

Financial Distress and Bank Failure: Relevance for Islamic Banks

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Introduction

Banking crises are particularly harmful for the economy and detrimental for the health of financial sector. The cost of any banking crisis is not the fiscal burden on government because it is simply a redistribution within the economy—though, this redistribution can have second order welfare effects in terms of envy and dissatisfaction etc. But the real cost of a banking crisis is (i) the deadweight loss and (ii) the consequence of any diversion in macroeconomic policy forced by the crisis. In context of Islamic banking the cost also is the reputation damage to the nascent industry; a slowdown in new developments towards interest free alternatives for the people; and consequently a drag on realization of potential benefits for the society from Islamic finance.

However, a milder crisis has its advantages too. That it may help avert a more serious crisis. It may improve the efficiency of the banking sector by shaking out the inefficient banks. It may force practitioners and researchers to think hard for better approaches to run the financial system. Thus, theoretically speaking, a few and small crisis are better than no crisis at all because they keep the system on guard such that the long run benefits may outweigh their costs.

The literature on banking crisis identify that the banking structure by its nature is unstable and therefore itself contributes to the occurrence of crisis. Being a deposit taking institution the liabilities of a bank are fixed and a fixed interest is promised on them, while its assets in the form of loans are subject

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to credit risk and earn variable interest leading to interest rate risk. Similarly, its demand deposits are of shorter maturity while its loans are for longer duration. Therefore there always exists a risk of maturity mismatch. These features render the banking sector prone to crisis in wake of any shock or decreased confidence of the depositors.

As opposed to this the literature on Islamic banking show Islamic banks to be more stable in theory. According to this literature (e.g., Khan 1987, Ahmed 2002, etc.) linking of returns on deposits with returns on assets of the bank serves as a disciplinary device and increases the efficiency of the bank and the financial system. It also serves as a stabilization device saving the banks from deposit runs in crisis situation. Because when the value of assets of the bank decline due to some shock the liability of the bank also decreases correspondingly due to profit sharing nature of the deposit contracts. Thus, preserving the net-worth of the bank. This feature adds to the stability of individual bank, and by avoiding a domino effect also adds to the stability of the financial system as a whole.

However of recent, some Islamic banks have shown signs of financial distress and few had been forced to close their operations.¹ Why this has happened? To what extent the causes of financial distress and failures identified for the conventional banks are relevant for Islamic banks? What factors are unique to Islamic banks? To our knowledge, so far there has been no systematic study or analysis on Islamic banks failure. This study is a first step in this direction.

In this paper we survey the causes of bank failure and banking crisis, evaluate their relevance to Islamic banks, identify new dimensions that are particular to the structure of Islamic banks. The paper can be thought of as a backgrounder to more detailed analysis and case studies of causes and consequences of financial distress of Islamic banks.

2. Structural Context of Crisis in Islamic Banking

While the Islamic principles of finance are old and well established, 'Islamic' banking has evolved in modern times in particular circumstances and often in environment unsupportive of its growth. A combination of religious, economic, political and other historical factors have influenced the development of its structure. The structural evolution of Islamic banking itself has bearing on the issue of financial distress of Islamic banks.

Initially the Islamic banks were conceived on the concept of two tiered *mudarabah* or in some cases as investment companies. But they were governed

by regulations made for conventional banks which gave rise to particular structure of their assets i.e., greater proportion of *murābahah* financing. Islamic banks have been few and their competition with the well established conventional banks was intense. They were formed with community efforts, in most cases their capitals were small and the scale and the scope of operations limited. Thus they were not able to diversify and also could not bank on each other. Due to tax advantage and legal reasons many of them came up as off-shore banking institutions and hence subject to different regulations than the jurisdiction that they served.

In many countries, despite the knowledge of prohibition of interest and a desire for its abhorrence among the masses and the ways out pointed by intellectual research, the efforts for practical implementation of Islamic finance did not come from public institutions like governments but from individuals or small groups. Since the practical efforts were only from relatively few individuals – i.e., those who could put up large amounts of wealth in establishment of new institutions – Islamic banks tended to become closely owned entities. And in many instances owned and governed by only one or very few wealthy people. Thus, started as voluntary effort by few wealthy individuals for the noble cause of breaking a new path eventually became one man controlled banks. In such circumstances a third party's ability to influence the owner—chairman of the bank started to matter in decision making instead of collective wisdom or professional management. All these structural features discussed in this and the previous paragraph contribute to susceptibility of Islamic banks to financial distress.

Further, the structure of the conventional banking sector also has bearing on the stability of the Islamic banks. While an ideal Islamic bank operating on profit and loss sharing basis both on its asset and liability sides may be more stable than a conventional bank, a crisis that may develop in the conventional banking sector can potentially affect Islamic banks through contagion effect as well as through a general loss of confidence in the banking sector.

Finally, Islamic banks have some features that are distinct to them. And, there are many other features that are similar to conventional banks both in theory and in practice. Therefore among the causes of financial distress in Islamic banks some unique while many common causes can also be identified.

Future evolution and stability of Islamic banks and financial institutions will be influenced by the trend of financial liberalization; development of other non-bank financial institutions; financial innovations; development in e-banking that has the potential to integrate the geographically dispersed

pockets of areas where demand for Islamic banking exists; and coming into being of support institutions that provide conducive financial infrastructure. Current trend in Islamic banking is to develop new financial products useful for Investment banking and to expand in retail and commercial banking with provision of other financial and payments services to the customers.

3. What Distinguishes an Islamic Bank

In order to identify the causes of financial distress for an Islamic bank and possibility of its failure it is important to understand the distinguishing features of an Islamic bank. Islamic banks are financial institutions characterized by:

- Commitment to shun interest based transactions.
- Commitment to promote *ribā*-free alternatives.

Further from the view point of their operations, they are:

- Deposit taking institutions, which are neither the lending institutions nor simply a reseller of commodity on credit; while it does *muḍārabah* it also involves itself in investment banking and financing on profit sharing principles.
- Have two types of deposits, namely demand deposits and investment participation deposits. While Islamic banks' demand deposits are loans from the depositor to the bank, its investment deposits are unsecured, capital-uncertain claims. Instead of a fixed promised return, the bank shares its profits and losses with its investment deposit holders. It therefore implies a strong element of trust and sound business judgment.
- Profit and Loss sharing on the liability side and profit sharing on the asset side is a unique feature of Islamic bank that directly links its asset and liability sides. This feature is thought to make it more stable entity than a conventional bank in which deposits constitute capital certain fixed liability while the asset side is value uncertain.

It is a common observation that clients (seekers of fund), on average, require funds for longer periods of time than that for which depositors, on average, are willing to enter into *muḍārabah*. Thus maturity transformation is one essential function of an Islamic bank like it is an important function of a conventional bank.

Whereas all investment deposit taking by Islamic banks is on *mudārabah* basis. It has been observed that clients who require funds, on average, prefer to get funds on *murābahah* basis than on partnership basis. *Murābahah* cannot be re-priced nor could be sold on a premium or discount at the time of liquidity need by the bank. So, even if the assets and liabilities of the bank are (on average) of the same lengths of time but non-synchronous in period, then there is a liquidity risk for the bank. Thus liquidity synchronization and management is also a function of Islamic bank which is not as important in conventional banks because their loan assets can be sold.

To the extent the banks deposit serves as money—the means of payments, the banks find themselves at the centre of payments system. Its efficiency is vital for the broader economy. To the extent the bank deposits serve as asset swap—privately negotiated value instruments, the banks will find themselves at the centre of valuation system, such as stock and equity markets.

4. What Causes Financial Distress and Crisis in the Banking Sector

The many experiences of the financial distress of individual banks and crisis of the banking sector as a whole in the conventional banking industry has taught us many lessons. Various causes of financial distress and banking crisis have been identified in the policy oriented literature on the subject. The clinical picture, to use the terminology of medicine, is similar in all such episodes that the affected banks are infected much earlier than realized by the regulators. Once the problems magnify they are realized and cause financial distress for the bank. It some times develop into a generalized crisis if other banks also get affected. The future course of the problems depend upon how accurately the regulators can identify the exact causes and what actions they take. The speed of corrective action, resources available in the system for this purpose, and contingency arrangements in place before the crisis also matter.²

Caprio and Klingebiel (1996) point out the reasons for the delayed realization of a bank's troubles. They point out that the banks are different from non-financial firms in that the output and production processes of non-financial firms are more transparent than that of banks; where most of the banking products or services include a promise to pay in the future. While the bad performance of the non-financial firms are immediately passed on to the shareholders and its debtors take queue from the falling prices there is no such mechanism for the banks who can hide their losses by raising more deposits, betting on high risk high return areas or work a Ponzi scheme.

Opacity of bank loans (and allocations) make them harder to sell at the time of liquidity need hence sales are possible only at deep discounts increasing the losses. Thus banks in trouble have the incentive and ability to delay loss recognition. This also leads to deterioration of incentives of the owners and managers of the troubled banks to manage it efficiently and prudently.

On the side of theoretical literature that tries to explain the banking and financial crisis and its causes a bulk of it addresses the issue at aggregate level (generalized crisis) rather than at the level of individual bank failure. It deals with general financial crisis and attempts to model banking as well as sovereign financial crisis.

Among this category, the older literature seeks explanations in the macroeconomic imbalances.³ It pins the cause on economic fundamentals in light of the financial crisis that took place in Latin America. However, it is more focused on currency crisis, though the same can be applied to the banking and general financial crisis. The policy implication is to adjust the macroeconomic fundamentals through prudential fiscal and monetary measures. But the financial crisis of East Asian countries occurred despite sound economic fundamentals, which called into question the validity of these models.

A second generation of theoretical models to explain financial crisis suggest the central role of expectations and coordination failure among creditors, so the crisis can occur independent of soundness of economic fundamentals.⁴ In context of a banking crisis it means that irrespective of solvent position of a bank (or of the banking sector as a whole) if a random event can adversely change the collective expectations of the depositors (i.e., its creditors) then it can precipitate a run on the bank and on the banking system. Thus there can be a range of economic fundamentals over which this type of a pure liquidity crisis can occur. These models are deficient from policy perspective in two ways. First, they do not predict why and when crisis may strike because it is based on some random event generating a sudden coordination of expectations. Second, they do not inform us what to do to contain the crisis.

A third generation of theoretical models attempt to overcome the above shortcomings by redefining the fundamentals more broadly to include micro incentives and policies.⁵ Some other models allow interaction between fundamentals and beliefs so that a crisis is triggered by both factors working together not by any one in isolation.

Among the category of theoretical literature that deals with individual bank failure (or runs) are (i) the models that show instability of fractional

reserve banks on account of early withdrawals by depositors in response to changes in inter-temporal relative returns obtainable from the bank and from elsewhere (say asset markets). These are closer to the first generation models discussed above pertaining to category 1. (ii) There are models that explain bank failures (bank runs) arising from game situation between depositors and the bank with inefficient equilibrium. The inefficiency arises when there is a coordination failure among the depositors and they lose confidence in their bank.⁶ These are closer to the second and third generation models of category 1 discussed above but pertain to individual bank failures.

5. Causes of Financial Distress—Policy Oriented Classification

In this paper we want to approach the subject with policy perspective in identifying the causes of financial distress and banking crisis, and highlight the differences and similarities in importance of these causes for Islamic banks. We therefore take a more basic (fundamental) approach of listing the causative factors and comparing the relevance of each for Islamic banking.

Fundamentally, four important economic agents take part in shaping the banking environment; namely, the government, the central bank or the supervising authority, banks themselves and bank customers be they depositors or clients who borrow.

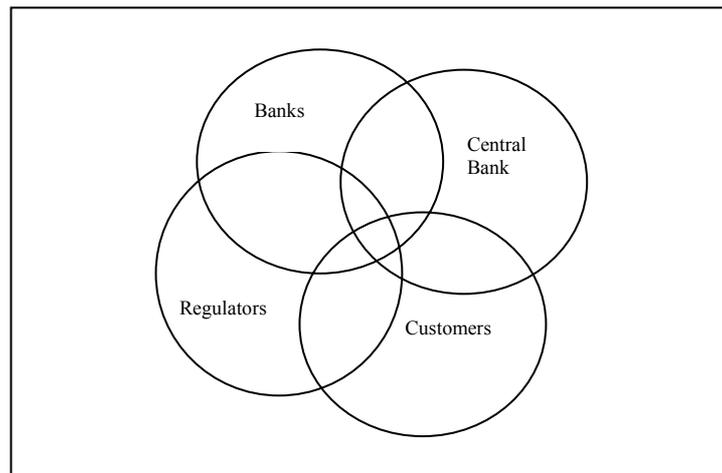


Figure 1: Four Types of Economic Agents - Shapers of the Banking Environment

Therefore, the causes of financial crisis in the conventional banking industry can be classified accordingly into following categories:

1. Those emerging from macroeconomic situation and policies which are mostly in control of the governments or planners.
2. Those emerging from microeconomic situation of individual banks and those arising out of the structure of the financial sector. This can further be divided between what is internal to the bank (i.e., bank's control) and what is external to the bank.

These are summarized in the following table.

Table- 1: Causes of Financial Distress: A Classification

CAUSES OF FINANCIAL DISTRESS AND BANKING CRISIS

Macroeconomic Factors	Microeconomic Factors	
<i>External to the Bank and the Supervisory Authority</i>	<i>External to the Bank (but in the direct control of the supervisory authority, central bank and government)</i>	<i>Internal to the Bank (i.e., in control of bank)</i>
<ul style="list-style-type: none"> • Macroeconomic situation 	<ul style="list-style-type: none"> • Supervision problems • Inadequate infrastructure • Financial liberalization policies • Political Interference • Moral Hazard due to deposit insurance • Lack of transparency • Fraud and corruption 	<ul style="list-style-type: none"> • Banking strategy • Poor credit assessment • Taking interest rate or exchange rate exposures • Concentration of lending • Connected lending • Entering in new areas of activity • Internal control failures • Other operational failures

The role of bank customers (depositors and clients) is also important. However, being large in number their decisions are not coordinated (except in situations of panics and mania when actions get coordinated in the form of a herd behaviour) therefore, for the time being we can abstract away from the role of bank customers as cause of banking crisis.

1. Macroeconomic Situation and the shocks that emerge in the economy outside the banking sector can be one cause of financial crisis. For example, a large and persistent current account deficit in a country can give rise to depreciation of its currency. If most of the liabilities of the banking sector are in foreign exchange or if the banks cannot adjust their liability—asset structure as fast as the home currency is depreciating, then the costs of carrying such portfolio increases eventually putting the banks in financial distress and can possibly trigger a financial crisis.

Such crisis originating through currency risk are more likely in countries with fixed or pegged exchange rate regimes if they ever face a sudden flight of capital. The central bank of such a country would have to support the home currency by depleting its foreign exchange reserves. Its inability to support the home currency would call for a sharp devaluation of the home currency. It can cause financial problems for the banks because they cannot adjust their portfolios that sharply and quickly.

In third world countries, excessive borrowing by the government creates an unsustainable financial position of the government. Therefore, sudden policy shifts take place by the government in its effort to survive or float the economy. Such sudden shifts change the explicit and implicit (effective) relative prices creating economic and financial squeeze in various sectors. If the bank is particularly exposed to one or more such sectors this can result in financial distress for the bank. Examples of such abrupt policy shifts are a sudden decision to privatize state owned enterprises in response to meet the conditionality for financing facilities from IMF.

Changes in macroeconomic conditions can be viewed as change in the structure and rules of the game. Therefore a portfolio strategy of a bank that was optimal under one situation no longer remains an equilibrium strategy after the change in government policies or change in macroeconomic conditions. Unless the environment changes slowly, the position of banks become precarious and the set of feasible strategies of the bank may not even be sufficient to avoid financial distress.

Theories of credit cycles that accompany economic cycles and operate through pro-cyclic movements in the value of collateral and thus extenuate

the amplitude of recession and boom also fall under the category of macroeconomic factors responsible for bank failure.

2. Supervision: Lax supervision allows some shortcomings in the bank escape the scrutiny of supervising authority hence becomes a source of failure. Similarly, over regulation, stringent bank supervision and restrictive rules can stifle the bank and can cause a bank failure.⁷

For example, prohibition of banks to enter into commerce or have their own non-financial subsidiary, the so called narrow banking, can stifle Islamic banking. Narrow banking restrictions makes the banking system more unstable and prone to bank runs. Whereas if the banks are allowed to enter into investment on sharing basis the banking system is more stable not prone to bank runs, however involuntary withdrawal restrictions will apply. Another disadvantage of too much supervision and control is that it reduces opportunities to innovate and puts the system into bureaucratic procedures. In a different context Barth, Gerard, and Levine (undated) in a study of banking systems around the globe have empirically shown that restricting banks from owning non-financial firms is positively associated with bank instability.

3. Inadequate Accounting and Legal Protection of Contracts: Shortcomings in accounting methods and auditing procedures at the banks' level can hide and delay the realization of developing problems of illiquidity and insolvency by supervisors and depositors. Similarly, shortcomings in account keeping at the level of bank clients (borrowers) can reduce banks' income and impede recovery of loans contributing to bank failure.

In this context Islamic banks face peculiar problems at all levels. First, until recently, the accounting procedures used by Islamic banks were not standardized leading to difficulty in inter-bank comparison of accounts. Second, the accounting conventions used by the supervisory authorities are, in most countries, still interest oriented leading to wrong classification of various types of incomes of the Islamic banks which have regulatory repercussions. Third, the accounting culture is not firm among the banks' clients in the third world countries – the jurisdictions where Islamic banks operate. Either accounts are not kept meticulously or forged accounts are kept to avoid taxation, which adversely affects the profitability of Islamic banks. Fourth, the legal protection to (financial) contracts is weak or justice is slow to obtain that also contributes to increase in risk of failure.

4. Financial Liberalization: Financial liberalization and deregulation of financial sector in various countries have given rise to banking and financial crisis. The experiences have taught the policy makers now to advocate a

gradual approach and to erect proper regulatory and support infrastructure before attempting to liberalize the financial sector. Like other banks, the Islamic banks have also suffered the burnt of ad hoc pursuit of financial liberalization policies by various governments. Since the Islamic banks do not come under similar patronage of the central banks as enjoyed by the conventional banks they are last ones to receive official support when a general panic strikes the banking sector in consequence of hasty liberalization and privatization policies and when the resources for support become scarce. While it can increase the likelihood of financial distress of Islamic banks (e.g. as it did in Turkey during 2000-2001), it also increased the opportunities to innovate and indulge in a variety of activities for the Islamic banks.

5. Political Interference: It comes in many forms and hastens the onset of a liquidity or solvency crisis if the banks are privately held, or prolongs the state of financial distress and financial repression if the banks are state owned. Government set credit targets and limits for various sectors; politically motivated/directed loans; very high reserve requirements that are to be held in government securities so as to finance the government are only some examples. These are detrimental for not only the profitability of banks but also cause a reputation damage to Islamic banks by forcing them to hold interest bearing government securities.

6. Moral Hazard: is a catch term for all post contractual informational problems. It can arise in conventional banks if the explicit or implicit guarantees of deposit insurance tempt the banks to indulge in risky investments and induces depositors not to care much about solvency of the bank. Such behaviour can magnify the crisis.

In case of Islamic banks the moral hazard problem is double edged sword. The investment deposits of the Islamic banks are share based, where depositors earn a share in profit and share with banks in absorbing losses. This can induce more risk taking by the bank. The moral hazard problem arises further in the second tier of contracts between the bank and its clients when the bank extends financing on profit and loss sharing modes. It increases chance of losses to the banks, a part of which are also transferred to the investment account holders. As opposed to conventional banks it induces depositors to be vigilant and choosy between safe and unsafe banks, and for the banks to discriminate between its clients, which are positive aspects. However, the banks' investments are opaque to depositors and decisions of depositors are generally non-coordinated (except in the form of herd behaviour in wake of bad or good news) therefore the advantage of depositor vigilance becomes smaller.

Under ideal conditions, and given the profit loss sharing mechanism of investment accounts an Islamic bank can never fail, theoretically speaking. But given the imperfections discussed above, Islamic banks increasingly resort to *murābahah* financing in order to reduce losses from moral hazard. This opens them up to unique liquidity risk (in addition to the credit risk) because resale of credit is not sharī'ah permitted. We will discuss more on this as an independent cause of financial distress and bank failure later in the paper.

7. Lack of Transparency: If circumstances of a bank lack transparency to its stake holders (depositors, clients, and shareholders) other than the management, then problems can persist until they multiply leading to bank failure. Since the financing by the Islamic banks is either tied to some real asset or based on profit and loss sharing, therefore transparency of circumstances of an Islamic bank allows market forces to work in better way to achieve economic efficiency. As opposed to this, conventional banks that extend untied credit and whose pricing is affected more by speculative pressures than economic fundamentals can benefit to a lesser extent from increased transparency. Thus transparency is more advantageous for Islamic banks; by the same token lack of transparency is more harmful in Islamic system.

Let us now focus on the factors in control of the bank itself as mentioned in the earlier table. These are listed from serial number 8 to 15.

8. Poor Credit Assessment: has been found to be an important cause of problems for conventional banks. The poor assessment can be caused by reasons independent of the level of expertise of the credit evaluators but a consequence of the nature of interest based lending contracts used by the banks. An important reason, for example, is the link between macroeconomic cycle and credit cycle. When economy is growing and heading towards a boom the banks find net worth of their clients growing. They tend to lend easily on interest and expand the size of their own balance sheet. During this period competition between the banks lowers their profitability while over optimistic expectations (chances of continuing growth) induces them into risky investment strategies resulting in over-extension of credit at the aggregate (economy wide) level. Note that the receivables of the banks are fixed by interest contract while the receivables of the clients are variable subject to business conditions. As soon as an economic down-turn starts the value of collateral taken by the banks drop; banks not only stop extending the credit but also start recalling their loans from their clients. Hence it hastens and deepens the recession.

Debt recall by a bank rendering its clients go bankrupt adversely affects other banks who had also extended credit to the same client. Therefore, each bank wants to get back its loans before others. This co-ordination failure among banks in the wake of rising expectations of recession hastens the down-turn and makes it deep. This further increases the financial pressure for many banks and results in their eventual failure.⁸

There are asymmetric information reasons too for poor credit assessment that are based on adverse selection argument. If the banks are not careful in pricing the risk they may be tempted towards those clients who are willing to pay higher interest but are more risky and deny the credit to prudent ones who are willing to pay a lower interest.

While the above arguments show weaknesses in interest based system for financial stability of the banking system, these also extend to Islamic banks' financing operations through a different channel.

Take the adverse selection argument first. Islamic banks while using *murabahah* mode face credit risk. If they are not careful in risk assessment of their clients they may be tempted more to those who are willing to pay higher mark-up rates than those who may be more prudent in risk-taking and therefore willing to commit only a lower rate of mark-up.

As for the pro-cyclicality of growth and credit argument, Islamic banks are safe on this side when they use *murabahah* finance. Since *murabahah* is not a re-priceable claim and it has fixed due date (or schedule of dates) therefore banks can neither recall it early nor can offer discounts to induce the clients for early payments. Therefore the likelihood of a 'run on debtors' by the banks, in expectation of a coming recession, is low. However, during the period of economic boom the chances of over-extension of *murabahah* financing still stands because not only the paying capacity of clients but also the value of their collateralised assets are rising.

There is another channel of pro-cyclicality in case of Islamic banks which does not operate through the credit and growth link. Rather, it operates through counter- (or pro-) cyclicality between monitoring costs and economic growth and operates through *mudharabah* and *musharakah* financing modes of Islamic banks. Thus it can be dubbed a financing and growth link. The argument is as follows:

Suppose Islamic banks extend financing on *mudharabah* or *musharakah* basis. There is a moral hazard problem associated with both these contracts. To keep the problem under tolerable limits the banks have to incur some monitoring costs. During a period of economic growth (boom) businesses in

general are profit making. Therefore, if a client tries to deceive the bank by reporting losses it can be readily identified and scrutinized. Thus monitoring costs become less than usual during a boom. On the other hand, during a recession when majority of businesses are making losses, if a profit making client cheats the bank by reporting losses it is hard to identify. Thus monitoring costs increase during recession. This counter-cyclical movements in monitoring costs have implications for the profitability of Islamic banks relying on partnership modes (*musharakah* or *muqarabah*). If the above argument holds, the profitability of Islamic banks will tend to increase during an economic boom and fall with recession.

There is another dimension to the above story, i.e., the behavioural aspect of the banks, how hard the banks should monitor? The benefit of (intensive) monitoring for the banks are greater during boom because to catch a cheater during this period brings more amount to the bank. Similarly, the benefit of (intensive) monitoring are low for the banks during recession, because by catching a cheater the losses can be avoided to a limit. Since intensity of monitoring is associated with higher cost therefore pro-cyclicality of profitability of banks with economic growth becomes debateable.

While the unit cost of monitoring is reduced during a boom the intensity of monitoring (say number of units monitored) is also increased. Therefore, total cost of monitoring may increase (or decrease) depending on which of the two factors is more sensitive to economic growth. Similarly, during a recession the unit cost of monitoring increases but the gain to the banks from monitoring decreases. Therefore, they may monitor less intensively and hence the total cost of monitoring may decrease (or increase) depending upon which of the two factors is more sensitive to economic growth.

9. Taking interest rate and exchange rate exposures: These are two separate sources of problems but described here under one heading because of similarity of their consequence on the banks' portfolio. Interest rate risk arises when there is a possibility that a bank will end-up paying more interest to depositors than it is able to earn itself. It arises when most of the lending by the banks is on fixed interest rate while the deposit contract stipulates a variable interest rate which changes with time and market conditions. This disparity was one of the major reasons for failure of Saving & Loan institutions (S&Ls) in USA during the early eighties. When interest rates rose sharply in 1979 the S&Ls found themselves in trouble because most of their lending were longer term and on fixed interest rate while their liabilities were marked to the market rate; eventually they had to be closed (*Economist*, October 28th 1999).

Exchange rate risk arises when the assets of the bank are in one currency (say domestic currency) while its liabilities are in another (say foreign currency). Excessive exposure or un-hedged positions in exchange rates can decrease the value of its assets and increase the cost of its liabilities in the wake of a sharp depreciation of domestic currency. Thus the bank ends up paying more to depositors than it earned. This has been judged as an important reason behind the financial crisis of East Asian countries of the late nineties.

In context of Islamic banking the interest rate risk or its likeness would not exist. The financing by Islamic bank is done either on the basis of profit sharing mode or on *murabahah* — which is a contractually fixed mark-up contract, but the payouts to depositors are sharing based rendering the payouts to directly mirror the performance of the bank in its financing operations. As long as the sharing ratio with the depositors is fixed in advance, the banks cannot end up paying more than what they earn.

A rise in the average rate of return available to the depositor at other banks (or in other financial instruments) can start a withdrawal from the bank. It would be stemmed by raising the profit sharing ratio for the new deposits or raising it for the next accounting period in case of the existing deposits. In any case, the bank is exposed to economic (or market) risk but not to the interest risk—i.e., will not end up paying more than what it earned.

Similar is the outcome of an exchange rate exposure for an Islamic bank. By taking excessive exchange rate risk the bank's total profit is at risk. But it cannot end up paying its depositors more than what it earned because of profit sharing nature of the deposit contracts.

10. Concentration of Lending: It increases the risk of financial distress for a conventional bank if its debtors are unable to pay a substantial amount on time. In this respect concentration of lending increases the credit risk mentioned earlier. Such concentration arises if the bank has special or long-standing association with some particular customer or if it focuses on a particular sector exposing itself to correlated defaults or in some cases if the bank was created with the purpose of financing a particular enterprise.

All these factors are important and relevant for Islamic banks too. Many of them were created as a financing arm of existing enterprises. In some other cases the concentration is the result of the small capital base of the bank. It is also a result of state's influence on the banking sector. In rare cases the concentration is the result of particular sector-specialization strategy of the bank.

However, there are some differences between factors that lead to concentration of lending in conventional banks and in Islamic banks. Since lending in the conventional bank can be untied and unrelated to the earnings from its use, as long as it is covered by the net-worth (or payback capacity) of the borrower, therefore unproductive concentration of credit is possible. The safeguard to concentration is provided by regulatory limits on loan concentration. And it is relatively easy to abide by such regulation because banks operate only as financial intermediary without getting involved in the business of its client. In contrast, for Islamic banks there is no untied lending but debt arises from credit sale be it *murabahab* or *salam* or through *istisna'* contract. Thus unproductive utilization is amenable to discovery early; but the bank gets involved with the parties and the commodities to a deeper level than arms-length financing of the conventional bank. If the sold commodity is use-specific to the bank's client (i.e., of specialized use) or specially manufactured (i.e., produced by unique firm) then the bank may have invested enough resources of time, human capital, and money over the completion of the deal that it would have developed some expertise in financing such commodities and/or dealing with these firms that a lock-in effect and specialization would naturally lead to credit concentration over the time. Putting ad hoc ceilings on concentration of credit independent of the size and capital of the bank can become a destabilizing rather than a stabilizing measure.

11. Connected Lending is defined as lending to companies owned by the bank or in which the members of the board of directors or the executives of the bank have substantial shares. It is discouraged by regulation in the conventional banking environment to safeguard the interests of the depositors.

When banks finance their own/connected companies there can be conflict of interests between that of bank and the depositors whose money it uses. Given the nature of deposit contract whereby the bank is liable to pay a fixed interest to the depositors the connected lending provides an opportunity to the bank to pocket all the residual earnings of the business it own and finance through depositors' money. Therefore, the bank has very high incentives to fund its connected firms even if the firm is riskier than other outside firms. This leads to moral hazard problem in risk taking.

Moreover, there is no significant advantage to the society in terms of any reduction in the monitoring costs affected by the connected lending. Because, the banks do not care to monitor the borrower for performance but care for establishing credit worthiness in the conventional banking system.

Hence, for the above reasons it is not prudent to allow unrestricted connected lending to the banks. The failure to control connected lending can also lead to concentration of lending and bank failure.

Whereas in case of Islamic bank: (i) the bank shares with the depositors the actual outcome of its investments, (ii) monitoring of its clients is a required feature. Thus the conflict of interest between the depositors and the bank is reduced by virtue of the former feature of returns sharing. Further, there is advantage of reduction in monitoring cost in case of financing of own business as compared to financing an outside firm.

Hence, for both these reasons the level of restriction on financing of connected businesses should be lesser in case of Islamic banks. The conflict of interest part can be controlled by ensuring that the contractual conditions are fair and that the bank also invest its own capital in the business. What should be the proportion of own capital of the bank is a policy question with no simple answer.

12. New Areas of Activity: Expansion into untested areas of business is one factor that can cause bank financial distress for conventional banks. On the other hand Islamic banks can expect to show more buoyancy when entering new areas of business due to participatory nature of their financing, which does not force premature bankruptcy of the financed party by loan recall on first signs of trouble.

More important factor however, in case of Islamic banks, is the expansion of ownership in too many lines of businesses relative to the capacity of corporate, financial and human resources of the bank that can become a source of their distress. A bad performance of only one business which is owned by a bank can cause reputation damage to the bank and knock over effect leading to its financial distress. Since the nature of participatory financing requires Islamic banks to actively participate in the businesses they finance, therefore it is very important for Islamic banks that they expand very carefully into new businesses in which they plan to have majority share. Unless the business is Shari'ah compatible and bank possesses the required monitoring resources, horizontal expansion for the sake of diversification only is a dangerous prospect that can produce contagion affect for the bank.

13. Internal Control Failures: It has resulted in collapse of some reputable conventional banks. Noted example include that of Barings which failed in 1995 because a trader in one of its subsidiaries kept on doing fraudulent trade unchecked by higher management and the parent company until accumulation of huge losses when it was discovered.

Internal control procedures are equally important for Islamic banks and need improvement. These procedures enhance transparency within the organization/management as opposed to transparency for outside stakeholders. They work by defining the rights and responsibilities and putting in place a system of monitoring and reporting; it also cover the control exercised by the Board of Directors of Islamic banks. Thus, these procedures can help avoid some of the above listed causes of bank failure.

There have been cases in which individual Islamic banks came under financial distress or closed down (e.g. Ihlas Finans in Turkey 2001) because of rubber stamp Board of Directors or their acquiesce behaviour that failed to realize the developing problems.

14. Other Operational Failures: There can be a number of miscellaneous operational deficiencies that can lead to problems and eventual failure of the bank. For example: Banks may have staff of poor quality or of lesser experience; They may have hired experienced persons but with tainted reputation which will not be a good omen for the bank; The management may be excessively centralized or it may be very lax without proper management and command structure; The bank may be unable to cut costs; etc. These are important both in context of conventional as well as Islamic banks.

15. Liquidity Problems: There are two types of liquidity problems for Islamic banks. Some banks have excess liquidity which they do not know where to park for short periods. Thus they incur a high cost-of-carry in the form of forgone earning opportunities on the excess liquid funds. On the other hand, there are banks that run into liquidity shortage when depositors withdraw money, but do not have access to funds for short periods.

6. Conclusions

In this paper we enumerate the various causes of bank failure that have been identified for the conventional banks in the theoretical as well as policy oriented literature. They range from macro to micro causes as well as factors that are intrinsic or extrinsic to the bank. Evaluation of the extent to which each of these factors are relevant for financial distress in Islamic banks reveal that while some causes affect Islamic banks equally as they affect conventional banks, there are some others that are not of concern. This is due to particular sharing structure of Islamic banks with their clients and/or depositors which positively contribute to more stability of these banks.

However, the small size and narrow ownership of Islamic banks pose its own problems as a source for financial distress.

There are also new dimensions to some of the conventional causes of financial distress when applied to Islamic banks. For example, moral hazard problem is at two levels in the two tier *muḍārabah* structure of Islamic banks which leads them to prefer *murābahah* financing and hence generates credit and liquidity risk. Poor credit assessment and the associated pro-cyclical movements in credit extension and business cycle is well known in conventional banking literature. However, the *murābahah* contract does not contribute to such credit cycles during a recession. This is owing to non-saleability of debt or its discounting. At the same time the financing cycle can operate in cases of *muḍārabah* and *shirākah* contracts through counter-cyclical monitoring costs and pro-cyclical incentives to monitor for the banks.

Financial distress in Islamic banks can also stem from the current structure of Islamic banks, regulatory environment that restricts them from owning or equity participation in businesses and trading, and from lack of support infrastructure institutions. Islamic banks are also affected if a crisis occurs in the conventional banking sector which erodes confidence of depositors in the banking sector in general.

This is probably the first such systematic study of the causes of financial distress in Islamic banks with the purpose to serve as background to further deeper study of individual bank cases.

Notes

¹ For example, Ihlas Finance House, an Islamic financial institution, in Turkey was closed in 2001 due to liquidity problems and financial distress. Bank Taqwa was closed in 2001. Faisal Islamic Bank closed its operations in the UK for regulatory reasons.

² We are using the term financial distress to refer to financial problems of individual banks and the term financial crisis to describe a situation when a large number of banks are affected either directly or through contagion. In this paper, we are concerned with both financial distress and financial crisis.

³ For example Krugman (1979); Flood and Garber (1984).

⁴ For example, Obstfeld (1996).

⁵ For example, Krugman (1999); Chang and Velasco (1999); Morris and Shin (1998); and Chui, Gai and Haldane (2000).

⁶ For example, Diamond and Dybvig (1983); Brynat (1980); Von Thadden (1995); Anderlini (1989); and Postlewaite and Vives (1987).

⁷ Caprio and Klingebiel (1996) report that out of 29 cases of bank insolvency in their survey, poor supervision and regulation featured in 26 cases (see figure-3 of their paper).

⁸ Various debt covenants defining priorities of different debts are some ways through which a 'run on clients' can be dampened but they by themselves are insufficient. Such problems occurred among international lenders during Latin American crisis and solution was proposed by forming a consortium to negotiate rescheduling of loans and payments with the sovereign borrowers (clients) rather than allowing the individual creditors to work out their own negotiated deals with the defaulting states.

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