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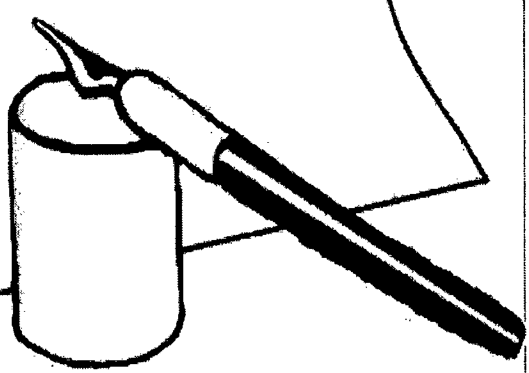

The Resilience of the Banking System of Islam to the Global Financial Crisis with Jordanian Islamic Banks as the Model Example

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Abstract

The conventional banking systems across the world have all been affected by the current global financial crisis. The Islamic banking system has not remained impervious; however, they have been more resilient. The literature indicates that the demand for the Islamic Financial system across the world is increasing due to its risk sharing mode of operation. This paper examines the causes and the effects of the financial crisis across the world and in the Middle East in particular. It also scrutinizes the extent to which the Islamic Banks in Jordan can avoid or mitigate the effects of this pernicious global financial crisis with its fiscal instruments like: '*Mudaraba*' (managed profit and loss sharing partnership/trust financing), '*Musharaka*' (profit and loss sharing partnership), '*Murabaha*'(cost-plus financing) and '*Ijara*' (lease-to-own). The hypothesis for the study has been developed on the basis of previous research and the particular idiosyncrasies of the global financial crisis. The study indicates that the 'interest rate' and 'excessive lending' are the primary factors of the fiscal crisis in the country. The empirical findings suggest that the fiscal instruments of Islamic banking such as *Mudaraba, Musharaka, Murabaha and Ijara* provide a robust immunity for the Islamic Banks during such a financial crunch.

Keywords: Global Financial Crisis, Islamic Banks, Mudaraba (managed profit and loss sharing partnership/trust financing), Musharaka (profit and loss sharing partnership), Murabaha (cost-plus financing), Ijara (lease-to-own), Maysir (gambling), Riba (interest).

قدرة النظام المصرفي الإسلامي في مواجهة الأزمة المالية العالمية (البنوك الإسلامية الأردنية مثال نموذجي)

ملخص الدراسة

أشارت الدراسة إلى أن الأزمة المالية التي يشهدها العالم اليوم هي فريدة في حجمها وآثارها، وأنها تُعد من الأزمات الاستثنائية والعميقة جداً من حيث النوع والكم، وقد تأثرت جميع دول العالم بها من أدناها إلى أقصاها، فلقد أثبتت الدراسة وبما لا يدع مجالاً للشك أن جميع الأنظمة المصرفية التقليدية في جميع أنحاء العالم قد تأثرت تأثيراً سلبياً وتكبدت أضراراً جسيمة من جَراء الأزمة المالية العالمية، وأن النظام المصرفي الإسلامي لم يسلم من هذه الأزمة شأنه شأن بقية الأنظمة المصرفية الأخرى، إلا أنه كان أكثر مرونة من غيره من المصارف التقليدية في التعامل والتصدي لهذه الأزمة المالية العالمية الطاحنة. أن الأدبيات السابقة في هذا المجال قد أشارت إلى أن الطلب على النظام المالي الإسلامي في جميع أنحاء العالم في تزايد مستمر، وذلك نظراً لخطر وضع تقاسم العملية المصرفية. كما بحثت الدراسة في أسباب وآثار الأزمة المالية في جميع أنحاء العالم بصفة عامة وفي المملكة الأردنية الهاشمية بصفة خاصة. وقد بينت الدراسة أيضاً آلية تعامل البنوك الإسلامية في المملكة الأردنية الهاشمية مع هذه الأزمة، لا سيما وأنها كشفت النقاب عن التدابير الوقائية لتجنب آثارها السلبية أو التخفيف من آثار هذه الأزمة المالية العالمية مع أدواتها المالية مثل: المضاربة، المشاركة، المرابحة والإيجار التمويلي. وعلية فقد تم صياغة فرضيات الدراسة على أساس الأدبيات السابقة والخصوصيات الخاصة للأزمة المالية العالمية. حيث أكدت الدراسة إلى أن "سعر الفائدة" "والإقراض المفرط" هي من أهم العوامل الأساسية للأزمة المالية في العالم بوجه عام وفي المملكة الأردنية الهاشمية بصفة خاصة مكان الدراسة. كما أشارت نتائج الدراسة إلى أن الأدوات المالية المصرفية الإسلامية مثل المضاربة، والمشاركة، والمرابحة والإيجار التمويلي وفرت الحصانة القوية للبنوك الإسلامية خلال الأزمة المالية.

كلمات البحث: **الأزمة المالية العالمية، المصارف الإسلامية، المضاربة، المشاركة، المرابحة، الايجار التمويلي.**

Introduction

The collapse of the US sub-prime mortgage market was probably the earliest indicators of the Global Financial Crisis (GFC) ("Great Recession") of the late 2000s, being probably the worst financial crisis since the 1930's Great Depression that preceded World War II and before the birth of the Bretton Woods Institutions. The GFC has led to the housing boom reversal in other industrialized economies which have had a global ripple effect. The Bretton Woods conference was held during the 1^{st}-22^{nd} July, 1944, where representatives from 44 nations agreed upon the post World War II global economic institutional framework. The sole purpose of this was the creation of an American leadership led open world economy, thus ensuring an unchallenged North American access to the global raw materials and markets. This founding principle is one of the major reasons for the weaknesses of the financial systems that have led to the rapid and widespread unhindered spread of the financial toxic aftershock of the financial failures which initially originated in the North American continent.

This global financial crisis in particular, which began with the banking, mortgage and insurance companies soon spread to the economic crisis that is now fully global. In particular, the financial gloom has now spread to affect the various economic sectors of the financial system viz.: insurance companies, banks, the real estate market and the diversified financial services. The financial crisis now plagues all the global economies – but their impact differs in the severity and scale from country to country and region to region. As far as Western Asia is concerned, they are divided into those in the major oil producing Gulf Cooperation Council (GCC) and other countries such as: Syria, Jordan, Lebanon and Egypt, which have greater diversified economies. Even so, the global economic crisis have affected them and in different ways. The crisis had a stronger impact in the GCC countries, where their financial systems were more globally integrated and the banks more overextended – thus more exposed. Countries elsewhere in the region weathered the crisis better due to less global exposure and global integration.

In the GCC countries the global economic downturn is specially taking its toll, while in developing economies of the region namely Syria, Egypt, Lebanon and Jordan, the global financial crisis impact has so far been muted. However, the openness of their economies determines to what extent these regional countries are affected. For over a quarter of a century, the Islamic banking and financial system has been continuing to develop from a dormant idea to a practical reality to express the Muslims willingness to live according to the Islamic laws of Shariah (the legal code of Islam) to the present fastest growing industry in the banking domain. With the current economic crises the Islamic banking and financial system has become the centre of attention and focus with its unique features. Since the onset of the financial crisis, Islamic banks have been analyzed to identify their resilience, characteristics, opportunities and potentials for growth and finally any weaknesses. It is said that the Islamic banking system stands as the best alternative in the face of the current global financial crisis, that was primarily a result of increased over-granting of loans by conventional banks, financial institutions and companies, especially loans and credit facilities, in the real estate market and at low rates of interest, without collateral in many cases. In the light of the above mentioned statement it seems crucial to have a look at the differences in the operations of Conventional Banks and Islamic Banks. The main difference between Islamic and conventional banks is that the former are Shariah compliant, being based on justice. This is achieved through risk sharing. Charging interest is prohibited and stakeholders share profits and losses together. This study examines the causes and the effects of the financial crisis on Islamic banks in Jordan and identifies the impact of the major tools of Islamic banking such as: *Mudaraba, Musharaka, Murabaha* and *Ijara* - to avoid or reduce the effects of the global financial crisis.

Background of the Global Financial Crisis:

When the first steep declines in the stock markets were noticed back in 2000, the US Federal Reserve immediately took the drastic action of lowering the interest rate to limit the damage. This course of action did not go unnoticed by the general public with their mortgage loans. The American public seized upon this opportunity to either borrow more money or refinance their current mortgage loans. Added to this, a new innovation began to emerge, which separated the lending decision of the banks from the actual ability to pay back the mortgage by the customers. It was assumed that the prevailing low or near zero interest rates would remain at such a rate for a prolonged period of time and that the mortgagee would not have problems repaying the loan back. The system was such that the American mortgage brokers were simply being paid to sign on mortgage loans and being paid commission solely on the number of borrowers without reference to any other financial criteria. The numbers of mortgage brokers who took this innovative opportunity numbered over half a million. The ignoring of the inability of the mortgagee being able to pay back and thus default on their loans was another new innovation in the money lending business. So far, the banks worked on lending money based on their actual reserves deposited by their customers. But the first critical problem that we can identify began when the banks took their decision to start lending money irrespective of their actual deposits held. This was again another new innovation in the banking world. At first, this created an enormous supply of money from nothing, which was not backed up by other securities, being based on the promise to pay back the loan by the borrowers only. As the rush to attract the number of borrowers reached frenzy, naturally the quality of the applicants began to deteriorate. This was specially the case when borrowers were being tempted with ever increasing LTV (loan-to-value) ratios. This over-leveraging was a potential time-bomb if the interest rate were to increase by only a few percentage points for the borrowers. Despite the critical mass being reached of what can now be described as "toxic borrowers" being held by the banks, the pace of lending showed no slowdown. This was purely because of the addiction of making high profits by selling these financial products, i.e. securities. "Banks themselves had set up highly leveraged, off-balance-sheet, structured investment vehicles (SIVs) to buy and hold some of these securities on their own account in order to maximize returns." [International Labour Office, 2009] The foundation of the subprime mortgage business was based on variable rate mortgages. These were unfortunately held by those people who had the greatest risk of defaulting if the interest rate were to increase. So once the interest rates began to increase and thus affect these people adversely with their inability to pay back their loans, the banks were now in the position of defaulting themselves. So as the interest rates continued to increase, the borrowers started to default in ever increasing numbers and this had a chain reaction in making more and more banks unable to exist as financial entities. This led to the closure of many banks and others began to merge with others just to survive. This can be described as the start of the "global financial crisis" and disaster.The first major warning regarding this toxic situation with sub-prime lending was seen in 2007 when one major European bank actually issued a formal warning and chose to write off tens of billions of dollars of losses from their own acquisition back in 2002, of an American sub-prime lender. This course of action did not go unnoticed by the major banks and its effect was seen four months later when an investment bank/securities dealer closed two of their own hedge funds, all due to their exposure to the American sub-prime mortgage market. Later, in 2007, another primary European bank chose to freeze three investment funds and prevent any withdrawals from them. This can historically be seen as the start of the great financial panic, since if European banks with no evident exposure to the American mortgage market, as perceived by the general public were behaving like this, then it was assumed these European banks may also be hiding other undeclared vast losses. Thus the credit crisis can truly be said to have begun, as the distrust and lack of faith between the major financial institutions began to spread beyond the European banks and eventually spreading to global levels. The effects of these were that the banks were now unwilling to lend among themselves, thus making it more and more difficult to obtain inter-bank loans. Obtaining credit between the banks was now becoming almost impossible. This naturally also meant that the public would also face huge difficulties now in obtaining credit - thus affecting the liquidity of credit. By September 2007, the liquidity between banks can be said to have become almost non-existent. This led to the rumours that the banks were now obtaining their money only from “the wholesale money markets”.Because leveraging was being used extensively to specially boost the high levels of profit, this was also a dangerous gamble, because high profits could also mean high losses when the markets reversed. This deleveraging was now taking place exacerbating the deflation. Thus due to the high leverage between the banks, they now suffered critical losses and many became bankrupt. Thus merging was seen as the only way to survive.Furthermore, this situation had already spread to the rest of the financial markets including the high-yield corporate bonds, asset-backed securities, money-market funds, commercial paper, the inter-bank market, the hedge funds, the auction-rate market and the real economy. The banks had also started to write-off billions of dollars of losses from the American housing market. But the problem had already spread to the housing markets of Europe, including Spain, Ireland and Britain, thus making the crisis a truly global one. Amongst the GCC financial economies of Western Asia, the United Arab Emirates (UAE) had been the most affected by this financial crisis. The GDP fell from 7.4 per cent down to only 0.5 percent between 2008 and 2009. The real estate business accounts for 16 per cent of the GDP in Dubai and thus the slowdown is severely hampering their growth. The main reason behind this was due to the severe shrinkage in domestic demand, especially in Dubai. Saudi Arabia, Qatar, Kuwait, Bahrain, Jordan and Oman are also expected to be severely hit.

Global Financial Crisis and Islamic Banking:

In the Shariah compliant banking system, the Islamic banks themselves act as the source of the venture capital firm. The banks primarily exist as a central depository of the wealth of the public. Not only that, the banks then take the responsibility of investing the money in the local economy and then in profit sharing with the creditors without the concept of charging or paying any forms of interest. Thus the Islamic bank acts as the investment partner with the creditor, taking on the rôle of an actual business partner. The bank acts to offer money with whosoever wishes to do business with them. The banks are limited to only being able to recover their original capital in proportion to their share of their investment with the business partner, capped at the market rate. As real partners, Islamic banks should not have any objections to owning real assets and hence they should be ready to share the subsequent risk. Although this practice appears to be a triviality, it could be a major relief for the clients of the Islamic banks, as they would now no longer live under the fear of repossession and the burden of debt.It is argued by exponents of the Islamic banking system that the present financial crisis would not have occurred if the requirements of Islamic Shariah were strictly adhered to and implemented in its entirety, e.g. the issue of pure risk-sharing. If commercial banks (i.e. non-Islamic Banks) would share the losses and profits of their clients, whether in mortgages or business investments, they would consequently pay further attention for the selection of the deal to finance.In a study conducted by the IMF on the performance of conventional banks and Islamic banks during the recent financial crisis, it was found that on average the Islamic banks exhibited stronger resilience during the global financial crisis. However, it was also observed that compared to their conventional peers, they faced larger losses due to weaknesses in their risk management practices. This was mainly due to their higher degree of concentration on, or greater exposure to, one sector and/or borrower when the crisis hit the real economy. This thus, revealed the important regulatory and supervisory challenges facing the Islamic banking industry. The Islamic finance industry suffers from the same problems as non-Shariah compliant banks because currently most do not strictly engage in risk sharing according to the Islamic definition. This is due to the lack of strict and improper adherence of Islamic regulations. The consequence of this is that the customers of Islamic banks when they default suffer from the same problems as those who use interest based banks. If Islamic banks engage in paper money creation without gold or silver to back them up, they also will suffer the same boom-bust inflationary cycle that is evident in Western economies. However, still in the presence of such a never before seen crisis, the Islamic banking and financial institution continues to witness phenomenal growth such that the global value of the Islamic finance has already approached $1 trillion, being in fact the fastest growing financial segment. The Islamic banking and the financial sector now account for greater than 15 per cent of the total world banking sector according to their average annual growth. This has lead to major research being undertaken to identify the rôle of important tools of the Islamic banking to avert any future financial crisis.

Financial crisis in Jordan:

In the light of the current world financial problems, especially after the collapse of Lehman Brother in late 2008, the central bank of Jordan decided to take a preventative and cautionary approach of entrenchment. The steps taken by the Jordanian banks first involved meeting with the private banks and then emphasizing prudence, followed by the enforcement of the 20 per cent credit ceiling for the real estate companies and issuance of several other cautionary instructions to the banks. Thus following these recommendations, the banks of Jordan faced the global crisis fairly well during the last four years, actually resulting in surplus deposits and the consequent attraction from global lenders. In late 2008, as the global financial crisis continued unabated and was felt across the region, the Hashemite Kingdom of Jordan took the bold step and announced that all deposits would be guaranteed until the end of 2009.This pledge was later extended until the end of 2010. This commitment by the Jordanian Government was in addition to that which was already being offered and in existence by the Jordan Deposit Insurance Corporation that insured deposits of up to $14,000 should a bank fail. Jordan has been affected by the global financial crisis like other countries; however, the following information regarding Jordan's financial sector will be helpful in judging the degree of its robustness against the crisis:

1. Most of the large American banks failed due to being purely investment banks. These banks collapsed due to no income from the commercial transactions and lack of sources of income. This was not quite the case with the banks in Jordan

as they are not pure investment banks and thus did not face the same financial risks.

2. Also in Jordan, complex and complicated financial instruments are not used, thus they are not exposed to the same degree of risk. This makes the Jordanian market more appealing to the general Arab investors.
3. Thus, Jordan's free market, in spite of its small size, makes Jordanian banks less prone to fluctuations and more durable.
4. Due to the stability of the Jordanian banks, the banks of the Arabian Gulf became interested in transferring some of their risk to them. This was easily implemented as there were already much interdependence between the Jordanian financial market and financial markets of the Gulf countries.

The main tools of financing used by Islamic banks are as follows (Shahul, 2000):

- ***Mudaraba*** (managed profit and loss sharing partnership/trust financing).

  Mudaraba "is a labour-capital partnership, wherein an investor puts up an amount of capital for a specific period of time with an entrepreneur who carries out business with that amount. The profit sharing ratio between the entrepreneur and the investor is pre-determined in advance. At the end of the period, profits are shared in the agreed ratio. In case of losses, the investor bears the entire loss, the entrepreneur loses his labour." [Ibrahim, 2000].
- ***Musharaka*** (profit and loss sharing partnership)

"This is plain partnership financing. Here the bank becomes a full partner of the entrepreneur who also contributes capital. The bank shares profits and losses of the business with the entrepreneur in a pre-agreed ratio. In case the bank does not play an active part in the business, then the entrepreneur may charge management salary or expenses to the business account. Unlike the case of [*Mudaraba*], where the bank cannot interfere in the running of the business, the bank has full rights of administration in *Musharaka* contracts." [Ibrahim, 2000].

- ***Ijara*** (Lease-to-own/Financial Lease)

"*Ijara* is rent or leasing of assets. Here the bank purchases the asset and leases it to the borrower. Although, strictly only operational leases are allowed in Islam, most *Ijara* contracts take the form of financial leases, which transfers the risk and rewards of ownership to the borrower. Even in the case of a financial lease, since the contract is a lease agreement, the ownership resides with the bank until the borrower exercises an option to buy the asset at the end of the lease. The buying option can be pre-agreed at the inception of the contract. This is known as an *Ijara wa iqtina* (lease and sell) contract." [Ibrahim, 2000].

- ***Murabaha*** (cost-plus financing)
  The "contract of *Murabaha* or mark-up originated in the deferred sale contract. In this contract, a buyer of goods requests an agent to do it for him, on the understanding that the agent will charge a mark-up on the cost of the goods which will be sold to the buyer. The price was usually deferred and hence the agent usually quoted two prices, one for spot and a higher price for deferred sales." [Ibrahim, 2000].

Literature Review and Development of Hypothesis

The literature available on the global financial crisis and Islamic banking is quite extensive and diverse. Various studies have been conducted which focuses on the robustness of the Islamic Banking System during the current financial crisis. Here, we give a testimony to some of the pertinent points of our studies.

The global financial crisis of 2008–2009 actually began in July 2007 according to the report published in the Wall Street Journal in 2007. It started in America with a total loss of confidence by investors in the worth of securitized mortgages. The consequence of this was that it resulted in a liquidity crisis that required a prompt and quite a substantial injection of capital into the financial markets in order to stabilise the financial market and to prevent its total collapse. This massive injection of capital was carried out by the United States Federal Reserve, the European Central Bank and the Bank of England (Norris, 2007; Elliott, 2008).

Yudhoyono (2009) and Dominick Salvatore (2009), mentioned that the initial causes of the present financial crisis are the rapid, large and increasing amounts of home mortgages and they expected or concluded that a rise in interest rates would cause many to default on their payment due to their inability to payback their loan. This crisis may have been averted if housing prices had continued to rise at the unrealistic high rates and thus maintain a high equity value and loan to value ratio. The steep contraction in credit was the primary origin as identified by Nanto (2009) which led to the disastrous financial problems. However, the roots of the financial crisis can be traced back to an even earlier time to the deflation of the high-tech industrial bubble when the stock markets began a steep fall and the interest rates started to plummet. This study differs from the preceding literature because it investigates a side of the financial crisis that tries to delve into the real reasons behind the GFC. According to those reasons, they evaluate a model which considers 'fraud', leverage, securitization, complexity, asset-liability mismatch and sub-prime lending as the important causes creating the crisis. Allen, (2001), in his study considered that a bubble bursts and the inevitable collapse in asset prices leads to a banking crisis and proposed that the important tools to prevent a financial crisis is that the central bank and government avoid a rapid expansion of credit.

Al-Zoubi, (2003), found in his study the key variables that triggered the 1997, East Asian financial crisis. The study constructed a proxy model of a crisis to isolate the causes of a crisis. The study finds that the most pressure for a crisis comes from the external sector and the financial sector. A crisis has higher probability of occurring when the current account deficits are high, foreign interest rates increase, financial liberalization is present, the reserve ratio is low and a lending boom is underway. The study concludes that the financial sector risk management capability as the most sensitive area of concern in reducing the probability and magnitude of a currency crisis.

Hausmann *et al.*, (2004), clarified that as crisis changes from country to country the nature of the crisis also tends to change with time. They indicated that sometimes the crisis originates when actually the government of the country itself defaults and in other circumstances it is the private firms who cannot pay. In other cases the banks get into financial difficulty as they have excessive surplus credit to customers who are anticipating the emergence of a banking crisis. Related to this, Kawai & Dean, (2008), had shown that the failures and collapses of major financial institutions in the United States (US) and Europe all contributed to the arising acute current global financial crises. Going one step further, Reinhart & Rogoffthe (2008), stated that the run-up to the U.S. equity and housing prices crash was the best leading indicators of the financial crisis in countries experiencing large capital inflows. This was found to be true for those countries which closely tracked the average of the previous eighteen post World War II banking crises in industrial countries. It can be observed that subprime problems were in fact quite widely spread. The problems may be observed in many unrelated parts of the global financial system when many losses occurred in diverse firms and markets because of the severe use of complex, large speculative positions underwritten by borrowed funds, hard-to-value financial instruments and or highly geared leverage ratios. According to Chapra (2008), the imprudent and excessive lending by banks is the major factor that contributed to the global financial crisis.

The primary reason for such a disastrous financial outcome was due to the primary motivation of the bankers whose sole motive was to make as much profit as possible and success between their peers was simply based on material acquisition whether money or possessions.

"Amoral failure" was also explicitly stated by Siddiqi (2008) under the terms of *riba* (interest) and *maisir* (gambling like speculation) - the underlying problem being the shifting of the risk instead of risk 'sharing'.

The bankers themselves are not solely to blame; however, the consumers' greed to live beyond their means was also a strong contributory factor which was amply exploited by the bankers. The selling of difficult to understand financial instruments like debt-finance coupled with speculative products to the consumers did not help matters much – selling of these being exploited by the avaricious agents whose only goal was to maximize their profit margins. The Casino like economics and human welfare as the alternative of 'risk sharing' were also identified by Siddiqui, (2008), as being the implicit causes of the financial crises. Secondly the concept of "credit without credibility" which is the use of over extending leverage, ignorance of current loans and use of high multiples of existing capital as being the major symptoms of the interest bearing financial debt system were also identified by Siddiqui.The immoral and counterproductive preference of debt financing of productive enterprise instead of risk shifting was also identified as a major cause of the current global financial crises. This practice of risk shifting did not guarantee generation of new wealth. Thirdly, during the peak of Islamic civilization, the practice of trade credit thrived and Islam had no problems with it. This was because it was still in accordance with the prohibition of exchanging money in the present with a future larger amount. This form of debt financing has always thrived and has been part of the financial system. It is only the charging of interest which is strictly forbidden in Islam. The problem starts with the actual "sale of debt", whether this is created by the loan of the money itself or owed as price of goods sold on credit whether in the present time or as a future transaction.Fourthly, the concept of "derivatives" is also forbidden in Islam as it also involves excessive uncertainty and hence risks and chance. The expectations' being based purely on chance, again forbidden in Islam as it comes under the umbrella of the definition of *maysir*. The concept of derivatives is traditionally based on predicting future price movements and rates of exchange for example and their management thereof. Mirakhor, (2009), correctly states that the present global financial system is indeed based on interest *(riba)* and as such is inherently unstable.Mirakhor, (2009), explains that to maintain resilience in the financial institution, it is very important to manage liquidity risk. This is also important in preventing the harmful effects of the financial toxic shock and from its spreading by contagion caused by liquidity shock.Once the American financial meltdown began, the panic spread worldwide shortly thereafter. The ensuing uncertainty in the fiscal liquidity made the banks more risk averse as they were now scared of contagion. This off course badly affected the rather complex and opaque credit instruments of the bank and this caused the banks to freeze their interbank lending mechanism. The banks furthermore started to deleverage and further details are provided by Chapra (2008).

Banks also know that the more credit they offer, often by high leveraging, the more profit they stand to make. However, this excessive lending is very dangerous and unsustainable because it leads to a temporary artificial boom in the asset prices followed by again a temporary increase in consumption and highly speculative investment. Due to the high rate of leverage already in use, it becomes ever more difficult during a downturn to unwind. This leads to being trapped in a vicious cycle during a downturn when asset prices free fall leading to a serious financial crisis, especially during overindulgence in "short sales".Excessive and unregulated lending led to the subprime mortgage crisis. Securitization, that is, "the originate-to-distribute" based model of financing was fundamental in the subprime mortgage crisis also. At first, securitization appeared to be a good financial innovation, as it led to easier capital market access, risks to be widely shared and lower transaction costs.

Islamic financing in its purest form as advocated by the author and elucidated in the paper by Chapra (2008) is the solution for the current global crisis. This is achieved by the sharing of both the equity and risk amongst the bankers and investors. This is achieved by the sharing of the profit and loss in projects and ventures through the Islamic financial instruments of *Musharakah* and *Mudarabah* modes of sharing. Siddiqi (2008) also explains further how value creation and risk management are integrated with risk sharing. *Musharaka* and *Mudarabah* both concentrate on value creation and are excellent financial tools for risk management.Weguelin (2008), also notes that unlike many of the Western mainstream competitors, the European Islamic investment banks were not leveraged and had not invested in toxic assets, as a result, the Islamic banks are in a relatively strong financial position. Thus although Islamic banks have been indirectly impacted by the general lack of liquidity, they have not been affected to the same extent compared to the conventional banks. '*Sukuk*' which adheres to Islam's ban on receiving or paying interest, typically work as a vehicle of profit-sharing. This is put into practice by the issuance of Islamic bonds by the companies that instead of paying interest make payments to investors using profits from their underlying business.Colander *et al.* (2009), in their study concluded that the failure of the risk management or danger of systemic risk and ethical responsibility have important negative effects on the financial systems. Bourbon *et al.* (2009), also believed that the main cause of the financial crisis was mainly due to the subprime crisis, securitization and the excessive lending. Gentil (2009), supported the same idea about the reasons of the financial crisis but in addition he also said that the financial crisis is a complex issue which is not easy to understand and to determine all its root causes.According to Al-Anani (2009), he clearly states that the Jordanian economic situation having a strong structure makes it quite impervious to the global crisis. The strong economic management of the Jordanian economy and its consequent strength makes it very amenable and attractive to foreign investors in terms of trading, economic interaction and other forms of investment. There is also the added advantage that the Jordanian economic system is both shielded from the global financial situation and thus subject to containment.Al-Nessor (2008) furthermore correctly states that the financial crisis will affect each country differently as they have differing complex financial systems. However, he states that the Gulf states will be more affected due to the unique behavioural pattern of the Arab investors and their reaction to international financial news, such as stock market news from the international stock exchanges. The Arab investors are also very wary from the foreign investors initially withdrawing their investments from the Arabian Gulf markets. On the positive front, the US mortgage crisis on the Arabian banks was limited mainly by the massive financial intervention of the Arabian governments to sustain and maintain financial liquidity.

According to Al-Billawi (2008), the underlying reasons affecting the global financial economy was created by the shifting from credits being based on real assets to virtual and imaginary goods or future transactions. This, though it led to an initial massive amount of "virtual" credit, in the end, it caused "actual" massive debt. Lack of regulation, co-ordination and control of the various banking sectors were also identified as a cause of this financial collapse. The paper summarized the results of the global stock market crash as being due to three reasons:

i) expansion of the American mortgage lending business without financial collateral as back-up;
ii) the incompetence of the bankers to carry out the operations of the real estate acquisition and finally;
iii) the failure of the governments to deliver on their promises of creating new jobs and improper financial handling of their economies.

Problem Statement

The current financial crisis has become a decisive problem that need to be addressed as a quick resort. Since the banking sector is one of the vital organs for sustaining the economy, the problem of the study lies in determining the effect of the global financial crisis on the Jordanian banking sector, with special references to the Islamic banking in the country as well as responses of the Islamic banking to the threat posed by the current global financial crisis. The basic problem of the study can be formulated in the form of the given questions:

"How far does the current financial crisis affect the Islamic banks? To what extent is the Islamic banking system able to succeed in averting or at least reducing the effects of the global financial crisis by using its own concepts that have been derived from the laws of Islamic Shariah?"

Hypothesis of the Research

On the basis of previous studies, the researcher proposes the following hypotheses:

H_1: That there is significant negative effect of *Mudaraba* on the financial crisis in the Jordanian banks' financial system.

H_2: That there is significant negative effect of *Musharaka* on the financial crisis in the Jordanian banks' financial system.

H_3: That there is significant negative effect of *Murabaha* on the financial crisis in the Jordanian banks' financial system.

H_4: That there is significant negative effect of *Ijara* on the financial crisis in the Jordanian banks' financial system.

H_5: That there is significant positive effect of the Interest Rate on the financial crisis in the Jordanian banks' financial system.

H_6: That there is significant positive effect of Excessive Lending on the financial crisis in the Jordanian banks' financial system.

Research Methodology

The technique used for the sample was purposive sampling. The main reason for selecting this technique was its feasibility in terms of time and cost. Above all, using survey techniques and basic statistical analyses is followed to test certain hypotheses and to study the consensus on objectives and characteristics of the Islamic financial institution. This is to elicit evidence on consensus from the respondents on Islamic economy, as well as to gauge the extent of non-Islamic behaviour reflected by conventional accounting to the present financial crises. Henceforth, the researcher in order to provide accurate results, selected a group of people which includes 80 employees from Islamic banks in Jordan to give some actualities whether to prove or to reject the ideas about the financial crisis and its effect on the performance of the Islamic banks. The sampling is confined to some specific targeted people, these being the: General Manager, Financial Manager, Accounting Manager and Chief of the Financial Department - so as in order to collect the desired information, depending on the availability of the relevant individual or person. Jordan has been chosen as the location for the study due to the proximity of its location to the Arabian Gulf economy as well as the prospect of getting adequate and efficient respondents in a timely manner.

Tools Used for the Study

The tools used by the researcher to collect the data comprised of:

1. Questionnaires and 2. Unstructured interview schedule. A questionnaire is considered to be one of the most suitable tools in collecting the relevant data for achieving the aims and objectives of the present study. The designed questionnaires covered a wide range of topics as per the objectives and hypotheses of the study. After preparing the first draft, it was given to the experts for validation. Thus, the final questionnaire was structured into six sections to find out the effect of the financial crisis on the performance of the Islamic banks. The first section measures the effects of *Mudaraba*, the second section measures the effects of *Musharaka*, the third section measure the effects of *Murabaha*, the fourth section measures *Ijara*, the fifth section measures excessive lending and the last section asked the respondents to measure the effect of the interest rate. In order to get a more in-depth and precise result, apart from the questionnaires, the researcher also used the unstructured interview schedule.

The respondents were asked to rate based on a five point Likert Scale on the effect of the financial crisis on the performance of Islamic banks and the adequacy of Islamic principles. An unstructured interview schedule was also prepared to cross validate the information obtained through the questionnaires. The interview did not follow any particular format. It was carried out on the basis of the informational cues obtained from the questionnaires. Interviews varied from case to case as per the interaction patterns of the respondents.

Result of the Study and Discussions

This section focuses on the analysis and interpretation of the selected data. Out of the 80 administered questionnaires, only 60 were returned with valid information, which the researcher then used for analysis.

Graphical Analysis

The graphical analysis shows the relationship of Mudaraba, Musharaka, Murabaha, Ijara, Interest rate and excessive lending with global financial crisis on the basis of bar charts in the sequence of one by one from Figures 1-7. The effect of Mudaraba from the global financial crisis is shown in Figure 1, below.

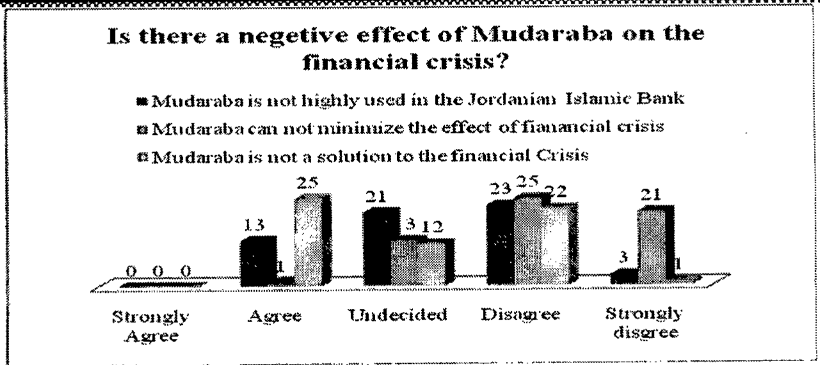

Figure 1. The Effect of Mudaraba on the Global Financial Crisis.

From the above Figure 1, it can be seen that the most of the respondent are strongly in disagreement with the statement that there is a negative effect of Muradaba on the financial crisis. It means that Mudaraba should be highly used during the financial crisis in Jordanian Islamic banks and it can minimize the adverse effects of financial crisis. It is also clear from the above figure that Murabaha can be used as a solution to the financial crisis. Only few respondents are in favour that Murabaha has a negative effect on the financial crisis and thus it cannot be used as a solultion to the global financial crisis. Therefore, it is clear from the analysis that Murabaha does indeed have a positive significant effect on alleviating the problems of the global financial crisis.

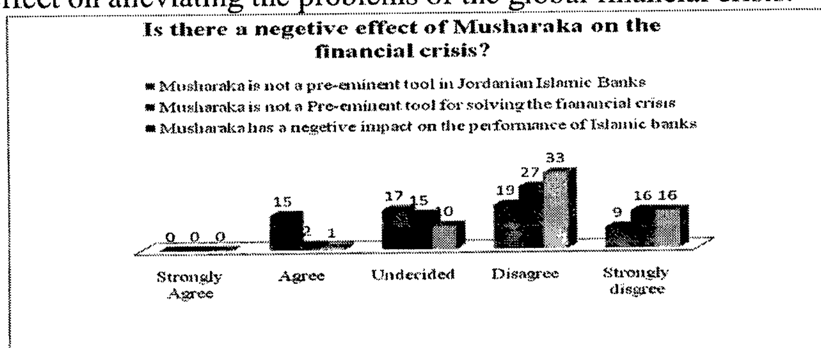

Figure 2. The Effect of Musharaka on the Global Financial Crisis.

Similar to Figure 1, Figure 2 above, also shows that most of the respondents are in strong disagreement with the statement that as a pre-eminent tool, Musharaka does have a negative effect on the financial crisis. The result therefore means that Musharaka should be used as a positive pre-eminent tool in alleviating the financial crisis in Jordanian Islamic banks and it can thus also minimize the effects of the global financial crisis. Only a few respondents are in agreement with the statement that Musharaka is not a pre-eminent tool for dealing with the financial crisis. So the analysis finds that Musharaka does indeed have a positive significant effect on tackling the global financial crisis.

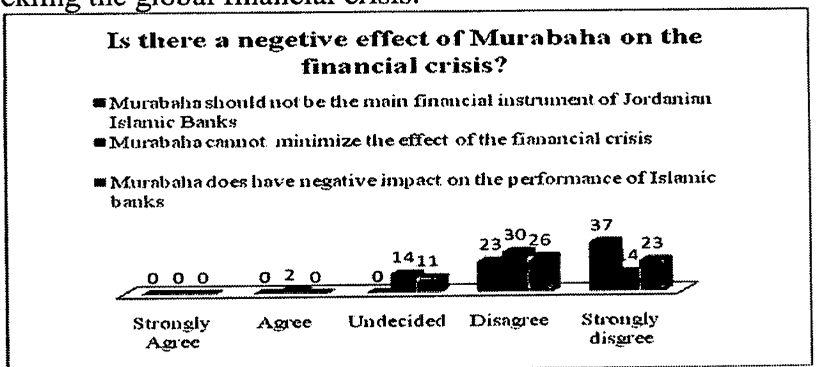

Figure 3. The Effect of Murabaha on the Global Financial Crisis.

In Figure 3, we can see that the most of the respondents are either in disagreement or in strong disagreement with the statement that Murabaha should not be the main financial instrument used in Jordanian Islamic banks and that it cannot minimize the effects of the global financial crisis. Most of the respondents are also in disagreement with the statement that Murabaha does have a negative impact on the performance of Islamic banks. The numbers of the respondents who have agreed with all the above three statements are negligible, being only two respondents. Thus, in line with the results from the previous two figures, the analysis states that Murabaha does indeed also have a positive significant effect on treating the global financial crisis.

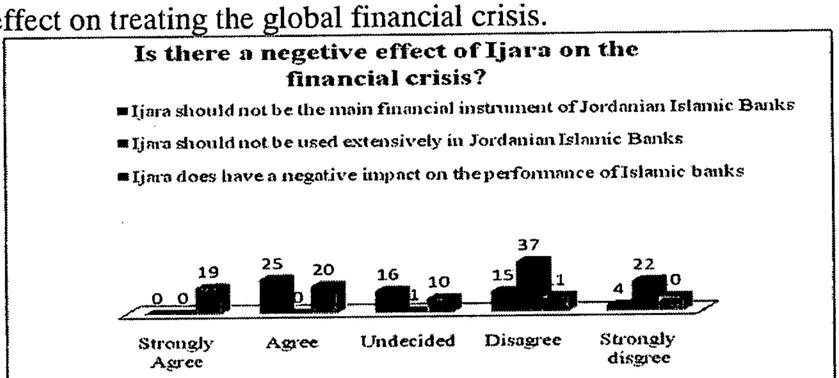

Figure 4. The Effect of Murabaha on the Global Financial Crisis.

Figure 4 clearly shows that most of the respondents are in disagreement with the statement that there is a negative effect of Ijara on the financial crisis and also that Ijara should not be highly used as a financial instrument in dealing with the financial crisis in Jordanian Islamic banks. The results actually means that Ijara should be highly utilized as a financial instrument in Jordanian Islamic banks and it is also clear from the above figure that Ijara can be used as a solution to the financial crisis. Comparatively less respondents are in favour that Ijara does have a negative effect on the financial crisis and thus it cannot be used as a solution to the financial crisis. Therefore, it is clear from the analysis that Ijara overwhelminghly does have a positive significant effect on solving the global financial crisis.

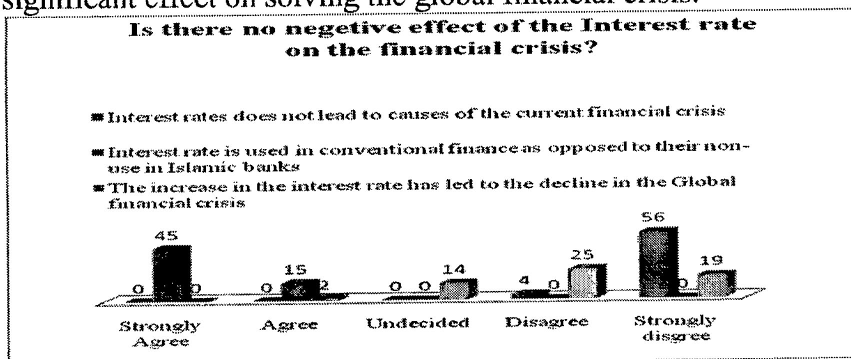

Figure 5. The Effect of the Interest Rate on the Global Financial Crisis.

From Figure 5, we can see that 45 and 15 out of 60 respondents are 'strongly agree' and 'agree' respectively with the statement that Interest rates in conventional finance is used in conventional finance as opposed to their non-use in Islamic banks. While 56 out of 60 respondents are 'strongly disagree' with the statement that interest rates does not lead to the cause of the financial crisis in Jordanian Islamic banks. Also the majority of respondents are in disagreement with the statement that the global financial crisis has led to an increase in interest rates. Thus it is clear to say that there is no significant effect of the Interest Rate on the financial crisis in the Jordanian banking financial system simply because it is not used in the Shariah compliant Jordanian banking system.

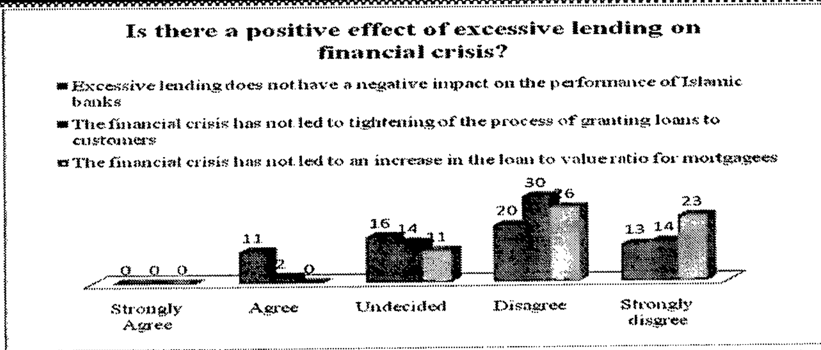

Figure 6. The Effect of Excessive Lending on the Global Financial Crisis.

From Figure 6, we can see that no respondents are in strong agreement with the above statements that excessive lending has not had a negative impact on the performance of Jordanian Islamic banks and that the financial crisis has not led to the tightening of the process of granting loans to customers. Also most of the respondents are in disagreement with the statement that the financial crisis has not led to an increase in the mortgage loan-to-value ratio for customers. Only eleven of the respondents are in agreement with the statement that excessive lending has not had a negative impact on the performance of Jordanian Islamic banks. Whilst only two respondents are in agreement with the statements that there has not been any tightening of the process of granting the loan during the financial crisie. This result, however, can be ignored as the sample size of two respondents is not statistically significant. So the analysis has concluded that the non-use of excessive lending has in fact had a strong positive effect on the performance of Jordanian banks. This has also shielded the Jordanian banks from the financial global crisis.

Reliability Test: The Cronbach's Alpha reliability test had been used to test the reliability of the questionnaire.

Table 1. Cronbach's Alpha Reliability Test for the Questionnaire

Variables	Test Value of Cronbach's Alpha
Mudaraba	0.8312
Musharaka	0.8542
Murabaha	0.8184
Ijara (Financial Lease)	0.7962
Interest Rate	0.8650

Excessive Lending	0.7865

Based on the test conducted, the results in Table 1 shows that the Alpha values for the set questions for hypotheses 1, 2, 3, 4, 5 and 6 are 0.8312, 0.8542, 0.8184, 0.7962, 0.8650 and 0.7865 respectively. According to the rule of thumb, the Alpha values of between "0.7 to 0.79" is acceptable while Alpha values greater than 0.80 is considered good (George & Mallery: 2001). Thus, to confirm the authenticity of the above reliability test, other independent statistical analyses were conducted.

To support a more statistically valid result, further in-depth exploration of the association between the dependent and independent variables were also carried out. This was done by using the Pearson Product Moment Correlation (Pearson's Coefficient) matrix and regression analysis.

	Perform-ance	Mudaraba	Musharaka	Murabaha	Ijara	Interest Rate	Excessive Lending
Performance	1.000	0.277*	0.338**	0.261 *	0.328**	-0.084	-0.043
Mudaraba		1.000	0.294 *	0.364**	0.364**	-0.092	-0.075
Musharaka			1.000	0.288**	0.177*	-0.045	-0.012
Murabaha				1.000	0.120*	-0.134	-0.125
Ijara					1.000	0.065	-0.085
Interest Rate						1.000	0.726**
Excessive Lending							1.000

Table 2. Pearson's Correlation Coefficient Matrix using the Dependent and Explanatory Variables for a Pooled Sample of 60 Respondents.

*** Correlation is significant at the 0.01 level (2-tailed).*

** Correlation is significant at the 0.05 level (2-tailed).*

Table 2 shows the Pearson's correlation coefficients of the group samples. It clearly shows that the tools used in Islamic banks, namely *Mudaraba*, *Musharaka*, *Murabaha* and *Ijara* all exhibit a positive significant correlation, whereas the interest rate and excessive lending does have a negative significant correlation in the performance of the Jordanian Islamic banks. This indicates that the tools used by the Islamic banks had a significant rôle in preventing the intensity of the effects of the global financial crisis on the daily operating functions of the Islamic banks.

Table 3. Results of Regression Analysis Using the Dependent and Explanatory Variables for a Pooled Sample of 60 Respondents.

Variables	*Hypothesis Number*	*Estimated Coefficient*	*Standard Error*	*Beta*	*t-statistic*	*Signi-ficant*
Constant		-12.934	4.886		-2.647	0.009
Mudaraba	1	0.450	0.093	0.534	4.816	0.000
Musharaka	2	0.357	0.091	0.459	3.932	0.000
Murabaha	3	0.472	0.284	0.266	4.263	0.000
Ijara	4	0.334	0.090	0.408	4.437	0.000
Interest rate	5	0.075	0.122	0.084	0.645	0.521
Excessive Lending	6	0.133	0.145	0.120	0.919	0.362
R^2	0.286					
Adjusted R^2	0.273					
F-test & (Sig.)	23.196 (0.000)					

For more statistically significant results, Table 3 shows the results of estimating the regression equation in order to test the influence of the independent variables on the performance of the bank and to see how far this corroborates the results of Table 2. The values of R-squared and the F-test are also given. As the researcher already hypothesize that *Mudaraba*, *Musharaka*, *Murabaha* and *Ijara* acts as strong immune factors during this current global financial crisis on the performance of the Islamic banks. Consequently, the study with its consistent results confirms those tools which exhibit confidence values less than 0.05 level have no significant effects on the financial crisis. Therefore, the current study rejects hypothesis 1, 2, 3, and 4. Thus the results are consistent with the note that the performance of Islamic banks are less affected from this financial crisis. This is in agreement with the results from the sample respondents who appear to engage with this truth that by using these tools they strongly contribute to the reversal effect of the global financial crisis, hence improving the performance of the Islamic banks.

The study furthermore, is in agreement with the result of Chapra (2008), who found a positive effect of performance on Islamic banks by using these tools and hence will act as a preventative measure against this current economic crisis. In the same vein, Weguelin (2008), Bremner *et al.* (2008), also argued that by using these tools the Islamic banks ensures a strong financial performance. Again analyzing the sample respondents, it can be seen that these tools if used as a financial Islamic toolset, can reduce the effect of the financial crisis and moreover play a crucial rôle in increasing the performance of the Jordanian Islamic banks and enable them to avoid the impacts of this current global financial crisis. Also with discussion with the Jordanian bank employees, this further confirms that the rate of utilization of *Murabaha* in the Jordanian Islamic banks is the highest and most of the financing systems use this tool to participate with these banks.

As far as the interest rate and excessive lending with the financial crisis is concerned, Table 4 shows that there is a significant positive relation with the financial crisis, at the 0.521 and 0.362 level respectively. The same findings of the current paper have also been corroborated by the previous researchers. This can be supported also by the increase in the performance of the Islamic banks during the financial crisis and by observing that many countries tried to decrease their interest rate in the conventional banks and others opened subsidiaries of the Islamic banks in the non-Islamic countries. Excessive lending and excessive loan to value lending were also seen to be reduced by the conventional banks in this time of financial global crises. Thus further strengthening the case for the adoption and use of the Islamic banking toolset.

Our research was also found consistent with that carried out by Agrion *et al.* (2000), Percy (2008), Dominick (2009), Nanto (2009) and Al-Zoubi (2003), who interpreted that high interest rates and excessive lending are the most influencing factors that positively contribute to the financial crisis. Therefore, the results of regression analysis in Table 4 support and confirm the correlation results of Table 3. Hence, it can be concluded that there appears to be positive evidence in using these Islamic banking toolset to increase the performance of Jordanian Islamic banks. Hence they act as a defence mechanism during times of financial global crisis. Thus, this is the reason why the current financial global crisis has not affected the Jordanian Islamic banks to such an extent compared with non-Shariah compliant banks.

Summary and Conclusion

The main objective of this research was to test the postulated hypotheses and to provide the evidence with respect to the impact of Islamic banks through the current global crisis by examining such major instrument used by Jordanian Islamic financing system such as *Mudaraba*, *Musharaka*, *Murabaha* and *Ijara* (Financial Lease). The analysis shows that these banks are not substantially affected much by the present financial crisis and this can be explained by their improved performance. The study also positively highlights that the rate of usage of *Murabaha* in Jordanian banks is the highest compared with the other tools used.The results from Figures 1-5 shows that *Mudaraba*, *Musharaka*, *Murabaha* and *Ijara* all have a positive effect on the global financial crisis. The figures also clearly show and support that all of these financial tools are highly used positively in Jordanian Islamic banks and that they can minimize the effect of the financial crisis and can also provide a solution to financial crisis.Figures 6 and 7, also shows that the global Interest Rate usage has no negative effect on the financial crisis in the Jordanian banking financial system. This is due to the usage and implementation of the interest rates in conventional finance when compared to their non-use or extremely minimal use in Islamic banks. The effect of excessive lending has also been found to have no negative impact on the performance of Jordanian Islamic banks during the financial crisis. The excessive lending has led to a tightening of the process of granting loans to customers and has also led to a decrease in the mortgage value of the loan to customers. The study also indicates that the interest rate and excessive lending are one of the most pernicious effective causes of the financial crisis in the country. This finding supports the ideas mentioned in the previous studies and the employees in the Jordanian Islamic banks are in agreement with this. Their reason being that their banks did not suffer financial collapse due to the non-use of the interest rate unlike those of the conventional non-Shariah compliant banks. Likewise, it has also been seen from the discussion that the performance of these Islamic banks increased during the financial crisis actually from their use of the Islamic banking toolset.The results of the research are particularly important in providing good solutions to the financial crisis and in preventing the banks from the severity of this crisis. We have seen here that Islamic banks must try to protect its good position by creating co-operation between them and also by trying to follow a continuous development of their tools and methods for increasing their performance further.

References

Al-Anani, Jawad, (2009), "The effects of the economic crisis, global financial impact on Jordan", Proceedings of the Conference of the economic crisis and the global financial impact on Jordan and on ways to combat it, Jordanian Center for Studies and Information, Amman, Jordan.

Albert Keidel, (2008), "The global financial crisis: lessons for the US and China", Carnegie Endowment for International Peace. 27, October.

Albert Keidel, (2009), "China in the Global Crisis: Recovery and Continued Reform?," paper presented at the XXI National Forum of Brazil, "The New Global Role of the BRICs and the Global Crisis," sponsored by the Instituto Nacional de Altos Estudos , Rio de Janeiro, May 18-21, Available: http://www.inae.org.br/trf_arq.php?cod=EP02900

Al-Billawi, Hazim, (2008), "Characteristics of the current financial crisis and its relation to previous similar crises" Symposium international financial crisis and its implications for financial markets and the Arab economy. Middle East Studies Center in cooperation with the Arab Academy for Banking and Financial Sciences. Amman, Jordan, 8 December 2008, Available: http://www.mesc.com.jo/mesc-12-15.html

Allen (2001). "Financial structure and financial crisis". Wharton School, University of Pennsylvania . International Review of Finance 2. pp1-19.

Al-zu'bi – Khaled (2004) , Empirical evidence on the effects of shocks to monetary policy on exchange rates: the case of 1997 East Asian Financial Crisis, Almanarah . Vol . 1 , No. 2.

Al-zu'bi – Khaled, (2002), Empirical analysis of the causes behind the East Asian financial crisis, Almanarah. Vol. 8, No . 1.

Carmen M. Reinhart and Kenneth S. Rogoff (2008). "Is the 2007 U.S. sub-prime financial crisis so different? An international historical comparison", Working Paper 13761 National Bureau of Economic Research, 1050 Massachusetts Avenue Cambridge, MA 02138.

Centre for European Reform, Policy brief, Beyond banking: what the financial crisis mean for the EU, www.cer.org.uk.

Crosetti, G. Poati P. and Noriel, R., "What Caused the Asian Currency and Financial Crises", National Bureau of Economic Research Working Papers, No.6833 and 6844.

David, Colander and Hans Föllmer (2009). "The Financial Crisis and the Systemic Failure of Academic Economics" No 1489 Kiel Institute for the World Economy, 120, 24105 Kiel, Germany.

Dick K Nanto, (2009), The Global Financial Crisis: Analysis and Policy Implications, Library of Congress Washington DC Congressional Research Service.

Dick K. Nanto (2009), "The Global Financial Crisis: Foreign and Trade Policy Effects" Congressional Research Service7-5700 R40496.

Dominick. Salvatore (2009). "The Financial Crisis: Causes, Effects ,Policies, Reforms, and Investment Strategies", GE Asset Management Fordham University, Marh, pp.1-4.

Fayez J.S. Alnajjar, The Global Financial Crisis and Its Impact on the Financial Sector in Jordan: Applied study on Financial Companies listed in Amman Stock Exchange, http://www.uop.edu.jo/download/research/members/285_1968_Faye.pdf

Garrick Blalock, Paul J. Gertler, David I. Levine (2007) "Financial Constraints on Investment in an Emerging Market Crisis: An Empirical Investigation of Foreign Ownership", pp. 2-7.

Gold, D., and Kamin, S., (2000), "The Impact of Monetary Policy on Exchange Rates During Financial Crises", International Financial Discussion Papers, Board Of Governors of Federal Reserve, No.669, January.

Hassan Abul, The Global Financial Crisis and Islamic Banking, http://www.islamic-foundation.org.uk/IslamicEconomicsPDF/Hassan-financialcrisis-if.pdf

Hassan Abul, The Global Financial Crisis and Islamic Banking, http://www.islamic-foundation.org.uk/IslamicEconomicsPDF/Hassan-financialcrisis-if.pdf

Hausmann, Ricardo, and Andrés Velasco, (2005), "The Causes of Financial Crises: Moral Failure Versus Market Failure." In *The Political Economy of Recurrent Debt*, edited by M.A. Centano, H. James, and J. Londregan. Princeton Institute for International and Regional Studies.

International Labour Office (2009), "Impact of the Financial Crisis on Finance Sector Workers", International Labour Office Report GDFFCW-2009-02-018-EN/v2, Geneva, 24-2532February, 2009. (www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/meetingdcoument/wcms_103263.pdf) Accessed on 15 July, 2012.

Jacques Sapir (2008), "Global finance in crisis a provisional account of the 'subprime' crisis and how we got into it", Real-world Economic Review, issue no. 46.

Mark Jickling, (2008), "Averting Financial Crisis", Financial Times, p.11.

Mark. Jickling (2009), "Causes of Financial Crisis", Congressional Research Service. 7-5700.

Masahiro Kawai, Dean (2008). "Global Financial Crisis and Implications for ASEAN" Asian Development Bank Institute, Institute of Southeast Asian Studies.

Mishkin, F., "Global Financial Stability Framework, Events, Issues", Journal of Economic Perspective, Vol.13, No.4, Fall, 1999.

Morris Goldstein & Daniel Xie, (2009), "The Impact of the Financial Crisis on Emerging Asia," Working Paper Series WP09-11, Peterson Institute for International Economics.

Morris Goldstein & Daniel Xie, (2009), "The impact of the financial crisis on emerging Asia," Proceedings, Federal Reserve Bank of San Francisco, pp. 27-80.

Nageswaran V. Anantha (2008). "Global Financial Crisis and Implications for ASEAN Institute of Southeast Asian Studies", Singapore 119614, pp. 1-39.

Philippe Aghion, Philippe Bacchetta, Abhijit Banerjee (2001), Currency crises and monetary policy in an economy with credit constraints, *European Economic Review*, Volume 45, Issue 7, 2001, Pages 1121-1150.

Ricardo Hausmann, Andrés Velasco, Kennedy School of Government, (2004), "The causes of financial crises: moral failure versus market failure", Harvard University.

Rogoff, K., (2009), "International Institutions for Reducing Global Financial Stability" *Journal of Economic Perspective*, Vol. 13, No. 4, Fall.

Ibrahim, S.H. bin Mohamed, "The Need for Islamic Accounting: Perceptions of its Objectives and Characteristics of Islamic Accounting: Perceptions of Malaysian Muslim Accountants and Accounting Academics, Ph.D. Dissertation, Chapter 5, (UK: University of Dundee, 2000. (www.iium.edu.my/iaw) Accessed on 15 July, 2012.

Sameer Khatiwada and Emily McGirr (2009). "Current Financial Crisis: a review of some the consequences, policy actions and recent trend" International Labour Organization (International Institute for Labour Studies), pp. 21-35.

Tanim, Laila, Islamic Microfinance for Alleviating Poverty and Sustaining Peace, http://www.ihmsaw.org/resourcefiles/1288447059.pdf

The Global Economic and Financial Crisis, Economic and Social Commission for Western Asia, UN, New York, 2009, p.73-82.

United Nations publication, (2009), The Global Economic and Financial Crisis: Regional Impacts, Responses and Solutions, UN, Sales No. E.09.II.F.18.

William D. Sunderlin (1999), "Financial crisis and political change on Indonesia's forest sector", 1997-99.

World Bank, (2011), Financial Access and Stability: A Roadmap for the Middle East and North Africa, The Impact of the Global Financial Crisis and Regional Political Instability on Regional Financial Systems, FAS_47-66.qxd 8/31/11 8:10 PM pp.1-312, September, 2011.