



Islamic Finance and Financial Stability: A Review of the Theoretical Literature

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Abstract

This paper provides an analytical review of about fifteen theoretical investigations that had examined the stability of the Islamic Financial System (IFS) vis-à-vis the conventional interest-based conventional system. The research aims at discussing the main findings and conclusions that the reviewed literature arrived at. A brief account of how financial stability has been defined, in the conventional literature, is also been explored.

The preliminary results indicate that there is an almost a general ‘consensus’ among these treatises on the financial stability’s ‘superiority’ of an Islamic financial system based on equity and participatory modes of financing. To what extent are these claims robust? And what are the underlying assumptions behind the development of such syntheses? These and other important related questions will form the basis of the discussion and analysis in this research.

Key words: Islamic finance, financial stability, financial instability, interest-based system

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1. Introduction

In 1985, the Federal Reserve Bank of San Francisco convened a two-day conference that gathered some leading financial experts, policy makers and academicians¹ to address the financial stability (FS) issue of the conventional financial system (CFS) from different angles and perspectives. The proceedings of the conference were published in a special volume titled *'The Search for financial Stability: the Past 50 years'*. After about a quarter of a century, in 2007-2008 the World was hit, by far, the largest financial crisis that the World has ever seen since the inflictions of the Great Depression of the late 1920s and early 1930s. The far-reaching magnitude and consequences of the recent global financial crisis has brought, once again, to the forefront the prolonged and the long-awaited issue *'the search for financial stability'*. Profound questions, similar to the ones that had been addressed in the 1985 conference, have been on the surface in a more pressing manner; what is financial stability? Why is it that important? What should, be done, or what can be done to ensure its effect and to benefit from its 'fruits'? Last but not the least, why it has not been possible to attain such an 'elusive' goal despite 'the great moderation'² that was proclaimed by the 'disciples' of the deregulation in 2004; three years prior to the crisis's eruption? And are there any 'effective remedies' and/or 'greatly moderated structural changes' that can be pursued to overcome the instability impasse?

Within the climate of this heated debate, Islamic financial institutions (IFIs) and the principles that govern their operations received considerable attention to examine the reality of their stability as proclaimed by their advocates. Nonetheless, it has to be acknowledged that discussion surrounding the stability issue of the IFS is not new; the available literature suggests that such discussions can be traced back to the early 1980s. However, most if not all pre-crisis

¹ Like Robert Holland who have spent twenty five (25) years at various positions in the Federal Reserve System (FRS or the Fed), and the distinguished classical historian of financial crises; Charles Kindleberger. In his opening remark Mr. Holland asserts that the 'instability' is deeply rooted in the prevailing system, 'I do not believe that financial instability is born of bad management or lousy regulation. It is inherent in the kind of financial system we have built and seem to like'. Robert C. Holland, 1985. 'The Problem of Financial Stability', in 'The Search for financial Stability: the Past 50 years' (ed.), Federal Reserve Bank of San Francisco, p. 1.

² This was the title of the speech that Ben Bernanke, the then Governor of the Fed and its current chairman, delivered at the meetings of the Eastern Economic Association in Washington, DC on February 20, 2004. Bernanke started his remarks by noticing that: 'One of the most striking features of the economic landscape over the past twenty years or so has been a substantial decline in macroeconomic volatility'. Why was it possible to attain such a feature? Three factors have been identified in Bernanke's speech; '... structural change, improved macroeconomic policies, and good luck. Explanations focusing on structural change suggest that changes in economic institutions, technology, business practices, or other structural features of the economy have improved the ability of the economy to absorb shocks ...The increased depth and sophistication of financial markets, deregulation in many industries, the shift away from manufacturing toward services, and increased openness to trade and international capital flows are other examples of structural changes that may have increased macroeconomic flexibility and stability'. After this brief touch upon this factor, Bernanke devoted much of his speech to 'the "improved-monetary-policy"' as the prime factor that provides an 'explanation for the Great Moderation.' Ben S. Bernanke, 2004, 'The Great Moderation', www.federalreserve.gov, accessed October 16, 2012.

studies have been theoretically conducted on an ‘abstract model’ assumed to be purely based on equity and participatory modes of Islamic financing. The crisis’s eruption has triggered empirical inquiries that have tried to capture the ground reality of these institutions.

This research aims to provide an account and a critical review of some theoretical investigations that have been carried out in this area. To meet the intended objectives the study will address the following questions:

- What is FS and why is it so important?
- What are the main findings and conclusions of the reviewed literature?
- How robust these findings and conclusions are?
- What are the main methods and arguments used to support the obtained results?

The rest of paper is organized as follows: Section II explores the definition of FS and its importance. In section III, the literature is critically reviewed and examined. Section IV concludes with few remarks.

2. What is financial stability and why?

Since its first adoption as a policy objective by a major central bank (i.e. the Bank of England in 1994), FS is receiving a great deal of a ‘special attention’ as a distinct issue from price stability and the efficient functioning of the financial system (Allen and Wood 2006). Various initiatives have been taken at the national, regional and international levels by different players; policymakers, financial analysts and academicians in order to unveil the complexities surrounding the term and to design the appropriate measures and/or policies that can be implanted to the financial system. These are so numerous to count and very difficult to quantify, to come up with a proxy estimate of the ‘opportunity cost’ that the international community is incurring because of the frequent revisits of financial turbulences. In spite of all the tremendous efforts that have been devoted to this issue, a comprehensive and an established definition has not been developed yet. This veracity makes the answer to the ‘what’ question a cumbersome exercise. In fact, even most of the major central banks that have started, over the past few years, producing financial stability reports (FSRs) do not provide a definition altogether or they provide a sort of ‘un-official working definitions’ (Oosterlooa and Haan 2004).

The segment of FS literature that looked into how the term can be defined come the conclusion that the term is very complex to have it defined clearly and comprehensively and it is even harder to measure (Allen and Wood 2005, Schinasi 2007, and Gadanez and Jayaram 2009). As

a result, three main approaches have been followed to overcome this stalemate: (i) to ignore the definition altogether, (ii) to define FS through its antithesis (i.e. financial instability) and finally (iii) some sort of a definition that follows certain route and fulfills special purpose.

Following the latter approach there is a general consensus that FS should reflect ‘the smooth functioning of a complex nexus of relationships among financial markets, infrastructures and institutions operating within the given legal, fiscal and accounting frameworks.’³, (Čihák, 2006; Oosterlooa and Haan, 2004 and Gadanez and Jayaram, 2009). However, when it comes to putting such a general consent into a well-defined and policy useful definition, the views differ considerably. This difference in views has been translated into the emergence of at least three main approaches: the broad, the narrow, and what I may call the ‘listing’ exposition. The broad definition of the FS term concentrates on the system-wide assessment. The attempt, in this regard, is to capture the stability aspects of the entire system rather than singling out an individual component of it (e.g. depository institutions or financial markets) as is the case under the narrow approach. Below are two illustrative examples of the narrow and the broad definitions of FS:

- In planning for the aforementioned 1985 conference the organizers defined FS as: “the soundness of depository institutions involved in the provision of monetary assets”. According to this view, ‘the important criterion was not the numbers of bank failures *per se*, but the degree to which liquidity and solvency crises would reverberate beyond individual institutions’ (FRBSF, 1985). It should be noted here that the very long historical record of financial crises reveal an established fact about banks and the banking industry. This type of financial intermediaries has been at the heart of almost all financial turbulences that the conventional system has suffered from. Besides, the banking industry is a key player in the transmission mechanism through which monetary policy affects the economy’ (Oosterlooa and Haan 2004). For this reason the banking industry has been singled out from other components of the financial system, as noted by Allen and Wood (2006), “for many years, until the issue faded from view after the Second World War, central banks were concerned with the stability of the banking system. The Bank of England and La Banque de France had both accepted this duty well before the end of the 19th Century, and the Banca d’Italia accepted it

³ In fact even those who ignore the definition issue or those who define instability instead may, at the practical level, agree with this reflection.

explicitly in its report and accounts for 1905. Furthermore, a major reason for the founding of the Federal Reserve was the concern over the stability of the US banking”. It is, therefore, not surprising that most of the policy and empirical literature have devoted much of their efforts to the stability fixing and testing of the banking industry.

- As for the broad definition, the Reserve Bank of Australia (the Australian Central Bank), for instance, defines FS as a situation in which “financial intermediaries, markets and market infrastructure of the financial system facilitate the smooth flow of funds between savers and investors and by doing so, helps promote growth in economic activity”, (Alawode and Al Sadek 2008).

The ‘listing’ approach can be viewed as an extension or an elaboration of the broad way of defining FS. The main rationale behind such an elaboration has been to overcome some of the shortcomings of the narrow approach and the difficulties that surround the development of a broad definition. The authors who have followed this route identified a number of elements and/or desired features which they consider as important ‘raw materials’ for the make-up of a ‘good’ FS definition. Among the aspects pointed out (Allen and Wood 2006, and Schinasi 2004) are the following:

- The definition should be broad in nature. Thus, it should encompass the different aspects of the financial system: infrastructure (including the legal system and official frameworks for financial regulation, supervision, and surveillance), institutions, and markets. Some advocates of this view went beyond the financial system to emphasize the importance of encompassing shocks that hit the real sector, but have dire consequences on the functioning of the financial system.
- The definition should not limit the FS scope of the financial system to resources and risks allocation, mobilizing savings, and facilitating wealth accumulation, development, and growth; it should also imply that the systems of payment throughout the economy functions smoothly.
- The FS concept should relate not only to the absence of actual financial crises but also to the ability of the financial system to limit, contain, and deal with the emergence of imbalances before they constitute a threat to itself or economic processes. In a well-functioning and stable financial system, this occurs in part through self-corrective, market-disciplining mechanisms that create resilience and prevent problems from festering and growing into system-wide risks.

- FS to be thought of as occurring along a continuum. The concept of a continuum is relevant because finance fundamentally involves uncertainty, is dynamic (meaning both inter-temporal and innovative), and is composed of many interlinked and evolutionary elements (infrastructure, institutions, markets). Accordingly, ‘FS is expectations-based, dynamic, and dependent on many parts of the system working reasonably well’.
- The definition should give an observable state of affairs to the FS issue, so that those who are responsible for maintaining FS can know whether they are succeeding in instating it or not.
- Soundness of the different segments of the financial system or a particular component of it (e.g. depository institutions). Thus specific risks and exposures; be it liquidity, maturity-mismatch, leverages...etc., should be incorporated in the definition, so that properly designed risk management policies and tools are in place.
- Monetary policy and its role in the triggering of financial crises. This is an element that should not be left out to address two important questions: does a sound regulatory framework exist and an effective enforcement of banking supervisory measures is in place?
- Contagious and the ‘domino’ effects of the failure of a component of the system on its smooth functioning are also of prime importance that needs to be reflected in the definition in one way or the other.

Despite the intellectual efforts of the above elaboration, two important observations can be made:

- First, it is very difficult, to say the least, to encompass and/or accommodate all such vital and very delicate aspects in a single clear, precise and all-inclusive definition. Furthermore, the difficulty becomes even harder when the development of a useful and empirically testable model is to be designed based on such an all-inclusive definition. After his long involvement in academia and in the monetary policy and FS issues at various Central Banks, Goodhart (2004) observed the absence of such an inclination for model, “I have become increasingly of the view that what needs to be done is to construct an underlying model that can act as an intellectual backstop to the systemic FS function, analogously to the way that macro-forecasting models provide the intellectual backbone to the MPC’s interest rate decision”. Given the difficulty

that surrounds such an exercise, Goodhart emphasized that ‘there is a long way yet to travel [in this road]’.

- Second, there are other important elements that have not been emphasized enough in the long ‘listing’ agenda. Among these is the factor relating to the property of a given financial system; does such a property dampen and contain financial shocks, or does it, rather, amplify and exacerbate them? In other words; does a given financial system have ‘special’ characteristics or devices that make it crises’ ‘prone’ or crises’ ‘immune’? This is a so vital issue as the reoccurrence of financial crises is becoming a phenomenon that has accompanied the progress and development of the conventional financial system for over a very long period of time in different continents and counties. Such persistency may indicate a fundamental flaw and/or flaws that have to be addressed first and foremost before the suggestion of any remedial policies and reforms.

In the light of the aforementioned discussion and given the nature of the reviewed literature in this occasion, it might be appropriate to give a particular attention to the property element to assess the ‘inherent’ stability or otherwise of a given financial system. If such a task is successfully completed it might be appropriate to identify the internal ‘device (s)’ that strengthen the stability or feed its antithesis.

Finally as for the ‘why’ question the inflictions of FCs are well known in terms of the huge financial costs and economic losses, the increased frequency and magnitudes of their appearance, the explosive growth in the volume of financial transactions in comparison to the sluggish growth of the real economy, the increased opaqueness of new instruments and products (Čihák 2006).

If the indirect costs like the rapidly growing number of financial stability reports (FSRs) published by central banks in the last decade and other initiatives are taken into account, the ‘invoice’ of such turbulences will be so enormous for the present and future generations. Therefore, there is no disagreement that FS is a vital issue, if not addressed properly and its antithesis is not tackled correctly, the inflictions of coming crises will be more severe in magnitude and nature than the ones we have witnessed in the recent past. Based on this agreement, some experts are calling for FS to be recognized as “a state of affairs which is conducive to the public’s welfare”, or “an important social objective –a public good-” (Allen and Wood 2006, and Schinasi 2007).

3. The literature: Analysis and Discussion

Table (1) below presents a summary of the main findings and conclusions of the reviewed investigations. The table, also, highlights the major utilized methods of analysis in those studies. It is apparent from the last column, on the right, that almost all studies⁴ claim the ‘superiority’ and the inherent stability of the IFS over that of its conventional counterpart. What are the bases of such claims? And how robust are they?

From a careful examination of those treatises I found that, the authors’ elaborations have been based, implicitly or explicitly, upon the following arguments and assumptions:

1. Debt and leveraging are the main sources of financial instability in the current system, Askari (2012). These two features are the prime result, to a large extent, of the existence of an *ex-ante* predetermined rate of return in the form of ‘interest’ (‘Riba’ or ‘Usury’) in the current practices of the conventional financial system. According to the literature, many renowned conventional economists, since the beginning of the 19th century till now, have observed a number of common features that precede the occurrence of financial crises (FCs) (Askari *et al.* 2012). Among the features relating to the ‘interest’ issue are the following⁵:

- ❖ An extended period of low interest rates as was the case in the subprime financial crisis of 2007-2008⁶. Such a policy has led to the huge growth of a non backed expansion of credit. Soros (2008) noted “when money is free [or quasi-free], the rational lender will keep on lending until there is no one else to lend to” (Askari *et al.*, 2010). This situation has been attributed to the development of another axiom; it is the fact that ‘too much money is chasing too little assets’. Under such a scenario there is no other way that this ‘too much money’ can be absorbed except through the appearance of a bubble(s) that will grow without any economic foundations. The appearance of a bubble or bubbles will feed the expansion of the unbacked credit, and the vicious circle continues until the bubble (s) burst. If such a situation arose, the huge volume of the non backed credit will

⁴ There are two exceptions to this general trend; one is explicit the other is implicit. The explicit is represented by Dr. Naqvi (1981, p. 127) who holds the view that a wholly equity-based system “will be highly unstable”. This is because, according to Naqvi, equity-financing, contrast to interest-financing makes the return on investment “a function of business conditions in general and of the efficiency with which the enterprise is being run. Hence an element of uncertainty is introduced into the investor’s expectations. Hence, to hedge against the probability of a loss, ways and means must be found, through some kind of deposit insurance scheme, to guarantee . . . the normal value of deposits. [Otherwise] . . . not only the banking system, but the entire economy will become highly unstable”. (Naqvi, p. 136). The implicit view is that of El-Gamal (1997). His study departed from the prevailing theoretical framework to construct a model based on ‘close-to-reality’ postulation as he portrays.

⁵ It has to be noted that we are not denying or underestimating the contribution of other factors in triggering or worsening FCs, like the lax regulations it is a methodological consistency that forced us to limit the discussion to factors relating to interest.

⁶ Yet these low or even zero-rates are suggested as remedies in the aftermath of FCs. This paradox indicates the puzzling dilemma of the interest rate itself.

meltdown, as it was no more than mere promises that were sought to be validated at a certain point in the future. Thereafter, another cycle of the bail-outs programmes, from the tax payers money, and the cheap money through zero-interest rate policy (ZIRP), quantitative easing and other sophisticated measures will come out from the ‘the conventional box’ of policy makers to the rescue of the ‘too-big-to-fail’ institutions and to fix other financial and economic distortions.

- ❖ The unique status and sensitivity of interest as a ‘price’ makes the maintenance of its ‘appropriate’⁷ level a very difficult, if not impossible task to attain, Stiglitz (1989) explains “the interest rate is not like a conventional price. It is a promise to pay an amount in the future. Promises are often broken. If they were not, there would be no issue in determining credit worthiness... raising the rate of interest may not increase the expected return to a loan; at higher interest rates one obtains a lower quality set of applicants (the adverse selection effect) and each of one's applicants undertakes greater risks (the adverse incentive effect). These effects are sufficiently strong that the net return may be lowered as the bank increases the interest rate characterized by credit rationing”. Buiter (2009) went further by stating that “debt, characterized by fixed financial commitments, can be a poor financing choice in a risky, uncertain world where the private and social costs of default are high...”.
- ❖ Minsky (1993), whose work is well known in this field, departed from the mainstream postulate of the Efficient Market Hypothesis to propose the Financial Instability Hypothesis instead, has been cited in various instances of the reviewed works. His extensive work, in the study and analysis of financial crises, that has been carried out for about forty years⁸ led him to conclude that there is a fundamental flaw in the conventional economic system. This flaw is related to the type of financing regime and the contractual arrangements that develop over time⁹, "a fundamental property of all capitalist economies is the existence of a system of borrowing and lending based upon various margins of safety... a debt instrument or a lease provides for payments to be made on account of both interest and principle. An equity liability has only a contingent commitment to make payments, dividends need to be paid only if earned and declared,

⁷ A level that makes the economy grow, for quite a lengthy period of time, without booms and busts. It should be noted, here, that the concern is not normal business fluctuations relating to the ups and downs of the real economy, but rather the ‘abnormal’ episodes that the economies suffer from as a result of the financial turbulences. I found this distinction very important as noted by the French Economist Paul Leroy-Bealieu (1843- 1916) and probably others.

⁸ His first work appeared in 1957, and the last 1996; the year he passed away.

⁹ Minsky believes in the variety of capitalist systems.

and there is no contractual need to repay principle. For any given cash flow, from operations or from the fulfillment of owned contracts, the greater the share of equity financing in a balance sheet the greater the margin of safety that protects the owners of the non-equity liabilities".

It is, therefore, apparent that based on the above arguments and observations, the authors of the reviewed investigations, share Chapra's view that market indiscipline in the current system is the primary cause of FCs, and this indiscipline is, in turn, the result of the risk-shifting paradigm under the 'interest-bearing' mechanism and the absence of risk-sharing as is the case under equity and participatory modes of financing, "the primary cause in our view is the inadequate market discipline in the conventional financial system. Instead of making the depositors and the bankers share in the risks of business, it assures them of the repayment of their deposits or loans with interest. This makes the depositors take little interest in the soundness of the financial institution. It also makes the banks rely on the crutches of the collateral to extend financing for practically any purpose, including speculation... the ability of the market to impose the required discipline thus gets impaired and leads to an unhealthy expansion in the overall volume of credit" (Chapra 2007). Thus to restore market discipline to the system, according to this analysis, a shift has to take place from the heavy reliance on debt financing based on interest-bearing instruments, to more of the like of equity equity financing and this will take us to the next point; the nature of financial intermediation in an IFS according to the postulations of these authors.

2. The IFS framework utilized in the analysis of the treatises is the one that is built on 'total' or 'pure' equity and PLS participatory modes of financing. This model has been derived on the basis of the authors, explicit or implicit, convictions that this is the 'Islamic' system that ought to be sought according to the requirements stipulated in the basic sources of Islam. For instance, some authors use the phrases "the Qur'an prohibits debt based contracts", and "Islam offers a system that prohibits all debts" as evidence to support their claim. To further strengthen this argument, these authors proclaim that the sort of the 'IFS' they propose goes in 'spirit', if not in line, with the reforms or the specified proposals of some conventional economists in the aftermath of major financial turbulences. The Chicago plan of the 1930s and Limited Purpose Banking (LPB) of Chamley and Kotlikoff (2009) have been displayed as illustrative examples. Furthermore, there have been other explicit reference to IF principles by other economists in the light of the unfolding inflictions of the 2007-2008 financial crisis. Buiter (2009), for instance, states that if too much debt is part of

the problem, reducing that level through equitization is part of the solution, “the application of Islamic finance principles, in particular a strong preference for profit and loss-sharing and risk-sharing arrangements and a rejection of ‘Riba’ or interest-bearing debt instruments” (Buiter, 2009). Two years later Rogoff (2011) echoed a similar tone, “we need to recognize that the real problems [in the financial system] are rooted in excessive concentrations of debt.. If G-20 governments stood back and asked themselves how to channel a much larger share of the imbalances into equity-like instruments, the global financial system that emerged just might be a lot more robust than the crisis-prone system that we have now”. He went further to point out that “perhaps scholars who argue that Islamic financial systems’ prohibition on interest generates massive inefficiencies ought to be looking at these systems for positive ideas that Western policymakers might adopt”. Chong and Ming-Hua (2009), also pointed out that the profit and loss sharing system subjects interest-free banks to greater market discipline.

The above two points (1 and 2) are the two fundamental assumptions that the authors have relied upon in their analysis to support the FS superiority of the IFS over that of its conventional counterpart. Nonetheless, it has to be noted that these sorts of studies tend not to give due consideration to very fundamental issues. Among these are: the application of the ‘aspired model’ is, at the end, bound by the strong adherence of ‘humans’ on one hand, and the laws and regulations that prevail at the time of the application, on the other¹⁰. Both factors are determinetal in success or otherwise of the ‘ideals’ that are presumed in these researches. Some authors did acknowledge these facts by highlighting the tax and regulatory ‘biases’ of most, if not all jurisdictions, towards debt instruments, particularly interest-based modes. Others have pointed out to the ‘heterogeneity’ fact of economic agents under an applied IFS, where the whole Islamic system is not fully applied. Therefore, they questioned the ‘realisticity’ of the presumption that “Muslims always practice Islam and abide by its teachings in financial activities and daily life” (El-Gamal, 1997 and Hassan and Kayed, 2010). The degree of such an adherence varies considerably. Moreover, ‘adherent’ or ‘practicing’ Muslims are not leaving in an ‘isolated’ village. Their societies, their economic and financial dealings do interact with economic agents of other faiths and cultures. Such reality will affect the sort of the ‘possible’ and probably ‘plausible’ financial model for that society or community. In the light of these and other factors some have gone further by acknowledging the ‘inaccurate’ proposition of the ‘pure’

¹⁰ These two elements will be elaborated more in the final version of this project.

equity financing regime under the Islamic system to be the ‘only inclusive’ model. For instance, in an unpublished note Zarqa¹¹ (2012) states, “I asserted [in the 1983 article] that in an Islamic system... all business financing must be based on various forms of equity... I realized later that this assertion is not justified neither by Islamic Shari‘ah nor by the reality of Muslim economies past or present... This being the case, it becomes important to further examine the stability implications of Islamic debt¹² vs. conventional debt.”¹³. Hence, it is a gross error to rule out debt and debt instruments completely from an Islamic financial system, as some have suggested. This would neither be feasible nor possible.

Moreover, the assertion that Islam ‘prohibits’ debt is an inaccurate postulation of the Islamic stance. One example may clarify that. It is a fact that the longest verse in the Qur’an is the verse of debt (Chapter 2, Verse 282). Ironically, this verse came straight after the latest and the strongest verses that prohibited and condemned Riba in a very explicit and comprehensive manner. The verse of provides a detailed measures and procedures that can be utilized and implemented to safeguard the interest of the parties entering into debt contacts, including deferred and installment sales. As a result, throughout the history of the Muslim societies and Islamic states dealing with debt instruments have been practiced. Indeed, there are ‘discouraging’ statements in the basic sources of Islam against the use of debt¹⁴, but that does not make the issue ‘illicit’ or ‘impermissible’. There has to be a clear understanding and distinction between the two stances. Moreover, the practice of the Islamic banking shown insignificant presence of PLS mechanism on the assets side of these institutions. For instance, Al-Shubaily (2011) found that PLS modes of financing on the asset side of twelve Saudi banks constitute no more than three (3) per cent of the total assets of these institutions. In Malaysia, on the other hand, the situation is even worse. According to Chong and Ming-Hua (2009) ‘only 0.5% of Islamic bank financing is based on the PLS paradigm of *Mudarabah* (profit-sharing) and *Musharakah* (joint venture) financing’.

On the liability side in the Malaysian case ‘*Mudarabah* (profit-sharing) deposits, which account for 70% of total Islamic deposits, are more predominant’ (Chong and Ming-Hua 2009). But this ‘theoretical’ arrangement has to be treated carefully as Chong and Ming-Hua (2009) have shown

¹¹ We are thankful to Zarqa for this and sending us a soft copy of his 1983 article.

¹² While accepting the possibility of establishing an accepts an IFS based on debt Zarqa noted that : “(a) re - financing of old debt by issuance of new debt and (b) selling of debt to third parties, are both strictly prohibited”, under such a system.

¹³ We are thankful to Prof. Dr. Zarqa for providing us with this note along the original 1983 article as it was published at that time.

¹⁴ See Al-Suwailem (1999). ‘*Mawqif As-Shari‘ah Al-Islamiyah Mina Ad-Dayn* (The Stance of Shari‘ah on Debt)’. Reprinted in Al-Suwailem (2011). ‘*Qadayah Fil Iqtisad Wa At-Tamweel Al-Islami* (Issues in Islamic Economics and Finance).

in their work that ‘Islamic deposits are not really interest-free, but are very similar to conventional-banking deposits’.

In spite of the above reservations, it has to be acknowledged that IBs have shown relative stability to the first wave of the last international crisis of 2007-2008. As a result, their ‘theoretical’ proposition of pure equity or ‘superficial’ link of financing to real activities may bring more discipline to the financial system behaviour. And this takes us to the asset-backing principle that govern the operation of IFIs. This principle has not been discussed thoroughly in the reviewed theoretical studies. Discussion of the effect and impact of such a principle is left to the empirical part of the research.

Finally the essential message that the authors would like to make centers around the greater role that should be given to risk-sharing paradigm in the World of finance as opposite to risk-shifting paradigm that dominates the current shape of the financial system, “whether the reforms implemented are called the Chicago Plan, Limited Purpose Banking, or Islamic finance, the message is unified: the world needs a financial system that reduces risk-shifting and debt financing in favour of risk-sharing and equity financing in order to create a financial system that promotes growth and minimizes instability” Askari 2012.

I think there a strong case for this message and in the analysis and argument of these authors. This plea deserves due consideration if policy makers and economists would like to widen the prospects beyond the ‘tool boxes and policies’ of the conventional wisdom.

Table 1: Summary of the Findings and Conclusions of the Reviewed Investigations

Author (s) and Publication year	Sample	Method of Analysis	Main Findings
Zarqa, M. A. (1983)		<ul style="list-style-type: none"> • Tentative remarks; e.g. Agreement of Many conventional economists that debt financing is a major factor destabilizing investment in capitalist economies, the speculative demand for money is a source of instability in the Keynesian system, the view held from corporate finance that an increase in debt-financing (as opposed to equity-financing) of a firm increases its risk of insolvency and magnifies the relative fluctuations, “hot money” movements are a destabilizing factor, and strict prohibition of interest eliminates the loan market, and implies that all business financing must be based on various forms of equity. 	<ul style="list-style-type: none"> • Equity financing is intrinsically more stable than one based on interest.
Chishti , S. U. (1985)		<ul style="list-style-type: none"> • The relative stability of investment under the two systems of fixed and flexible returns to capital is examined through qualitative general model of two differential equations to express financing conditions and investment behaviour. • The model put forth here is closely related to Minsky’s approach of analyzing the inherently unstable character of a financially developed and sophisticated capitalist economic system. • The added wrinkle to Minsky’s model is to interpret 	<ul style="list-style-type: none"> • The spread between cash-flows (i.e., profits) and payment commitments (i.e., interest payments) which is the main source of instability in investment. • The real source which generates the abovementioned gap is the fixity of the dated payment commitments versus the uncertainty of cash flows. • IF has a built-in stabilizer to reduce

		<p>the fixity of financing terms, vis-a-vis the uncertainty of profits to be mainly responsible for the gap between cash flows and payment commitments.</p>	<p>the volatility of investment.</p> <ul style="list-style-type: none"> Islamic financing facilities make the payment commitments a function of cash flows.
Khan, M. (1986)		<ul style="list-style-type: none"> Theoretical aggregate macroeconomic model is used to study the behavior of the Islamic banking system. The framework is based upon the model developed by Meltzer (1951) and extended by Fernandez (1984). 	<ul style="list-style-type: none"> The Islamic banking model; based on equity and participation bears resemblance to proposals made in the literature on the banking reform in many countries, especially USA. The IB model may prove to be better suited to adjusting to shocks resulting from crises (i.e. shocks to assets are absorbed by liabilities). The real values of assets and liabilities in this model would be equal at all points in time The banking system discussed in the paper is a 'two-window' model; one window for demand deposit (100% reserve + no return or interest to be paid), the other for investment purposes based on PLS or equity mechanisms (no guarantees on principal and return + no official reserve requirements). Many eminent western economists (e.g. Fisher (1945), Simons (1948), Friedman (1969)) Western economists have argued that the current (one-sided liability) interest-based financial system is fundamentally unstable.
Mirakhor, A. and Zaidi, I. (1991)		<ul style="list-style-type: none"> Development and use of a simple general equilibrium model for an open-economy to compare the stability of an interest-free PLS –based or an equity-based economy vis-à-vis the prevailing interest-based system. The study is an extension of previous researches that have been based on a closed-economy presumption (e.g. Khan (1986)). 	<ul style="list-style-type: none"> The IFS has the capacity for a better adjustment to macroeconomic disturbances that require the shifting of resources from traded to the non-traded sector than does the conventional interest-based system. The IFS would be based on a 'two-tier <i>Mudarabah</i>', or the 'two-windows model'; 100 per cent reserve for demand deposits (i.e. deposits of this category are regarded as <i>Amanah</i> (safe-keeping), and a PLS arrangements for investment deposits.
Zuberi, Habib A. (1992)	Time-series data covering a period from 1973 to 1989 on Pakistan were used.	<ul style="list-style-type: none"> A modified version of the Keynesian type demand function for money has been applied Separate estimates were made for the velocity of circulation of money. The hypothesis: public's demand for non-interest bearing money tends to be stable relative to the interest-bearing demand for money. 	<ul style="list-style-type: none"> The velocity of circulation of money has been stable. The desired demand for real money is positively related to real GDP and negatively to interest rate. The active support by the government in the operations of the banking industry can bring about the desired results. The results do not support the hypothesis that the public's demand for money tends to be more stable in the absence of interest-bearing financial assets.
El-Gamal, M. (1997)		<ul style="list-style-type: none"> The stability of the institution of Islamic banking from a micro-economic point of view, where the survival of this institution depends on its ability to maintain sound financial positions for its customers (devout Muslims, and others). An evolutionary game-theoretic model of the dynamics of Islamic banking in the existence of other interest-based financial institutions. 	<ul style="list-style-type: none"> 'The necessary and sufficient condition for Islamic banking to survive in the long run is the existence of agents who are willing to interact symmetrically with the Islamic and the interest-based parts of the economy, and that those agents deal amongst themselves in an Islamic way'. The Malaysian experiment of a dual-system that support and regulate the two 'tiers' may support the author's finding.

Chapra, M. U. (2005)	Observations about recent crises. Examples : The US stock market crash of 1987, the bust of the Japanese stock and property market bubbles in the 1990s, the 1992-93 ERM breakdown, the Mexican crisis of 1995 .	<ul style="list-style-type: none"> • Systemic and intellectual analysis based on observing the recurrence of financial crises over the past few decades. • Arguments and analysis of some conventional economists and institutions about the imbalances created by interest-based instruments. 	<ul style="list-style-type: none"> • ‘Interest’ creates market indiscipline because of the assurances given to a depositor or a banker to claim a return without participating in the risks of the banking business. • Greater role for equity and risk sharing instruments to bring market discipline and stability to the financial system.
Chapra, M. U. (2008 & 2009)	Observations about recent crises. Examples : <ul style="list-style-type: none"> • The US stock market crash of 1987. • The Asian crisis 1997-98 • The Long-Term Capital Management (LTCM) collapse in 1998. • The ‘dot.com’ bubble burst in 2000. • The US sub-prime mortgage crisis of 2007. 	Intellectual analysis and arguments based on: <ul style="list-style-type: none"> • The ‘impossibility’ of designing a new financial architecture without first determining the primary cause (s) of the crisis or crises. • The work of eminent Western economists ; e.g. Fisher, Simon, Galbraith, Minsky and Rogoff with regard their analysis of the recurrence of Financial crises (FCs) and their ‘call’ for Greater reliance on equity financing’. • The absence of the ‘risk-sharing’ element in financial practices created the ‘market indiscipline’, and thus the culmination of the abnormalities of ‘debt explosion’, ‘high leverages’, and speculation. 	<ul style="list-style-type: none"> • The false sense of immunity from losses introduces a fault line into the system. • One of the major causes of these crises is the absence of risk-sharing, ; Risk-sharing along with the availability of credit for primarily the purchase of real goods and services = greater market discipline + reduction in instability. • Greater role for equity financing, but debt still has a role to play. • The widening of the ‘housing finance cooperative’ schemes to cater for the needs of the like of the ‘sub-primers’. But the pool of money sources should be extended to include: banks, corporations and rich individuals.
Askari et al. (2010)		Sequence of analysis and arguments to conclude the inherent stability of the IFS vis-à-vis the inherent instability of the CFS. The analysis has been based on: <ul style="list-style-type: none"> • Deduction of the common factors that led to FCs to draw the general pattern of the identification and sequence of these factors. • The factors that led to the crises are absent in the IFS. • The proposed plans to eliminate crises factors from the financial sector like the Chicago plan and Limited purpose banking (LPB) proposed after the INFC are of equity nature of the financial claims and obligations. These proposals resemble the IFS which is an equity-based system. • A theoretical model to prove the inherent stability of the IFS. This model is based on the classical assumption of full employment equilibrium. Besides, total preclusion of debt and debt trading. 	<ul style="list-style-type: none"> • The general pattern displayed by the historical record of FCs reveals that ‘each episode was preceded by rapid credit expansion, a speculative boom and excessive price volatility in one or more asset classes. This boon is then followed by a burst of that asset. This in turn leads to asset price deflation and banking failure’. • ‘Conventional banks (CBs) fail to meet inherent stability conditions even in the presence of prudential regulations’ [p. 209]. • ‘The instability of the conventional finance is not limited to the role of commercial and investment banks’. • ‘The credit multiplier notion is irrelevant for IF. The corresponding notion is savings multiplier’. • The main principles of IFS like the prohibition of interest contribute to its inherent stability. • IBs do not create and destroy money through the credit multiplier as is the case under CBs. • ‘The classical model, based on full employment, is representative of an Islamic economy where interest is precluded’. • ‘An IFS is a PLS equity-participation system’. • The equity-based system is not an alien to the Western thinking in financial intermediation. • Under the IFS maturities of assets and liabilities are assumed to be matched.

<p>Iqbal, Z. & Mirakhor, A. (2011)</p>		<ul style="list-style-type: none"> • Systemic and intellectual analysis of the prolonged episodes of financial turbulences and some of the proposals that have been suggested by some eminent conventional economists. • The Chicago plan, the limited purpose banking (LPB), and the analysis of conventional economists like Fisher, Allais & Minsky have been referred to as a proof for the inherent instability of the conventional financial system. • Besides the reference to the credit multiplier and money creation under the conventional system as endogenous features that feed the persistent instability of the conventional system. 	<ul style="list-style-type: none"> • ‘Only a financial system along Islamic principles is immune to instability’. • ‘For a given regime of financial institutions, the lesser the weight of debt refinancing, the greater the stability of the system to be’. • ‘The Islamic system would not be expected to experience deep boom and bust cycles’. One of the reasons for this feature; ‘IBs do not create and destroy money’. Besides financing is tied to real activities, no speculation, gambling and the like’. • The ideal IFS would be based on ‘two-window’ model of intermediation; 100 per cent reserve for demand deposits, and a PLS mechanism for investment deposits. This last feature will eliminate the rigidity of the interest-based system in its guarantees of principals and ‘returns=interests’ in isolation from the performance of real activities.
<p>Hassan, M. K. and Kayed , R. (2010)</p>		<ul style="list-style-type: none"> • Systemic analysis of the causes of the crisis and measuring these causes against the intrinsic principles of the Islamic financial system. • The resilience of the IFS is seen through the absence of the factors that led to the sub-prime crisis; ‘Such crisis would not have occurred under an Islamic financial system – due to the fact that most, if not all, of the factors that have caused or contributed to the development and the spread of the crisis are not allowed under the rules and guidance of Shariah’. 	<ul style="list-style-type: none"> • ‘Government bailouts of existing banking system neither present long term solution to the problem nor give assurance that similar crises will not happen in the future’. • ‘Evidence at hand strongly suggests that IF is well endowed to deliver noteworthy contributions towards a more healthy and stable international economy’. For instance, ‘the principle of, ‘no pain, no gain’ embedded in the Islamic financial structure ... [can] help introduce greater discipline into the financial system’. • Theoretically, it would be impossible for a crisis resulting from the factors that triggered the like of the subprime mortgage crisis to take place in the Islamic capital markets sector’. This is due to several reasons; among them are: ban on interest, ban of selling what one does not own or possesses, ban ‘to sell a debt against a debt, IF is based on equity capital rather than debt. • The above results are based upon many assumptions. The foremost among them is ‘Muslims always practice Islam and abide by its teachings in financial activities and daily life’. • ‘There is no absolute assurance that IF, once mature, will weather a similar financial crisis in the future unless it commits itself to being Shariah-based (the substance) rather than Shariah-compliant (the form)’. Therefore, only ‘an honest implementation of Islamic theory of finance is potentially capable of solving, and in all probability averting, such crises from happening’.
<p>Askari, H. (2012)</p>	<p>▪</p>	<p>The analysis has been based upon the following arguments:</p> <ul style="list-style-type: none"> • The assertion that ‘The Quran prohibits debt based contracts (p. 5)’ and ‘Islam offers a system that prohibits all debt (p. 8)’ 	<ul style="list-style-type: none"> • ‘The absence of debt and leverage, financial failure is localized and prevented from infecting the entire financial system’ • ‘Commercial banks to restrict their

		<ul style="list-style-type: none"> • ‘An Islamic bank is assumed to match deposit maturities with investment maturities’. • Stability of the IFS is seen through the ‘lenses’ of the instability of the conventional system. The analysis is based ‘debt prohibition or elimination and its associated characteristic ‘risk-shifting’ to ‘equity and participatory financing’ with ‘risk-sharing’ as its main instinct. Use of some recent financial turbulence, such as the US subprime as an evidence for that. • ‘Conventional banking is based on a fractional reserve system that creates money and encourages borrowing and leveraging’. Assets and liabilities mismatch has become a chronic feature of such a system. • Proposals to reform CFS close the IIFS are neither new nor alien in the West (e.g. the Chicago Plan and LPB). 	<p>mandates to two activities: (i) cash safekeeping (100% reserves against checking deposits), and (ii) investing client money in a mutual fund.</p> <ul style="list-style-type: none"> • ‘Full government monopoly in the issuance of currency. Commercial banks are barred from ‘money creation’. • ‘The tax bias against equity finance must be removed, if policymakers want to eliminate recurring of financial crises’. • ‘Policy makers must discourage excessive borrowing, leveraging, and risk-shifting and instead encourage risk-sharing and equity finance’.
Shafique et al. (2012).		The research is based on a descriptive framework by extracting important information and conclusions about IB performance from various reports and studies during the recent financial crisis of 2008.	<ul style="list-style-type: none"> • ‘Performance of Islamic banks during the global financial crisis is better than conventional banks’. Thus they are ‘more stable’. • ‘Risk in IBs is less than their conventional counterparts, because of their interest free nature’. • ‘Because of global financial crisis there is increasing demand of Islamic Financial system in Western world’. • ‘It is proved from all reports, past records, famous authors and experts views that there is a less impact of global financial crises on Islamic banking system’.

4 - Concluding remarks.

Based upon the analysis and the discussion carried out in the previous sections, the following remarks can be made:

- ❖ Despite the tremendous efforts that have been devoted to financial stability over the recent past, the world is still in ‘*the search*’ for its attainment.
- ❖ Given the interdependence and the complex interactions of different elements of the financial system among themselves and with the real economy FS proves to be a very difficult term to be accurately defined. As a result, the construction of a useful model that encompasses these delicate aspects is even harder to obtain. But it might be a worthwhile exercise to devote some effort to overcome some of the stalemates that surround this issue.
- ❖ It seems that under the capitalist financial system that has evolved over the years there are financial arrangements that breed its stability and others that feed its instability. The reviewed literature indicated that the interest-bearing modes are the prime source that feed instability, and the like of equity financing may help the system to enhance its immunity to financial shocks and turbulences.

- ❖ If the IFS prove to be inherently stable, theoretically and empirically, I think the two fundamental ‘devices’ behind that are: risk-sharing and asset-backing principles. This by no means should be interpreted as an underestimation or unimportance of other tenets of IF.
- ❖ The current regulatory, supervisory and tax framework proved to be biased towards interest-bearing debt instruments. This fact has been pointed out, not by the authors of the reviewed literature but by other prestigious institutions like the IMF and other conventional economists. Therefore, if policymakers incline to achieve certain degree of stability, a shift has to be made to provide a ‘level playing field’ for equity modes of financing.
- ❖ Dr. Chapra and the IMF-World Bank Muslim economist professionals have been the most proactive researchers in this aspect of the IFS. Their work has been persistently carried out from mid-1980s till now. As a result, can an ‘Islamic’ hypothesis that pinpoint to the ‘cause of all causes’ of FCs, be developed out of these rich analyses and literature?
- ❖ Though debt is discouraged under the IFS, this should never be equated to a ‘total’ ban of debt and debt instruments. Therefore, there is a dearth need for the ‘revisiting’ of ‘Islamic theorems’ of financial intermediation to assess their relevance and practicability. Thus, there might be a variety of models to cater for the various needs and to adapt to certain impediments.
- ❖ History has shown that the regulatory and supervisory financial framework is a prerequisite for the successful implementation and safeguarding of financial systems. The IFS is not an exception in that. Hence, to exalt the system’s optimality, an enabling environment for its nourishment needs due consideration.

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