



IMF Working Paper

Islamic Financial Institutions and Products
in the Global Financial System:
Key Issues in Risk Management and
Challenges Ahead

V. Sundararajan and Luca Errico

IMF Working Paper

Monetary and Exchange Affairs Department

**Islamic Financial Institutions and Products in the Global Financial System:
Key Issues in Risk Management and Challenges Ahead¹**

Prepared by V. Sundararajan and Luca Errico

November 2002

Abstract

The views expressed in this Working Paper are those of the author(s) and do not necessarily represent those of the IMF or IMF policy. Working Papers describe research in progress by the author(s) and are published to elicit comments and to further debate.

The provision and use of financial services and products that conform to Islamic religious principles pose special challenges for the identification, measurement, monitoring, and control of underlying risks. Effective and efficient risk management in Islamic financial institutions has assumed particular importance as they endeavor to cope with the challenges of globalization. This requires the development of not only a more suitable regulatory framework, but also new financial instruments and institutional arrangements to provide an enabling operational environment for Islamic finance. The recent establishment of the Islamic Financial Services Board, facilitated by the IMF, addresses these needs.

JEL Classification Numbers: E58; G18; P51

Keywords: Islamic banking, risk management, Islamic Financial Services Board

Authors' E-Mail Addresses: vsundararajan@imf.org; lerrico@imf.org

¹ Paper presented at a conference on "Risk Management in an Islamic Financial System" organized by the Iran Banking Institute, Central Bank of the Islamic Republic of Iran, Tehran, September 1, 2002.

Contents	Page
I. Introduction	3
II. Special Risks Surrounding Islamic Banking.....	4
III. Risk Management in Islamic Banking.....	7
A. Addressing the Special Risks of Islamic Banks: Strengthening the Regulatory and Disclosure Framework.....	8
Main elements of a suitable CAMELS framework.....	9
Main elements of suitable information disclosure requirements	12
B. Addressing Other General Risk Factors in an Islamic Environment: An Institutional Development Approach.....	15
IV. Key Challenges Ahead	16
Annex I: Islamic Banking vis-à-vis Conventional Banking	20
References.....	27
Annex Tables	
1. A Synoptic Analysis of Islamic Modes of Financing	24
2. A Comparison Between Islamic and Conventional Banking	25

I. INTRODUCTION

Islamic banking has grown in size and significance in a large number of countries throughout the world. In the Islamic Republic of Iran and Sudan all financial institutions have fully adopted Islamic banking—that is, the provision and use of financial services and products that conform to Islamic religious principles—outlined in the *Qur'an* and in Islamic *Shariah* laws. In Pakistan, the process of full transformation of the financial system to become compliant with Islamic principles is underway. Other countries, such as Malaysia, Indonesia, Bangladesh, Jordan, and Egypt, operate Islamic banking alongside conventional banking. This is done either through the opening of Islamic “windows” in conventional institutions or the establishment of separate banks, or branches and subsidiaries, that specialize in Islamic financial products. Global financial institutions, such as Citibank, have been offering instruments conforming to Islamic *Shariah* in several countries. Islamic banking is also an additional facet of the complex cross-border financial activities taking place in certain offshore financial centers, such as Bahrain and Labuan, Malaysia.

The Islamic financial services industry comprises an increasingly diverse range of institutions, including commercial and investment banks, mutual insurance (*takaful*), and investment companies. Banks, however, remain the core of the financial services industry in many countries and offshore financial centers since they account for the bulk of financial transactions and their soundness is of key concern for systemic stability.

Effective risk management in Islamic banks,² therefore, deserves priority attention. However, it entails many complex issues that need to be better understood to be successfully addressed. In particular, the nature of the specific risks facing Islamic banks, together with the virtually unlimited number of ways available to them to provide funds through the use of combinations of the permissible Islamic modes of financing—both profit-and-loss-sharing (PLS) and non-profit-and-loss-sharing (non-PLS)—raise a host of issues in risk measurement, income recognition, adequacy of collateral, and disclosure standards. Hence, innovative solutions and an appropriate adaptation of available risk-management frameworks are needed to reflect the special characteristics of Islamic financial products and services. The present paper examines this challenging subject.

The paper is organized as follows. Section II underscores the special risks surrounding Islamic banking. Section III discusses how the bank-specific and general risk factors of Islamic banking may be addressed through the implementation of a two-pronged strategy

² The terms “Islamic banks” and “Islamic financial institutions” are used interchangeably to refer to financial institutions operating in countries where all financial transactions are conducted according to Islamic precepts, as well as specialized institutions and windows of conventional banks that offer Islamic products and instruments in countries where both conventional and Islamic banking coexist.

based on an appropriate regulatory framework and adequate institutional development. Finally, section IV highlights the key challenges lying ahead to foster further development of Islamic banking in the global financial system, including the role of the Islamic Financial Services Board, the recently established standard-setting body for the prudential regulation of the Islamic financial services industry.

II. SPECIAL RISKS SURROUNDING ISLAMIC BANKING

The features of Islamic banks and the intermediation models that they follow (for a discussion, see the Annex) entail special risks that need to be recognized to help make risk management in Islamic banking truly effective.³ First, the profit-and-loss-sharing modes of financing (see Annex Table 1) raise several important considerations. Specifically, while PLS modes may shift the direct credit risk of Islamic banks to their investment depositors, they may also increase the overall degree of risk of the asset side of banks' balance sheets. In practice, PLS modes make Islamic banks vulnerable to risks normally borne by equity investors rather than holders of debt. There are a number of reasons for this, including:

The administration of PLS modes is more complex than conventional financing. Indeed, these modes imply several activities that are not normally performed by conventional banks, including the determination of profit-and-loss-sharing ratios on investment projects in various sectors of the economy, as well as the ongoing auditing of financed projects to ensure proper governance and appropriate valuation;

In principle, there is a virtually unlimited list of activities that Islamic banks can engage in, in addition to an unlimited number of ways they can provide funds through the use of combinations of the permissible PLS (and non-PLS) modes.⁴ In these circumstances, standardization of some Islamic financial products may become more difficult to achieve;

When Islamic banks provide funds through their PLS facilities, there is no recognizable default on the part of the agent-entrepreneur until PLS contracts expire, barring proved negligence or mismanagement on the part of the agent-entrepreneur. In fact, a "default" of PLS contracts means that the investment project failed to deliver what was expected, that is, a lower-than-expected profit or none at all, or a loss. In this case, the lower profit or loss is shared between or among parties

³ For a discussion of special risks in Islamic banking, see also Chapra and Khan (2000), and Hassan (2000).

⁴ In practice, however, Islamic banks mainly use a defined set of modes of financing (see Annex Table 1). Moreover, they cannot be involved in certain prohibited activities, notably the production of goods and services which contradict Islamic values, such as alcohol, pork, gambling, and any transaction involving interest. Typically, Islamic banks a *Shariah Board* acting as a body approving the *Shariah* compliance of banks' investments, financial instruments, and other transactions and activities..

according to the stipulated PLS ratios. For example, in the case of a *Mudaraba* contract (see Annex Table 1), the bank is entitled to receive from the entrepreneur the principal of a loan at the end of the period stipulated in the contract if, and only if, profits have accrued. If, on the contrary, the enterprise's books showed a loss, the bank would not be able to recover its loan.⁵ Moreover, such a situation would not normally constitute default on the part of the entrepreneur, whose liability is limited to his time and efforts;

Islamic banks have no legal means to control the agent-entrepreneur who manages the business financed through *Mudaraba* contracts. This individual has complete freedom to run the enterprise according to his best judgment. Banks are contractually entitled only to share with the entrepreneur the profits (or losses) stemming from the enterprise according to the contractually agreed-upon PLS ratio.⁶ In *Musharaka* and direct investment contracts, banks have better opportunities to monitor the business they invest in because, in these arrangements, partners may influence the management of the enterprise and exercise voting rights (see Annex Table 1); and

PLS modes cannot systematically be made dependent on collateral or other guarantees to reduce credit risk.

The above considerations underscore operational risk as crucial in Islamic banking. Operational risk may arise from various sources, including: (i) the unique activities that Islamic banks must perform internally (see first bullet point above). These highlight internal controls as key to ensuring that all phases of the investment process are monitored, comply with Islamic banks' investment policies, and are properly accounted for (see also section B below); (ii) the non-standardized nature of some Islamic financial products; and (iii) the lack of an efficient and reliable *Shariah* litigation system to enforce financial contracts.

While being less risky and more closely resembling conventional financing facilities than PLS modes, non-PLS modes of financing (see Annex Table 1) also carry special risks that need to be recognized. Specifically, *Salam* or *Bai' Salaf* (purchase with deferred delivery)

⁵ Of course, in the typical case of a *restricted Mudaraba* (i.e., on the banks' assets side), banks seek to stipulate in the *Mudaraba* contract certain conditions that they consider essential for a successful outcome. However, this is done *ex ante* and the contract's terms and conditions cannot be altered during the life of the contract except with the mutual consent of all parties.

⁶ By contrast, Khan and Mirakhor, 1993, argue that banks have direct and indirect control over the agent-entrepreneur through both explicit and implicit contracts. This is the case because banks could refuse further credit or blacklist the agent-entrepreneur and also because the agent-entrepreneur puts at stake his credibility and respectability (an important consideration in the Islamic ethos). Therefore, a strong deterrent to irresponsible behavior would be put in place. This argument, however, does not change the fact that the bank has no legal means to intervene in the management of the current enterprise while it is being run by the agent-entrepreneur.

contracts expose Islamic banks to both credit risk and commodity price risk as banks agree to buy the commodity on a future date against current payment and also hold the commodity in question until it can be converted into cash. Similar risks are also involved in *Ijara* (leasing) because, unlike conventional leasing contracts, *Ijara* contracts do not provide Islamic banks with the ability to transfer substantial risks and rewards of ownership to the lessee as leased assets must be carried on the balance sheet of banks for the term of the lease.

Another specific risk inherent in the operation of Islamic banks stems from the special nature of investment deposits, whose capital value and rate of return are not guaranteed. This feature, coupled with information asymmetry resulting from the *unrestricted Mudaraba* contract (i.e., on banks' liabilities side) where banks manage depositors' funds at their own discretion,⁷ significantly increase the potential for moral hazard and create an incentive for risk taking and for operating financial institutions without adequate capital. Indeed, investment depositors in Islamic banks do *not* enjoy the same rights as equity investors in conventional investment companies, but do share the same risks. *A fortiori*, this applies to demand depositors in the *Two-Tier Mudaraba* model (see the Annex for a discussion). Under these circumstances, corporate governance is more difficult to exercise and the potential for undue risk-taking and moral hazard is increased.

In addition to the specific risks delineated above, there are other more general factors that make the operation of Islamic banks riskier and/or less profitable than conventional banks. These factors include:

Fewer risk-hedging instruments and techniques. The *Shariah's* prohibition against *riba* (interest) and some *fiqhi* (Islamic jurisprudence) issues in the interpretation of *gharar* (excessive risk) mean that many risk-hedging instruments and techniques based on conventional tools, such as options, futures, and forwards, are not yet available to Islamic banks in the current state of development of Islamic finance;

Underdeveloped or nonexistent interbank and money markets and government securities (owing to the difficulties in designing short-term general government funding instruments based on profit and loss-sharing). This circumstance complicates Islamic banks' liquidity management and increases their exposure to liquidity shocks. Islamic banks' probability of incurring in asset-liability mismatches is increased by the lack of *Shariah*-compliant short-term government securities, such as treasury bills, or high-quality privately issued commercial paper. While significant progress toward the development of government securities and short-term instruments has been made in Iran and Sudan, where *Shariah*-compatible instruments have been issued—namely: National Participation Certificates, central bank *Musharaka*

⁷ According to the *unrestricted Mudaraba* contract, depositors agree that their funds be used by banks at their discretion to finance an open-ended list of (possibly) profitable investments and expect to share with banks the overall profits accruing to banks' business.

Certificates, and government *Musharaka* and *Mudaraba* Certificates—their potential for effective government debt and monetary management remains to be further developed,⁸ and

Limited availability of and access to lender-of-last-resort (LOLR) facilities operated by central banks. Again, the limited availability of *Shariah*-compatible LOLR facilities is linked to the prohibition against interest-based transactions. Nonetheless, a promising practical approach to help address this issue has been developed by Bank Negara Malaysia, which established an interbank investment facility where Islamic financial institutions may obtain short-term funds from one another on the basis of PLS arrangements. Operations in central bank and government paper, once developed, would greatly facilitate the use of LOLR arrangements.

- Regulatory and supervisory practices concerning Islamic banking are highly diverse, ranging from frameworks that explicitly promote dual banking systems (Malaysia) to frameworks that only recognize Islamic banking (Sudan). Main differences include: (i) the legal recognition granted to Islamic financial institutions; (ii) risk weights for capital adequacy calculations; and (iii) access to any systemic liquidity arrangement operated by central banks.

As a result of the specific as well as general risk factors facing them, Islamic banks have historically been forced to hold a comparatively larger proportion of their assets in reserve accounts with central banks or in correspondent accounts than conventional banks. This has significantly affected their profitability because central bank reserves and correspondent accounts typically yield no or minimal returns. This, in turn, has affected their competitiveness and increased their vulnerability to external shocks, with potential systemic consequences.

III. RISK MANAGEMENT IN ISLAMIC BANKING

Based on the above considerations, effective and efficient risk management in Islamic banking should consider a two-pronged strategy based on a suitable regulatory and disclosure framework and adequate institutional development.

⁸ These issues are beyond the scope of the present paper. For a discussion, see Sundararajan, Marston, and Shabsigh (1998).

A. Addressing the Special Risks of Islamic Banks: Strengthening the Regulatory and Disclosure Framework

Adequate capital and loss-offsetting reserves, as well as appropriate pricing and control of risks are key to ensuring a sound operation of Islamic banks as ongoing concerns. The reasons for this include the following:

To lessen the inherent greater potential for moral hazard in the operation of PLS modes, it is essential for bankers to have adequate amounts of their *own* capital at risk;

Owing to the information asymmetry in unrestricted *Mudaraba* contracts, adequate capital and reserves provide depositors with a “psychological reassurance” to help maintain their confidence against possible rumors on the performance of individual banks that may lead to runs and, in turn, reputational damage and loss of franchise value;

To increase banks’ ability to attract demand deposits, which are never remunerated, but may well share the same risks as investment deposits;

To avoid an excessive erosion of investment deposits in the event of losses, which may trigger flights to quality and lead to a liquidity crisis against which Islamic banks are perhaps less well equipped than conventional banks; and

To take into account the fact that financing through PLS and non-PLS modes adds an element of operational complexity and several unique forms of risks that need to be monitored, depending upon the specific structures of the contracts and the overall environment.

Adequate capital and loss-offsetting reserves for Islamic banks could usefully be viewed within a comprehensive risk-management framework, addressing all critical dimensions of banks’ operations in an Islamic environment supported by a suitable disclosure regime for Islamic banks. Such a framework could be designed along the lines of a CAMELS system for assessing bank soundness appropriately adapted to fit the needs and requirements of an Islamic environment.⁹ Suitable information disclosure requirements would need to be an integral part of the regulatory framework for Islamic financial institutions as they, coupled with appropriate accounting standards (below), would help the market overcome the non-transparency inherent in some aspects of Islamic banking, such as inventory and collateral

⁹ The acronym CAMELS stands for Capital, Assets, Management, Earnings, Liquidity, and Sensitivity to market risk corresponding to various aspects of financial soundness. The CAMELS model is a measure of the relative soundness of a bank and is often calculated by some supervisory authorities on a 1 to 5 scale, with 1 representing the strongest performance.

issues, as noted previously. This, in turn, would help the market better price the special risks surrounding Islamic banking.

The main elements of a suitable CAMELS framework and disclosure requirements for Islamic banks are briefly discussed in the following paragraphs.¹⁰

Main elements of a suitable CAMELS framework

Capital

In the standard CAMELS framework, capital adequacy is assessed according to: (1) the volume of risk assets; (2) the volume of marginal and inferior assets; (3) bank growth experience, plans, and prospects; and (4) the strength of management in relation to all the above factors. In addition, consideration may be given to a bank's capital ratios relative to its peer group. While most of these factors can usefully be applied in an Islamic framework without major changes from standard practices, the rating factor of the volume of risk assets or (1), warrants closer consideration in an Islamic framework.

In principle, the bulk of the assets of Islamic banks should be made up of PLS modes, that is, mostly uncollateralized equity financing. These assets carry far more risk than those made up of non-PLS modes, which are collateralized commercial or retail financing operations. Hence, in principle, the ratio of riskier assets to total assets should typically be higher in an Islamic bank than in a conventional bank. Capital adequacy norms in an Islamic environment should therefore place more emphasis on this factor than is the case in conventional banking. Nonetheless, it should be noted that the potential losses that capital bears in an Islamic bank are lower inasmuch as PLS depositors themselves will absorb part of them, and this factor could well offset the special risks in PLS accounts.¹¹ In practice, however, PLS modes are but a small fraction of Islamic banks' total assets. Aggregate data compiled by the International Association of Islamic Banks (IAIB) indicate that *Musharaka* and *Mudaraba* assets account for some 25 percent of Islamic banks' total assets, the majority of which are made up of non-PLS modes, notably mark-up transactions.¹² Therefore, it may be reasonable to conclude that the assessment of capital adequacy for Islamic banks should be based not only on a thorough evaluation of the degree of risk of each bank's portfolio, but also an assessment of the mix of PLS and non-PLS assets.

¹⁰ This discussion draws from Errico and Farahbaksh (1998).

¹¹ See AAOIFI (1999) for concrete proposals for the risk-weighting of assets funded by PLS deposits that take into account the loss absorption by the depositors, as well as special risks in managing PLS accounts.

¹² IAIB, 1997.

This approach would be consistent with the rationale underpinning the first pillar of the proposed New Basel Capital Accord (commonly referred to as Basel II proposals), notably the proposed changes in the risk-weighting of assets, including through acceptance of internal-ratings-based systems for banking book credit risk and trading book market risk. The second and third pillars of the new Accord relate to the supervisory framework and market discipline, respectively. The latter is especially important in Islamic banking (see section III.B and section IV below).

Assets

In the standard CAMELS framework, asset quality is assessed according to: (1) the level, distribution, and severity of classified assets; (2) the level and composition of nonaccrual and reduced rate assets; (3) the adequacy of valuation reserves; and (4) the demonstrated ability to administer and collect problem credits.

With regard to factor (1), it should be borne in mind that in an Islamic environment assets represented by *Mudaraba* transactions cannot be classified until the underlying contracts expire. Until that moment, there is no recognizable default, with the exception of proved negligence or mismanagement on the part of the agent-entrepreneur. As noted previously, “default” of PLS contracts means that the investment project failed to deliver what was expected, that is, a lower or no profit, or a loss. Nonetheless, with regard to factor (2), it would be advisable to take a proactive and forward-looking stance and consider PLS assets that are estimated to yield a lower or no profit as reduced-rate assets even before the expiration of the relative contracts. With regard to factor (3), the ability of Islamic banks to reduce the capital value of investment deposits in case of losses should not be viewed as tantamount to an automatic setting aside of provisions against loan losses. Indeed, this situation should not be allowed to dilute sound loan-loss provisioning practices aimed at preserving the solvency and the viability of an Islamic bank as an ongoing concern. In fact, adequate loan-loss provisioning is needed to provide strong incentives to limit moral hazard. Hence, adequacy of loan-loss reserves remains a key factor in ensuring banking soundness in an Islamic environment, too. Finally, with regard to factor (4), the ability of an Islamic bank to administer and collect problem credits should be evaluated in those cases where PLS contracts do default before expiration because of negligence or mismanagement on the part of the entrepreneur, as well as in all cases of defaulted non-PLS transactions. Insofar as the legal environment poses obstacles to efficient loan recovery and enforcement of contracts, the provisioning rules should be tightened correspondingly.

Management

In the standard CAMELS framework, management is evaluated according to: (1) technical competence, leadership, and administrative ability; (2) compliance with banking regulations and statutes; (3) ability to plan and respond to changing circumstances; (4) adequacy of and compliance with internal policies; (5) tendencies toward self-dealing; and (6) demonstrated willingness to serve the legitimate needs of the community. All these factors are applicable in an Islamic banking environment, too. Of course, in this case, the management’s specific

competence in Islamic banking practices and procedures should be critical in such an evaluation. Given the complexity of many Islamic banks' operations, involving the monitoring of investment projects, managing commodity inventories at times, legal uncertainties relating to *Shariah* litigation systems, and similar problems, establishing adequate internal systems and controls for managing risks and validation of transactions play a particularly crucial role in the effective management and containment of operational risks.

Earnings

In the standard CAMELS framework, earnings are assessed according to: (1) the ability to cover losses and provide for adequate capital; (2) earnings trends; (3) peer group comparisons; and (4) quality and composition of net income. Earnings are considered of high quality if they are sufficient to make full provision for the absorption of losses and the accumulation of capital when due consideration is given to asset quality and bank growth. Banks so assessed typically have earnings well above peer group averages. At the other extreme are banks that are experiencing losses.

The above criteria are generally applicable to Islamic banks as well. Nonetheless, in an Islamic bank, economic losses would first result in a depreciation of the value of the depositors' wealth and then affect the bank's equity position in the event that it had also used its own resources to finance the loss-making investment project (e.g., through a *Musharaka* arrangement). Also, such risks to deposits, if they materialize, might result in reputational damage and loss of depositor base, leading to liquidity and, possibly, solvency problems.

Liquidity

In the standard CAMELS framework, liquidity is assessed according to: volatility of deposits; reliance on interest-sensitive funds; technical competence relative to structure of liabilities; availability of assets readily convertible into cash; and access to interbank markets or other sources of cash, including lender-of-last resort (LOLR) facilities at the central bank.

As discussed in section II, compared with conventional banks, Islamic banks have fewer opportunities to obtain funds through LOLR facilities, such as Lombard or overdraft facilities operated by central banks or through access to interbank and money markets, which are typically underdeveloped or nonexistent in an Islamic environment. However, Islamic banks have obligations only toward demand deposit holders, while conventional banks have obligations toward all depositors. Therefore, it may be reasonable to conclude that the adequacy of liquidity in an Islamic environment should be assessed on a bank-by-bank basis, taking into account the state of development of the broader systemic liquidity arrangements.

Sensitivity to market risk

In the standard CAMELS framework, sensitivity to market risk is assessed by the degree to which changes in market prices, notably interest rates, exchange rates, commodity prices, and

equity values adversely affect a financial institution. While the same approach is also applicable to Islamic banks, several differences are worthy of note.

Owing to the *Shariah*'s prohibition against interest-based instruments, interest rate risk (one of the most important market risks) affects Islamic banks only indirectly through the mark-up price of deferred sale and lease-based transactions. As pointed out by Chapra and Khan (2000), an Islamic bank has to share with investment depositors any increase in new earnings (owing, for example, to an increase in the LIBOR rate¹³ that automatically leads to a rise in the mark-up), but it cannot, at the same time, re-price its receivables on the assets side at higher rates. This pricing mismatch makes the net *Murabaha* (see Annex Table 1) income of the Islamic bank vulnerable to mark-up price risk.

Islamic banks are directly exposed to commodity price risk because, unlike conventional banks, they typically carry inventory items, as noted in section II. They are also directly exposed—perhaps to a greater extent than many conventional banks—to equity price risk as the very nature of Islamic banking is equity financing through the PLS modes. In principle, Islamic banks are exposed to exchange rate risk in the same way as conventional banks are.

Perhaps more important, however, is to recognize that Islamic banks can rely on fewer risk-hedging opportunities than conventional banks because *Shariah*-compliant substitutes for conventional market risk hedging instruments, such as futures, forwards, options, and swaps contracts, are not yet available to Islamic banks at the current state of development of Islamic finance, as noted previously.

Main elements of suitable information disclosure requirements

Information disclosure is more important in an Islamic environment than it is in a conventional system because the profit-and-loss-sharing principle and the implied lack of protection for investment depositors is at the core of Islamic banking.¹⁴ The more depositors are left unprotected, the more public disclosure of information about banks' policy objectives and operational strategies becomes necessary to enable depositors (and other lenders alike) to monitor banks' performance. Further, in an Islamic banking framework, depositors have more incentives to monitor bank performance than conventional depositors because neither capital value of nor returns on investment deposits are fixed and guaranteed by banks, but depend on bank performance in investing depositors' funds. Such monitoring should not only seek to protect the capital value of depositors' funds, but also help ensure that the rates of return paid to them reflect a fair application of the PLS principle on banks' net profit. Therefore, by reducing information asymmetry inherent in *unrestricted Mudaraba* contracts,

¹³ Most Islamic banks use LIBOR as the benchmark rate for their financing operations.

¹⁴ In principle, a deposit insurance arrangement for investment depositors would be possible in an Islamic banking framework as well.

a clear and concise disclosure of key data and information is likely to allow depositors more flexibility in choosing a specific bank in which they can allocate their funds according to their risk preferences.

Moreover, appropriate information disclosure can provide the public, as well as the supervisory authorities, with a better understanding of banks' strategies and their relevant risks. This places the public and the supervisors in a better position to exercise informed market discipline and effective prudential supervision, respectively, thus helping reduce systemic risks in an Islamic financial environment.

Given the operational similarity between Islamic banks and investment companies (see the Annex for a discussion), it may prove useful to consider information disclosure requirements established for investment companies in conventional systems (e.g., by the United States Securities and Exchange Commission), and adapt them to the specific needs of an Islamic environment. In this vein, information disclosure requirements for Islamic banks could usefully cover *at least* the following interrelated areas: investment objectives and policies, including concentration; types of securities; risk factors; internal controls; performance data; and professional qualifications and experience of management and senior staff. The content of the proposed disclosure requirements is briefly reviewed below.¹⁵

- Investment objectives and policies, including concentration. This section should provide the public with sufficient information to assess the appropriateness of policies with regard to portfolio diversification (see also next bullet point). It should provide an accurate description of the investment objectives and policies, including with respect to concentration—investment of more than 25 percent of total assets may define concentration in any one industry. In addition, any economic, business, or political developments or changes that may affect that industry or group of industries should be briefly discussed. Such disclosure may include proposed national or regional legislation involving the financing of the concerned investment projects; pending civil and/or religious courts decisions relating to the validity of the projects or the means of financing them; predictable or foreseeable shortages or price increases of materials needed for the projects, and the like.
- Types of securities.¹⁶ This section should provide the public with an indication of an Islamic bank's degree of exposure to any type of securities or other assets, particularly those for which there is no established market, that is illiquid assets. This

¹⁵ See also AAOIFI (2001).

¹⁶ For Islamic banks the term "securities" defines any note, stock, certificate of interest or participation in any profit-sharing arrangement.

section should also illustrate the “filtration” process followed by the Islamic bank to select securities to invest in.¹⁷

- Disclosure and monitoring of risk factors. This section should provide information on the main risk factors associated with the investment portfolio. It should also describe the internal procedures, organization, and infrastructure for the monitoring and handling of risk factors. Because of the unlimited list of activities that an Islamic bank can engage in, and the number of ways to provide funds through the use of combinations of the permissible Islamic modes of financing, each Islamic bank should be allowed some degree of freedom in engineering how best to monitor and handle the risks inherent to its specific activities.
- Good governance and internal controls. An Islamic bank performs internally several complex activities that are not normally performed by conventional banks, including the determination of profit-and-loss-sharing ratios on the projects it finances and the ongoing auditing of these projects to ensure that its shares of profit are fairly calculated. These specific activities highlight good governance and internal controls as key to ensuring that all phases of the investment process are monitored, comply with the Islamic bank’s investment policies, and are properly accounted for. Moreover, good governance and adequate internal controls are also crucial to the depositors’ interests, too, because, as noted previously, an Islamic bank’s net profits are, in turn, shared with its (investment) depositors. Hence, particularly in an Islamic environment, good governance and adequate internal controls serve two goals: (i) to reduce mismanagement risk (typically the most important factor of weak internal governance); and (ii) to strengthen market confidence by enhancing governance related disclosures and correspondingly reducing moral hazard.
- Performance data. Particularly in an Islamic environment, the expected rate of return on investment deposits is an important consideration in the depositors’ choice of a particular bank because what it can indicate to prospective investment depositors is the *expected* rate of return only. The actual rate depends on the Islamic bank’s ability to finance successful investment projects, thus accruing profits to be shared with its investment depositors. Ill-conceived, unsound institutions might seek to attract depositors by promising unrealistic rates of return, thus crowding out serious and well-managed institutions. Hence, this section should provide a brief explanation on how an Islamic institution calculates its historical performance in order to advertise this data. This should be done in a concise description of the essential features of the data and how it has been computed. A statement should also be included that advertised yields are based on historical earnings and *are not intended to indicate future performance*.

¹⁷ The “filtration” process ensures that the operation, and capital structure of each business an Islamic bank invests in is compatible with Islamic law.

- Management and senior staff. This section should provide information on the education and professional background of an Islamic bank's management, including the Board of Directors, and senior staff (at least at the level of director of department). Particular attention should be paid to the assessment of staff's competence and skills in Islamic banking. This section should also clarify the role of the *Shariah Boards*, particularly whether their role is limited to approving financial products and services or is extended to the approval of individual credit decisions.

It is worth noting that the growing emergence of institutional investors, such as Islamic mutual funds, will more than likely make the market-enforced discipline mechanism inherent in the process of information disclosure more effective and binding on banks' strategies and risk-taking decisions. As has already happened in conventional systems, it can be reasonably expected that institutional investors in an Islamic environment will play a crucial role in collecting, interpreting, and evaluating the flow of information disclosed by Islamic financial institutions. These investors will act as these institutions' major private monitors while such skills are being developed by smaller private depositors and other investors. Such a development will more than likely help facilitate risk management in an Islamic framework.

B. Addressing Other General Risk Factors in an Islamic Environment: An Institutional Development Approach

In addition to the establishment of a suitable regulatory and disclosure framework, effective risk management in an Islamic environment requires the development of adequate instruments, markets, and market infrastructure that can provide an enabling environment. As discussed in section II, several general factors currently make the operation of Islamic banks riskier and/or less profitable than conventional banks, including: (1) underdeveloped or nonexistent interbank and money markets, as well as government funding instruments; (2) limited availability of and access to LOLR facilities; and (3) legal uncertainties and limited market infrastructure, which limit contract enforceability and the availability of hedging instruments and techniques.

There is an urgent need, therefore, to strengthen systemic liquidity arrangements and enabling infrastructure for Islamic financial institutions by further developing liquid markets in *Shariah*-compatible government borrowing instruments and central bank instruments, as well as related central bank operations. In this context, the recent approval of an agreement for establishing the International Islamic Financial Market (IIFM) is a welcome development.¹⁸ The IIFM is envisaged to play a facilitating role for the design and issuance of Islamic instruments by governments and large corporations based on guidelines approved by a global *Shariah* Supervisory Committee to be established by the IIFM's Board for the purpose of ensuring that all instruments traded at the IIFM are compliant with Islamic principles.

¹⁸ The establishment of the IIFM was discussed and agreed upon during the seventh meeting of the Working Group for the International Islamic Financial Market project held in Bahrain November 7-8, 2001.

The critical importance of a strong disclosure regime in Islamic banking has to be backed by high-quality and internationally acceptable accounting standards for Islamic banks. Adequate transparency requires that financial information disclosed by Islamic banks be reliable, consistent, and comparable across time and similar organizations. To protect the public confidence, annual financial statements should be audited by independent reputable professionals. These characteristics are exactly the same as those prescribed in the conceptual framework of the International Accounting Standards (IAS). In this regard, the continuing progress made by the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) to develop accounting standards aimed at rendering the financial statements of Islamic financial institutions more comparable, for example with regard to the timeliness of income/loss recognition, and transparent has been a significant achievement.

AAOIFI has thus far issued a range of accounting standards for key Islamic financial instruments and related provisioning and disclosure practices. The organization has also issued standards for auditing and governance of Islamic financial institutions. These standards are gradually gaining wider acceptance: they are currently mandatory in Bahrain, Sudan, and Jordan. They are also being implemented as guidelines by the Monetary Agency of Saudi Arabia. Finally, these standards are the ultimate goal of a convergence process initiated by Malaysia; plus they underpin accounting standards in Indonesia and Qatar.

A lack of adequate legal framework, including with regard to insolvency regimes, as well as a relatively weak legal infrastructure supporting financial transactions, can raise operational risk and undermine market development. Further development of the legal framework and the associated reduction in legal uncertainties will very possibly contribute to reducing operational risk, while enhancing risk-management capabilities of Islamic financial institutions. In particular, it is especially important to step up efforts aimed at overcoming unresolved *fiqhi* (Islamic jurisprudence) issues that have so far delayed or even impeded adequate institutional development in many countries. The most important unresolved *fiqhi* issues include the following questions of: (i) late settlement of financial obligations; (ii) the nature of a PLS partners' liability, limited or unlimited, with respect to third parties; (iii) the permissibility of different types of lease contracts; (iv) the permissibility of the sale of debt through securitization; and (v) hedging and financial engineering.¹⁹

IV. KEY CHALLENGES AHEAD

To help ensure sound and sustainable development of Islamic banking in the future, on April 21, 2002, in a meeting held in Washington, DC, at the sidelines of the IMF/World Bank Spring Meetings, the central bank governors of Bahrain, Indonesia, the Islamic Republic of Iran, Kuwait, Lebanon, Malaysia, Pakistan, Saudi Arabia, Sudan, and the United Arab Emirates and senior officials from the Islamic Development Bank and the AAOIFI agreed to establish a new organization—the Islamic Financial Services Board (IFSB)—to promote

¹⁹ These issues are beyond the scope of the present paper. For a discussion, see Chapra and Khan (2000).

good regulatory and supervisory practices and uniform prudential standards for Islamic financial institutions. That decision followed extensive consultation coordinated by the IMF with the collaboration of the Islamic Development Bank and the AAOIFI.²⁰

The IFSB will be based in Kuala Lumpur, Malaysia, and will complement the efforts of the AAOIFI while maintaining close ties with other bodies being set up to promote Islamic financial instruments and markets.²¹ To help strengthen and harmonize prudential standards, it is envisaged that the IFSB will also:

Set and disseminate standards and core principles—as well as adapt existing international standards—for regulation and supervision, consistent with *Shariah* principles, for voluntary adoption by member countries;

Serve as liaison for and promote cooperation with other standard setters in the area of monetary and financial stability; and

Promote good practices in risk management in the industry through research, training, and technical assistance.

The establishment of the IFSB is a milestone in the recognition of the growing significance of Islamic financial institutions and products globally. The achievement of its ultimate objectives crucially depends on further progress in addressing some of the technical issues outlined in the previous discussion; the harmonization of the legal and regulatory frameworks (in addition to accounting standards) governing Islamic financial institutions and their governance; and the development of adequate instruments, markets, and market infrastructure to support their operations, as noted previously. In fact, these may be viewed as the key challenges lying ahead.

This harmonization, while supportive of global financial stability, should also be conducive to effective prudential supervision of Islamic financial institutions in their home countries, and facilitate a sustained international expansion of Islamic banking. The development of adequate instruments, markets, and market infrastructure are also factors essential to facilitate risk management and enable Islamic banks to successfully compete with conventional banks in the global financial system.

²⁰ “IMF Facilitates Establishment of Islamic Financial Services Board,” IMF News Brief No. 02/41, May 1, 2002. <http://www.imf.org/external/np/sec/nb/2002/nb0241.htm>

²¹ Dr. Zeti Akhtar Aziz, Governor, Bank Negara Malaysia was asked by participating governors and senior officials to head a steering committee that would oversee the establishment and inauguration of the IFSB. See also *IMF Survey*, May 13, 2002. The Malaysian Parliament passed the IFSB Bill on June 27, 2002 (Lower House) and July 9, 2002 (Upper House), respectively, to enable the establishment of the IFSB in Malaysia with certain powers, immunities, and privileges conferred on the Board of the IFSB and its constituent organs and for matters connected to it. The IFSB was inaugurated in Kuala Lumpur on November 3, 2002.

Therefore, it is crucial for the IFSB to play a strategic role as the catalyst for promoting discussion at the international level on a wide array of Islamic banking, financial, and legal matters, encompassing not only technical and regulatory issues, but also broader policy and market development issues. The IFSB should become the center of competence for designing appropriate solutions to the many challenges that the global capital markets pose to institutions operating in an Islamic environment, as well as for promoting wider acceptance of the standards and good practices necessary to implement these solutions. In carrying out these tasks, the IFSB should establish a close partnership with concerned national supervisory authorities and central banks, the AAOIFI, the International Financial Institutions, and relevant market participants.

The New Basel Capital Accord is a welcome development for Islamic banking. Indeed, it offers a timely and important opportunity for the IFSB to play its part in the ongoing efforts to strengthen the international financial architecture. That is because the new Capital Accord is expected, *inter alia*, to:

- Better reflect banks' true risk. The proposed changes to the risk-weighting methodologies, especially the acceptance of internal rating systems and the focus on operational risk, would go a long way toward making the new Accord more compatible with and meaningful for Islamic banks. As argued in section II, Islamic banks themselves are best poised to evaluate the degree of risk of their own portfolios and operations on the basis of their thorough knowledge of own business structures, including the mix of PLS and non-PLS assets, and to ensure the adequacy of capital and loss-offsetting reserves to cushion against operational risk.
- Adapt the supervisory regime. Supervisory guidance should remain essential, and its scope and content should be influenced by the quality of internal governance and risk management by banks themselves. Several countries have begun strengthening supervisory regimes for Islamic banking through a separate legal framework in some cases and a special regulatory focus in others. The core element of these efforts should include clear identification of risks; treatment of similar risks in a similar manner across all institutions and business units; and adequate supervisory guidance and oversight to ensure effective internal monitoring and control. These efforts could be further strengthened, and practices harmonized, based on international cooperation through the IFSB.
- Enhance market discipline by encouraging sound disclosure of policies: As argued in section III, this aspect is crucially important for a sustained growth of Islamic banking, especially with regard to the riskier (but more truly Islamic) PLS modes of financing. In addition, the heightened focus on market discipline should fit well in the Islamic approach to the sharing of financial risks between banks and borrowers on the one hand and depositors and banks on the other.

In sum, the IFSB could become a key instrument of financial stability and market development for Islamic banking. In this connection, the IMF, in collaboration with other

International Financial Institutions, could continue to play a facilitating role by helping promote the IFSB's goals through the provision of technical assistance, as well as through the dissemination of standards and good practices in the context of its financial sector surveillance work and other relevant activities.

ANNEX I: ISLAMIC BANKING VIS-À-VIS CONVENTIONAL BANKING

The lack of uniformity in the interpretation of some Islamic banking principles makes it possible that similar operations carried out by Islamic financial institutions may be accepted in one country and rejected in another. It may be useful, therefore, to form a common view on a set of key features characterizing financial institutions operating according to Islamic banking principles to be used as a benchmark against which they may be compared and contrasted with institutions operating in a conventional or interest-based system. This, in turn, may facilitate a better understanding and management of the special risks surrounding Islamic banking.

Key Features of Islamic Banking

Islamic financial institutions are characterized by:

- A prohibition against the payment and receipt of a fixed or predetermined rate of interest, which is replaced by profit-and-loss-sharing (PLS) arrangements where the rate of return on financial assets held in financial institutions is not known and not fixed prior to the undertaking of the transaction. The actual rate of return can be determined only ex post, on the basis of actual profits accrued from real sector activities that are made possible through the productive use of financial assets.
- A requirement to operate through Islamic modes of financing, which affect both the assets and liabilities sides of bank balance sheets. These modes can be divided into two groups: those that are based on the PLS principle (which should, in principle, be viewed as core modes), and those that are not (which should, in principle, be viewed as marginal modes). PLS modes include: *Mudaraba* (trustee finance), *Musharaka* (equity participation), and direct investment. Non-PLS modes include: *Qard al Hasanah* (beneficence loans), *Bai' Mua'jjal* (deferred payments sales), *Bai' Salam* or *Bai' Salaf* (purchase with deferred delivery), *Ijara* and *Ijara wa iqtina'* (leasing and lease-purchase), *Murabaha* (mark-up), and *Jo'alah* (service charge).

Annex Table 1 provides a synoptic analysis of PLS and non-PLS modes of financing.

Annex Table 1. A Synoptic Analysis of Islamic Modes of Financing

TYPE	DESCRIPTION	COMMENTS
PLS Modes	Profit-and-loss-sharing modes	At the core of Islamic banking
Mudaraba	<p>Trustee finance contract Under this kind of contract, the bank provides the entire capital needed for financing a project, while the entrepreneur offers his labor and expertise. The profits (or losses) from the project are shared between the bank and the entrepreneur at a certain fixed ratio. Financial losses are borne exclusively by the bank. The liability of the entrepreneur is limited only to his time and efforts. However, if the negligence or mismanagement of the entrepreneur can be proven he may be held responsible for the financial losses incurred.</p> <p>Mudaraba is usually employed in investment projects with short gestation periods and in trade and commerce.</p> <p>It affects both assets and liabilities sides of banks= balance sheet. On the liabilities side, the contract between the bank and depositors is known as <i>unrestricted Mudaraba</i> because depositors agree that their funds be used by the bank, at its discretion, to finance an open-ended list of profitable investment and expect to share with the bank the overall profits accruing to the bank's business. On the assets side, the contract between the bank and the agent-entrepreneur is known as <i>restricted Mudaraba</i> because the bank agrees to finance a specific project carried out by a specific agent-entrepreneur and to share the relative profits according to a certain percentage.</p>	<p>Three conditions need to be met:</p> <ol style="list-style-type: none"> 1. The bank should not reduce credit risk by requesting a collateral to this purpose: it bears entirely and exclusively the financial risk. Collateral may be requested to help reduce moral hazard, for example, to prevent the entrepreneur from vanishing. 2. The rate of profit has to be determined strictly as a percentage and not as a lump sum. 3. The entrepreneur has the absolute freedom to manage the business. <p>The bank is entitled to receive from the entrepreneur the principal of the loan at the end of the period stipulated in the contract only if a surplus exists. If the enterprise books show a loss, this will not constitute default on the part of the entrepreneur, except for negligence or mismanagement.</p>
Musharaka	<p>Equity participation contract The bank is not the sole provider of funds to finance a project. Two or more partners contribute to the joint capital of an investment.</p> <p>Profits (and losses) are shared strictly in relation to the respective capital contributions.</p> <p>This kind of contract is usually employed to finance long-term investment projects.</p>	<p>Banks can exercise the voting rights corresponding to their share of the firm's equity capital. Their representatives can sit on the firm's board of directors.</p> <p>All parties invest in varying proportions, and have the right to participate in the management of the enterprise.</p>
Muzar'ah	<p>This is the traditional counterpart of the <i>Mudaraba</i> contract in farming.</p> <p>The harvest is shared between the bank and the entrepreneur. The bank may provide funds or land.</p>	
Musaqat	<p>This is the traditional counterpart of the Musharaka contract in orchard keeping.</p> <p>The harvest is shared among the partners based on their respective contributions.</p>	
Direct investment	<p>This represents the same concept as in conventional banking. The bank cannot invest in the production of goods and services which contradict the value pattern of Islam, such as gambling.</p>	<p>Banks can exercise the voting rights corresponding to their share of the firm's equity capital. Their representatives can sit on the firm's board of directors.</p>

Annex Table 1. A Synoptic Analysis of Islamic Modes of Financing

TYPE	DESCRIPTION	COMMENTS
Non-PLS Modes	Non-profit-and-loss-sharing modes	They are used in cases where PLS modes cannot be implemented, for example, in cases of small-scale borrowers or for consumption loans.
Qard al-Hasanah	Beneficence loans These are zero-return loans that the Qur'an exhorts Muslims to make to "those who need them." Banks are allowed to charge the borrowers a service fee to cover the administrative expenses of handling the loan, provided that the fee is not related to the amount or maturity of the loan.	
Bai'Mua'jjal	Deferred payment sales The seller can sell a product on the basis of a deferred payment in installments or in a lump sum payment. The price of the product is agreed upon between the buyer and the seller at the time of the sale and cannot include any charge for deferring payments.	Contrary to contracts based on the PLS principle, modes such as markup, leasing, and lease purchase have a predetermined and fixed rate of return and are associated with collateral. In fact, banks add a certain percentage to the purchase price and/or additional costs associated with these transactions as a profit margin, and the purchased assets serve as a guarantee. Moreover, banks may require the client to offer a collateral.
Bai'Salam or Bai'Salaf	Purchase with deferred delivery The buyer pays the seller the full negotiated price of a product that the seller promises to deliver at a future date. This mode only applies to products whose quality and quantity can be fully specified at the time the contract is made. Usually, it applies to agricultural or manufactured products.	These instruments can be considered to be more closely associated with risk aversion and they do not substantially differ from those used in a conventional banking system, other than in their terminology and in some legal technicalities. They are considered to conform to Islamic principles because the rate of return is meant to be tied to each transaction, rather than to a time dimension. However, some Muslim scholars advocate a stricter utilization of such a modes.
Ijara Ijara wa iqtina'	Leasing Lease purchase A party leases a particular product for a specific sum and a specific period of time. In the case of a lease-purchase, each payment includes a portion that goes toward the final purchase and transfer of ownership of the product.	
Murabaha	Mark-up The seller informs the buyer of his cost of acquiring or producing a specified product; then the profit margin (or mark-up) is negotiated between the buyer and the seller. The total cost is usually paid in installments.	
Jo'alah	Service Charge A party undertakes to pay another party a specified amount of money as a fee for rendering a specified service in accordance to the terms of the contract stipulated between the two parties. This mode usually applies to transactions such as consultations and professional services, fund placements, and trust services.	

Sources: Kazarian, 1993; Iqbal and Mirakhor, 1987.

- A limited ability to require collateral. As a general rule, when financing customers through PLS modes, Islamic financial institutions are *not* expected to require collateral to reduce credit risk. Some authors, however, argue that, by way of exception to this general rule, banks may *occasionally* require collateral *to lessen moral hazard* in PLS financing, for instance, to help prevent the entrepreneur (that is, the user of funds) from excessive risk-taking or fraudulent behavior. Islamic financial institutions, on the other hand, have the ability to request customers to pledge collateral for accessing non-PLS financing.²²
- Investment deposits are not guaranteed in capital value and do not yield any fixed or guaranteed rate of return. In the event banks record losses as a result of bad investment decisions, depositors may lose part or all of their investment deposits. The only contractual agreement between investment depositors and banks is the proportion (ratio) according to which profits or losses are to be distributed between the parties of the deposit contract.
- Demand deposits are guaranteed in capital value, but no returns are paid on them. The reason to justify the capital value guarantee is the assumption that demand deposits are placed in banks as *Amanat*, that is, for safekeeping.
- Consistency with one of the following two intermediation models:²³
 - Two-Tier Mudaraba. According to this model, the assets and liabilities sides of a bank's balance sheet are fully integrated. On the liabilities side, depositors enter into an *unrestricted Mudaraba* contract (a trustee finance contract, see Annex Table 1) with the bank to share the overall profits accruing to the bank's business. Thus, depositors act as financiers by providing funds, and the bank acts as an entrepreneur by accepting them. On the assets side, the bank, in turn, enters into *restricted Mudaraba* contracts (see Annex Table 1 for details) with agent-entrepreneurs who search for funds to invest and who agree to share profits with the bank according to a certain percentage stipulated in the contract. In addition to investment deposits, banks are allowed to accept demand deposits that yield no returns and may be subject to a service charge. These deposits are repayable on demand at par value. Depositors, however, are aware that banks will use demand deposits for financing risk-bearing projects. Banks may also grant short-term interest-free loans (*Qard al-Hasanah*, see Annex Table 1) up to a certain fraction of total demand deposits. Although the concept of reserve requirements is a

²² For a fuller discussion, see Annex Table 1.

²³ These two intermediation models are considered to be fully consistent with Islamic banking principles. For a fuller discussion, see Khan and Mirakhor (1993).

recognized one in Islamic banking, the *Two-Tier Mudaraba* model does not mandate specific reserve requirements on either type of deposits.²⁴

- “Two-Windows.” According to this model, bank liabilities are divided into two windows: one for demand deposits and the other for investment deposits. The choice of the window is left to depositors. Demand deposits are assumed to be placed as *Amanat* (for safekeeping), thus they are considered to belong to depositors at all times. They cannot, therefore, be used by banks as the basis to create money through fractional reserves. Consequently, banks operating according to this model must apply a 100 percent reserve requirement on demand deposits. By contrast, investment deposits are used to finance risk-bearing investment projects with depositors’ full awareness. Therefore, these deposits not only are not guaranteed by the bank, but also no reserve requirement is applied to them. The bank may charge a service fee for its safekeeping services. Interest-free loans may only be granted from funds specifically deposited for that purpose.

Annex Table 2 summarizes the above characteristics and provides a synoptic comparison between Islamic and conventional banks.

Annex Table 2. A Comparison Between Islamic and Conventional Banking

Features	Islamic Banking	Conventional Banking
Guarantee of the capital value of: Demand deposits Investment deposits	Yes No	Yes Yes
Rate of return on deposits	Uncertain, not guaranteed for investment deposits. Demand deposits are never remunerated.	Certain and guaranteed.
Mechanism to regulate final returns on deposits	Depending on bank performance/profits from investment.	Irrespective of bank performance/profits from investment.
Profit-and-loss (PLS) principle applies	Yes	No
Use of Islamic modes of financing: PLS and non-PLS modes	Yes	Non-applicable
Use of discretion by banks with regard to collateral	Generally not allowed to reduce credit risk in PLS modes. By way of exception, may be allowed to lessen moral hazard in PLS modes. Allowed in non-PLS modes.	Yes, always.

²⁴ Traditionally, banks operating according to the *Two-Tier Mudaraba* model have kept substantial reserves against demand deposits (even if they were not considered as *Amanat*) and little (sometimes none) on investment deposits.

Based on the above, the following points are worthy of note:

- Owing to the structure of their balance sheet and the use of profit-and-loss-sharing arrangements, Islamic banks are better poised than conventional banks to absorb external shocks. In the event of operational losses, unlike conventional banks, Islamic banks have the ability to reduce the nominal value of investment deposits, that is, reduce the nominal value of a portion of their liabilities. As a result, solvency risks that may arise from an asset-liability mismatch are typically lower in Islamic banks than in conventional banks.
- Islamic banks operating according to the Two-Windows model (a typical case of “narrow bank,” which is very rare in practice) are virtually insolvency-proof. Islamic banks operating according to the *Two-Tier Mudaraba* model (the norm in practice) are still subject to the risk of an asset-liability mismatch because: (1) demand deposits are guaranteed in capital value and are redeemable by depositors at par and on demand; (2) demand deposits can be used to finance longer-term risk-bearing investment projects; and (3) there is no mandated specific reserve requirements on demand and investment deposits (*vis-à-vis* the 100 percent and zero percent reserve requirements on demand and investment deposits, respectively, mandated in the Two-Windows model).
- Islamic banks show an *operational similarity* with conventional investment companies, including mutual funds owing to the fact that they do not guarantee either the capital value of or the return on investment deposits and that they basically pool depositors’ funds to provide depositors with professional investment management. There is, however, a fundamental *conceptual difference* between the two that also needs to be recognized. It lies in the fact that investment companies sell their capital to the public, while Islamic banks accept deposits from the public. This implies that shareholders of an investment company own a proportionate part of the company’s equity capital and are entitled to a number of rights, including receiving a regular flow of information on developments of the company’s business and exerting voting rights corresponding to their shares on important matters, such as changes in investment policy.²⁵ Hence, they are in a position to take informed investment decisions, monitor the company’s performance, and influence strategic decisions. By contrast, (investment) depositors in an Islamic bank are only entitled to share the bank’s net profit (or loss) according to the PLS ratio stipulated in their contracts. Investment deposits cannot be withdrawn at any time, but only on maturity and, in the best case, at par value.²⁶ Moreover, depositors have no voting rights because they do not own any portion of the bank’s equity capital.

²⁵ See Sally Buxton and Mark St. Giles, “Governance Issues and the Capital Market,” in *Financial Sector Governance—The Roles of the Public and Private Sectors*, ed. by Robert E. Litan, Michael Pomerleano, and V. Sundararajan (Washington, DC: Brookings, 2002), pp 303–326.

²⁶ Although investment deposits cannot, by contract design, be withdrawn before maturity, in many instances banks do not object should depositors ask for them.

Hence, they cannot influence the bank's investment policy. In fact, their relationship with the bank is regulated according to an *unrestricted Mudaraba* contract, as noted previously.

REFERENCES

- Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), 1999, *Statement on the Purpose and Calculation of the Capital Adequacy Ratio for Islamic Banks* (Bahrain: Accounting and Auditing Organization for Islamic Financial Institutions).
- _____, 2001, *Statement on the Purpose and Calculation of the Capital Adequacy Ratio of Islamic Banks* (Bahrain: Accounting and Auditing Organization for Islamic Financial Institutions).
- Basel Committee on Banking Supervision, 1999, *A New Capital Adequacy Framework* (Basel: Bank for International Settlements).
- Buxton, Sally, and Mark St. Giles, 2002, "Governance Issues and the Capital Market," in *Financial Sector Governance—The Roles of the Public and Private Sectors*, ed. by Robert E. Litan, Michael Pomerleano, and V. Sundararajan (Washington, DC: Brookings Institution Press)
- Chapra, Umer, and Tariqullah Khan, 2000, *Regulation and Supervision of Islamic Banks*, Occasional Paper No. 3 (Jeddah: Islamic Development Bank—Islamic Research and Training Institute).
- Errico, Luca, and Mitra Farahbaksh, 1998, "Islamic Banking: Issues in Prudential Regulations and Supervision," IMF Working Paper 98/30 (Washington: International Monetary Fund).
- Hassan, Sabir Mohammad, 2000, "Capital Adequacy and Basel Guidelines: On Risk Weights of Assets for Islamic Banks," paper presented at the Conference on the Regulation of Islamic Banks in Bahrain, February 2000.
- International Association of Islamic Banks, 1997, *Directory of Islamic Banks and Financial Institutions* (Jeddah: International Association of Islamic Banks).
- Iqbal, Zubair, and Abbas Mirakhor, 1987, *Islamic Banking*, IMF Occasional Paper No. 49 (Washington: International Monetary Fund).
- Islamic Research and Training Institute (IRTI), 2001, Islamic Development Bank, July 2001, *Risk Management: An Analysis of Issues in Islamic Financial Industry*, Occasional Paper No. 5 (draft)(Jeddah, Saudi Arabia).
- Kazarian, Elias, 1993, *Islamic versus Traditional Banking: Financial Innovations in Egypt* (Boulder, Colorado: Westview Press).
- Khan, Mohsin, and Abbas Mirakhor, 1993, "Monetary Management in an Islamic Economy," *Journal of Islamic Banking & Finance*, Vol. 10 (July–September), pp. 42–63.
- Sundararajan, V., and David Marston, 2002, "IMF Facilitates Establishment of Islamic Financial Services Board," *IMF Survey*, May 13, p. 157.
- Sundararajan, V., David Marston, and Ghiath Shabsigh, 1998, "Monetary Operations and Government Debt Management Under Islamic Banking," IMF Working Paper 98/144 (Washington: International Monetary Fund).