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# Diversity in the regulation of Islamic Financial Institutions<sup>☆</sup>

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#### Abstract

More than 200 Islamic Financial Institutions (IFIs) are reported to have total combined assets in excess of US\$ 200 billion with an annual growth rate estimated between 10 and 15%. The regulatory regime governing IFIs varies across countries. International organizations have been established to set standards that would strengthen and eventually harmonize prudential regulations as they apply to IFIs. The paper contributes to the discussion on the nature of the prudential standards to be developed. It clarifies risks IFIs are exposed to and the type of regulation that would help to manage them. It considers that the industry is still evolving with an anticipated convergence of the practice of Islamic financial intermediation with its conceptual foundations. Accordingly, the paper contrasts the risks and regulation that would be needed in the case of Islamic financial intermediation operating according to core principles and current practice. Implications for approaches to capital adequacy, licensing requirements and reliance on market discipline are outlined. The paper suggests an organization of the industry that would allow it to develop in compliance with its principles and prudent risk management and to facilitate its regulation.

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<sup>&</sup>lt;sup>★</sup> The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the view of the World Bank, its Executive Directors, or the countries they represent.

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#### 1. Introduction

Islamic finance services are expanding worldwide.<sup>1</sup> More than 200 Islamic Financial Institutions (IFIs) are reported to have total combined assets in excess of US\$ 200 billion (General Council for Islamic Banks and Financial Institutions (GCIBAFI), 2005).<sup>2</sup> Some observers expect that Islamic finance may be able to attract 40% of the total savings of the Muslim population worldwide within the next few years (Zaher & Hassan, 2001). To capitalize on the potential of that market, a number of global financial institutions – including Citibank, Hong Kong Shanghai Banking Corporation (HSBC), Goldman Sachs, BNP-Paribas and Union Bank of Switzerland (UBS) – have established *Shariah* compatible services (Sundararajan & Errico, 2002).

The growth of the industry and its potential impact raise public policy issues. International organizations and standard setters, national regulatory authorities, policy makers, and academia are focusing on IFIs' risk management practices, the broad institutional environment in which they operate, and the regulatory framework that governs them. Institutions have been established notably the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), the International Islamic Rating Agency (IIRA), the Islamic Financial Services Board (IFSB), and the Liquidity Management Center (LMC).<sup>3</sup>

Less widely understood than conventional finance, Islamic finance generates mixed perceptions on the risks it introduces. Thus, Islamic finance reminds of Merton's (1995) point that "less apparent understanding of the new environment can create a sense of greater risk even if the objective level of risk in the system is unchanged or reduced". Thus Islamic finance viewed as financial innovation is generating concerns on its inherent risks and their possible spillover on the rest of the financial system (Merton, 1995).

These concerns are compounded by features specific to Islamic finance. First, there is the divergence between the theory of Islamic finance, and the way it is practiced. Second, IFIs have to compete with conventional financial intermediaries while they do not have access to similar risk management tools. Third, each IFI's business conduct is idiosyncratic, shaped by its *Shariah* board, local legal tradition and interpretations, and the specific market's competitive pressure. Fourth, in many jurisdictions, IFIs need to comply with conventional finance regulations that may not be adapted to the business. Fifth, different schools of thought on Islamic finance offer different interpretations of permissible financial contracts.

This paper identifies IFIs' risks and considers regulatory approaches that may help deal with them. It starts from the premise that the industry is evolving towards harmonization of core principles and convergence of practice with conceptual foundations. Consequently, the paper dis-

<sup>&</sup>lt;sup>1</sup> While it is difficult to identify precisely the date of the first formal IFI in recent history, references are often made to Mitghamr Egypt Savings Association in 1963. See Ali (2002) and Archer and Ahmed (2003).

<sup>&</sup>lt;sup>2</sup> Estimates about the number of IFIs and their growth have differed. A recent Moody's report states that there are 300 IFIs with more than US\$ 250 billion growing at 10–15% a year (see Moody's Report, April 2006). The General Council for Islamic Banks and Financial Institutions reports that there is a total of 284 businesses offering Islamic financial services and managing US\$ 178.5 billion (General Council for Islamic Banks and Financial Institutions (GCIBAFI), 2005).

<sup>&</sup>lt;sup>3</sup> AAOIFI, IIRA, and LMC are based in Bahrain whereas IFSB is based in Malaysia. For a description of the role of each institution (see Ali, 2002).

<sup>&</sup>lt;sup>4</sup> See for instance Moody's (2001), which reports that "A survey of published accounts indicates that most IFIs do not see their on-balance sheet deposits as being profit-and-loss sharing", Special comment, January 2001.

<sup>&</sup>lt;sup>5</sup> The five schools are: *Hanafi*, *Shafei*, *Hanbali*, *Maliki*, and *Jaafari*. Although there is consensus on all major issues, there are some minor differences pertaining to the operations of different instruments, such as, the binding nature of a *murabaha* contract.

tinguishes between theory and practice of Islamic financial intermediation, the risks each presents, and the regulation they call for. Section 2 presents an overview of Islamic financial intermediation. Section 3 considers the nature of regulation that may be needed. Section 4 outlines a framework for the industry that would accommodate its founding principles and stability requirements. Finally, Section 5 concludes on the challenges lying ahead in the development of a regulatory framework for IFIs.

#### 2. Overview of Islamic financial intermediation

Four basic principles would guide the conduct of Islamic financial business: (a) risk-sharing—the terms of financial transactions need to reflect a symmetrical risk/return distribution each party to the transaction may face; (b) materiality—a financial transaction needs to have a "material finality", that is, it is directly or indirectly linked to a real economic transaction; (c) no exploitation—a financial transaction should not lead to the exploitation of any party to the transaction; and (d) no financing of sinful activities such as the production of alcoholic beverages.<sup>6</sup>

Over time, consistent with the foregoing principles, basic contracts have evolved. They distribute risks inherent in the transactions they govern. This section starts by presenting the framework of Islamic financial contracts; it then outlines Islamic financial intermediation features they enable. Subsequently, it considers questions raised by the practice of Islamic financial intermediation, and examines the risks that are specific to IFIs.

#### 2.1. The nature of contracts

Islamic finance activity is based on two sets of contracts. The first includes those that govern economic transactions between two parties and may be called transactional contracts. The second includes contracts that serve the function of intermediation to facilitate and finance transactional contracts and, therefore, may be called intermediation contracts (Fig. 1). Transactional and intermediation contracts combine to address notably diverse maturities and degrees of risk. Appendix A provides a description of Islamic financial instruments as well as a glossary of Arabic terms used in the paper.

#### 2.1.1. Transactional contracts

Transactional contracts facilitate exchange, sale and trade. They include contracts such as *murabaha*, *bay' salam*, or *bay' mua'ajal*. Additional contracts to extend credit based on underlying sale or trade transaction give rise to some form of an asset-backed financial claim. The resultant financial instruments are akin to conventional finance asset-backed securities. Thus on one end of the risk spectrum, the system offers low risk asset-backed securities, while at the other

<sup>&</sup>lt;sup>6</sup> No exploitation entails no information asymmetry between the parties to the contract.

<sup>&</sup>lt;sup>7</sup> It should be noted that *bay' salam* is not restricted to trade financing. In some countries, it has more use in financing agricultural operations than in financing trade.

<sup>&</sup>lt;sup>8</sup> Whereas a typical asset-backed security in the conventional system is a claim against a pool of assets, Islamic instruments are claims against individual assets. A distinct feature of such financial securities is that they resemble conventional debt securities characterized by a pre-determined pay-off with the difference that Islamic instruments are collateralized against a real asset. The result is that a financial claim is created against a real asset with a short-term maturity and relatively low risk.

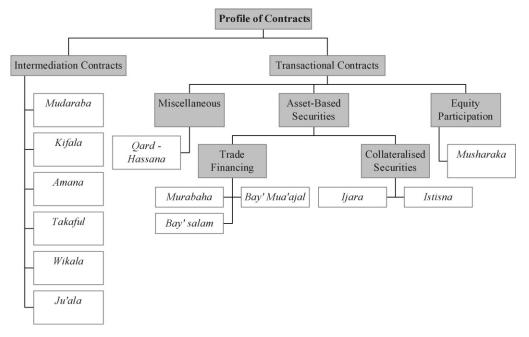


Fig. 1. Islamic financial system profile of contracts.

end, it envisages partnership with equity participation, under the name of *musharaka*. <sup>9</sup> In between the two extremes of risk, other collateralized securities are based on leasing, *ijara* contracts, or production or construction orders, *istisna* contracts. Both are linked to real assets and fall in the short to medium-term maturity and risk category of instruments. The system also offers grant contracts, *zakat*, as well as return-free loans, *qard-hassana*. These two instruments are meant to promote social welfare.

#### 2.1.2. Intermediation contracts

Financial intermediation contracts perform functions of screening and monitoring and capital allocation. They include *mudaraba*, *kifala*, *amana*, *takaful*, *wikala*, and *ju'ala*. In a *mudaraba* contract, a party with available capital (*rabb-ul-mal*) develops a profit-sharing partnership with an agent (*mudarib*) who has investment expertise. Losses are borne only by the capital provider. The *mudarib* may be liable for a loss in case of misconduct or negligence. However, under a *mudaraba* contract, the capital provider does not participate in the management of the funds, exclusively left to the agent (*mudarib*). Mudaraba is often the basis of contracts between depositors and banks.

<sup>&</sup>lt;sup>9</sup> In case of *musharaka*, the capital owner enters into a partnership by contributing equity with others in return for sharing profits and losses at a predetermined ratio. The partners' contributions need not be equal, and contributions may be in the form of physical or intangible capital, such as labor, management, skill, and goodwill. In the case of mark-up or cost-plus modes of financing, the finance user stands obligated to pay back the entire financing. The repayment by the finance user is, in fact, predetermined in advance and hence becomes a sort of debt from the finance user's point of view. For further details see Khan (1994).

<sup>&</sup>lt;sup>10</sup> Another distinct feature of *mudaraba* is that the distribution of profits can only take place after the capital owner has retrieved his capital (see Fadeel, 2002).

Kifala, amana, wikala, and ju'ala contracts deal with custodial services, brokerage, consulting, guarantees and insurance. In a kifala, guarantee contract, a third party becomes surety for the payment of a debt, if unpaid by the person originally liable. It is a pledge given to a creditor that the debtor will pay the debt, fine or any other liability. Conceptually related to kifala, takaful is in the nature of a mutual guarantee and provides for contracts of mutual insurance. Amana means literally a trust deposit; it gives rise to contracts where a party deposits its resources with another with no other purpose than safe keeping. Demand deposits are generally governed by amana contracts. Wikala gives a power of attorney or an agency assignment. The contract of ju'ala deals with offering a service for a predetermined fee. It is used to offer professional services, fund placements, and trust services. Ju'ala allows contracting on an object not certain to exist or to come under a party's control. It can be utilized to introduce innovative financing structures (Vogel & Hayes, 1998).

*Mudaraba* and *musharaka* are popular contracts. <sup>12</sup> Both types have been used to mobilize the entire reservoir of monetary resources of the medieval Islamic world for financing agriculture, crafts, manufacturing and long distance trade. <sup>13</sup>

#### 2.2. Framework of Islamic financial intermediation

An IFI will perform the functions of financial intermediation through screening projects and monitoring the performance of the ones it finances on behalf of depositors—investors. The *mudaraba* contract becomes the cornerstone of financial intermediation. Two concepts have been suggested for the structure of an IFI. The first one is commonly referred to as the "two-tier mudaraba" model. The second is the "two-windows" model.

In a "two-tier mudaraba" model, both funds mobilization and allocation are on the same basis of profit sharing among the depositor, the bank and the entrepreneur. The first tier mudaraba contract is between the depositor—investor and the bank, where the bank acts as a mudarib for the depositor who shares in the earnings of the bank's investments financed with his resources. The liabilities and equity side of the bank's balance sheet includes deposits accepted on a mudaraba basis. Such profit-sharing investment deposits are not liabilities as their value is not guaranteed and they may incur losses. They are rather a form of limited-term, non-voting equity. In this model, banks would also offer demand deposits that yield no returns and are repayable on demand at par value and are treated as liabilities. The second tier features mudaraba contracts between the bank as supplier of funds and entrepreneurs seeking funds and sharing profits with the bank according to a ratio stipulated in the contract.

The salient feature of the "two-tier mudaraba" model is that it does not factor any specific reserve requirement on either investment or demand deposits. It has been argued that in contrast to investment deposits, demand deposits are liabilities which are not supposed to absorb any loss and therefore reserve requirement should be introduced for them (Mirakhor, 1989; Khan, 1986). In the "two-tier" model, by design, the assets and liabilities sides of a bank's balance sheet are

<sup>&</sup>lt;sup>11</sup> In Islamic law, *kifala* is the creation of an additional liability with regard to the claim, not to the debt (see Ayoub, 2002).

<sup>&</sup>lt;sup>12</sup> In *musharaka* and *mudaraba*, the ratio of profit distribution may differ from that of capital contribution, but the loss must be divided exactly in accordance with the ratio of capital invested by each of the partners (see Ayoub, 2002).

<sup>&</sup>lt;sup>13</sup> It is claimed that these instruments were used not only by Muslims but also by Jews and Christians to the extent that interest-bearing loans and other overly usurious practices were not in common use (see Udovitch, 1981 and Chapra and Ahmed, 2002).

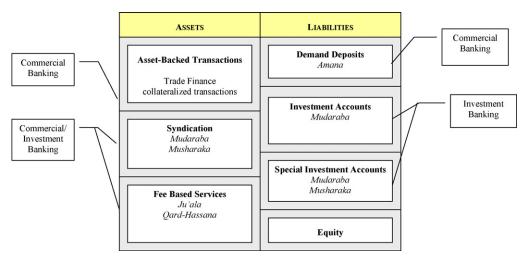


Fig. 2. Stylized balance sheet of an IFI.

fully integrated and thus should minimize the need for active asset/liability management. The quasi-full risk-sharing feature of the model would provide stability to the bank against economic shocks.

The "two-windows" model, in contrast to the "two-tier mudaraba", takes a different view on reserve requirements. According to the "two-windows" model, bank liabilities are divided into two windows: one for demand deposits (liabilities in the strict sense) and the other for investment deposits, not liabilities in the conventional sense; the choice of the window being left to the depositors. Investment deposits are used to finance risk-bearing investment projects with the depositor's full awareness. The model requires banks to hold a 100% reserve on the demand deposits that are guaranteed by the bank and no reserve on the investment deposits that are used by the banks to finance risk-bearing investments.

The liabilities side of an IFI's balance sheet typically includes current, restricted and unrestricted investment accounts (Fig. 2). Current accounts are non-earning custodial arrangements and are repayable in full on demand. They are based on the principle of *al-wadiah* (trust or safe-keeping), creating an agency contract for the purpose of protecting and safekeeping depositor's assets. However, the largest portion of an IFI's financial liabilities would consist of investment accounts, in principle not liabilities but a form of equity investment, generally based on the principle of *mudaraba*. <sup>14</sup> They would be offered in different variations, often linked to a pre-agreed period of maturity, which could range from 1 month upward and could be withdrawn upon advance notice. The returns are distributed between depositors and the bank according to a predetermined ratio. A distribution of 80% to investors and 20% to the bank would be typical. <sup>15</sup>

An IFI may also offer restricted investment accounts customized for high net-worth individuals or institutional clients. These accounts also operate on the principle of *mudaraba*, but the modes of investment of the funds and the distribution of profits are customized to the needs of the clients. In general, restricted investment accounts are linked to special investment opportunities that have specific size and maturity and result from the IFI participation in syndication, private

<sup>&</sup>lt;sup>14</sup> Particularly the case for unrestricted investment accounts.

<sup>&</sup>lt;sup>15</sup> This ratio may vary from these numbers, however.

equity placement, joint venture, or a fund. To some extent these accounts resemble conventional specialized funds that finance different asset classes. The maturity and distribution of profits for restricted investment accounts are negotiated separately for each account, with the yield directly related to the success of the particular investment project (Lewis & Algaoud, 2001). In addition to deposits, an IFI offers basic conventional banking services, such as fund transfers, letters of credit, foreign exchange transactions, investment management, and advice for a fee to retail and institutional clients.

Whereas the liabilities side of an IFI offers limited modes of raising funds, the asset side can carry a more diversified portfolio of asset classes with a range of risk and maturity profiles. For *short-term maturity*, *low-risk investments*, there is a choice of asset-backed securities that resemble debt securities in terms of payoffs. Such securities originate from trade related activities and include *murabaha*, *bay' mua'jal*, or *bay' salam* that are arranged by the IFI. In offering these services, the IFI combines a variety of skills and information that spread across various markets and uses trading expertise and the customer base. The short-term maturity of these instruments and their backing by real assets mitigate the risks the IFI carries.

Medium-term maturity investments include investment in ijara and istisna based assets. <sup>16</sup> These contracts are backed by an asset, and can also have a fixed or floating rate feature, which can facilitate portfolio management. Common features of Islamic (ijara) and conventional leasing provide additional investment opportunities for IFIs since investing in conventional leases with appropriate modifications can be consistent with Shariah principles. In addition, an IFI can set up special purpose portfolios to invest in a particular asset class and can finance these portfolios by issuing restricted investment accounts, based on mudaraba contracts. For longer-term maturity investments, an IFI can engage in private equity activities in the form of musharaka.

#### 2.3. Islamic financial intermediation in practice

Practices and balance sheets of ongoing IFI businesses differ from the framework outlined in the foregoing in notably four aspects: (a) IFIs' preference for liquidity, (b) income allocation policies, (c) implementation of the risk-sharing principle, and (d) governance rights granted to investment account holders. These issues bear on the industry's potential and compound the challenges faced by its regulators.

The first aspect is the significant deviation of the structure of assets from what basic principles would lead to anticipate. IFIs have a clear preference to hold asset-backed securities, based on trade finance. This preference reflects the low risk and high liquidity of sale-related securities. In addition to trade-based instruments, IFIs prefer leasing, considered to carry a lower risk and have less uncertain returns than *musharaka* or *mudaraba*. In a typical IFI, sale and lease-based transactions dominate the assets portfolio and can exceed 80%, with the remainder allocated to profit-sharing arrangements (Iqbal & Mirakhor, 2002). As a result, IFIs have limited themselves to a small set of asset classes that constrain portfolio diversification. Though this practice is conservative as assets are collateralized, it has associated costs in terms of additional exposure to credit and operational risk. Table 1 presents the distribution of assets across different modes

<sup>&</sup>lt;sup>16</sup> Khan (1994) points out that leasing would require a bank to deviate from its basic character as a financial intermediary as it would require it to get involved in purchasing an asset and then keep its ownership until the asset is disposed of responsibility in terms of maintenance and associated costs over the life of the contract (at least, for operating lease). Disposing of the asset requires not only bearing all risks resulting from price fluctuations, but also some marketing expertise. Therefore, it will require the bank to engage in activities beyond financial intermediation.

Year	Murabaha (%)	Musaharaka (%')	Mudaraba (%)	Bay' Salam (%)	Others (%)
2002	35.9	27.9	4.6	3.3	28.3
2003	44.7	23.2	5.7	4.8	21.6
2004	38.5	32	5.7	3	20.8

Table 1 Concentration of assets in trade—finance instruments in Sudan

Source: Various issues of annual reports by Bank of Sudan.

of financing in Sudan. The average share of unrestricted investment accounts in the total balance sheet of selected banks is about 60%, and ranges between 42 and 80%. Current accounts range between 0.5 and 20% of the total balance sheet.<sup>17</sup>

A second aspect of the divergence between the practice and the premises is the policies that affect the allocation of income between shareholders and account holders or between different classes of account holders. In its essence, Islamic finance would be consistent with clear barriers in the deployment of assets between those funded by demand deposits, unrestricted and restricted investment accounts, and equity. However, in practice the asset side is treated as one large bucket with all stakeholders' funds co-mingled together, suggesting that operating IFIs are more akin to universal banks. However, unlike conventional universal banks, IFIs do not place firewalls to separate legally, financially, and managerially their investment and commercial banking services (Abdel Karim, 2001). As a result, investment accounts' funds are not "ring-fenced" from other funds, including those of equity holders. This feature poses a challenge to regulators because IFIs activities have features of banking and capital markets generally regulated under different principles. Therefore, taking a one-solution-for-all approach may defeat the objective of the regulation.

A third aspect is the status of investment accounts. Although they are supposed to be operating on profit and loss principles, actual practice differs. IFIs have faced the criticism that when they do write down the value of assets, they do not in practice write down the value of deposits (Cunningham, 2001). This implies that losses on the asset side are absorbed by either other depositors or equity holders. This practice raises a question on the degree of transparency and information disclosure. It also raises the issue of the separation of asset categories to match them to liabilities either through fire-walling or segmentation.

A fourth aspect is the investment account holders' governance rights. Large investment accounts serve as a source of capital to finance pools of investments, sharing risks with the financial institution, but without any rights in governance or monitoring (Archer, Karim & Al-Deehani, 1998). Under such circumstances, regulators and *Shariah* boards need to address the issue of protection of the rights of investment account holders.

#### 2.4. Specific risk features of Islamic financial intermediation

IFIs face five broad risk categories: transaction, business, treasury, governance, and systemic risks (Fig. 3). The following focuses on risks specific to IFIs: (a) displacement risk; (b) quality of management; (c) harmonization of the institutional environment; (d) liquidity management, and (e) counter-party risk. <sup>18</sup>

<sup>&</sup>lt;sup>17</sup> A precise picture is not always easy to obtain because of the reporting made where some banks include restricted investment accounts into their liabilities while others do not.

Appendix B provides a description of the different risks and their impact on different stakeholders.

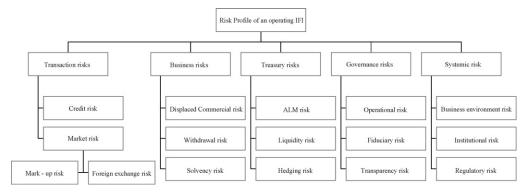


Fig. 3. Risk profile of an operating IFI.

Displacement risk is identified by AAOIFI (1999) as the risk of a deterioration of an IFI returns to equity holders to maintain the IFI's attractiveness to investment account holders. It arises when an IFI pays investment depositors a return higher than what should be payable under the "actual" terms of the investment contract. An IFI engages in such practice to induce investment account holders not to withdraw their funds to invest them elsewhere. As a result, during bad times the bank may forgo up to all its shareholders' profits, adversely affecting its own capital. An example is the International Islamic Bank for Investment and Development in Egypt, which distributed all of its profits to investment account holders while the shareholders received nothing from the mid to late 1980s (Warde, 2000). An implication of displacement risk is the need for the IFI to maintain higher levels of reserve capital than would be envisaged under a pure profit and loss sharing regime.

The quality of management and operational processes raises specific risks for IFIs. As an emerging industry required to abide by different rules, Islamic finance needs management skills fully conversant with conventional and Islamic finance principles. While familiarity with either finance or *Shariah* may not be an issue, the combination of both types of skills is less widespread. In addition, compliance with *Shariah* imposes on IFIs operational procedures that require management information systems less easily accessible in the market. The quality of management and internal control processes may present operational risks and expose IFIs to potential losses. <sup>20</sup> In addition, IFIs may be exposed to a technology risk, associated with the use of software not specifically tailored to their needs (Khan & Ahmed, 2001).

Limits in the harmonization of the institutional environment governing IFIs' conduct of financial intermediation presents risks to their performance. At the forefront of these limits is the institutional risk resulting from the limited consensus among Fiqh scholars on contracts. For instance, some Fiqh scholars consider the terms of a murabaha or istisna contract to be binding to the buyer; others argue that the buyer has the option to rescind from the contract even after making an order and paying the commitment fee (Khan & Ahmed, 2001). This limited standardization as

<sup>&</sup>lt;sup>19</sup> In 1988, the bank distributed to its depositors an amount exceeding its profits, and the difference appeared in the bank's accounts as "loss carried forward". It is also reported that this bank was subject to temporary takeover by the Central Bank of Egypt; see Warde (2000).

<sup>&</sup>lt;sup>20</sup> For instance, an internal control problem cost the Dubai Islamic Bank US\$ 50 million in 1998, when a bank official did not conform to the bank's credit terms. This also resulted in a run on deposits in the magnitude of US\$ 138 million, 7% of the bank's total deposits, in just 1 day (see Warde, 2000).

well as the absence of effective litigation and dispute resolution systems increases IFI's exposure to counter-party risks of default and delinquency.<sup>21</sup> Furthermore, IFIs are subject to a regulatory risk that may result from confusion associated with the dual regulation to which they are subject in countries with mixed systems of Islamic and conventional banking.

IFIs are vulnerable to *liquidity risk* given the constraints they face in using conventional money market instruments, considered not *Shariah* compliant. IFI's surplus of liquidity needs to be invested and shortage needs to be funded (Maroun, 2002). Prohibitions by *Shariah* law from borrowing as well as the absence of an active inter-bank *Shariah* compliant money market restrict IFIs' options to manage their liquidity. The current use of secured commodity *murabaha* and short-term trade financing has enabled IFIs to invest their short-term surplus cash.<sup>22</sup> However, there is not as yet an efficient mechanism for funding shortage of cash in case of need.<sup>23</sup> These factors have limited IFIs' ability to invest their capital in long-term, generally less liquid but more profitable assets in order to honor withdrawal requests from their depositors.

IFIs face a *counter-party risk* inherent in some modes of Islamic finance. It is present in case of deferred payment and delivery contracts and when these are combined with a mark-up *murabaha* financing. In a deferred delivery, *bay' salam*, as well as in production orders, *istisna*, contracts, the bank is exposed to the risk of failure to supply on time or at all or failure to supply the quality of goods as contractually specified. This combined credit risk and counter party risk may be compounded with a commodity risk related to the storage, in particular in the case of agricultural-based contracts (Khan & Ahmed, 2001).

The *mudaraba* contract could expose an IFI to a larger counter party risk. When the IFI as *rabb-ul-mal* books an asset with a *mudaraba* contract, it bears all the losses in case of a negative outcome. In addition, the IFI cannot oblige users of the funds (*mudarib*) to take the appropriate action or exert the required level of effort needed to generate the expected level of returns (Lewis & Algaoud, 2001). In a *mudaraba*, the IFI does not have the right to monitor or participate in the management of the project and may loose its principal investment in addition to its potential profit share if the entrepreneur's books show a loss (Errico & Farrahbaksh, 1998).

#### 3. Regulation of Islamic finance

The legal and regulatory practice governing IFIs varies across countries (Archer & Ahmed, 2003). Indonesia, Iran, Lebanon, Malaysia, Pakistan, Sudan, Turkey, U.A.E., and Yemen have enacted Islamic banking laws. However, these laws may not always fully take into account the unique characteristics of Islamic banking. For example, the Malaysian Islamic Banking Act (1993) refers to banking as a "lending business" and investment accounts are considered to be liabilities. In Iran, IFIs accept customer investments on the basis of the *wikala*, agency contract, not the

<sup>&</sup>lt;sup>21</sup> While the imposition of penalty in the case of late payment is not accepted according to *Shariah* law, some banks enforce the penalty as a deterrent mechanism and use the collected sums for charitable causes (see also Archer and Ahmed, 2003).

<sup>&</sup>lt;sup>22</sup> It is estimated that IFIs have US\$ 20 to US\$ 30 billion available for short-term investment (see Ali, 2002).

<sup>&</sup>lt;sup>23</sup> Secured commodity *murabaha* involves the purchase of commodities, traded on the London Metal Exchange, with the full payment of the spot price. This is followed by their sale to a third party on the basis of *murabaha* for a deferred payment with a maturity of 1 week to 6 months with spot delivery. Repayment of the principal and profit is usually guaranteed by an acceptable international bank. Short-term trade financing is similar to secured commodity *murabaha* except for the fact that it is mainly used to finance the importation of basic commodities needed locally, such as crude oil (see Maroun, 2002).

Country	Banking system	AAOIFI standards	Islamic banking	Existence of <i>Shariah</i> Supervisory Boards	Supervision	
Iran	Islamic	No	Yes	No	No	
Jordan	Dual	IAS	Yes	Yes	Consolidated	
Kuwait	Dual	IAS	Considered	Yes	Consolidated	
Sudan	Islamic	Yes	Yes	Yes	_	
Yemen	Dual	No	Yes	Yes	No	
Malaysia	Dual	IAS	Yes	Yes	Consolidated	

Table 2 Diversity in the legal, regulatory and supervisory arrangements

Source: Compiled from different sources including: Zaher and Hassan (2001) and Chapra and Khan (2000).

*mudaraba* contract, as is the case in other countries.<sup>24</sup> In countries, such as Saudi Arabia and Egypt, no laws have been enacted to govern IFIs. They operate under the same laws governing conventional banks. Kuwait's IFI came only in 2004 under the supervision of the Central Bank.

Greater attention has been paid since the early 1990s to the prudential framework governing IFIs. Differences between balance sheet structures of IFIs and conventional banks and the features of Islamic financial contracts have been recognized to have important implications for accounting and financial reporting (AAOIFI, 1999; Archer & Ahmed, 2003). Early studies raising the issues of regulation and supervision of IFIs include Archer and Abdel Karim (1997), Archer et al. (1998), and Errico and Farrahbaksh (1998). These studies note that an appropriate regulatory framework needs to place greater emphasis on accounting standards and information disclosure. Errico and Farrahbaksh (1998) suggest a supervisory framework, based on the standards and best practices established by the Basle Committee, and an Islamic finance-tailored prudential framework based on the CAMEL system. Sundararajan and Errico (2002) reinforce this view by recommending a regulatory framework created along the same lines as a CAMEL framework and the adoption of a Securities and Exchange Commission (SEC) type disclosure system (Table 2).

AAOIFI has promulgated a statement on the purpose and calculations of capital adequacy ratio (CAR) for IFIs, which takes into account differences between deposit accounts in conventional banking and investment accounts in Islamic finance. This statement builds on the capital adequacy principles laid down by the Basel Committee (Chapra & Khan, 2000; Mulajawan, Dar & Hall, 2002). Archer and Ahmed (2003) point out features of Islamic finance that require specific accounting, corporate governance, and prudential regulations. They note issues regarding the applicability of the IFRS to IFIs and further describe efforts undertaken notably by AAOIFI in creating accounting and auditing regulations, standardizing *Shariah* interpretations and establishing capital adequacy ratios for IFIs.

In November 2002, a group of central banks from Islamic countries established the Islamic Financial Services Board (IFSB) in Kuala Lumpur. The IFSB has developed international standards on capital adequacy, risk management, corporate governance, transparency, disclosure and supervision. With the AAOIFI, the IFSB, and the various national efforts to provide a framework

<sup>&</sup>lt;sup>24</sup> Wikala operates on the basis of the agent receiving a fixed fee, not a share of profits like in mudaraba.

<sup>&</sup>lt;sup>25</sup> A number of other studies have been prepared since then, many quoted in this paper.

<sup>&</sup>lt;sup>26</sup> CAMEL system stands for capital adequacy (C), asset quality (A), management of investment accounts (M), earnings quality (E), and liquidity management (L) of banks.

<sup>&</sup>lt;sup>27</sup> See also Mulajawan, Dar, and Hall (2002) for discussion of the issue and suggestion for a modified CAR.

governing Islamic financial intermediation, the essential building blocks for the formulation and implementation of public policy are coming into place. Exploiting the synergies between these initiatives will be essential for consolidating the industry's credentials and enhancing its stability and efficiency.

#### 3.1. Rationale for regulation

This paper argues that it is reasonable to propose minimal regulation for IFIs operating fully in accordance with the core principle of risk sharing. However, as prevailing practices present risks akin to those in conventional banking, a similar regulatory framework would be justified. Diverse views on the need for regulation in conventional finance range from positions of almost total opposition to any regulation, to the justification of broad, intrusive regulation (Rodriguez, 2002). These positions reflect varying rationales for regulation: (i) the supply of a public good, (ii) the protection of public resources, or (iii) the enhancement of the integrity of fiduciary contracts. Islamic finance has been subject to a similar diversity of views. For example, El Sheikh (2000) mentions, among others, "the widely held view by Islamic jurists... that Islamic banks should not be regulated or supervised by any authority". While acknowledging the latter view, Chapra and Khan (2000) argue for the need for regulation. The following discussion contrasts prevailing views on the rationales for the conventional finance regulation with various arguments generally put forward for IFIs' regulation. It reviews the public good, protection of depositors, integrity of fiduciary contracts views of regulation and also assesses their relevance to IFIs.

#### 3.1.1. Public good view

It provides that regulation is a public good that the market cannot supply on its own. This view proceeds from two premises. A first one is that the objective of prudential regulation is the mitigation of risks taken by stakeholders (e.g., depositors) unable to undertake on their own the necessary due diligence to assess these risks. Some stakeholders have sufficient investment savvy to develop these assessments on their own and would not in principle need, in the same degree, the support of public regulation, except for transparency and disclosure requirements necessary to conduct their due diligence. A second premise of the public good view is that the objective of prudential regulation is the mitigation of risks of disruption of the normal business performed by the financial system in terms of payments or the provision of liquidity. Such systemic risks could be the outcome of a spillover from a distressed institution, undermining the confidence in the system. It could also be the result of a failure in the payments system itself, whether its material infrastructure or the mechanisms and instruments to exchange liquidity. Consequently, from the public good perspective, the design of prudential regulation would call for a clear sense of the type, quality and quantity of the public good to be delivered, as well as the nature of the risks and risk exposure or values at risk involved.

#### 3.1.2. Protection of public resources view

Another view of financial regulation is that the existence of an explicit or implicit safety net, notably in the form of deposit insurance, creates a government contingent liability. The existence of such a commitment of public resources would entail not only the right, but also the duty of the public authority to regulate activities whose performance may endanger these resources. This view is not unrelated to the public good perspective as the existence of deposit insurance is itself a public service.

#### 3.1.3. Integrity of fiduciary contracts

Another perspective on regulation is provided by a focus on the fiduciary nature of the business of finance. The role of regulation is seen here as the provision of sufficient checks and bounds to mitigate the risks of the intermediary failing the trust of its stakeholders. These are generally seen as the depositors, but also include small shareholders, raising the importance of sound corporate governance.

Chapra and Khan (2000) suggest four reasons for the regulation of IFIs, considered below in light of the foregoing three generic rationales for regulation. They include systemic objectives, the protection of depositors, compliance with *Shariah*, and the integration of Islamic finance in the international financial system.

Systemic considerations, relate to the need to maintain an orderly payments system and ensure the development of the economy. Maintaining orderly payments is clearly in the nature of a public good whose supply stability needs to be protected. Whether IFIs operate according to core principles or follow prevailing practices, regulation to mitigate the risks of disruption in payments can be justified. In contrast, the promotion of economic development may be beyond the role that should be assigned to financial regulation. Activity expansion and growth would be promoted by increased trust in the financial system that regulation could provide. However, its design to explicitly promote development is likely to distort its objectives of ensuring soundness and stability and pose difficult challenges for regulators having to choose between promoting economic development and ensuring the stability of the financial system.

Protecting the interest of depositor of IFIs fully abiding with risk-sharing principles is less compelling than for conventional finance. This view seems to underlie the absence of reserve requirement in the "two-tier mudaraba" model. The essence of Islamic financial intermediation being symmetrical risk as well as profit and loss sharing, introducing a guarantee on the downside would run counter to the core objective. Investment depositors should, however, expect to be informed on the features of the contract they enter into and have recourse if it is breached. Hence, regulation promoting the integrity of fiduciary contracts would be consistent with the theory of Islamic finance. With existing IFIs, depositors may not always be fully apprised on the risks they face in principle with their deposits while at the same time IFIs try to protect their deposit base by providing sufficient security assurance and returns. Under the circumstances, there is a case for regulation that seeks to protect depositors, public resources, and fiduciary contract integrity. The protection of demand depositors is envisaged in the "two-windows" model and can be justified through any of the three perspectives considered in this paper.

#### 3.1.4. Ensuring compliance with Shariah

The relationship between civil and religious law varies across national jurisdictions. In the case where there is an orientation toward a strong separation, it would be difficult to justify assigning to public authorities the role of ensuring that financial intermediation activities comply with *Shariah*. The issue of truth in disclosure and in advertisement would, however, remain and would allow stakeholders to have recourse. This would not, however, be a matter of financial regulation, but one of broad institutional infrastructure for business. In jurisdictions where the distinction between civil and religious law is less pronounced, one can see a public policy choice for assigning to a public regulator the role of ensuring that banking activity complies with *Shariah*.

<sup>&</sup>lt;sup>28</sup> The protection of demand depositors, e.g., *amana* deposits, and their role in payments could call for some regulation, however. At the same time, it raises the issue of the nature of the business in which the institution is engaged.

The integration of IFIs in the international financial system would develop from the participation of IFIs in the financing of international trade and international payments. Counterparts of IFIs would want to be satisfied of the ability and commitment of IFIs to fulfill the contracts they enter into. In this respect, national and international regulation can be grounded in the public good need to ensure orderly participation in international payments and the integrity of fiduciary contracts.

#### 3.2. Regulatory options

The "what to regulate" and "how to do it" questions are now considered. Regulators have traditionally governed their jurisdictions through direct rules mostly on capital, assets, and income allocations. At the same time, regulatory changes often lag financial developments and may constrain financial institutions to flexibly manage their portfolios, or provide them with opportunities to take unchecked risks implicitly comforted by the existing safety net (MacLachlan, 2001). In adapting to these developments, the profession is now moving toward letting regulated institutions assess and manage their risks within a framework agreed on with the regulator (Basel Committee on Banking Supervision, 2003). In this context, numerous voices call for the introduction of mechanisms to let the market impose the needed discipline on financial intermediaries (Calomiris, 1999; Evanoff & Wall, 2000). Others have questioned the applicability and effectiveness of such market reliance (Basel Committee on Banking Supervision, 2003; Bliss, 2001; Karacadag & Shrivastava, 2000).

In light of the discussion on risks and rationales for regulation, capital, transparency, and licensing requirements are primary candidates of what to regulate. The method of regulation can rely to various degrees on a combination of direct "command and control" rules, market discipline, or organization specific home-developed risk assessments. The type and method of regulation chosen will depend naturally on the adopted view on the rationale for regulation, on the extent to which IFIs follow core principles, and on the assessment of their practices.

For IFIs fully following risk-sharing principles, one can envisage minimal regulation. It would emphasize less capital requirements, more transparency and disclosure, more screening of management, more licensing of business lines, and equivalent supervision in comparison with regulation applying to conventional banking. Larger reliance on direct market discipline and less on "command and control regulation" can also be features of their regulation.

The "two-tier mudaraba" or "two-window" frameworks use mostly profit and loss sharing (PLS) accounts on both sides of the balance sheet. They would provide trade finance or facilitation as well as payments services. They would take *amana* deposits as part of these services. The PLS intermediation has direct market discipline embedded in it and, hence, should not require significant capital. Some minimal capital may be needed for protecting the reputation of the institution that is its legitimacy as a partner for all its stakeholders.<sup>31</sup> But one could argue that

<sup>&</sup>lt;sup>29</sup> This is described as "the increasingly ineffective command-and-control regulations" in Chami, Khan, and Sharma (2003).

<sup>&</sup>lt;sup>30</sup> The essence of market discipline is to induce market investors to penalize excessive risk-taking by raising funding cost and limiting its availability. This can happen directly with depositors demanding higher returns or withdrawing their deposits. It can happen indirectly if there is an asset traded in the market whose price promptly reflects investors' assessments of the risks that the institution that has issued them is taking.

<sup>&</sup>lt;sup>31</sup> This would deal with Chapra's and Khan's point on the acceptance of IFIs as members of the international financial system, sometimes also referred to as international integration.

sufficient transparency and disclosure should allow markets to judge this legitimacy and induce the institution on its own volition to maintain the needed level of capital. The case for a capital requirement to protect orderly payments and *amana* deposits would be stronger. It is not likely to lead to the same level of capital requirement but would suggest the need to consider the appropriateness of bundling the intermediation and payments services in the same balance sheet. Consequently, the regulation of an IFI, compliant with risk-sharing principles would need to put a heavy emphasis on transparency and disclosure as well as licensing requirements, but deemphasize capital requirement.

In the existing IFIs, prevailing intermediation practices would seem to point to the need for equivalent emphasis on capital requirement, supervision and licensing, but more emphasis on transparency and disclosure, compared to conventional banks.<sup>32</sup> Competitive pressure is inducing the established IFIs to provide sufficient safety and return to depositors in unrestricted investment accounts. They consequently face the risk of "displacing" shareholders in their returns and capital to accommodate these depositors. As a result they practically face an intermediation risk similar to conventional banks' and should therefore be subject to similar capital and supervision requirements. The pooling of *amana*, unrestricted investment deposits and capital in funding their assets raises transparency issues for the distribution of returns or losses. Consequently, it calls for rigorous transparency and disclosure requirements. It would also call for significant scrutiny in licensing, notably with respect to managers' profiles.

#### 3.3. Broader institutional requisites for effective regulation

Effective regulation requires readable, reliable signals of the risks that a financial institution faces resulting from its own behavior or from events external to it, as well as risks that may affect the financial system through contagion or infrastructure failure. It also requires an ability to process these readable signals and to introduce the appropriate corrective actions as needed. As such it may be more akin to sophisticated art that uses advanced techniques.<sup>33</sup> But even if art presumes independence and creativity beyond the availability of a good technique, it still requires the necessary tools.

In this respect, the role of the broader institutional infrastructure is core. Of particular importance would be the clarity and enforceability of property rights, the quality of contract law and opportunity to bring prompt remedies to breaches, the efficiency of judicial recourse and other dispute resolution mechanisms. The majority of existing IFIs operate, however, in jurisdictions where there is much left to be desired in these matters, which would adversely affect their performance.

More closely related to finance, the quality and transparency of accounting and auditing play a crucial role. Measurement and comparison of risk exposure should underlie regulation. The efforts at establishing accounting and auditing standards for IFIs have made a significant contribution in this respect. However, disclosures of accounting results may not be an adequate instrument for risk assessment because, as a structure, accounting is directed toward value not risk allocation (Merton, 1995). This situation gives additional importance to other services, such as the collection and dissemination of financially relevant information and credit rating. In addition,

<sup>&</sup>lt;sup>32</sup> In conventional banks that offer a window for Islamic services, there may be opportunities for regulatory arbitrage that would also call for transparency and disclosure.

<sup>&</sup>lt;sup>33</sup> Although dealing with the Federal Reserve policies and not regulation per se, Woodward's title of his book on A. Greenspan, "The Maestro," is indicative of this aspect.

it would call for renewed efforts at enhancing the relevance of accounting and auditing for risk assessment.

With financial innovation, various instruments and structures are continuously emerging to meet the demand for specific services. As a result, the functions of financial businesses are evolving accordingly. Such increased fluidity of the regulated businesses calls for nimbleness and skills on the part of the regulator with frequent assessments of the adequacy of their perspective.<sup>34</sup>

#### 4. An organizational framework for the Islamic finance industry

The bundling of commercial and investment banking within IFIs and prevailing practices compound the difficulties of designing a regulatory framework to govern them. In particular, the risks depositors face when their funds are co-mingled are difficult to assess in the context of Islamic financial intermediation where there is a limited availability of hedging instruments and constraints on liquidity management. Under these circumstances, there would be a case to consider an organization of the industry where IFIs structure their operations in clearly defined and separated segments catering to classes of depositors with different risk appetite and investment objectives. For example, one class of depositors may be looking for custodial services only, while others may need to place funds for performing day-to-day transactions and therefore would not exhibit any risk appetite. Similarly, there may be a class of depositors that is less risk averse and readier to see IFIs make less liquid longer term investments.

Historically, stability and efficiency arguments have been used to argue for and against segmentation. These arguments need to be considered in the context of the stage of financial development and the robustness of the broad institutional environment. In particular, broad and deep financial markets, robust and effective regulatory and supervision arrangements, sound corporate governance rules, and a clear accounting and auditing framework would comfort concerns of instability and weak system integrity. Many of these conditions are not yet present for the Islamic finance industry, either due to the limited harmonization in its standards of operation or the poor institutional environment in many of the jurisdictions where it operates. In such a context, a framework for the industry that can accommodate its core principles and address some of the deficiencies of the broader institutional infrastructure could envisage the IFIs structured as a group of fairly independent entities, each designed to optimize the functional demands of its clients. This view is elaborated in Fig. 4, where liabilities and assets are separated according to the risk appetite of depositors into three distinct segments.

Segment A is designed to handle funds for depositors who are highly risk averse, require a high level of liquidity and would use the funds for daily transactions or would prefer to keep savings in safe assets where their capital is preserved. This segment would invest funds in asset-backed securities with fixed-income characteristics, and IFIs intermediate by screening and monitoring such opportunities and making sure that credit and operational risk are contained. The concept is similar to narrow banking and would require a similar approach to its regulation.

Segment B is designed to cater to depositors with the next level of risk appetite who are willing to take some risk in expectation for a higher return, with capital preservation and liquidity less high on their agenda. IFIs would deploy these funds in medium- to long-term instruments, such

<sup>&</sup>lt;sup>34</sup> For example, Merton (1995) suggests considering a functional rather than an institutional perspective for regulation to enhance the ability of regulators to follow market developments.

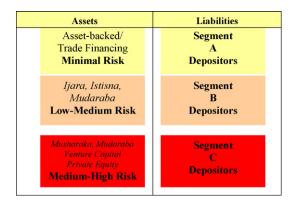


Fig. 4. Organizational framework for the Islamic finance industry.

as *ijara* or *istisna*, or may prefer to invest on *mudaraba* basis directly with the entrepreneur or through *mudaraba* certificates. With a well-developed secondary market for *mudaraba* based funding, then the form of intermediation taken by IFI will be very similar to mutual funds where IFIs will manage and invest depositor's money in different *mudaraba* funds. Since the contractual agreement with the depositors would be similar to the fiduciary responsibility of a mutual fund in a conventional system, the same regulatory principles would apply.

Segment C is designed for investors who would be willing to take additional risk and would like to participate in riskier investments, like private equity or venture capital. IFIs could deploy these funds on the basis of musharaka or mudaraba instruments. When funds are invested on musharaka basis, IFIs also gain rights to participate in the governance of the enterprise, which raises another issue for regulators. The IFI as equity participant becomes an institutional investor that has a vested interest in the governance of the institutions, the recipients of funds. This implies that the financial institution itself becomes a stakeholder in the enterprises that depend on funds it provides. Since Islamic financial principles advocate a stakeholder approach to corporate governance, the IFI would be expected to conduct active monitoring of the businesses it invests in (Iqbal & Mirakhor, 2002). In these circumstances, the IFI would behave in a similar way to financial institutions in a bank-based or insider system practiced in Germany or Japan. It would be expected that a representative of the IFI participates in supervisory boards of enterprises in which they have considerable investment and a long-term relationship. The IFI's relationship with musharaka enterprises would be of long-term nature with active involvement in governance in contrast to a short-term, transactional relationship.

To summarize, an IFI structured to provide financial intermediation through clearly segmented windows or even separate institutions would make the task of regulators in protecting the stability and integrity of Islamic financial intermediation easier. Each entity could then be subject to a regulating principle most suited to its nature. Once standards harmonization efforts bear fruit and the institutional environment is more conducive to broader and deeper Islamic financial markets, the usefulness of segmentation may diminish and should then be reconsidered.

#### 5. Conclusion: the regulatory challenges ahead

Regulators cannot avoid acknowledging the presence of Islamic financial services and their market potential possibly close to 10% of global GDP. The industry's financial stability and its

ability to efficiently intermediate the resources it mobilizes become critical for the communities it serves. However, the emerging and evolving nature of the industry and the competitive pressure it faces call for flexibility and alertness on the part of regulators.

Under the circumstances, regulators would want to consider a two-pronged strategy: managing current practices and shaping the transition towards stable and efficient intermediation. In managing current practices, regulators need to consider: (a) the presence of balance sheets where profit and loss sharing accounts have limited weight, (b) an emphasis on trade and short-term financing, (c) risks akin to those faced by conventional banks, like "displacement risks", and (d) market risks based on interest rates benchmarks used by conventional banks. Given the close affinity of prevailing practices with conventional banking, the regulatory framework cannot be very different. Prevailing IFIs' practices seem to point to the need for equivalent emphasis on capital requirement, supervision and licensing, and a larger one on transparency and disclosure, compared to conventional banks. Supplemental rules addressing IFIs' idiosyncratic features would enhance the effectiveness of existing regulatory arrangements.

A long-term perspective of the industry calls for the development of a consensus vision. A significant intellectual effort geared at providing practical ways of achieving consistency between the demands of the market place and underlying principles will need to be ongoing. This effort would need to include debates that remain substantive, consultative, and evidence-based. In particular, it is important to be clear on the nature of Islamic financial intermediation with special attention given to the consistency of core principles and practice in shaping financial development. In line with a search for clarity an option for the vision may be to consider separating the functions of Islamic financial intermediation in windows or institutions. Such a separation could permit greater transparency of risks. It could also bring to bear the market discipline features embedded in the risk-sharing feature of Islamic financial intermediation, and contribute to its stability. An Islamic financial industry incorporating such segmentation would likely require lighter and more focused supplemental regulation.

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#### Appendix A. Glossary of Arabic terms

Amana (demand deposits)

Bay mu'ajal (pre-delivery, deferred payment)

Bay salam (pre-payment, deferred delivery)
Figh (Islamic jurisprudence)

Deposits held at the bank for safekeeping purpose. They are guaranteed in capital value and earn no return.

The seller can sell a product on the basis of a deferred payment, in installments or in a lump sum. The price of the product is agreed upon between the buyer and the seller at the time of the sale and cannot include any charges for deferring payment

The buyer pays the seller the full negotiated price of a product that the seller promises to deliver at a future date

It refers to Islamic jurisprudence that covers all aspects of life: religious, political, social and economic. *Fiqh* is mainly based on interpretations of the *Qur'an* and *Sunna* (sayings and deeds of the prophet)

#### **Appendix A** (Continued)

Ijara (lease, lease purchase)	A party leases a particular product for a specific sum and a specific time period. 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
Istisna (deferred payment, deferred delivery)	A manufacturer (contractor) agrees to produce (build) and to deliver a certain good (or premise) at a given price on a given date in the future. The price does not have to be paid in advance (in contrast to <i>bay salam</i> ). It may be paid in installments or part may be paid in advance while the balance to be paid later on, based on the preferences of the parties
Ju'ala (service charge)	A party pays another a specified amount of money as a fee for rendering a specific 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
Kifala	It is a pledge given to a creditor that the debtor will pay the debt, fine, or liability. A third party becomes surety for the payment of the debt if unpaid by the person originally liable
Mudaraba (trustee finance contract)	Rabb-ul-mal (capital's owner) provides the entire capital needed to finance a project while the entrepreneur offers his labor and expertise. Profits are shared between them at a certain fixed ratio, whereas financial losses are exclusively borne by rabb-ul-mal. The liability of the entrepreneur is limited only to his time and effort
Murabaha (mark-up financing)	The seller informs the buyer of his cost of acquiring or producing a specified product. The profit margin is then negotiated between them. The total cost is usually paid in installments
Musharaka (equity participation)	The bank enters into an equity partnership agreement with one or more partners to jointly finance an investment project. Profits (and losses) are shared strictly in relation to the respective capital contributions
Qard Hassana (beneficence loans)	These are zero-return loans that the <i>Qur'an</i> encourages Muslims to make to the needy. Banks are allowed to charge borrowers a service fee to cover the administrative expenses of handling the loan. The fee should not be related to the loan amount or maturity
Shariah (Islamic Law)	The Islamic Law extracted from the <i>Qur'an</i> and <i>Sunna</i> (sayings and deeds of the Prophet)
Takaful	Arabic name for insurance based on <i>Shariah</i> rules. An Islamic Insurance is a collective protection scheme. It literally means solidarity. <i>Takaful</i> reflects solidarity and is akin to mutual insurance
Wikala	An agency contract which may include in its terms a fee for the agent. Same contract can also be used to give a power of attorney to someone to represent another's interests
Zakat	Religious tax to be deducted from wealth to be paid to the needy

Source: Archer and Ahmed (2003), Chapra and Ahmed (2002), and Errico and Farrahbaksh (1998).

<sup>35</sup> In a survey by Khan and Ahmed (2001) on the risks perceptions of Islamic bankers, market risk of a *murabaha* mark-up is considered the highest as the contract cannot be re-priced, and swaps cannot be used to transfer it. Operational risk ranks second and points to the need to train employees at IFIs and to adapt software programs and internal systems to IFIs' specific needs. Liquidity risk is also perceived to be important due to the absence of money market instruments needed to manage IFIs' liquidity. Credit risk is perceived to be low due to the security provided by the asset—backed nature of financing that most IFIs use. Finally, Islamic bankers perceive other market risks as ranking lowest in the scale due to the limited trading in commodity and asset-backed securities.

### Appendix B Types of risks facing operating ${\bf IFI}^{35}$

	Type of risk	Definition Institution			Depositors	
			Bank	Shareholders	Demand	Investment
Transaction risks	Credit risk	Failure of counter-party to meet his or her obligations timely and on the agreed terms of the contract	The bank faces counter-party risks in the various forms of contracts: such as bay' mua'jal, mudaraba, musharaka, murabah		They face the risk that the bank does not honor requests for withdrawals at face value	They face the risk that the bank does not honor requests for withdrawals at market value
	Market risk	Risk associated with change in the market value of held assets Mark-up risk is risk of divergence between the murabaha contract mark-up and the market benchmark rate	The bank may incur losses if the benchmark rate changes adversely			
		Foreign exchange risk is the risk of the impact of exchange rate movements on assets denominated in foreign currency	This exposes the bank to risks associated with their deferred-trading transactions as the value of the currency in which receivables are due may depreciate or the currency in which payables are due may appreciate (Archer & Ahmed, 2003)			
Business risks	Business risk	Business risk results from competitive pressures from existing counterparts Displaced Commercial risk is the risk of divergence between assets' performance and expectations for returns on liabilities Withdrawal risk where the bank is exposed to the risk of withdrawal of deposits as a result of the lower rate of return depositors get compared to	Displaced commercial risk may adversely affect the value of the bank's capital. Return on equity goes down Withdrawal risk exposes the bank to liquidity problems and erosion of its franchise value	Shareholders are exposed to the risk of not receiving their share of the bank's profit		Investment depositors may have to forgo receiving their <i>mudarib</i> share
		what the bank's competitors pay Solvency risk is the risk of a bank having insufficient capital to continue operations (Greuning & Bratanovic, 2003)	Solvency risk may expose the bank to loss of its reputation	Solvency risk exposes the different stakeholders to counter-party risks		
Treasury risks	Asset and liability management (ALM) risk	Balance sheet mismatches risk resulting from the difference in terms and conditions of a bank's portfolio on its asset and liability sides	This may adversely affect the bank's capital			

#### Appendix B (Continued)

	Type of risk	Definition	Institution		Depositors	
			Bank	Shareholders	Demand	Investment
	Liquidity risk	Bank's inability to access liquid funds to meet its obligations	The bank is exposed to risk of failure to honor requests for withdrawals from its depositors		They face the risk of not being able to access their deposits when they need to	
	Hedging risk	Failure to mitigate and manage the different types of risks	This increases the bank's overall risk exposure		,	
Governance risks	Operational risk	Failure of internal processes as related to people or systems	The bank incurs losses due to occurrence of that risk hence may fail to meet its obligations towards the different stakeholders	This risk adversely affects return on equity		This risk adversely affects return on assets
	Fiduciary risk	Risk of facing legal recourse action in case the bank breaches its fiduciary responsibility towards depositors and shareholders	Legal recourse may lead to charging the bank a penalty or compensation. This may lead to withdrawal of deposits, sale of shares, bad access to liquidity or decline in the market price of shares if listed on the stock exchange	This risk adversely affects return on equity. For instance, any profits accrued to the bank as a result of investment in non-Shariah acceptable assets would be distributed for charity		This risk exposes investment depositors to economic losses. For instance, any profits accrued to the bank as a result of investment in non-Shariah acceptable assets would be distributed for charity
		Risk of loss of reputation				
	Transparency risk	Risk of consequences of decisions based on inaccurate or incomplete information which is the outcome of poor disclosure	Losses may occur as a result of bad decisions based on inaccurate or incomplete information			
System risks	Business environment risk	Risk of poor broad institutional environment including legal risk whereby banks are unable to enforce their contracts	Business environment risk increases banks' exposure to counter-party risk as weak contracts are not easily enforceable			
	Institutional risk	Risk of divergence between product definition and practices	Institutional risk exposes the bank to counter-party risks due to the unsettled nature of the contract			
	Regulatory risk	Risk of non-compliance with regulations due to confusion, bad management or mistakes	Banks may be penalized for non-complying with the rules or regulations. This could be the result of a high degree of discretion on the part of the regulator or supervisor			

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