

# FINANCIAL CRISIS: RISKS AND LESSONS FOR ISLAMIC FINANCE

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## **Abstract**

*The severity of the current financial crisis has shaken the foundations of the capitalist financial system and has led to the search for ideas and solutions. This paper identifies the failure of risk mitigation at different levels as the main cause of the crisis. While following the principles of Islamic finance would have prevented the occurrence of the crisis, the practice of Islamic finance of mimicking its conventional counterpart can make the industry vulnerable to similar crises. Lessons for the Islamic financial sector are drawn by suggesting ways in which risks can be mitigated at the levels of institutions, organisations and products. In doing so, some key risks arising in Islamic finance are identified and various ways in which the Islamic finance sector can be made stable and resilient are proposed.*

**Key Words:** Islamic finance, financial crisis, risks, institutions, organisations, products.

## I. INTRODUCTION

The current financial crisis, considered the most severe since the Great Depression, has shaken the very foundations of the capitalist financial system. While Brooks (2009) views the crisis as ‘a flaw in the classical economic model and its belief in efficient markets’,

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Greenspan (2008) points out that ‘some of the critical pillars of underlying market competition arguably have failed’. An unregulated legal/regulatory environment in the United States initiated innovations that resulted in fundamental shifts in the financial sector. Driven by excessive profit motives at the organisational level, new financing structures and products evolved. There was a failure to assess and manage risks at various levels, and this ultimately caused the crisis.

As the financial sector imploded and endangered the global economy, different quarters began evaluating it to understand the causes and look for solutions. A large body of literature has poured out to assess the causes and suggest remedies so that a similar crisis is not repeated in the future.<sup>1</sup> This paper studies the implications of the crisis for the nascent Islamic financial sector, focussing on the risk-related issues. The crisis reveals misunderstanding and mismanagement of risks at institutional,<sup>2</sup> organisational and product levels. After examining the evolution of the crisis in the light of risk factors at different levels, this paper discusses the lessons that the Islamic financial sector can derive from the episode.

The paper is organised as follows. The next section presents some background material on various risks in light of the crisis. Risks are identified at institutional, organisational and product levels. In section 3, the cronology of events that led to the crisis is presented and the risk factors examined. In section 4, the implications of the crisis for the Islamic financial sector is presented. It points out that the variation in the principles and practices of Islamic finance can make the sector vulnerable to similar crises. Section 5 discusses the policy implications that can strengthen risk mitigation features of the Islamic financial sector at various levels. The last section concludes the paper by suggesting that building trust is an important element in making the Islamic financial sector a viable and resilient alternative.

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1 As the aftermath of the crisis is still unfolding, many of the writings have appeared in various reports and commentaries and editorials of newspapers/magazines.

2 Institution is used here in the sense of New Institutional Economics and does not represent organisations. Institutions represent a broader notion of the political/legal/regulatory environment under which organisations and individuals operate.

## II. RISKS AND FINANCE

Financial transactions take place among various stakeholders (individuals and organisations) either through intermediaries or markets under certain legal and regulatory frameworks. Risks are inherent in financial transactions and can arise from different levels-institutional, organisational and products. In all of these sources, risks can be distinguished as inherent and residual. Inherent risks are those that are present before any controls or actions are taken. Residual risk is the exposure after some corrective actions or effective controls are undertaken. The objective of risk-management tools and mechanisms would be to reduce inherent risks to tolerable levels so that the residual risks satisfy the risk appetite of different stakeholders, which encourages them to engage in growth-enhancing and wealth-creating investment activities in the economy.

Risks offer both vulnerabilities and opportunities. Societies that have means and mechanisms to reduce the risks to acceptable levels and make the most of the opportunities are the ones that grow and prosper. At the organisational level, successful firms are not those that only reduce risks, but those which take advantage of the opportunities offered by risk-taking (Damoradan, 2005). Risk management is a process that ‘protects assets and profit of an organization by reducing the potential for loss before it occurs, mitigating the impact of the loss if it occurs, and executing a swift recovery after the loss occurs’ (Coffin, 2009, p. 4).

Given the positive correlation between returns and risks, however, there may be incentives to engage in risky endeavours in order to obtain higher yields. An important element determining risks and outcomes of different economic activities is the human element. The risk appetite of individuals and managers reveals the preferences for threats/costs and opportunities and determines how much an individual/organisation is prepared to actively put at risk in order to reap the expected benefits of opportunity. The urge for higher returns can sometimes lead to moral hazard behaviour that can ‘encourage people to engage in destructive rather than productive acts’ (Shiller, 2003, p. 2).

One of the key functions of the financial sector is the management of risks by facilitating households and firms to pool and allocate risks

(Merton & Bodie, 1995). This is done by using various mechanisms that include hedging, diversification and insurance. Although the insurance and securities markets are used to allocate risks, derivatives are increasingly playing an important role (Mason, 1995). Many new derivatives instruments such as forwards, futures, options and swaps are being used as instruments to transfer risk exposures. The bulk of the derivatives, however, have taken the form of ‘speculative capital’ with risk becoming central to their design (LiPuma & Lee, 2005). LiPuma and Lee (2005) contend that as derivatives are free from the constraints imposed by the real economy they can increase leverage without limits. The use of derivatives for speculative purposes increases the overall inherent risks in the economy.

Financial innovations change the nature of products and the structure of relationships within and between intermediaries and markets. Driven by technological advancement, deregulation and globalisation, intermediaries and markets compete to create products that enhance returns and lower transaction costs and risks. The history of financial innovation indicates that products initially offered by intermediaries gradually move towards markets (Merton & Bodie, 1995). As the products offered by financial intermediaries increase in scale by serving a larger customer base, these can be standardised, packaged and sold in the markets. While some instruments are exchanged in organised exchanges, an increasing number of these are traded over the counter (OTC). These dynamic changes in the financial system can create complex risks that are difficult to comprehend. Given the above, sources of risks can be studied under the following headings.

### *Institutional*

Government and public agencies play an important role in ensuring that the actors in the economy do not engage in activities that can lead to system-wide risks. Stiglitz (1994) identifies information and market failure as the rationale for state intervention in the financial sector. When operations of the markets and intermediaries create externalities that have unfavourable implications going beyond their operational space and scope, there may be a need for active public policy response to contain the detrimental effects.

At the institutional level this is done by enacting appropriate laws and implementing prudential regulation. Thus, a key role of the government is to provide a proper and stable legal environment under which economic transactions can take place. To do this, the government enacts laws that, among others, protect property rights, ensure transparency and information disclosure and prevent fraudulent moral hazard behaviour. Long-term contracting would also require having the rule of law and stability of legal regimes. The role of regulators is more pro-active as they seek to implement the statutes and laws, monitor the compliance of market actors with the rules, and enforce the rules in case of non-compliance (Albrecht, 1995).

As pointed out, many new risks arise due to innovations and the dynamic nature of the financial system. The relevant public authorities need to understand these new risks and bring about appropriate legal and regulatory changes to deal with them. If legal and regulatory regimes fail to adjust to the changing situations, they become ineffective in mitigating new risks that can lead to systemic financial meltdowns.

### *Organisational*

To understand risks and their management at the organisational level, risks can be classified as those that can be eliminated or avoided, those that can be transferred to others, and ones that can be managed by the institution (Oldfield & Santomero, 1997). Good risk-management practice in financial institutions means taking up activities in which risks can be efficiently managed, shifting risks that can be transferred, and avoiding other risks by simple business practices and by not taking up certain activities. The risks undertaken by financial institutions are those which are central to their business. These risks are accepted because the banks are specialised in dealing with them and are rewarded accordingly. There are some risks that cannot be eliminated or transferred and must be absorbed by financial institutions. This may be due to the complexity of the risk and difficulty in separating it from the underlying transaction.

Risk-avoidance techniques would include the standardisation of all business-related activities and processes, construction of diversified portfolios, and implementation of an incentive-compatible scheme with accountability of actions (Santomero, 1977). Risk-transferring techniques include, among others, the use of derivatives for hedging and selling or buying of financial claims. Some risks can be reduced or eliminated by transferring or selling these in well-defined markets.

### *Product*

Different products will have diverse, idiosyncratic risk profiles and need to be dealt with accordingly. In general, credit risk is inherent in conventional banking-book activities and market risks in the trading-book activities of banks. On the asset side, risks in contracts that create a debt can be mitigated by having suitable collateral or guarantees. Market risks arising from movements in interest rates or prices of assets held by a financial intermediary, however, need other hedging tools and mechanisms. Risks arising in financial market products include market and liquidity risks.

While risks in debt and equity instruments are known, risks arising in many derivatives are complex, as they are abstract with no links to any real transaction or asset (LiPuma & Lee, 2005). Furthermore, certain types of derivatives such as futures, forwards, a put option or a call option may introduce unlimited risks of loss that go beyond original investment (Swiss Banking, 2001). It should be noted that the introduction of new products can also link various intermediaries and market segments, creating contagion risks that are not well understood.

## III. FINANCIAL CRISIS: EVOLUTION AND CAUSES

The financial crisis originated in the US as a result of the failure of risk assessment and management at the three levels identified above: institutional (legal and regulatory), organisational, and products. At the overall institutional level, the crisis evolved in an environment that endorsed market fundamentalism with minimum government

intervention. This is reflected in the regulatory and legal regimes under which the financial sector was operating. In 1999, the Gramm-Leach-Bliley Act repealed the Glass-Steagall Act that prevented banks from mingling commercial and investment banking activities. At the regulatory level, the Federal Reserve System propounded the view that the financial institutions were capable of self-regulation and there was no need for government bodies to interfere (Fukuyama, 2008).<sup>3</sup> Similarly, in 2004 the Securities and Exchange Commission (SEC) loosened capital requirements for large investment banks. As a result, there was a large increase in leverage in these firms.<sup>4</sup> Furthermore, the derivatives market was deregulated and there was resistance to control the fast-growing over-the-counter (OTC) derivatives market (Faiola et. al., 2008).

An urge to reap excessive profits at the organisational level in an unregulated environment led to innovations and the introduction of new products that changed the financial structure. The traditional financial intermediation model, in which depositors provided funds to the banks for investment, was replaced by raising funds from the market through securitisation. Loans were pooled and sold to investors as Mortgage Backed Securities/Collateralized Debt Obligations. Instead of the financial intermediary that originated the transaction, a Master Servicer managed the pool of debt obligations on behalf of the security holders. By the end of 2006 about 55% of the estimated total of \$10.2 trillion value of mortgage loans in the US was packaged and sold to local and global investors (Norges Bank, 2007).

Another segment which expanded rapidly during the period preceding the crisis was the derivatives market. The value of the overall notional amounts of OTC contracts reached \$596 trillion by the end of 2007, with credit default swaps increasing by 36% during the second half of the year to reach \$58 trillion (BIS, 2008). While some of these products were used for hedging purposes, most of them

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3 One finds a similar viewpoint in the new regulatory standards issued by the Basel Committee on Bank Supervision (Basel II) which proposes market-based risk assessment and capital requirements for financial institutions.

4 Securities and Exchange Commission (SEC) loosened the capital requirement of five large investment banks (Merrill Lynch, Lehman Brothers, Goldman Sachs, Morgan Stanley, Bear Stearns) controlling \$4 trillion in assets. After the loosening of the capital requirements, the debt/equity ratio of Bear Stearns shot up to 33:1.

were used for speculation. This is apparent when one compares the size of the derivatives with the real economy. In 2007, the GDP of the US was \$13.8 trillion (and world GDP was \$54.3 trillion).

### *A. Risks and Evolution of Crisis*

The fundamental shifts in the financial sector under a deregulated regulatory environment created a risk profile that was a recipe for a crisis. New economy-wide financial linkages were created and financial markets became complex and connected. At the product level, complex and opaque securities enabled originators of loans to transfer risks to others. One implication of these securities was the breakdown of the relationship between lender and clients. This created risks both at the pre- and post-contractual stages. As the loans were packaged and sold, there was little incentive to scrutinise the financial health and capabilities of the clients by loan originators before contracts were signed. This resulted in lowering the standards of due diligence, resulting in subprime lending. In the post-contract stage, the Master Servicer had no incentive to reschedule the loans in case of a default and instead took the easy way out of foreclosure (Geanakoplos & Koniak, 2008).

The specific steps that laid the foundation of the financial crisis are given below:

1. Banks/financial institutions engaged in subprime lending (with adjustable interest rates).
2. The loans were packaged as Mortgage Backed Securities (MBS)/Collateralized Debt Obligations (CDO).
3. Rating Agencies gave positive ratings to these securities.
4. Investors (investment banks, hedge and pension funds, municipalities, schools, etc.) invested in these securities.
5. Investors and speculators bought Credit Default Swaps (CDS) to hedge/speculate on credit risks on loans backing the MBS/CDO.
6. Issuers of CDS (investment banks and insurance companies) took on the risk of default of securitised assets in general and subprime loans in particular.

As pointed out, new complex and interrelated risks originated in the financial sector due to deficiencies at the institutional, organisational

and product levels. Specifically, lack of adequate institutional setup, lax risk-management practices at organisations, and creation of opaque and complex products formed a new financial structure that created risks that were not well understood and difficult to assess. Some specific risks arising in the new financial structure are listed below:

1. Breaking down of relationships between lender and borrower.
2. Excessive risk taking at the originator level.
3. High leverage (low capitalisation).
4. Lax risk-management practices.
5. Under-pricing of risks.
6. Transferring of risks.
7. Creation of newer risks.
8. Difficulty in assessing the risks in new structures and products.
9. Lack of control and understanding by investors of the exact nature of assets underlying the securities.

The risk matrix linking different risks to the steps that led to the financial crisis is shown in Table 1.

*Table 1: Risk Matrix and the Financial Crisis*

<b>Risk Features</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
Breakdown of relationship between lender/borrower				√		√
Excessive risk-taking at the originator level	√	√	√	√		
Leverage/ Under-Capitalisation	√	√				
Lax RM practices	√			√		√
Under-pricing of Risk	√		√			
Risk transfers		√			√	
Creation of New Risks		√			√	
Difficulty in Assessing Risks		√	√	√		
No control over underlying assets				√		√

- A. Banks/financial institutions engaged in subprime lending
- B. Loans packaged as MBS/CDO
- C. Rating agencies gave positive ratings to these securities
- D. Investorās bought MBS
- E. Investors bought Credit Default Swaps (CDS) to hedge credit risks
- F. Issuers of CDS took on the risk of default

The risks and their inducement from the three sources (i.e., institutions, organisations, and products) are shown in Table 2.

*Table 2: Sources of Risks*

<b>Risk Features</b>	<b>Institutions</b>	<b>Organisations</b>	<b>Products</b>
Breakdown of relationship between lender/borrower		√	√
Excessive risk-taking at the originator level	√	√	√
Leverage/Under-Capitalisation	√	√	
Lax RM practices	√	√	
Under-pricing of Risk		√	√
Risk transfers	√	√	√
Creation of New Risks	√	√	√
Difficulty in Assessing Risks		√	√
No control over underlying assets	√		√

Given the complex web of risks arising in the financial sector, the system began to unravel once there was a negative shock in the economy. One triggering factor was the gradual increase in interest rates from 1% to 5.25% between 2004 and 2006 (Bianco, 2008). Higher interest rates raised the adjustable rates on subprime

loans. Given the feeble financial base of the subprime clients, an increase in higher mortgage instalments led to default on payments. As subprime loans constituted 12-15% of the securitised mortgages (Norges Bank, 2007), the asset base of the MBS and CDO started to erode. This caused the holders of these securities to incur losses, decreasing their prices.

Those who had insured and/or betted on the possibility of default by buying CDS claimed compensation against the losses. As issuers of CDS starting paying off the claims, these organisations themselves started to incur losses which caused depletion of their capital. To avoid bankruptcy, there was a scramble to get funds from different sources. However, as lenders did not know the risks involved with different financial institutions, and as many banks were affected and needed funds themselves, no funds were forthcoming. As a result, the money market froze, causing a liquidity crisis.

Lack of liquidity resulted in a credit crunch that spilled over into the activities of the real economy. Lack of financing caused the housing market to crumple, further decreasing housing (and CDO) prices. Thus, the dynamics of the interlinked relationships and web of risks in the financial sector created a 'vicious cycle of deleveraging' (Krugman, 2008) that brought the real economy to a standstill and decline. A problem that started with credit risks soon created liquidity risks and market risks that produced systemic risks threatening not only the financial sector but the global economy.

#### IV. FINANCIAL CRISIS AND ISLAMIC FINANCE

Islamic economists have asserted that the financial crisis has revealed the inherent weaknesses of the conventional financial system. Chapra (2008) attributes the crisis to inadequate market discipline resulting from lack of using profit-loss sharing modes of financing, expansion of the size of the derivatives, and the policy of 'too big to fail'. He calls for a 'new architecture' to prevent occurrence of similar crises. Siddiqi (2008) identifies the root cause of the crisis as 'a moral failure that leads to exploitation and corruption'. He identifies credit (liquidity) crunch, over-extended leverage, complexity of the

products, and speculation and gambling (risk shifting) as the main features of the crisis.

The proponents of Islamic finance argue that if the Islamic principles related to economics and finance had been applied, the financial crisis could have been prevented. With emphasis on equity modes of financing, financing would not only require higher standards of due diligence, but also have active monitoring. As debt cannot be traded because it can lead to *ribā*, products like CDO/MBS would not exist in an Islamic system.<sup>5</sup> Furthermore, derivative products like CDS are prohibited under Islamic law due to, among other reasons, the existence of *gharar*. As Islamic financial institutions were not exposed to the toxic securities that caused the crisis due to the Shari'ah prohibitions, they were not directly affected by the crisis (Desai 2008; Brewster 2008).

While following the principles of Islamic finance would have prevented the crisis, there is a danger that some of the practices of Islamic finance can make the sector vulnerable to a similar episode. In an attempt to meet the demands of clients, the main focus of the Islamic financial industry became providing 'Shari'ah-compliant structures for conventional products' (Dar, 2007). In doing so, the practice of Islamic banking and finance appears to be gradually moving towards that of conventional banking over the years. The direction the industry has taken is being censured from various quarters.<sup>6</sup> At one extreme of this spectrum, the Islamic financial industry has been denounced as 'deception' and 'charade' (Saleem, 2006a & 2006b). ElGamal (2005 & 2007) claims Islamic financial institutions to be 'rent-seeking Shari'a arbitrageurs' using 'ruses to circumvent prohibitions'. Concerns are also raised by the advocates of Islamic banking and finance. For example, Siddiqi (2007) maintains that the widely used instrument of *tawarruq* entails more harm (*mafāsīd*) than benefits (*maṣāliḥ*) and cannot be characterised as Shari'ah-compliant.

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5 Sale of debt is generally not allowed by most scholars based in the Middle East. Accordingly, debt cannot be sold at discount but transferred at par or face value by *hawala*. However, Shari'ah scholars in Malaysia have allowed sale of debt arising from sale based transactions.

6 For a review of the current state of Islamic finance, see Siddiqi (2006).

If the key elements of the current crisis are examined, one can observe that Islamic finance can potentially end up in the same situation. As pointed out above, the key factors causing the crisis can be identified at three levels: a deregulated environment, financial institutions engaged in excessive risk-taking (to reap higher profits), and the use of innovative complex products. When the practice of Islamic finance and the environment under which it operates are examined, one can identify trends that are similar to the ones that caused the current crisis. At the institutional level, the regulatory standards for the Islamic financial sector are in elementary stages, weak and still evolving. Thus, the regulatory restraints on Islamic financial institutions are expected to be no better than their conventional counterparts. At the organisational level, it is difficult to prevent excessive profit seeking and risk taking in Islamic banks unless their Boards of Directors and management impose prudent risk-management practices. In the recent past, the Gulf region has witnessed its own episodes of speculation in their stock and real-estate markets.

Finally, the Islamic financial industry has witnessed rapid growth with innovations of complex Shari'ah-compliant financial products. Risks in these new Islamic financial products are complex, as the instruments have multiple types of risks, and they evolve and change at different stages of the transactions.<sup>7</sup> As the risks of Islamic financial products are not easy to comprehend, it may be difficult to control them. Among the products relevant to the current crisis are *ṣukūk*, created through securitisation of assets. The features of tradable *ṣukūk* (such as *ijārah* or diminishing *mushārahah*-based ones) are similar to those of CDO and MBS. Securitisation of assets enables the transfer of risks to investors who may not have direct control over underlying assets.<sup>8</sup> Similarly, products similar to CDS are being created in the form of return-swaps through which returns on one type of assets can be swapped with those on another class of assets. Note that the return on the Shari'ah-compliant asset can be swapped with returns

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7 See Ahmed and Khan (2007) for a discussion on risks in Islamic finance.

8 One of the Shari'ah issues in *ijārah ṣukūk* is the transfer of assets to the *ṣukūk* holders, which should give them all the rights of ownership including control.

on any type of asset, even ones that are not permissible by Sharī‘ah.<sup>9</sup> In theory, Islamic return-swaps can be structured whereby the returns on the underlying permissible assets can be swapped with returns on subprime CDOs. Some of these products are sold as capital-efficient solutions that encourage more leverage.

Given the above, the steps that led to the financial crisis can well occur in the Islamic financial sector. Table 3 shows how the different steps of the current crisis can be replicated in Islamic finance.

*Table 3: Replication of the Crisis in Islamic Finance*

Conventional	Islamic
Banks/financial institutions engaged in subprime lending.	IFIs can be engaged in subprime financing with lax risk-management practices.
Loans were packaged as MBS/CDO.	If financing is <i>ijārah/diminishing mushārakah</i> , assets can be securitised as <i>sukūk</i> .
Rating agencies failed to understand the risks and gave positive ratings to these securities.	Risks of Islamic products are complex and difficult to assess, but can get good ratings.
Investors bought securities.	Investors will buy securities.
Credit Default Swaps (CDS) were bought to hedge credit risks.	Investors can buy return-swaps that exchange returns of <i>sukūk</i> with return on other asset classes.
Issuers of CDS took on the risk of default.	Issuers of swaps take up the risk of <i>sukūk</i> .

## V. LESSONS FOR ISLAMIC FINANCE

The crisis shows that changing financial structure and products created new risks that were difficult to understand, assess and control. While greed leading to excessive risk-taking was one of the key elements that triggered the crisis, this problem cannot be resolved by preaching

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9 For a critical discussion on return-swaps, see Delorenzo (2007).

morality. The problems related to risks need to be tackled at the levels of institutions, organisations and products by creating appropriate laws, rules, support systems and incentive structures. Some of the policies and practices that can enhance the stability and resilience of the Islamic financial industry at different levels are discussed below.

### *A. Institutional Level*

At the institutional level there is a need to minimise the legal and regulatory risks for the Islamic financial industry. Accordingly, the factors that can bring stability and growth to the Islamic financial sector are discussed under legal and regulatory headings.

#### *Legal Regime*

With few exceptions, most Muslim countries have also adopted Western legal models, particularly when it comes to commercial law.<sup>10</sup> As most Muslim countries have either the common law or civil law framework, their legal systems do not have specific laws/statutes that support the unique features of Islamic financial activities. Two broad categories of laws related to Islamic financial sector development can be identified. The first relates to appropriate banking laws to support the development of financial intermediaries and the second entails laws that encourage the development of the capital markets.

Conventional banking laws may not be appropriate for supporting operations of Islamic banking and can create legal risks. For example, whereas Islamic banks' main activity is trading (*murābahah*) and investing in equities (*mushārahah* and *muḍārahah*), current banking law and regulations in most jurisdictions forbid commercial banks to undertake such activities. This calls for specific laws and statutes that can support and

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10 Specifically, countries that were ex-British colonies have adopted the English common law framework, the ex-French colonies adopted the civil law tradition and most of the Arab countries have some variations of the European (continental) civil law regimes. See World Bank (2004) for legal regimes adopted by different countries.

promote the Islamic financial services industry.<sup>11</sup> Furthermore, to develop Islamic capital markets in general and *ṣukūk* markets in particular would require detailed codified securities, disclosure and bankruptcy laws from the Islamic framework. These laws should entail specific rules related to *ṣukūk*-holders' rights, re-organisation and liquidation rights (of different stakeholders and creditors), and ones that require transparency, disclosure and comprehensive accounting standards.

### *Regulatory Regime*

After the financial crisis, there is a realisation that a comprehensive regulatory architecture for the financial sector is needed. As prudent regulations do not exist for the Islamic financial industry in most jurisdictions, there is a need to provide a wide-ranging regulatory framework to bring stability and ensure growth of the industry. A comprehensive regulatory architecture for the Islamic financial sector should entail the following elements.<sup>12</sup>

### *Market Stability across the Entire Financial System*

One key role of regulators is to minimise information and market failures that can lead to financial instability. Relevant risks for the Islamic financial system can be identified as macro-prudential or systemic risks, liquidity risks, and Sharī'ah-compliant and reputation risks. To avoid systemic risks, practices and rules that create incentives for taking responsibility to bear risks and that limit the transfer of these to others are required. As Chapra (2008) suggests, using equity modes of financing would induce stringent due diligence and monitoring of assets by financial institutions. In the case of securitisation, credit risks can be reduced if originators of securities are required to retain some of the assets and their associated risks.

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11 For a detailed discussion on the need for Islamic laws related to the financial sector, see Ahmed (2006).

12 Some of the suggestions given are derived from Paulson (2008 and 2009) and Nanto (2009).

Guttenberg (2009) suggests that new regulatory rules must also cover the systemic actors and markets in the financial sector. To reduce information-related risks the regulators should have power to intervene when there is lack of or misleading information about products and institutions. The crisis shows the failure of the rating agencies to properly assess the risks involved in many securities issued by subprime loan originators. Noyer (2008) proposes regulating the rating agencies to correct the problem of asymmetric information in the financial industry. For Islamic finance, the rating agencies need to have a better understanding of the risks involved in Islamic financial products and have to be made more accountable. Some risks arising in securities can be tackled by imposing legal and regulatory conditions for issuing and exchanging securities/*ṣukūk*. Furthermore, securities/*ṣukūk* should be traded in well-regulated exchanges.

Another system-wide risk that appeared to be acute during the crisis was the liquidity risk. Liquidity risks arise from difficulties in obtaining cash at reasonable cost in times of need. This can be due to lack of available funding sources (funding liquidity risk) or problems of selling assets to get cash (asset liquidity risk). Islamic banks are prone to facing liquidity risks due to various reasons. First, there are no organised Islamic money markets in most jurisdictions from which funds can be sought in times of need.<sup>13</sup> Second, as most assets of Islamic banks are predominantly debt-based, these become illiquid due to restrictions on sale of debt. Due to the above problems, one option may be to establish a Liquidity-Risk *Takāful* Fund at the national level that can be used to provide liquidity to Islamic financial institutions in times of need.

The Islamic financial system can become susceptible to instability from another unique and important source. Qattan (2006) points out that Shari'ah non-compliance can be a reason for reputation risk that can trigger bank failure and cause systemic risk. The Islamic financial system can become

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13 Malaysia has an Islamic money market where liquidity needs of Islamic banks can be met to some extent. But this model cannot be replicated in other jurisdictions due to Shari'ah-related issues.

susceptible to instability if the perception of stakeholders about Islamic products becomes negative, causing a serious loss of trust and credibility.<sup>14</sup> Additionally, as Shari'ah Boards produce *fatwās* by interpreting different legal sources, the possibility of coming up with conflicting opinions increases the legal risks. With the expansion of the industry, the likelihood of conflicting *fatwās* will increase, undermining customer confidence in the industry (Grais & Pellergrini, 2006).

Shari'ah Boards, being the gate-keepers of Islamic finance, play a key role in approving the appropriate products. When financial institutions deal with other peoples' money and the interests of the stakeholders are not protected, verdicts issued by the Shari'ah scholars cannot be considered private religious matters left at the organisational levels (Grais & Pellergrini, 2006). The Shari'ah compliance, reputation and legal risks arising in Islamic financing products can be mitigated to some extent by establishing a National Shari'ah Authority (NSA) which can oversee the Shari'ah-related issues of the Islamic financial sector in general and products in particular.

Moving the control of products from the organisational level to a neutral national body will not only ensure fulfilment of some of the broader Shari'ah requirements, but also provide impetus to healthy development of Islamic finance. As the members of the NSA will not operate in a profit-driven organisational environment, they are expected to be free of conflicting interests. The NSA will be able to integrate the *maqāṣid al-Sharī'ah* in Islamic finance and promote products that ensure the stability of the sector. By protecting the interests of the customers and community, the NSA will be able to instil trust and enhance the credibility of the Islamic financial industry. This national body can also provide Shari'ah governance guidelines to reduce legal and Shari'ah compliance risks at the organisational level.

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14 Chapra and Ahmed (2002) report that a survey shows that 381 (or 81.4 percent) of the total number of 468 depositors from Bahrain, Bangladesh and Sudan will move funds to other banks due to non-compliance of Shari'ah and a total 328 (70 percent) will move funds if they learn that income of the banks comes from interest earnings.

### *Supervision to Ensure Soundness of Financial Firms*

The second role of a prudential financial regulator is to ensure the safety and soundness of financial institutions. Noyer (2008) suggests three levels of regulatory requirements applied to financial institutions. At the first level, institutions would be required to register and commit to comply with a code of best practices. At the second level, institutions would be required to disclose activities and accounts. At the final level, there would be an oversight of the transactions and risks involved. Regulators can minimise risks by requiring higher levels of regulatory capital.

As many of the risks arising in Islamic financial institutions are unique, there is a need to understand the nature of these risks before devising the regulatory standards. The IFSB standards provide some guidelines for regulators regarding prudent capital adequacy and risk-management standards for Islamic financial institutions.<sup>15</sup> Excessive profiteering and risk-taking can be controlled by setting up appropriate rules and standards for all financial institutions, including Islamic ones. Some rules that can mitigate risks are setting up investment criteria to prevent excessive risk-taking, imposing restrictions on excessive leveraging, requiring stringent capital requirements, and ensuring more transparency and accountability.

### *Protecting Consumers and Investors*

The third task of the regulator would be to ensure the protection of consumers and investors. While deposit insurance shields the depositors from bank failures, the crisis indicates that more is required to protect the financial consumers. Key aspects of regulation in this regard would include chartering or licensing strong financial institutions, requiring disclosures and having consistency in business practices. Nanto (2009, p.6) suggests establishing an independent Consumer Financial Protection Agency to 'protect consumers across the financial sector from

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15 For IFSB risk management and capital adequacy standards see IFSB (2005a & 2005b).

unfair, deceptive, and abusive practices'. A key stakeholder that needs protection in Islamic banks is the profit-sharing investment account (PSIA) holder. Although PSIA holders share the risks of the banks, which legally cannot be covered by deposit insurance, they do not have any influence on the management of the organisations.

### *B. Organisational Level*

Good governance is the key to managing risks at the organisational level. Maximising profit or shareholder value was partly blamed for excessive risk-taking and leverage during the current crisis. It is the responsibility of the Board of Directors to clearly define the risk-return parameters and introduce a prudent risk-management culture and practices (Becker & Mazur, 1995). Once a financial institution decides that it has a comparative advantage in taking certain risks, it has to determine the role of risk management in exploiting this advantage (Stulz, 1996). An organisation's ability to undertake activities not only depends on risk-management policy, but also on its capital structure and general financial health. Risk management and capital are substitutes in protection against risks in financial exposures. In the case of Islamic banks, higher risks in the modes of financing need to be reduced by either having efficient risk-management systems or holding more capital.

Cumming and Hirtle (2001) identify risk management as an overall process that a financial institution follows by defining a business strategy and instituting appropriate processes and procedures. Risk management should be an integral part of the corporate strategy involving everyone in the organisation. Although elements of the risk-management process would include identifying, measuring, monitoring and controlling various risk exposures,<sup>16</sup> these cannot be effectively implemented unless various processes and systems are in place. The overall risk-management system should be comprehensive, embodying all departments/sections of the institution so as to create a risk-management culture. Among others, there is a need to enhance transparency and information

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16 See Jorion (2001, p. 3) for a discussion.

disclosure, ensure maintenance of credit standards at all times, and maintain adequate capital to cover the risks.

Schroeck (2002) divides risks in financial firms into two types: first, risks related to the balance sheet or both assets and liabilities. These risks include interest rate, exchange rate and liquidity. The second type of risks is related to transactions and can arise either on the asset side or the liability side of the balance sheet. These risks depend on the specific product or contract used.<sup>17</sup> Other than the traditional risks faced by financial intermediaries, Islamic banks face additional risks arising from compliance with Shari'ah. Not only does the nature of some traditional risks (such as legal, liquidity and operational risks) change, but there are also some additional unique risks arising in Islamic banks. These include withdrawal risks, fiduciary risks, displaced commercial risks and bundled risks.<sup>18</sup> These additional risks need to be understood by Islamic banks and mitigated through appropriate risk-management tools.

### *C. Product Level*

Risk mitigation will be different for existing and new Islamic financial products. As noted, risks in existing Islamic financial products are complex and evolve over different stages of the transaction. Even though Islamic finance has existed for more than three decades, the risks involved in its products are not well understood. It is only recently that some literature on risk-management issues related to Islamic banking practices has appeared. The crisis has shown that there is a need to better understand the various risks in Islamic banking products and come up with appropriate controlling tools and mechanisms. The crisis and the downturn of economies are also likely to bring disputes to courts, which may reveal some unknown legal risks inherent in Islamic financial products.

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17 Some of the risks arising at transactions level are discussed later under the product heading.

18 For a discussion on risks in Islamic finance see Ahmed and Khan (2007).

The second aspect of risk relates to the introduction of new products in Islamic finance. As pointed out, the general trend in Islamic finance has been to come up with Sharī'ah-compliant alternatives to conventional products. While this approach can potentially make the industry susceptible to similar risks and crises, it also exposes the sector to Sharī'ah-compliance and reputation risks. Instead of using the current product-based method of developing Sharī'ah-compliant alternatives to conventional products, a functional approach to develop Sharī'ah-based products can be used to mitigate these risks.

The functional approach to product development would examine the needs that the financial sector satisfies and then come up with Islamic alternatives that can satisfy these needs. For example, one function of the financial sector is to provide financing to enterprises. The most common way to meet this need of enterprises in conventional finance is to provide interest-bearing loans. Under the product approach taken by Islamic banks, this would result in using a product like *tawarruq* that mimics the conventional loan in substance. The functional approach, however, would assess the need of the entrepreneur. In the case of a loan, the need is not money itself but the necessity of the entrepreneur to buy certain input with it (Al-Suwailem, 2006). The functional approach to financing would require understanding the need of the enterprise and then devising appropriate modes of financing (like *istiṣnā'*, *murābahah* and *ijārah*) that appropriately satisfy the need.

Similarly, another function of financial institutions is to minimise risks. In conventional finance, derivatives are widely used as hedging instruments. If the current Sharī'ah-compliant product approach is taken in Islamic finance, then one would try to develop Islamic forward, Islamic swap, etc. As conventional derivatives do not comply with Sharī'ah principles, this may involve using financial engineering to come up with stratagems/ruses to circumvent the prohibitions. Under the functional approach, however, the need of minimising risks can be accomplished by using other means. For example, Al-Suwailem (2006) suggests using a cooperative technique of hedging currency risks that does not employ any derivatives.

## VI. CONCLUSION

The severity of the current crisis has led to the evaluation of the foundations of the capitalist financial system and the search for ideas and solutions. Islamic economists contend that Islamic finance has an alternative that would prevent the recurrence of a similar crisis. Whereas the principles of Islamic finance have much to offer to bring about a stable financial system, the practice of the industry is drifting closer towards the conventional models. This paper has identified some policies and proposals at the institutional, organisational and product levels that can reduce risks and prevent financial meltdown in the Islamic financial sector. While the focus of the discussion in this paper has been on the failure of institutional and organisational mechanisms that led to the failure in evaluating and managing risks, there is a more fundamental lesson to be learnt from the current predicament. The crisis has revealed the importance of trust in economic transactions in general and financial transactions in particular.

Brooks (2009) asserts that ‘an economy is a society of trust and faith’ and ‘every recession is a mental event’ and ‘has its own unique spirit’. Similarly, Stiglitz (2008) maintains that ‘financial markets hinge on trust, and that trust has eroded’ in this crisis. The severity of the current financial crisis is partly a result of the breakdown of trust. People lack confidence in financial institutions or in the ability of the governments to fix the problem, and financial institutions do not trust each other or their prospective clients. As a result, there is a need to set up intelligent rules for all market actors to enhance transparency, credibility and trust (Guttenberg, 2009). The gravity and the length of the crisis will not only depend on how fast the risk-management infrastructure can be rebuilt, but on how fast the overall trust can be restored.

As pundits in the West are evaluating their own system and searching for solutions, it is a good time for Islamic finance to pause and reflect on the path it has taken. As discussed in this paper, using Sharī‘ah-compliant products that are similar to those in conventional finance is blurring the difference between the two systems and can potentially lead the Islamic financial sector to a similar crisis. What is at stake by following this path in the long run is trust in the Islamic

financial system. In the case of Islamic finance, trust will not only be created by having transparent dealings and well-managed risks, but more importantly by the authenticity of Islamic products. One way of doing this is to bring discipline in Sharī'ah governance by creating a national-level Sharī'ah regulatory body in different jurisdictions. By overseeing that the products coming into the market fulfil the Sharī'ah requirements in the broader sense, this national body will take control of and determine the direction that the Islamic financial industry should take in the future. Building trust would require developing a Sharī'ah-based Islamic financial system that can produce the desired stable, resilient and just alternative.

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