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The 1997-98 East Asian Financial Crisis: An Islamic Perspective

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Abstract: This paper examines the causes and policy implications of the 1997-98 financial crisis in East Asia from Islamic perspectives. The paper suggests that the crisis may be better understood as consequences of internal contradictions in the interest-based financial system as regards risk and return sharing between financiers and entrepreneurs. The analysis challenges orthodox policy prescriptions and concludes that the Islamic principle of partnership in finance, which calls for profit and loss sharing and emphasizes the need for project finance, seems to provide the ingredients for the long-sought solutions.

1. Introduction

The importance of financial markets in economic development and social welfare cannot be overestimated, especially in developing countries. However, the 1997-98 financial crisis in East Asia underpinned serious flaws in the conventional western-style financial system. Easy debt finance induced over-investment in real estate and low return projects. Failing to achieve expected returns, significant predominantly short-term capital inflows into these countries led to sudden reversals. These reversals added to already falling currency markets raised the burden of honoring liabilities on the part of many financial institutions, and shattered public confidence in the financial system. This engineered the worst financial crisis and economic and social degeneration in the recent history of the region.

The interest-based system is also to blame for the debt problems burdening many of the developing countries, seriously constraining their ability to grow. Yet, credible solutions appear to be lacking for both the prevention of the like of East Asian financial crisis as well as the ills of the international credit system.

This study argues that the prevention and management of the type of the 1997-98 East Asian financial crisis lay in accepting the Islamic critique of debt finance. Inflexibility of debt repayment with respect to borrowers' conditions, and inadequate

information gathering about the projects financed by interest-based institutions are the gist of this critique. The absence of profit and loss sharing (or debt workout) formulas has manifested itself in terms of the magnitude of the crisis, their cost to the countries involved and the lengthy search for credible reform policies. Islamic finance stresses the need for equity-based lending, particularly project finance, as a basis for capital mobility, locally or internationally. It is hypothesized that the Islamic profit and loss sharing alternative may be more conducive to financial stability and reduced costs of financial crisis to recipient countries.

After presenting and analyzing the Islamic perspectives on the recent East Asian financial crisis, the paper concludes with some policy remarks. The next section discusses the theoretical basis of conventional and Islamic financial systems. Section 3 reviews the causes and consequences of the 1997-98 East Asian financial crisis. In section 4, the Islamic view of the crisis is presented, while section 5 concludes.

2. The Theoretical Basis of Conventional and Islamic Financial Intermediation

2.1. Principles of conventional and Islamic intermediation

The primary function of a conventional financial system is the mobilization of savings from savers of funds to users of funds. A distinctive function of the financial institutions that are the engine of this system is that they, at least partly, transfer risk from the lender to themselves and/or to the borrower. Of course, there is always some risk facing the lender as far as there is a possibility of insolvency on the part of the borrower. Nonetheless, risk transfer is particularly important in view of the fact that many savers may be reluctant to invest themselves, or lend directly, or take equity in a borrower's project [1, p.12]. Conventional financial intermediaries take the lending risk away from ultimate lenders and often transfer it to the borrower by taking security.

The relationship between savers and investors is the core of the theory of intermediation. By pooling small savings to finance large and more productive projects, banks, for instance, may raise the volume and efficiency of investment, and provide incentives for increased savings. More importantly, banks can also increase investment's size and productivity through maturity transformation that is by accepting short-term deposits and extending long term loans[1]. This is based on two assumptions. First, the proportion of deposits held as short-term funds will be enough to meet expected withdrawal requirements. Second, given a large number of small depositors, the risk of a sudden upsurge in withdrawal demand is reduced. Similarly, given a large number of small borrowers, the failure of some of them is unlikely to impair public confidence in the intermediary. In addition to taking security, risk may be reduced by the choice of

[1]Investing liquid funds into long-term illiquid funds is often a cause of vulnerability to bank runs [2, p.199]. They also add that uncertainty about banks' investment projects and adverse information may trigger a bank run.

financial instruments. For example, a financing intermediary may take equity or loan in a project or a combination of the two.

In any case, risk transfer is limited to the extent that the loan is covered by security. Neither the intermediary nor the savers are completely covered given the problem of valuing, and the cost of liquidating, securities besides problems of contract enforcement. It follows that the burden of financial crisis may not be fairly apportioned among savers, intermediaries and borrowers.

Islam categorically[2] prohibits payment or receipt of a pre-determined rate of interest, which does not allow a just partitioning of the risk and return aspects of projects financed by borrowed funds. Instead of the interest-based credit system, Islamic principles call for partnership[3] in finance, in which the return to both lenders or fund providers and borrowers or fund users depend on the performance of the project financed. In this Profit-and-Loss-Sharing (PLS) system, fund providers and users are subject to risk and uncertainty characteristics of investment projects. For instance, in the case of project failure, the face value of the loan is not guaranteed [6]. The outcome of this arrangement is that ultimate savers and fund users are no longer divorced from each other, but closely related through implicit PLS contracts (see Fig. 1).

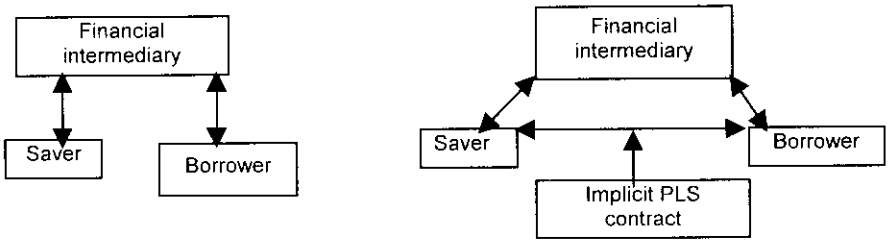

Fig. 1. Conventional and Islamic processes of financial intermediation.

The Islamic theory of finance rejects the principle of risk transfer and the mechanism of fixed interest rates. This departure is expected to be more conducive to

[2]Various justifications for this prohibition may be found in the Holy Quran as a set of principles (see [3, and 4]).

[3]There are two basic forms of participation, *Mudarabah* and *Musharakah*. In the former, the lender supplies all financial capital while the borrower provides the human capital. The lender is the sole owner of the project throughout its lifetime, and, in the case of project failure, he bears the entire financial loss, whereas the borrower shoulders the non-financial component. A *Musharakah* contract signifies a joint venture in which there is more than one contributor to the financial capital. As a negotiated percentage of future profits, returns to capital holders are determined in line with their respective contributions (see e.g., [5]).

financial stability and economic growth[4]. The question of financial stability and risk sharing is best explained by comparing the risk and return features of the two systems. The assumption is that the Islamic financial system is essentially an equity-based system. The institutional development of this system calls for a fully developed capital market that ensures improved liquidity and enhanced efficiency. In the case of a capital market in an Islamic system, however, all fixed-interest-bearing instruments such as preferential shares are disallowed.

The conventional financial system encompasses two interrelated markets, the money market and the capital market. The two markets differ greatly as regards the risk, return, maturity, and liquidity characteristics of their instruments. Because long-dated capital market instruments, as opposed to short-term ones are usually more risky and less liquid, conventional financial markets are generally dominated by debt finance institutions such as banks. The capital market, however, lies at the heart of the Islamic financial system. From an Islamic perspective, a major relevant function of the capital market is that it provides a mechanism through which returns on savings are related to expected yields on real investment. This would stimulate increased savings that are linked to profitable investment as well as greater financial stability.

2.2. Risk and return features of conventional and Islamic financial systems

The relationship between risk and expected return is the essence of capital market or modern portfolio theory as well as the debate over the growth and stability comforts of the PLS system. The comparison between the PLS system and capital markets is therefore easy to make. In particular, we make the hypothesis that the solvency, liquidity, risk and return aspects of the main PLS instruments, namely *Musharakah* and *Murabahah*, are the same as those of a capital market. The comparative stability property of the PLS system may therefore be explained in the context of the capital market model.

The capital market theory postulates that unless returns on securities are perfectly correlated, portfolio diversification reduces risk. Total risk consists of market or systemic risk, which cannot be reduced through diversification; and non-market or specific risk, which can be eliminated by diversification. Market risk results from factors exogenous to firms whose shares are being traded, and affect share prices as well as the whole economy in the same direction. In contrast, specific risk originates from factors, such as product mix, managerial and technological innovations that are endogenous to firms.

Assuming an efficient market, i.e., a market that fully comprehends and reflects all available information, the expected returns on diversified portfolios would depend on market risk, which is acceptable [5]. However, this hinges crucially on the availability of "perceivably" risk-free investments or returns, which are usually provided by government

[4]Although not dealt with here, ample theoretical as well as empirical literature suggests that the PLS system is also more robust in effecting investment and economic growth. It is also argued that there is no compelling reason for it to be less effective than its traditional counterpart in mobilising savings (See e.g., [7 and 8]).

securities or bank time deposits. The choice of a risk-free investment depends on savers' preference over risk and return. With the availability of risk-free assets, the relationship between a saver's expected return and the accompanying risk may be demonstrated as in Fig. 2. At zero risk, the investor can obtain the risk-free rate of return, but as his willingness to take risk increases, so his required rate of return rises, as indicated by the market line[5].

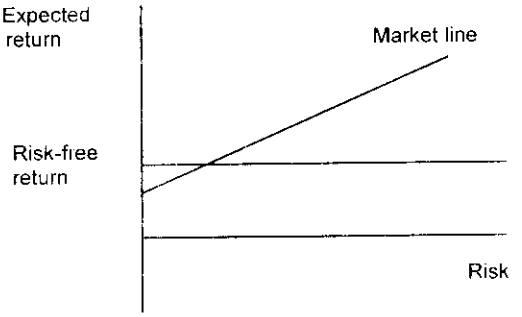

Fig. 2. Risk and expected return.

The risk-averse financial investor may wish to combine risk-free assets and risky assets by putting a proportion X of his funds in the latter, and (1-X) in the former. Given the rate of return on risk-free assets (r_f) and the rate of return on risky assets (r_a), total return (r_t) is $r_t = r_a X + r_f(1-X)$.

Traditional financial intermediaries help create perceivably risk-free investment by securing collateral from fund's users. It follows that the borrower endures the entire investment risk in this case. Since under all events of nature he has to repay the principal in addition to a fixed rate of interest, the borrower may be inclined to choose riskier projects in order to maximize his returns. Yet, these projects may be exactly the type that lenders do not like for risk considerations. Lenders would only finance such investment if they are given explicit guarantees or failed to perceive the degree of risk involved. In other words, given the choice of projects borrowers would undertake projects that promise higher returns, and probably involve higher risk. Such inclination would be reinforced by rising or high interest rates. Lenders, on the other hand, would prefer more secured loans even if they promise lower returns [9].

This discord in attitude towards risk and return stems from the fact that rewards to investors rely on the performance of the projects undertaken, whereas rewards to banks

[5]The existence and shape of the market line, represented by the combinations of risk and expected return available to the investor, depend on the efficient market hypothesis. The relationship in Figure 2 is known as the Capital Market Asset Pricing Model, CAMP.

and their depositors are fixed in nominal terms. As a result, borrowers may have the incentive to take excessive risk, whereas lenders may be inclined to economize on the cost of information gathering about the projects. In other words, whereas easy availability of credit may give borrowers the incentive to take excessive risk, implicit guarantees provided by the general economic environment, and/or collateral reduce risk perception on the part of lenders. When such perception changes, there are no mechanisms for contracts to be renegotiated, precipitating financial panic and possibly a run on banks. These problems of information asymmetry can only be mitigated through closer links between lenders and borrowers such that lenders are better informed about the projects financed and that it is possible to take corrective measures once troubles start.

In the PLS system, as opposed to the conventional system, all parties explicitly share the risk involved in investment activities, and returns to each of them depend on the investment's performance. To the extent that the textbook (e.g., [10, p.144]) prediction of a positive correlation between risk and return holds, Islamic banks would be less inhibited by expectations about project returns[6]. This is so because of the extensive information that they have to collect about projects and that their returns from the projects are not fixed but dependent on actual profits. At the same time, since ultimate fund providers participate in capital as well as profit risk, banks are less exposed to collapse. On the other side, entrepreneurs do not have to pledge collateral and shoulder the whole burden of possible capital losses.

The PLS system has no risk-free assets since only investment deposits earn profits from productive investments, and portfolio hedging is at odd with the Islamic principle of risk-sharing. Portfolio diversification is only relevant in the limited sense of risk pooling in the case of institutional financial investors. Therefore, the only alternative to risk-bearing investment is cash balances that have no real yield. The portfolio selection for PLS fund providers would be between cash balances and PLS instruments. The risk and return combinations confronting fund providers are similar to those facing the entrepreneur. For instance, according to the basic PLS instrument of finance, e.g. *Musharakah* (partnership), fund providers and fund users share expected profit/loss according to an agreed formula.

To explain the resulting risk and return sharing the following simplifying assumptions are made. First, all fund providers have the same risk and return preferences or identical. Fund users are also assumed to have identical risk and return preferences. Second, there are unlimited investment opportunities to be financed according to the *Musharakah* principle. Third, the project's capital and returns/losses are to be equally apportioned between fund providers and users. Finally, fund owners are assumed to be risk-averse in the sense that they require higher compensation in terms of increased expected return in order to accept a given increase in risk. Entrepreneurs, on the other

[6]In a formal model, Khan [11, p.15] demonstrates that in the absence of fixed returns, higher expected profit is conducive to increased risk-taking.

side, are presumed to be risk-takers meaning that for a given increase in expected return they are prepared to accept a greater increase in risk.

These simplifying assumptions[7] imply that the two parties equally[8] share risk and expected return, as shown in Figure 3. The shape of the lender's preference curve and the borrower's curve is determined by their respective risk and return attributes. When a PLS agreement occurs, the two curves have the same slope, which is given by the budget or capital market line. The slope of this line depends on the relative risk and return attitude of fund providers and users. The point of tangency between the two indifference curves gives the optimal portfolio mix of money holdings and PLS funds from the fund owners' point of view. At the same time, assuming perfect competition, this point also corresponds to optimal project-mix or investment size from the fund providers' perspective.

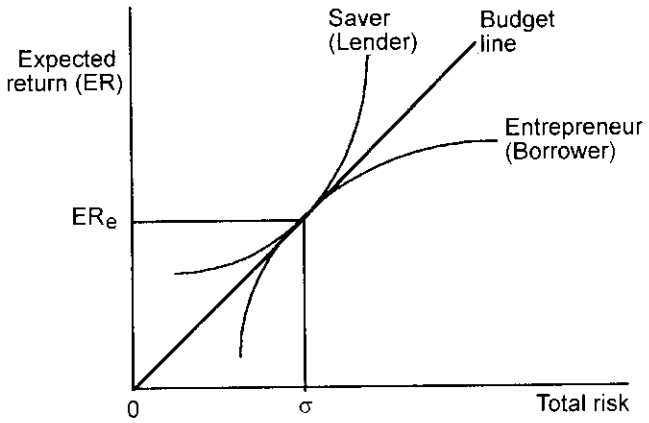

Fig. 3. Risk and return sharing in a POLS system.

If the borrower wishes to obtain a rate of return higher than that preferred by the lender, the budget line tilts to the right indicating that the rate of increase in return (from alternative projects) must be higher than the rate of increase in risk. In other words, the investor must convince the fund provider that there is going to be a net increase in return. On the other side, if the fund provider's expected rate of return is lower than that of the borrower the budget line tilts to the right, indicating that lower productivity investment is preferred and that the decrease in return is lower than the decrease in risk. In either case, risk and return change in the same direction. Meanwhile, by virtue of the PLS instruments, banks have to gather more information about, and be closely involved in, real investment or projects financed.

Contrasting the position of the fund provider under the PLS system and the interest-based one, it is clear that the former may be worse-off in so far as risk is concerned. The

[7] These assumptions are also useful in explaining the fairness of the PLS system, which has been widely practiced by Muslim communities [12 and 13].

[8] In practice, this may not be the case and risk and return are shared according to a mutual agreement between lenders and borrowers.

PLS' lender faces both market and non-market risks. However, whilst higher risk may entail higher returns, the PLS arrangement reduces information asymmetry[9] as banks do not just give loans but become equity holders. This may lower lending risk. On the other hand, it is conceivable that borrowers would be better off under the PLS arrangements, at least in so far as risk is concerned. In the case of project's success the entrepreneur may have to pay a rate of return to the fund provider that is higher than the rate of interest. But, the entrepreneur would be compensated by the fact that if the project fails he does not only pay no return, but also part of the losses will be shouldered by the fund owner. Where financial intermediaries are involved in such a case, the face value of deposit is adjusted to absorb part of the loss.

In summary, the PLS system reduces, but in no way eliminates, differences between the interest of borrowers and their financiers. This is likely to be true because fund providers have real stake in project performance, since they have no guaranteed returns and are amenable to the risk of capital loss. They are necessarily more closely involved in project selection, follow up and monitoring. Meanwhile, borrowers have less or no incentive for excessive risk-taking since they are not compelled to meet fixed and high interest rate obligations. By reducing the information problem and enforcing the principle of loss-sharing, the Islamic system is obviously more conducive to financial stability and better distribution of the burden of any possible financial loss.

3. The Causes and Costs of the East Asian Financial Crisis

3.1 An overview

The financial crisis that occurred in East Asia can be classified in broader terms as banking, currency and stock market crisis. But, in view of the objectives of this paper, I confine myself largely to the banking and debt crisis. The term financial crisis denotes not only insolvency but also palpable illiquidity on the part of a financial intermediary to meet its due liabilities. In this sense, financial crisis occur when the financial system is illiquid or insolvent. This often stems from the trade-off between the ability of a financial institution to grow and expand through increased lending and investment and its ability to meet customers' liquidity[10] requirements. It is arguable that proper management of financial resources may improve this trade-off and, in some circumstances, allow financial intermediaries to have more of both.

However, since the early 1980s the incidence of financial crisis in developing countries has increased. These crisis have been identified as currency crisis, banking crisis, or both. "Currency crisis are usually attacks on the domestic currency that end up with a large fall in its value, although they can include speculative attacks that are successfully warded off by the authorities. Banking crisis refer to bank runs or other

[9] In a theoretical model of Islamic and traditional banking, Akkas [14, p.80] shows that Islamic banking is more conducive to allocative efficiency, distributive efficiency, and stabilization efficiency.

[10] No distinction is made between liquidity risk and investments risk because "it is extremely difficult to separate the two causes of a bank crisis. This is so because depositors' withdrawal is related to the investment behavior of the bank and the returns on bank's investment depend on the accuracy of its prediction of withdrawals" [2, p.201].

events that lead to closure, merger, takeover, or large-scale assistance by the government to one or more financial institutions" [15, pp.124]. Financial markets are believed to be particularly vulnerable to the volatility[11] of international capital inflows and outflows [16].

The 1997-98 East Asian financial crisis involved both banking and currency problems. It has been widely accepted that these crisis defied existing models[12] of financial crisis. However, as modern economic theory suggests information asymmetries and financial market failures are central in explaining macroeconomic fluctuations and financial crisis (see e.g., [17, p.156]). The essence of this argument is that lenders know less than borrowers about the use of borrowed funds. Since lenders cannot force borrowers to act in their best interests, they can panic and withdraw their funds when they perceive increased risks. This is particularly true when adequate public regulation and safeguards are not in place. Such a panic can lead to wider financial crisis, with severe real-sector effects and costs. The financial crisis can in turn bring down the financial system, cause asset prices to collapse, and bankrupt sound as well as unsound banks and corporations [15, p.122].

3.2 The causes of the crisis

The East Asian[13] financial crisis occurred against the background of sustained economic growth and poverty reduction in the past two decades. The economies of East Asia maintained an average rate of growth of 5% per annum and were stable with few down turns [18]. Poverty has declined, both in breadth and in depth. Through remarkable increases in employment and job opportunities, the region reduced the number of people living in absolute poverty from about 60% in 1975 to about 20% in 1995 [19, p.2]. The fall in poverty rate in Indonesia from 64% in 1975 to 11% in 1995 was particularly remarkable. It is therefore worth noting that levels of economic growth and poverty reduction were not identical across countries within East Asia.

Nonetheless, as economists stress, the East Asian economic miracle was real and the lessons from it are still sound. Governments that created and maintained a favorable macroeconomic environment and invested considerably in human capital inspired the miracle. Macroeconomic stability encouraged high rates of savings induced by positive real rates of interest, limited price distortions, rapid absorption of foreign technology, and avoidance of implicit taxation and other biases against agriculture [19].

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[11] Such volatility faces developing countries with a serious policy problem because foreign capital complements domestic savings and helps growth.

[12] These models are the 'first generation' models, in which the source of collapse is excessive money-financed borrowing by a government defending a fixed exchange rate with limited foreign reserves. And the 'second-generation' models, which emphasize the political and economic costs of increased unemployment consequent upon defense of an exchange rate peg through tight monetary policy.

[13] The countries engulfed by the crisis are Indonesia, Malaysia, The Republic of Korea, Thailand and The Philippines.

The question then is why did East Asia plunge into financial crisis? There are countless explanations. However, the main sources of the crisis as identified by numerous researchers (e.g., [18-21]) can be seen in terms of a set of interrelated factors that precipitated structural vulnerability. These factors include "a burgeoning availability of private capital, especially short-term capital, that was in search of higher returns; macroeconomic policies that permitted capital inflows to fuel a credit boom; and newly liberalized, but insufficiently regulated financial markets that were growing rapidly" [19, pp.4-7]. Large international capital inflows into poorly regulated domestic financial systems stimulated an excessive domestic credit boom. This resulted in an asset price bubble and added to the excessive debt of already over-leveraged firms, which exposed the region to the shocks of changing investor expectations.

The volume and short-term nature of international capital inflows exacerbated the situation Table 1. These flows exceeded the absorptive capacity of receiving countries. For example, between 1990 and 1997, while world trade grew by about 5 percent annually, private capital flows grew by nearly 30 percent annually. Meanwhile, these flows were dominated by short-term funds involving commercial bank debt and portfolio investments. Macroeconomic and exchange rate policy in East Asia raised local demand for international capital that financed the domestic credit boom. This in turn led to a sharp acceleration of domestic aggregate demand. The macroeconomic policy package designed to overcome problems of the excess demand induced further inflows, particularly for the accumulation of short-term, unhedged external liabilities. For example, restrictive monetary policy that attempted to sterilize inflows and curtail credit expansion increased domestic interest rates, as well as the differential between domestic and foreign rates [19, p.6].

Table 1. Private capital flows to East Asia, 1991-1996 (US$ billion)

	1991	1992	1993	1994	1995	1996
Total private net capital flows	20.8	36.9	62.4	71.0	84.1	108.7
Indonesia	3.4	4.6	1.1	7.7	11.6	17.0
Malaysia	4.2	6.0	11.3	8.9	11.9	16.0
Thailand	5.0	4.3	6.8	4.8	9.1	13.3
Net foreign direct investment	12.7	2.09	38.1	44.1	51.8	61.1
Indonesia	1.5	1.8	2.0	2.1	4.3	5.8
Malaysia	4.0	5.2	5.0	4.3	4.8	6.2
Philippine	0.5	0.2	1.0	1.6	1.5	1.5
Korea	1.2	0.7	0.6	0.8	1.8	2.3
Thailand	2.0	2.1	1.8	1.4	2.1	2.9
Gross portfolio flows	1.5	4.4	23.6	25.4	26.9	35.7
Debt	0.8	2.3	8.9	15.3	12.2	22.8
Equity	0.7	2.1	14.6	10.1	14.7	12.9

Source: Global Development Finance 1997, World Bank.

At the same time, informal pegs to the U.S. dollar encouraged capital inflows due to large interest rate differentials. It was argued that relative exchange rate stability reduced the perception of exchange risk, encouraging the accumulation of particularly short-term foreign debt. Between 1994 and 1997, the net private capital inflows as a share of the rapidly expanding national income increased throughout East Asia, reaching 14.5 percent of gross domestic product in Thailand.

On top of the above, weak financial systems led to poor investments and excessive risks [21, p.4]). It is argued that had the capital inflows into East Asia been invested in high-return activities to creditworthy borrowers, they could have spurred their economic growth. However, incremental additions to investments, notably in the sphere of real estate, appear to have yielded a lower return. In addition to property developers, speculators were over-optimistic about property prices and rental values casting an element of deception (on themselves and others) and misleading financiers [20].

According to the World Bank [19], foreign capital inflows through the domestic banking system or through direct corporate borrowing are clearly more destabilizing than foreign direct investment. This is so because such flows result in an excessive buildup of risky forms of leverage on the balance sheets of financial institutions and non-financial corporations, in particular of short-term foreign currency debt in excess of foreign currency resources available on short notice. By mid 1997, the ratio of short-term debt to foreign reserves, a rough measure of a country's ability to meet its current obligations from its own liquid resources, rose sharply to well above 150% in Korea, Indonesia, and Thailand. Furthermore, there was also a sharp rise in the ratio of broad money to reserves. This ratio indicates the potential for a "run" on the foreign exchange reserves of a country with a fixed exchange rate by its own residents when there is a loss of confidence in the local currency [15].

In short, corporations and domestic banks had a strong incentive to borrow abroad to meet the local demand for loans. This was occasioned by the implicit insurance offered by the fixed exchange rate, high domestic funding costs and market segmentation, and the creation of off-shore financial markets in which local corporations could obtain finance at a relatively low cost. Meanwhile, the domestic financial system was inadequately regulated to cope with the influx of foreign capital. For example, inadequate reforms and sequencing of liberalization in Korea permitted groups of companies to own both banks and the same groups of firms to whom they were lending.

With the buildup of vulnerabilities, currency exposure and property speculation ignited the crisis. By mid-1997, the Asian real estate market moved into recession and many construction companies could no longer service their debt. Among other things, this resulted in a lack of confidence in banks and financing companies heavily exposed to the construction sector. Soaring domestic rates of interest were not enough to support existing dollar rates of exchange. Local currency assets held by banks that were no longer

serviced were written down in value, while currency depreciation caused the dollar liabilities of banks and corporations to rise in local currency terms [20]. Whereas the expected rates of return offered by booming East Asian markets appeared to be illusive by mid 1997, a currency mismatch of banking assets and liabilities developed into widespread financial crisis.

The above discussion suggests that the explanation of the collapse lay in a combination of vulnerabilities together with inappropriate policy actions. However, many researchers believe that these vulnerabilities and policy actions aggravated the problems but were not fundamentally to blame. For Stiglitz [18], the two most likely causes of crisis relate to the following. First, change in international economic policy besides changes in the policies of the Asian governments, which altered foreign investors' perception of investment profitability in the region. Second, the closer integration of capital markets and the rapid liberalization of Asian financial sectors, without commensurate regulatory strengthening. This argument was supported by Wyplosz [22] who points out that "the Asian crisis may be an example of a financial crisis caused by self-fulfilling speculation, as opposed to fundamental imbalances. There was necessarily some form of pre-existing weaknesses, but these weaknesses were not enough to make the crisis inevitable. When the crisis occurred they become much more serious and offered ex-post justification for it" [22, p.4]). Krugman [22, p.4] argues that the explanation of the crisis in terms of asset market 'bubbles' besides institutional and regulatory failures and problems of moral hazard are consistent with the reality of the East Asian situation. However, Krugman adds that the bubble theory does not explain the contagion effect that ran from a small, rather than a large, economy to big economies.

It is debatable that all these explanations do not go far enough to reach the underlying causes of financial crisis. As we will argue in the next section the thread that carried the lather across East Asia seems to lay with the interest rate mechanism underpinning the financial systems of all the countries engulfed in the crisis. This point is enhanced by Kaminsky and Reinhart [23] observation that the greater frequency and cost of currency and twin crisis[14] have been associated with surges in international capital inflows, especially private-to-private flows, to developing countries and the growing liberalization and globalization of financial markets.

3.3 Costs of financial crisis

Financial crisis are believed to have large economic and social costs as well as serious distribution effects. For instance, banking crisis exacerbate the negative impacts on the economy through a reduction in the volume of loans, the misallocation of financial resources, and the subsequent contraction in credit and cutbacks in investment. A recent study found for a sample of 14 banking crisis a 5.2 percent average decline in output

[14]According to Kaminsky and Reinhart [23]), examples of recent financial crisis include Argentina (1981 and 1995), Uruguay (1982), Chile (1982), Mexico (1994), Argentina (1995), the Czech Republic (1997), and Finland, Norway, and Sweden (1991 and 1992).

growth after the crisis [24]. Another study found in emerging markets an average cost in lost output of 14.6 percent of gross domestic product per crisis [25]. In addition to lowering output growth and efficiency, banking crisis can bring about exchange rate volatility and currency crisis. Such crisis can also result in significant recovery costs that stretch over many years.

The net foreign capital outflows between 1996 and 1997 amounted to more than $100 billion or 11 percent of the gross domestic product for the five East Asian crisis countries before the crisis [15, p.55]. The reversal also stimulated steep devaluation of currencies, large increases in interest rates, and sharp declines in stock and other asset prices. Spillover effects from the crisis spread throughout the developing world, with high costs in terms of shrinking markets and lower commodity prices [21].

The currency and financial crisis in East Asia has also incited social crisis through rising unemployment and declining real wages. Subsequent inflation has also worsened income distribution and further reduced the real incomes of particularly low-income groups. As studies indicate, the effects go beyond the poor. The currency falls and crash of the equity markets has a particularly significant negative impact on the savings of the middle class group. The decline in equity values in the region has surpassed US$400 billion in one year [19]. It will be a long time before these countries recover and improve the life of their citizens to the pre-crisis levels.

Between 1996 and 1998, the impact of the crisis on economic growth rates was estimated at -2.4% for the whole world, -5.7% for Japan, -2.7% for Latin America, -1.2 for Africa and 0.2% for Europe [26, p.18]. Meanwhile, massive external financial support seems to have provided at least part of, the funds needed by the crisis countries so as to prevent a possibly widespread default on their external obligations. According to Hussain *et al* [26], Africa and other developing nations were the most badly hit by the crisis. Africa's exports to East Asia amounted to 13% of total African exports. Due to reduced demand, the impact of the crisis on the prices of primary commodities was estimated at –5.3%, while that on the price of crude oil was -5.4%. The economies of the West in particular were not significantly affected by the crisis in East Asia mainly because their trade with the crisis countries was limited. For example, exports by all countries that are members of the Euro Zone to the rest of the world amounted to less than 12% of their total exports.

The East Asian economic miracle was brought about by real factors (education, technology, etc.), whereas the crisis were brought about by excessive capital inflows chasing the fruits of the miracle. Those who argue that the crisis are a desirable consequence of well-functioning capital markets (for, their absence would imply excessive risk aversion and, hence, suboptimal investment levels) severely underestimate the economic and social costs of the crisis, which they do not really feel at home.

4. The Islamic Perspective of the Crisis

4.1 The fundamental causes of the crisis

As indicated previously the financial crisis are a symptom of fundamental flaws in the interest rate system rather than the unintended consequences of policy actions. In fact the buildup of vulnerabilities itself can be seen as a result of internal contradictions (in terms of distribution of risk and return) of the conventional financial system, which, as explained in section 2, can only exacerbate information problems. Since this system has no formula for private debt workouts and burden sharing it often intensifies the cost of failures to financial markets (and eventually the whole economy) leading to financial instability and crisis. In the case of East Asia, where large foreign capital flows were involved, the recipient economies borne the brunt of the crisis in the form of sudden and large falls in GDP and upsurge in unemployment and poverty rates.

From an Islamic perspective, the Asian and indeed several early financial crisis may be attributed to the interest-based financial arrangement. "The divorce of the financing from the underlying projects being undertaken implied that the funding was in no way participatory . . . as the banks and financial institutions providing the dollar loans were more concerned with the credit ratings of the domestic financial intermediaries than with the actual projects being funded. It was the isolation of the ultimate fund providers from the fund users and the consequent breakdown in information flows that lay behind the crisis" [20, p.50]. This contrasts sharply with the PLS mechanisms, in which fund providers as well as fund users are subject to both the investment risk of projects financed and the currency risk.

It was however argued[15] that "the isolation of fund providers from users is not unique to debt financing. In portfolio (indirect) investment, the fund providers are not involved in running the companies and may be totally unfamiliar with the projects the company is undertaking. Likewise, stock traders leave decisions to management even when they can influence, but mostly they are without influence. In a stock market crash everybody loses, but many times people lose without there being a crash. Indirect investors usually have neither the knowledge nor the time to understand the operations of the companies they invest in."

This argument ignores the nature, organizational arrangement and implications of debt finance as opposed to company finance. As explained in section 2, the danger of debt finance is that the effects of a financial loss, particularly a financial crash, may not be limited to the persons or institutions involved but spill over to the rest of the system, or even the region as it was believed to be the case in East Asia. The spill over effect may harm performing as well as non-performing deposit institutions once public confidence is shaken. Even more importantly, debt finance institutions use funds that are not pledged

[15] By one of the anonymous referees of JKSU.

for investment – for example, checking deposits. More than all other institutions debt finance ones have the ability to create deposits and finance activities that once fail could destabilize the whole economy.

Another questions may also arise as to why the isolation of fund providers from the projects they finance did not result in a similar crisis in the West, and that there must be other factors at work. Indeed as the analysis in the previous section indicated the history of the West had seen numerous crisis (see e.g., [23]). Through the years, however, mature Western economies developed measures and mechanisms that substantially reduced the possibility of a financial crash. As explained below, there are both internal and external dimensions to the financial crisis in East Asia and that developing countries may not have the knowledge or resources to easily enact the measures required for reducing the probability and cost of crisis.

4.2 The policy dimension

The analysis of the crisis provides no robust and cost-effective remedies and preventive measures that can be easily and successfully adopted by developing countries. Policy options are complicated by the fact that the East Asian crisis involved largely private-to-private capital flows, and the role of domestic and international financial systems in intermediating such flows and that various factors interacted to amplify risks.

To begin with, it is now widely conceded that financial market imperfections need policy intervention, and cannot be sorted out by market forces. These include resolutions for dealing with collective action problems among creditors and their better representation and smooth negotiations with debtors. The literature indicates that there is a need for private-to-private debt workouts, increasing liquidity to crisis countries, appropriate burden-sharing, rules for intervention and measures for dealing with moral hazard (see e.g., [19 and 22]).

In the aftermath of the crisis in East Asia, suggestions for helping to prevent them centered on better early warning indicators and improved surveillance. However, as Goldstein [21] notes although the heavy costs imposed by financial crisis justify the search for mechanisms that will help to identify and reduce vulnerabilities, financial market indicators alone are insufficient for this purpose. Meanwhile, the information received by regulatory authorities through surveillance might be less useful and less timely than the data obtained by private investors and credit-rating agencies, who are the prime movers of the market.

Some researchers have argued for the adoption by borrower countries of policies and practices, which would reduce the risk of crisis. These policies include avoidance of premature and indiscriminate liberalization of capital flows and wariness – even regulation – of short term capital inflows; reduction of impediments to foreign direct investment, and strengthening of financial systems. Other analysts have, however,

accorded greater blame to domestic policy factors and argued for increased openness, complete capital account liberalization, and improved environment for more international capital inflows [21, p.21].

It is important to note that some of the East Asian economies appear to have made a way to recovery, and that all of them have continued to rely on debt as a method of financing, though some of them (e.g. Malaysia) have placed important restrictions on the nature of capital inflows. Yet, the real cost of the crisis remains significant in terms of real output losses and the huge new external loans that were required to service existing foreign debt and to implement extensive corrective measures.

In line with what I mentioned earlier, the World Bank [27] reports that the year 1999 saw the East Asian financial crisis abate, and the hard work for recovery begin with notable differences across countries, Table 2. But, it will take some years before the economies of East Asia fully recover because the collapse pushed millions back to the brink of poverty and increased economic insecurity due to high job losses and lower real wages. The collapse has also decimated the savings of a whole generation of new middle-class citizens. It is still unclear if the recovery is built on solid foundations that are sufficient to launch the resumption of a new era of high growth and that raising productivity depends on policies and institutions, including regulatory policies, business institutions, government institutions and broader social institutions [27].

Table 2. Indicators* of economic recovery in East Asia, 1997-1999

Indicator	1996	1997	1998	1999
Real GDP growth rate	7.3	4.1	-7.6	4.9
Inflation (% in consumer price)	6.1	5.4	17.8	6.1
Real effective exchange rate (% change)	-3.9	30.0	-9.9	-4.3
Current account balance (% of GDP)	-5.1	-3.2	3.0	7.0

Source: Asian Development Bank (2000) "Asian Recovery Information".
*Unweighted averages, 1996=100.

In addition to pursuing various forms of these policy measures, with albeit notable variations across countries, the recovery has relied on massive external official support aimed at minimizing output losses and avoiding external debt default after huge net capital outflows. With the exception of Malaysia, all countries maintained open capital accounts and floated their exchange rates. The policy response consisted of three components. First, external finance from the IMF to overcome liquidity crisis and meet external debt obligations, especially in Indonesia, Korea and Thailand. The amount of funds immediately pledged by the IMF, the World Bank, the Asian Development Bank and bilateral sources amounted to $42.3 billion (20% of GDP) for Indonesia, $58.4 billion (13% of GDP) for Korea and $17.2 (11% of GDP) for Thailand. Yet, in Indonesia in particular substantial numbers of private debtors have gone into arrears with foreign creditors, who are expected to lose principal as financial distress is worked out over time

[28]. Second, all countries undertook varying measures to strengthen the regulation and supervision of banks, capital adequacy requirements and provisioning and classification rules. But, Berg's [28] analysis shows that progress has been disappointingly slow in bringing the financial system to health.

Finally, the results of the response with respect to macroeconomic policies have been mixed, with some countries like Indonesia continued to experience relatively large depreciation and high nominal and real interest rates. In Korea and Thailand, firm monetary policies backed by appropriate structural reforms resulted in stable exchange rates and declining rates of interest. Studies suggest that there seems to be no clear answer on the appropriate fiscal reform in the East Asian crisis context, and policy has varied substantially across countries and over time. It has also been argued that as regards real output change after the crisis, the countries (Indonesia, Korea and Thailand) with both internal and external vulnerabilities have observed the largest declines, followed by Malaysia, a country with a weak domestic financial system but a limited external financing gap. The Philippine was the country with relatively less internal and external financial problems and as a result saw the least decline in real growth rates. This observation attests to the importance of internal as well as external financial stability in sustaining real economic activity.

The above policy responses as well as the arguments for greater transparency and better financial management are not necessarily inconsistent with the principles of Islamic finance. But, the underlying analysis appears to lack clear theoretical basis as well as empirical support. Information asymmetries are not dealt with, while empirical evidence cited by Stiglitz [18] finds no support that capital account (or financial) liberalization leads to higher growth or investment. Moreover, the information problem together with other market imperfections is unlikely to be resolved by government intervention. While many economists now agree to the need for public policy to reduce the risk of financial market imperfection, there is a great deal of difference on how governments should intervene (see [17]). It is also doubtful that governments can intervene at the right time even if they have the right policy prescriptions.

Although they cannot be eliminated, it can be seen from the analysis in section 2 that the moral hazard and incentive effects may be reduced by PLS mechanisms (also see [29]). By tying debt obligations to the outcome of the projects financed, the PLS arrangement mitigates both market imperfections and the need for public policy. In this system both fund providers and fund users have stake in the productivity of investment, and none of them have guaranteed returns. Therefore, there is less or no incentive for market asset price bubbles to surface. This added to dismantling of fixed interest rate contracts and sharing of losses would ensure improved financial market's stability, and reduce the economic and social costs of crisis, as and when they occur.

The PLS system would also reduce the costs involved in developing institutions and structures to deal with the negative effects of financial liberalization, excessive volatility, and information problems associated with international financial markets. More specifically, by eliminating perceptions of risk-free investment, the PLS mechanism would encourage project finance and foreign direct investment, which are considered as the most appropriate forms of capital flows into developing countries. But, empirical evidence on the PLS system is sparse.

According to Darrat [30], there are currently about 200 interest-free financial institutions, managing more than $100 billion and operating in over 60 countries including non-Muslim countries. However, only a few of these countries have completely abolished interest-based financial instruments, notably Iran, Pakistan and Sudan. Existing detailed empirical studies offer interesting experiments but they are almost entirely limited to specific sectors (e.g. agriculture) or functions of the financial market. The few available comprehensive studies provide rather tentative and indirect evidence on the stability of the interest-free institutions.

To the best of my knowledge, Darrat [30] provides the most comprehensive empirical work on the relative efficiency and policy usefulness of interest-based and interest-free monetary systems in Iran and Pakistan. In Pakistan the conversion is dated to 1979, whereas in Iran a significant conversion to Islamic finance began in 1983.

Using data for the two countries for the period 1960-1998 and in a before and after framework, Darrat [30] investigated their overall macroeconomic performance in terms of the growth and variability of real GDP, as well as economic uncertainty. Economic uncertainty is alternately measured by the standard deviation of the growth rate of the monetary base and the money stock. Darrat also studied the behavior of the velocity of money in the pre-and-post interest-free era in order to analyze its effect on economic stability. In addition, using an error correction model, Darrat [30] examined both the short-run and long-run relationship between monetary aggregates on the one hand and policy instruments and goals (such as the control of inflation) on the other. Darrat [30, p.26] concluded that "introducing interest-free banking in both countries in the last two decades: (a) improved – or at least did not hamper their overall macroeconomic performance, (b) led to a smoother behavior of money velocity, (c) provided policymakers with a more controllable monetary environment and, (d) strengthened the linkage between policy instruments and the main policy goal of price stability".

However, as Darrat [30] correctly points out the empirical results are only suggestive and may not be taken as conclusive evidence on the relative efficiency of the conventional and interest-free financial systems. But it remains possible that the PLS arrangements that emphasize equity finance rather than debt finance might be more conducive to financial stability.

5. Conclusion

The objective of this study was to analyze the Islamic perspective of the fundamental causes and remedies of financial crisis, with specific reference to the recent East Asian case. After examining the theoretical foundations of Islamic and conventional financial intermediation, the paper discussed the causes, consequences and policy measures for dealing with the crisis as suggested by existing research. The article then explained the Islamic perspective of the causes of the crisis and their policy implications.

The literature review reveals that the key to the crisis lay with the excessive short-term capital inflows and misperceptions of currency risk as well as investment risk and returns on the part of lenders. These problems cannot be solved by macroeconomic policy alone. Because debt finance, especially short-term debt, raises questions about capital account liberalization and adds to vulnerability, the literature maintains that policy response must include the following. First, market-related policies in terms of better information and improved financial regulation. Second, financial restraint involving, for example, restrictions on lending to certain sectors such as real estate or taxation of pre-mature reversals of short-term capital inflows. However, the literature also argues strongly that the quantity and quality of information is limited by information asymmetry while financial regulation may not be enough to limit corporate exposure.

It is true that by 1999 the process of recovery has begun in most of the countries concerned. But there still remain the huge costs of the crisis in terms of, for example, decimated savings, lost output and increased unemployment. The recovery also involved significant additional costs in view of the massive external loans required to service the existing foreign debt and to support corrective policy measures.

While underscoring the importance of public policy and financial regulation, this study argues that the Islamic profit and loss sharing principle appears to provide a more robust market-based solution to financial crisis. The PLS system contains both internal restraints and better information (via co-ordination between fund suppliers and fund users), which reduce the possibility of a crisis, and a risk-sharing mechanism, which reduce the cost of a crisis (economic and social). The entrepreneurial support and scrutiny implicit in PLS finance, increased financial stability via reduced risk and less discord in the interests of fund providers and users, makes Islamic banking, a possibly more efficient form of intermediation. However, the results of the empirical evidence on the relative efficiency of the interest-based and interest-free financial systems are rather suggestive.

An important policy conclusion of this paper is that a policy of increased project finance in developing countries ought to be vigorously adopted, as opposed to debt finance. Concerning international capital flows, developing economies need to see increased long-term capital inflows to finance projects or foreign direct investment, and to avoid excessive

short-term capital flows. Further research is called for to shed light on the stability and relative efficiency of interest-free finance in specific and equity finance in general.

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الأزمات المالية في دول شرق آسيا في ١٩٩٧-١٩٩٨ من منظور إسلامي

آدم بريمة الحريكة

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جامعة الإمارات العربية المتحدة

ملخص البحث. يتعرض هذا البحث بالتحليل لمسببات الأزمات المالية في دول شرق آسيا في العام ١٩٩٧-١٩٩٨م و ما ترتب عليها من آثار و سياسات اقتصادية من منظور إسلامي. توضح الورقة أن تلك الأزمات يمكن فهمها و تفسيرها بصورة أفضل باعتبار أنها انعكاس للتضارب بين مصالح الدائنين و المدينين في النظام المالي الذي يقوم على سعر الفائدة، و ذلك بسبب انعدام المشاركة في المشروعات، التي تمول بالدين، من حيث العائدات والمخاطر. تخلص الدراسة إلى أن معالجة مشكلة الأزمات المالية في المدى الطويل تكمن في تبني و ترسيخ مبدأ المشاركة و التركيز على تمويل المشاريع.