility is to model the initial transfer as a gift (*heba*) contract in favor of the project company by the government. The reverse transfer on a future date however is problematic. A gift (*heba*) contract on a future date may not be binding under Islamic law. A possibility of revoking the initial contract is also ruled out subsequent to the development of the land and creation of the facility. Thus a build-operate-transfer (BOT) structure does not seem to be *Shariah*-compatible if modeled as a gift (*heba*) contract. It may be noted here that a concession for a build-own-operate (BOO) structure or full-scale privatization perfectly fits into this framework. A gift (*heba*) contract may be conditional and in this sense, the initial transfer of land in favor of the project company, subject to the condition that it would develop the facility in a desired manner seems to be *Shariah*-compatible.

The partnership between the government and the private parties with the provision that the government (or the state company having a degree of autonomy from government) ultimately becomes the sole owner of the project, may indeed be modeled as a diminishing *musharaka* (*musharaka yantahi bi al tamlik*) contract between the parties. The project company formed as a diminishing *musharaka* would imply that the stake of the private parties in the project declines over time to zero, ultimately leading to full ownership by the government. The government as the partner would also legitimately enjoy its discretion to exercise varying degrees of control as specified in the partnership contract. The outcome under this arrangement would be similar to that under the build-operate-transfer (BOT) structures though the process of achieving the same is different. Under diminishing *musharaka*, profits and losses are shared according to the *musharaka* principle, that is, profits are shared according to a mutually agreed ratio while losses are shared using the participation ratio of both parties in the capital. Further, a proportion of profits accruing to the government is kept in an escrow account. As soon as the value of this account becomes equal to the value of the private partners' capital contribution in the project, payment from this account is made to the private parties and the government becomes the sole owner of the project.

The two crucial variables in this structure which would be determined after taking into consideration the project risk factors, revenue growth, expected return, investment time horizon of the financier etc., are the profit sharing ratio and the ratio of profits accruing to the government that would be transferred to the escrow account. The others dimensions of this structure are given without any element of uncertainty

It may be noted here that the concept of diminishing *musharaka* is not a classical *Shariah*-based contract. It is an excellent example of Islamic financial engineering. Like many other products of financial engineering or innovation, this too is not free from divergence of views, The major objections from some scholars relate to the *Shariah*-basis of forward commitments involved in the contract and when the *musharaka* contract is seen to contain several contracts of forward sale. However, the diminishing *musharaka* contract may also be viewed as containing a promise by a party (as a condition) to sell a part of its ownership on a future deal. This is generally considered to be binding on the promisor(s). At the same time the counterparty is not making any promise to purchase as a condition to the contract. Thus, there is in fact an option to purchase for the counterparty which may or may not be exercised.

Another alternative model for the project company could be a special purpose *mudaraba* with limited liability of the partners and the private parties agreeing to gradually reduce their stake in favor of the government. The advantage in case of a *mudaraba* as compared to a *musharaka* structure is the limited liability of the parties involved in it. The various private parties that may come together to from the *mudaraba* include the project sponsors as *mudarib*, such as, the construction company, the government, the operating or utility company, and the parties that are entrusted with managerial or monitoring responsibilities. Long-term investors who are non-sponsors may be part of the *mudaraba* as *rab-al-maal.*

Construction and Related Agreements

The second element of a build-operate-transfer (BOT) structure is the construction contract between the project company and the construction company. This is generally in the form of a comprehensive turnkey contract, which provides for the project to be handed over and to be ready for immediate operation. Some variations are also possible when the project company is directly and partially involved in the creation of the facility. The project company may enter into an equipment supply agreement(s) with suppliers(s). In order to finance these activities, the project company would also enter into credit agreement with the bank(s). The construction company may also enter

into direct credit agreement with the banks(s). Since the credit agreements in the conventional structure would involve *riba*-based loans, alternative financing arrangements may be sought in the Islamic framework. The financing mechanisms which are already being used or have good potential are *bai-istisna*, *bai bithman ajil, ijara*, and *bai- salam*.

An Islamic bank may act as an intermediary between the project company and the construction company or the supplier(s) as the case may be. The bank may undertake financing of the entire or a component of the project by selling the facility or equipment to the project company in need of financing through *istisna* or *bai bithman ajil.* The project company may now make payments to the bank on a deferred basis. Prior to this, the Islamic bank would purchase the facility or the equipment from the construction company or the supplier as the case may be. Since the facility or equipment would be of a specialized nature, the Islamic bank may have to make progressive or advance payments to the construction company or the supplier under *istisna* or *salam* as the case may be. The Islamic bank may also act as a lessor to the project company and supply the facility or equipment under *ijara*, acquired from the construction company or the supplier. The bank may also opt for variations of *ijara* such as, *ijara wa iktina* or *ijara thummal bai* which allows the lessee to purchase the facility at the end of the lease period. It is also possible that the construction company may be in need of financing in which case an Islamic bank may provide finance in the same manner as described above. Indeed, various alternative financing structures are possible with combinations of the above contracts because of the fact that various parties involved in the process: the project company, the construction company, the supplier, the operating or utility company, and the Islamic financiers may not be different entities and may also act as agents of each other.

For example, in the recent famous example of PUTRA LRT II project in Malaysia, financing during the construction phase was provided by Islamic banks in the following manner. The Islamic financiers would purchase the original contract(s) to supply goods and services to the project company from the supplier(s), and agree to the subsequent sale of the goods arising from this contract to the project company at a fixed profit mark-up.

Another structure involving *ijara* was used in the famous Hub River Power Project in Pakistan. In an *ijara* between the project company as the lessee and the Islamic financier as the lessor, the former acted as an agent of the latter and entered into a purchase contract with the supplier of equipment. On satisfactory delivery of the equipment to the lessee, the lessor would make payment of the purchase price and other expenses directly to the supplier.

Thereafter the lease contract would be activated and have a definite maturity period at the end of which the lessor would make a gift of the leased equipment to the lessee. It may be noted here that if the *heba* (gift) contract is an independent contract, then forward commitment involved may be problematic as cited earlier. If the *heba* (gift) is part of the *ijara* (lease) contract then the situation is similar to the case of *ijara thummal bai* (hire purchase) with two contracts being executed within one contract. The combination of two contracts is believed to be a source of *gharar*. However, the above structure has been found acceptable by some scholars apparently on the ground that there is hardly any uncertainty about the parties' ability to deliver and settle the transaction in future, since the asset is already in the possession of the lessee.

Operation and Related Agreements

In cases where the operation and maintenance is to be undertaken by the project company there is no need for this agreement. But where it is to be undertaken by a utility or operating company having specialized competence, a separate agreement for the operation and maintenance of the facility is needed. After the construction phase is over, the status of the project company as discussed above may be that of an owner or of a lessee with a purchase option. The project company may enter into a contract of *joala* with the utility company under which the former purchases from the latter for a predetermined fee or commission a service relating to maintenance and collection of tolls and other user fees. The commission may be in the form of an absolute amount or a ratio of the revenues.

Another alternative could be that the project company enters into another *ijara* agreement with the operating or utility company for a time period, perhaps matching with the time till the full ownership of the facility by the government is effected. With the *ijara* contract the project company transfers all the rights of collection of revenues in the form of tolls or other user fees in favor of the lessee, that is, the utility company in lieu of the rental payment in future.

In projects, such as gas and electricity generation, the structure may be very different from what has been outlined above. In gas and electricity generation projects, the generation process is continuous and the producer is also entrusted with the operation and the maintenance of the facility. Further, since spot or retail market sales of the output in these projects are ruled out, there is a need for long-term off-take or purchase agreements between the power producer and the project company. The distribution of electricity and gas is entrusted to the utility company, which may enter into the off-take agreement with the producer as an agent of the project company. If this agreement is

modeled as *bai-istisna* or *bai-salam*, this would require prior determination of the price, quantity and the specification of output to be purchased by the utility company. However, if the agreement is modeled as *bai-istijrar*, there is scope for greater flexibility. The flexibility relates to timing of payments. Unlike *salam*, payments can now be made in the beginning of the contracting period or any time thereafter. It allows for contracting with a definite or a normal price in the market. It also admits the possibility of stipulating options for either or both parties to the contract. This flexibility is understandable in view of the fact that under *istijrar*, by definition, purchases are to be made from a single producer.

Issues in Product Management

Agency Problems and their Resolution

As stated earlier, various contracts forming part of a financial structure must be independent (though these may be executed in parallel fashion) in spite of their interrelated nature in order to avoid the possibility of *gharar*. It is a well-known principle of *fiqh* that there cannot be two contracts within one. The underlying rationale seems to be that, with multiple interdependent contracts forming part of one contract, the possibility that the rights and obligations of the parties to the contract would not be honored in future greatly increases, since default in one component of the structure may lead to defaults in others. However, it must be recognized that even if the contracts are made independent of each other, the contractual structure referred to above can result in considerable conflicts between the various interests of a particular party within the structure. Often this is referred to as a party wearing "two or more hats". It is important in formulating the structure and in negotiating the parties' overall aims to constantly bear in mind these conflicting interests. Below, we highlight some such possibilities and explore ways of resolving the same. Such conflicts of interest arise primarily with the project sponsors whose participation in the project is not restricted to their role as investors and who may play a major role in the management of the project company that may follow a *musharaka* or *mudaraba* structure.

The Construction Company as a Project Sponsor

The classic conflict of interest under this BOT model is the majority shareholder in the project company who is also to be the main contractor for the project appointed under the construction documentation. Accordingly, this party's ultimate interest in participating in the project is not necessarily the same as the interest of certain other project sponsors or shareholders, especially the

long-term investors. For example, this party would wish to receive monies from the project as early as possible and the easiest method of achieving this is to obtain a lucrative *istisna* contract. Payments under this *istisna* contract would usually be on a periodic or staged basis and will be made during the course of the construction phase. In contrast, a long-term equity investor in the project company will only obtain payments from the project through declarations of dividends, which will not be made until such time as the project has been built and is generating a reasonable return.

Whilst the long-term investors would appreciate that the contractor must obtain reasonable payments under the construction contract to ensure that the project is actually built on time, their obvious concern is that these payments should not be overly generous, as the sums paid are part of the overall development cost of the project which the shareholders are financing through their injection of funds into the project company. The directors on the board of the project company representing these minority shareholders would therefore want to ensure that the directors representing this majority shareholder do not take advantage of their position to ensure a more favorable deal is made for the contractor with the project company.

There are several agency problems which arise here. For example, whether the project company is modeled as a *mudaraba* or *musharaka*, a *mudarib* or a member of the board of directors owes a fiduciary duty to act in the best interests of the project company. The directors appointed by this majority (contractor) shareholder should therefore act in the project company's best interests when they make decisions in their capacity as directors on the board of the project company. However, having said that, it is often extremely difficult to prove a breach of this type of fiduciary duty by these directors in making decisions to favor the actual company, which has appointed them to the board and with whom they are usually in full-time employment. Examples of conflicts, which could arise would be the directors of the project company contemplating legal action against the main contractor on the construction documentation, or considering how best to defend or negotiate claims made by the contractor against the project company.

The preferred mechanism for dealing with these particular conflicts lies in the shareholders' agreement regulating the internal affairs of the project sponsors in the project company. It would not be incompatible with a *mudaraba* or *musharaka* structure, for example, to stipulate that certain decisions would require the consent of not only the majority shareholders, but all, or at least a higher percentage of the board of directors. The same situation applies to decisions to be taken by the project sponsors in their capacity as shareholders in

the company. Such items may include the following non-exhaustive list: any proposed amendments or variations to the construction documentation; the bringing of any claim or the commencement or settlement of any litigation, arbitration or claim (whether or not above a certain monetary amount). Indeed, if such a claim is contemplated by or against the project company against or by any shareholder, such a shareholder or any director appointed by it may well be disenfranchised by the terms of the shareholders' agreement from voting in determining whether such a claim should be brought, or the terms of settlement thereof; the approval of entry by the project company into a contract with a subsidiary or associate company of any shareholder.

The Operating Company as a Project Sponsor

A utility company will obviously want to have as favorable an operating agreement as possible between it as operator and the project company and may again try to use its shareholding in, or representation on the board of directors of the project company to obtain such a favorable agreement. Again, the *mudaraba* or *musharaka* underlying the project company may stipulate that approval by the board of directors of the project company of the terms of the operating agreement will require directors, other than those appointed by the operating company, to vote in its favor. Alternatively, the directors appointed by the operating company may be disenfranchised from voting on this issue.

An Islamic Financier as Project Sponsor

An Islamic bank that provides debt facility to the project company through *bai-bithman-ajil*, or *murabaha*, or *ijara*, or *istisna*, may also be a project sponsor or investor in the project company. It is usually a condition in the loan documentation that no dividends to shareholders be paid out by the project company without the prior approval of the banks providing debt capital to the project company. In such case, there is firstly a conflict of interest in a bank's own internal position should it be both a shareholder in the project company, as well as a member of the syndicate of banks providing debt finance to the project company.

The bank, in its capacity as an investor in the project company, would, like other investors, want as much dividend as possible to be paid out at as early a stage as possible. However, the bank in its capacity as a debt-provider to the project company would, as a general rule, require the repayments of the installments, or at least would have to be satisfied that forthcoming payments of installments can be made, before it would approve the payment out of any dividend by the project company.

Financial Adviser to the Project Company as Arranger of the Syndicated Finance

The project company may appoint an Islamic investment bank as its financial adviser on how to structure and finance the overall project. This investment bank would negotiate on behalf of the project company, with other Islamic banks, leasing companies etc. to provide third party finance to the project company for the project. It may not itself, however, participate in the provision of third party syndicated finance. This may be the preferred situation as it mitigates a possible conflict of interest in that the investment bank would only have the interests of its client (the project company) in mind in negotiating the financial terms. Another view is that this bank as financial adviser, in negotiating and putting together the finance package, and in having perhaps the best overview of the project in total, should itself take up a portion of the third party finance.

The above is by no means an exhaustive list of the potential agency problems and conflicts of interest. The presence of a large number of parties in the financial structures with many parties performing multiple roles is certain to raise many moral and ethical problems. These potential areas of conflict of interest need more exhaustive investigation and must be minimized through appropriate stipulations in the *mudaraba* and *musharaka* structures used for the purpose.

Risk Allocation and Management

Major infrastructure projects are characterized by big risks. Below, we outline the risk factors related to construction and operation of the project. We also highlight some risk factors that arise because of a specific contractual mechanism being used. We discuss how these risk factors are managed and shared between various parties under alternative financial structures - both conventional and Islamic.

A conventional BOT project may be regarded as a high-risk construction project followed by a low-risk utility project. The various parties among which these risk factors are allocated include: the government, the project company, the banks and financial institutions, multilateral credit agencies, the construction company, the operating company, insurance companies, equipment and other suppliers. The project company is generally seen as a mere pass-through mechanism of both risk and return to the sponsors and non-sponsoring equity providers. In general, in a conventional structure, the

market risk factors are borne by the sponsors, which include the project and operating companies, the government and the project lenders. The construction and the operating companies bear most construction and operation related risk respectively. Risk of *force majeure* is transferred to insurance companies. The non-sponsoring equity providers bear the residual risk. The major difference between a conventional and an Islamic structure is that while conventional lenders are exposed to risk of default only, the Islamic financiers are supposed to share risk in a more significant way.

Construction- Related Risks

Risk factors during the design, construction and commissioning of the project include, *inter alia*, the unexpected and adverse topographic and geotechnical conditions, weather conditions and labor relations that may adversely affect the project budget and schedule adherence; risk in application and absorption of a new technology resulting in construction and operational defects; cost overruns due to increase in financing costs and/or increase in prices of inputs during inflation (these are in practice the major risks); environmental damage; and force majeure events. These risk factors may lead to either delays and defaults in construction of the facility or non-conformity of the facility to desired specifications. These risks are often allocated to the construction company as the project company would like to enter into a fixed price, fixed time, turnkey construction contracts. This is not always achieved as some costs and timing risks are not borne by the construction company. The risk of environmental damage and force mejeure events are borne by the party causing the damage or the insurance company. As highlighted earlier, in the Islamic contractual structures, the construction phase of project may be financed through *bai-istisna*, *bai bithman ajil* and *ijara*. There is a need therefore to examine the allocation of the risk factors among various parties under these alternative mechanisms.

Considering the case of *istisna* first, as discussed earlier, a contract between the Islamic bank as the seller and the project company as the buyer will provide for the manufacturing or construction of the facility or equipment(s) conforming to the specifications required by the latter and the delivery thereof within the stipulated time for an agreed price to be paid by the latter, normally on deferred basis.

The Islamic bank will then enter into another *istisna* contract as a buyer with the manufacturer or the construction company to purchase the same facility or equipment(s) which is the subject of the first contract and then deliver them to the Islamic bank within a stipulated time that will coincide with the time for

the delivery under the first contract, for a price which is less than the price under the first contract by a margin that represents the return to the Islamic bank under the first contract.

The price under the second contract will normally be paid in a manner that is commensurate with the progress of works under the contract. The manufacturer or construction company under the second contract will deliver the facility or equipment(s) to the Islamic bank which would in turn deliver them to the project company, or directly to the project company on the orders of the Islamic bank. If the manufacturer or construction company fails to deliver the facility or equipment(s) as per specifications, the Islamic bank would equally be in default of its obligations under the first contract. A pertinent issue here is whether the *istisna* contract is binding on both parties from its inception or not. In other words, does the contract oblige the seller to manufacture and deliver the goods and oblige the buyer to take delivery of the goods and pay the price if the goods are manufactured in conformity with the specifications? The predominant view among the classical jurists is, that the contract is revocable by either party at any time. In conventional parlance, both parties, the Islamic bank as the seller and the project company as the buyer (or the construction company as the seller and the Islamic bank as the buyer) have an option withdraw from their commitments. While the option does provide flexibility to either party and may be of value, it also implies great risk for the counterparty.

Fortunately, the contemporary view in this regard, is that the *istisna* contract is binding on both parties from the moment the contract is concluded by offer and acceptance. Either party will be in breach of his obligations if it fails to perform its part of the bargain. The only situation in which the buyer can revoke the contract is where the seller delivers goods that do not conform to the specifications. Thus, in the first contract between the project company as the buyer and the Islamic bank as the seller, the latter bears the construction completion and commissioning risks. These are passed on to the construction company in the second contract between the Islamic bank as the buyer and the construction company as the seller.

A possible variation in the *istisna* contract between the Islamic bank and the project company, in addition to providing for the manufacturing of the facility or equipment(s) conforming to the specifications within a certain time for an agreed price, may also provide that the project company agrees to take delivery from the construction company and to supervise (through a consultant or other expert) the execution of the contract with the construction company in a manner that will ensure that no progress payment under the contract will be effected unless the project company's consultant certified that the work for

which payment is sought, has been carried out in conformity with the contract; and that the issuing by the project company's consultant of the final payment certificate under the contract with the construction company will ipso facto operate as acceptance of the goods under the first contract. This arrangement has the advantage of ensuring that no progress payment will be made unless the project company is satisfied that the execution of the work is progressing satisfactorily in conformity with its specifications. Consequently, if all progress payments are released only on the certification of the project company's consultant, it will be extremely unlikely that the project company would reject the facility on the ground of its non-conformity to the specifications. This also implies that all risks arising out of non-conformity of the facility to specifications remain with the manufacturer or the construction company alone and the risk to the Islamic bank is reduced to minimum.

In addition to the above, there is also a risk that the manufacturer or construction company may delay or default in adhering to schedules. Apart from due to force majeure events, this may be cause by a variety of factors as stated earlier including the insolvency or bankruptcy of the construction company. Under the conventional structures these risks are managed through security on assets refundment bonds, performance guarantees and liquidated damages. The scope for use of such tools also exists in the context of an *istisna* contract.

The most effective means of reducing risk due to insolvency of the manufacturer or the construction company is to undertake a rigorous examination of the financial standing, technical and administrative capability of a company before its selection as the contractor or the construction company. Even then bankruptcy risk cannot obviously be reduced to zero, and hence there is need of some risk management tools. One alternative for the Islamic bank would be to take a mortgage of or a charge on the parts of assets that have been created or over all the assets of the manufactures though this may not be very effective since the process is likely to be cumbersome and time consuming. And if the charge is on the incomplete assets, then sale of these assets in the secondary market is not likely to cover the progress payments made by the bank. Another alternative could be to take a refundment bond or performance bond or a bank guarantee. Unlike a security that could be enforced only in the event of the liquidation of the construction company, a refundment bond guarantee could be made encashable in all cases where there is a failure to deliver the facility as per specifications. Where the construction of the assets is being done on the land of the buyer as in the case of a building a power station or a toll road it may be sufficient for the Islamic bank to require a performance bond and retention money.

The time-related risks or the possibility of losses due to delays on the part of the construction company may be minimized by obliging it to pay liquidated damages for this delay. As per the Islamic *Fiqh* Academy Resolutions, the imposition of a penalty clause for the payment of liquidated damages is acceptable in the Islamic framework. The possibility of damages to the assets during the construction phase due to factors, such as vandalism, acts of war, employee theft, accidents may be insured against and the risks may be shared through *takaful* or mutual Islamic insurance. Under the agreement the construction company may be required to seek insurance against specific risk factors from a *takaful* company and assign the proceeds to these policies in favor of the Islamic Bank.

Another alternative contractual mechanism used for financing the construction phase is *bai bithman ajil* under which an Islamic bank purchases a facility or equipment(s) as required and specified by the project company from the construction company or the manufacturer and sells the same to the project company at a higher price on a deferred basis. Similarly it may also extend direct financing to the construction company through *bai bithman ajil* under which it purchases supplies and sells the same to the construction company at a higher price on a deferred basis. The process involves a risk that subsequent to purchase by the Islamic bank from the original supplier, it may not be in the interest of the client any longer to buy the same from the bank. While according to some scholars the promise by the bank's client to purchase is binding and the bank may demand a compensation based on the actual loss suffered, this is not free from controversy. The compensation is paid from *hamish gedyyah*, an amount that is paid with the purchase order to the Islamic bank by the client to ensure that the latter is serious about purchase. If the actual loss exceeds *hamish gedyyah* then the bank would have recourse to the client for the excess. The management of the above risk is also possible in the *khiyar al-shart* framework under which the Islamic bank may retain an option for itself at the time of purchase from the original supplier. Subsequently, if the client buys the same as promised the option would automatically expire and the earlier contract would become binding. However, if the client fails to honor its commitment, then the Islamic bank would be in a position to exercise its option and rescind the purchase contract. This option enables the Islamic bank to shift the above risk to its original supplier. It is also quite realistic that the Islamic bank may have to forgo a part of its profits since, the original supplier may charge a higher price in case of the sale with option as compared to a sale without option. This is ethically justifiable since, the original supplier is now exposed to greater risk, and also Islamically valid as long as price is inclusive of the compensation for risk.

A third alternative for financing the construction phase is *ijara*. It seems to be a popular mode of financing with Islamic banks for financing acquisition of long term assets, such as land, building, plant and machinery by the construction company and/or the project company. The Islamic bank may either purchase or get an asset as specified by the client on *ijara* from the original supplier and enter into a second contract of *ijara* with its client. As in case of *bai bithman ajil*, this involves a risk that the client may not honor its commitment to enter into the second contract after the asset has been acquired by the bank for onward *ijara*. *Ijara* transaction also admits of stipulation of options and hence the risk may be managed in a similar manner in the *khiyar al-shart* framework. Another issue of considerable significance in *ijara* relates to sharing of risk relating to wear and tear, partial or total destruction of the object of lease. Since the lessor is the owner of the asset it is supposed to bear the above risk even in a long-term *ijara* (often with a purchase option resulting in ultimate transfer of ownership in favor of the client) except when the loss is due to misuse or negligence on the part of the lessee. The above risk may be mitigated by the bank seeking a *takaful* cover and including the cost of the cover in the *ijara* rentals. According to some scholars, this risk may also be mitigated by making the lessee specifically liable for damages, theft, loss or destruction of assets except in the case of *force majeure*. The risk of delays and defaults by the lessee may be mitigated by the Islamic bank seeking advance rentals as a security deposit against these risks.

Operations-Related Risks

As discussed earlier, after the construction phase is over the project company may either enter into a contract of *joala* or an *ijara* with the operator or the utility company. When the contract is *joala* for an absolute fee, the risk of revenue fluctuation is borne by the project company and the operators or the utility company receives a reward which is known and unaffected by the risk factors. When the contract is *joala* for a proportionate share in revenues the risk of revenue fluctuation is jointly shared by the project company and the utility company. Under *ijara* the risk is further magnified due to use of leverage and borne by the operator of utility company.

Ijara implies higher leverage for the lessee-operator and increases its financial risk. If the leverage is already too high (as in case of the aviation industry for example), the lessee-operator may be reluctant to increase its financial risk further. An alternative may be to link the *ijara* rentals to the actual utilization of the object of leasing, (say, flying hours in case of an aircraft *ijara*). However, this arrangement also exposes the lessor-project company to greater risk as its revenues in the form of *ijara* rentals would now be susceptible to the

business risk of the operator. Stipulations of *khiyar al-shart* can offer various possibilities of risk sharing between the lessor and the lessee. The lessor-project company may for instance, stipulate that rentals would be linked to actual utilization (flying hours) of the object of *ijara* (aircraft) subject to a minimum utilization. In other words, if the actual utilization falls below a lower bound, it would have an option to rescind the contract. A similar option may be provided for the operator -lessee.

Other risk factors relevant during the operation phase may be the risk of insolvency of the operator, risk of incurring liabilities in a litigious society; fluctuations in revenues caused by service interruptions due to accidents, weather conditions, equipment failure, natural disasters etc.. Here too, as discussed in the context of construction-related risks, the risk for the parties may be mitigated, transferred or shared through the mechanism of liquidated damages, specific stipulations in *ijara* agreements or passed on to the *takaful* company.

Risk due to fluctuations in revenues are at times passed on to sponsoring governments. The governments may provide a guarantee for growth in traffic and consequently in revenues and any shortfall may be met by the government. This is very much in line with framework of *al-kafala*. Such guarantees provided by the sponsoring governments usually involve a trade-off between quantity guaranteed and price.

Financial and Other Risks

Financial risk factors relevant in infrastructure finance may be in the nature of risks due to inflation, interest rate changes and currency rate changes. Inflation poses a risk when it results in an increase in the cost of the project, increase in the recurring costs without a corresponding increase in revenues. Interest rate increases are also caused by inflation to the extent the same is anticipated by the market and adversely affect the bottom line by increasing the financing costs. To the extent that mark-ups and *ijara* rates are influenced by interest rates, Islamic financing is vulnerable to interest rate risk. Below we discuss how inflation and interest rate risk may be managed in *ijara* transactions both in the construction and operation phases of the project.

A major source of risk for Islamic banks as lessors and their clients as lessees is due to the fixed nature of the rentals. In a dynamic economy, rates of returns undergo continuous shifts. If in future the rates of returns are expected to increase driving the cost of funds for the lessor, then the Islamic banks would be clearly at a disadvantage. Similarly if rates are expected to fall, the lessee would

be reluctant to go for a fixed commitment of lease rentals. A fixed rent *ijara* can of course be converted into a floating rate *ijara* by entering into several short-term parallel fixed rent *ijara* contracts. To consider a simple two-period case, let us assume that the Islamic bank expects the rentals to increase from 'x' percent during current period to 'x+y' percent during the next period. Instead of committing itself for an *ijara* with two -period maturity at the current 'x' percent and be exposed to risk of loss, it may opt for two one-period *ijara* contracts: the first for *ijara* at 'x' percent beginning from now but with a maturity of one period only; and the second beginning from one period hence through the second period at 'x+y' percent, The forward commitment to lease involved in such contracting is permissible.

However, in such an arrangement the issue is only partially resolved since the bank would still have to specify the rental (as per its expectations at 'x+y' percent). What if the rates turn out to be different from 'x+y' percent? Another problem could be due to the fact that the expectations of the lessee may be diametrically opposite to that of the lessor (i.e. if the lessee expects rates to go down in the second period) in which case, no contracting is perhaps feasible. Conventional floating rate leases take care of this problem by linking the rentals to a benchmark index such as the LIBOR. The rentals for future are made dependent on the future level of the interest rates as captured in LIBOR. For Islamic scholars not comfortable with use of a benchmark interest rate, such as LIBOR, this may be substituted with another Islamic benchmark rate, such as, the Consumer Price Index. There is however considerable divergence of opinion on this possibility as many Islamic scholars do not seem to be in favor of leaving the rental unknown on grounds of *gharar*.

From the above it follows that under *ijara* there are possibilities of mitigating and managing inflation risk by making the lease rentals variable and perhaps linking the same to some macro economic index. When the contract involves *bai*, is there any possibility of making the price and returns vary with dynamic changes in the economy? This is obviously not possible in *bai-salam* or pure *bai* unless forward contracting is made acceptable or some flexibility is accorded regarding fixation of the contractual price in future. Fortunately, such flexibility exists when purchases are made from a single producer, such as, when the utility company purchases gas or electricity from the producer, or when the final consumers buy goods and services from the single utility company. The agreement would now be governed by the rules of *bai-istijarar*. *Bai- istijrar* permits fixation of price at a normal level over a time period and also allows for payment of price at the end of the time period. *Istijrar* also admits the possibility of options in the *khiyar al-shart* framework. With such

flexibility, a host of risk management possibilities with alternative contractual mechanisms emerge. We have discussed one such possibility in chapter 14.

In a contract between the power producer and the utility in a Power Purchase Agreement, the producer which is likely to be adversely affected with inflation may retain an option for itself (it is also possible to make it conditional upon extreme movements, that is, the option would get activated only when inflation rate exceeds a certain rate) to fix the price at a "normal" level as against the level initially set by the contract. *Bai-istijrar*, unlike *bai-salam*, by admitting the possibility that the settlement price may differ from the contractual price (*thaman*), thus opens up a number of possibilities through which risks can be shared and managed by the parties.

Another important risk arises out of exchange rate fluctuations. In infrastructure projects in particular, requiring massive investments, the large blocks of capital are often not available within the borders of the country where construction is taking place. International capital flows are frequent because of involvement of parties from multiple countries. In the Islamic framework with its emphasis on spot settlement of transactions, the problems of currency risk largely remains to be addressed. Some Islamic scholars have favored the idea of deferred settlement from one end, which can address the issue in a limited way. The conventional mechanisms of options, futures and swaps are generally not found to be acceptable on various grounds. Some banks use Islamic swaps to reduce currency risk though complete transfer of risk is not possible under this arrangement. We have discussed Islamic swaps in chapter 14. In project finance one acceptable alternative seems to be a guaranteed exchange rate from the host government regarding conversion of inflows and outflows relating to the project. This voluntary bearing of currency risk on the part of the government which has been practiced in the Hub river Project in Pakistan, is quite sound in the framework of *al-kafala*.

Liquidity risk is another significant risk factor, which may affect the development of infrastructure projects. In view of the fact that such projects require massive investments committed for the long term and that investors in Islamic banks typically have a short time horizon, imparting liquidity to investments assumes great significance. In the absence of liquidity Islamic banks would be constrained to remain out of infrastructure financing to avoid an asset-liability mismatch. Securitization has been suggested as mechanism to impart liquidity to investments in infrastructure and to ensure participation of the average investors in the process. For example, this process may involve a sale of the facility owned by the project company to a special purpose vehicle (SPV) created for this specific purpose and taking it back on lease, The

predetermined stream of lease rentals expected to flow to the SPV may now be securitized. The SPV would issue securities entitling the holders a pro rata share in the rental income. The process involving sale and lease back is known as *bai-istighlal*, a variant of *bai-bil-wafa* and is free from any controversy. The PUTRA LRT II project followed a similar mechanism of securitization. The securities created may also involve a pro rata share in revenues. Other forms of securitization, such as involving *bai-bithman-ajil* and *istisna* receivables are also being practiced and found acceptable in the Islamic framework. There are however few other dimensions of such securitization process, such as sale of receivables or debt (*bai al dayn*) in the secondary market at price lower than the nominal value of the debt; and repurchase (*bai al einah*) of assets, which have generated a lot of controversy and divergence of opinion regarding their acceptability. These are rejected primarily on the ground of opening up the doors of *riba*.

Privatization may bring in certain advantages. The advantages are in the form of greater efficiency in planning and implementation of privately designed and developed projects, lower project costs, greater efficiency in responding the demands of the market because of availability of price signals, economies of scale, scope, experiences and benefits of diversification and most importantly, the reduced capital and investment demands on the governments for provision of the goods and services. The benefits expected from privatization are also associated with risk factors. The risk factors relate to higher project cost, adverse project selection, contract management, public opposition, monopoly behavior of the private partner, and private inefficiency. While some of the risk factors in the event of adverse outcome may undermine economic efficiency, others (such as, monopoly behavior of private partners, and public opposition) are of much grater importance, since their occurrence can render the entire structure unIslamic. These risks may however be mitigated by suitable government initiative. There is nothing inherently unIslamic about privatized initiative in infrastructure development and a realistic cost-benefit comparison must be undertaken in the framework of *masalahah mursalaha* for each such project before a decision is taken regarding their permissibility. A rigorous and careful exercise is important from the standpoint of mitigating legal risks and risks relating to contract management and public opposition for the private parties as well.

Infrastructure projects are characterized by substantial risks. These risk factors must be properly allocated, shared and managed if privatized initiative in infrastructure development it to succeed. The contractual structure of infrastructure financing is often quite complex incorporating a large number of elements which need to be combined and integrated and require an extensive

network of interrelated and often inter- conditional contracts. Various contracts that form part of the structures and lead to risk allocation among the parties include: the concession agreement, the construction agreement, the operations agreement, the credit agreement, the shareholders' agreement, the off-take agreement, the tariff agreement, the agreements relating to insurance, guarantees, and derivatives for managing currency risk. This chapter identifies some *Shariah*-based contractual structures that would result in allocation of risk among the parties concerned but in an Islamically acceptable manner that is free from *riba* and *gharar*. The concession agreement that underlies the formation of the project company may be modeled as diminishing *musharaka* or *mudaraba. Bai-istisna*, *bai-bithman-ajil, ijara* are found to be useful mechanisms during the construction phase. The operations phase may involve use of *ijara*, *joala, daman* and *bai-istijrar* contracts. Various risk management tools involving the framework of *al-kafala*, *takaful, khiyar al-shart* may be used to facilitate risk sharing and management among various parties. Islamic securitization offers solutions to problems of liquidity and asset -liability mismatch for Islamic banks participating in the financing process.

SUGGESTED FURTHER READINGS

Suggested Further Readings

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