Royal Docks Business School



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<b>Introduction</b> Identification of a valid topic, research question and objectives framed to Masters Level standard with academic rationale developed, clear industry contextualisation of the research topic	Supervisor Comments: 2 <sup>nd</sup> marker Comments:	10%	
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#### THE IMPACT OF THE 2008 GLOBAL FINANCIAL CRISES ON ISLAMIC BANKING INSTITUTIONS

A dissertation submitted in partial fulfilment of the requirements of the Royal Docks Business School, University of East London for the degree of **MSc FINANCE AND RISK** 

#### **SEPTEMBER 2014**

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#### ABSTRACT

In this Dissertation, the impact of the global financial crises on Islamic banking institutions was discussed. The data of eleven Islamic banking institutions from the Middle East and Asia were used to carry out an empirical analysis of this research. It also enumerated how Islamic banking institutions work and what financial services do they offer and also the difference between Islamic and conventional banking. Lastly an empirical data analysis was carried out on the data of the eleven Islamic banks that was obtained.

**KEYWORDS:** Islamic banking, Finance, Conventional banking, Shari'ah

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#### **1 INTRODUCTION**

#### **1.1 BACKGROUND**

During the previous years, Financial Institutions have contributed to an undeniable function in the expansion of the global economy in terms of progress and expansion (Chapra, 2008). Banking Institutions both Islamic and Western banking Institutions are the main feature for these economic progress and expansions. The 2008 financial crises was not the first of its kind and it was estimated that there were around hundred financial crises (Joseph, 2003). These financial crises affected many countries is portrayed as the worst financial crises or turmoil experienced by the global financial institutions around the world (Chapra, 2008). The presented financial crises or turmoil, which began from the United States and spread around the globe are still ongoing and also the present crises on sovereign debt also known as government debt markets experienced in the Eurozone has displayed bigger exposure of the banking institutions in some countries in the Eurozone (IMF, 2010). The financial crises did not only impact the developed economies of the world but also the developing and weaker ones also. As the United States and most of Europe underwent the financial meltdown in this phase, the Middle East showed some wonders as how did its financial sector responded to the financial crises or turmoil. Most countries in the Middle East use the Islamic banking system both in parallel with the western banking system such as Malaysia, United Arab Emirates (UAE), and Bahrain or only the Islamic banking model such as in Iran and Sudan. The Islamic system of banking and finance have many important variances from the western system of banking and finance in how they carry out their operations. The western banking system or model is solely built on debts, while that of the Islamic model or system of finance and banking is built on Shari'ah known as Islamic Law and also built on the ethical principle of justice, sharing of risk, and most importantly the prohibition of interest. According to data by the International Monetary Fund (IMF), Islamic Banking Institutions were more resistant during the financial crises than their western banking counterparts. The profitability of Islamic banking institutions rose better than the western banking institutions before the start of the crises and stayed the same in the first year of crises (Renata, 2011).

Even though the profitability of Islamic banks fell to the same levels of 2009, their credits and assets held by the Islamic Banking Institutions stayed significantly higher (Hasan, and Dridi, 2010). Study on thus present financial turmoil or crises and what triggered it are usually accessible. Extreme and irresponsible lending were some of the severe essential issues (Chapra, 2008). On the other hand, the study conducted by the United States congress after the crises or meltdown has itemized what appear to be most essential triggers of the financial crises or meltdown which are Irresponsible mortgage lending, the housing bubble, World Financial Disparities, Securitization Issues, lack of transparency in the financial system, activities of Rating Agencies, failure of adequate financial risk management, complication of financial Mechanisms, Extreme lending, and Short term Incentives (Mark, 2010). While there is general agreement about what triggered the recent financial meltdown, there are diverse opinions on what is the remedy to this financial meltdown. Academics from the west are of the view that the just revealed problems can be solved by improving the rules and regulations of banking institutions and tougher regulatory or supervisory measures, while some Muslim academics such as (Chapra, 2008) are of the view there are two issues that makes banking institutions assume that they will not experience losses. The first factor is the collateral, which is essential and inevitable in any system of finance for managing risk of default. Chapra (2008) and others have held the view that the collateral itself is wide-open to a valuation risk and also stated that collateral value could be lessened by the same reason that decreases the debtor's capability to pay back. The Muslim academics support shari'ah law compliance and have the view of using profit and loss sharing system and which may reduce this problem. They maintain that without this system of profit and loss sharing, banking institutions will not always commence a thorough assessment of the collateral and the customer's credit worthiness and will spread financing for any purpose (Chapra, 2008). The second issue that offers protection for banking institutions from default is that they assume that they are too big to fail or default, which implies that the central bank guarantees the banking institutions that it will bail them out in the event of a crises or a meltdown. The banking institutions that are assured of this bailout have encouragement to undertake taking of unwarranted than what they are

supposed to take (Frederic, 1997). This unrealistic sense of invulnerability from losses offered to the banking institutions as well as its customers weakens the capacity of the market to enforce the essential supervision and this has headed to an unsustainable growth in the total size of credit, to undue influence, to even subprime debt, and also living beyond means (Chapra, 2008).

The concept of Islamic system of banking and finance was conceived during the turbulent identity political years of the middle Twentieth century. It was argued that that Arab, Indian, and Pakistani intellectuals envisioned independence from the United Kingdom and also a Pakistani independence from India within the framework of a society based on Islamic values. Concurring with this view, the Islamic values are presumed to motivate political, economic, and financial systems that are different and self-determining from conventional or capitalist and communist systems of economics (Mahmoud, 2006). The Improved significance of the Islamic system of finance and its speedy growth as a possible alternative system of financial model is still in its beginning. Preceding to the 70's, only retail banking service was available. The first Islamic banking institution was founded during the 70's. Housing finance, Islamic insurance (Takaful) were established in the 80's. During the 90's, equity funds, leasing (Ijarah) and Islamic Securitization were formed (IFSB, 2010). According to the IFSB report of 2010, Islamic banking and financial services symbolizes roughly 1 percent of all worldwide assets. But the expansion rate of this model of finance is anticipated to be between 15percent to 20percent (IFSB, 2010). Given the prominence of Islamic Banking and Finance, it is worthy to investigate this area in much more detail. Past research on global financial crises have put emphasis on what triggered the crises and also the effects of it and put less significance to the emergence of Islamic banking and finance. This research or study will investigate the causes of the global financial crises or meltdown and will try to depict how Islamic Banking Institutions did it during the crises, some sub questions were investigated and which will be mentioned in the next sub chapter.

#### **1.2 PURPOSE OF THE DISSERTATION**

Due to this recent global financial crisis, the overall purpose of this dissertation is to know how this crisis impacted on Islamic banking and financial institutions.

#### **1.2 OBJECTIVES OF THIS DISSERTATION**

The main objective of this research is to investigate the impact of the global financial crises on Islamic banking and financial institutions in which eleven Islamic banks from Middle East and Asia were analyzed. Other objectives in light of this research include the following:

- To investigate the differences between Islamic banking and conventional banking.
- To investigate the services been offered by Islamic banking institutions.
- To investigate how the Islamic finance system works compared to the conventional system.
- To investigate the causes of the financial crises through the perspective of Islamic Finance.

#### **1.3 EXPECTED OUTCOMES**

The expected outcomes of this dissertation are as follows:

- A useful understanding of what Islamic Banking and Finance is and how it works.
- A useful understanding of differences between Islamic banking and conventional banking.
- A useful understanding of Islamic banking services that are offered.
- A useful understanding of the impact of the financial crises on Islamic banking institutions.

#### **1.4 RESEARCH STRUCTURE**

To enable the management of the research as well as coverage of the areas designed, this document is classified into five chapters. Each chapter is further divided into sections, which deals with specific aspects of the chapter. The purpose of the research, with its objectives and expected outcomes, are contained in this first chapter. The remainder of the write up consists of review of literature on the research area, which forms the content of chapter two. Chapter three contains the methodology this dissertation and chapter four contains the empirical data analysis in which data from eleven Islamic banks were analyzed using panel data through the use of the software of Eviews. Finally the last chapter contains the conclusion of this dissertation together with some recommendations that are made.

#### **2. LITERATURE REVIEW**

This chapter covers the theories behind Islamic banking system, and gives an idea on how they carryout their financial operations or activities. As going to be mentioned in this, this system of banking is based on the principle of profit and loss sharing. This chapter will also discuss the growth, profit, and customers of Islamic banks, and lastly it will define financial crises and discuss its impact on the competiveness of Islamic Banks.

#### **2.1 ISLAMIC BANKING SYSTEM**

What generates interest in Islamic banking system is the lack of interest in all financial activities that are been undertaken, which is known as the pillar of the conventional system of banking and finance. Islam forbids the use of interest in financial activities which is also known as Riba, the prohibition according to Shari'ah that is the Islamic Law is not manmade law but as a divine law which gives no reason to argue or state otherwise. This makes it mandatory for Muslims to completely shun riba or interest in all their financial and nonfinancial activities that they undertake on daily basis. There are some certain prohibitions apart from the use of interest and they include uncertainty in financial activities, excessive taking of risk, ambiguity, and financing in unethical business activities that do not comply with the Shari'ah guidelines on banking like Alcohol, Gambling, and weaponry. The system of Islamic banking works on the codes of profit and loss sharing and its financing is done as a sharing mode rather than lending mode. The Islamic banking system is a system that is devised in order to allow Muslims to undertake their commercial or financial activities in accordance with there believes. The academic or theory model of Islamic banking is tempting and is wisely created to prevent interest or riba, and other prohibitions that it contains as mentioned above, but the application of this system of banking has been always successful in the real world (Ali et.al, 2011). The theoretical elaboration of the system of Islamic banking and finance increased motion after the middle of the 1940s. Islamic scholars such as Qureshi, Ahmed, Uzair, Maududi, Al-Arabi, Siddiqi, and Al-sadr made important inputs to

the development of the standard of Islamic Banking and finance. Also the huge inflow of cash from the sale of petroleum during the end of the 1970s provided a

very strong catalyst to the development of many Islamic banking institutions in the middle east, and many other countries with Muslim majority populations started their own Islamic banking organizations as time passed. The system of Islamic banking has made stable development over the recent years, it has emerged as the fastest developing sector of world finance because of steadily high crude oil prices in the global markets and also because other favorable socio-political factors. It is booming in Asia, Africa, Europe, and North America. There are currently more than 200 Islamic banking and Financial Institutions across more than 60 countries holding investments in capital worth more than \$400 - \$700 billion with an average rate of growth of 15percent and it is also expected to take 40 to 50 percent of total saving of majority of Muslim population around the globe in the subsequent coming eight to ten years (Mansoor, and Ishaq, 2008). The first appearance of an established Islamic Bank was the in the 1970s in which the Dubai Islamic bank was established in the United Arab Emirates (UAE) and then Islamic Development bank which is located in Jeddah, Saudi Arabia. During this period, Islamic banking and finance began to increase extensively in nations like Bangladesh, Iran, and Pakistan (Ali, 2012). Islamic banks are governed by the shari'ah, which is known as Islamic law, and also bound by regulations of their host country. Some Islamic banks and financial institutions are intentionally founded to function within the shari'ah guidelines on finance and some other banks were converted from conventional ones to Islamic ones due to the rules and regulations of their host countries like in Sudan, and Iran. Also, there are Islamic countries that undertake both Islamic bank and finance system together with the western system like for example in Bahrain, Egypt, Pakistan, and Saudi Arabia (Mariani et.al, 2009). Islamic banking and finance is evolving as another option to western interest based system of finance. Islamic bank's successful operations along with increasing number of Muslims in the western countries have drew the attention of the western countries towards the Islamic system of finance. This has also lead to an increasing number of conventional banks in the west to start to offer Islamic financial services to their Muslim clients. For example Citi Islamic bank opened in Bahrain in 1996 which is owned by Citi Corp, Chase Manhattan provides Islamic finance products through its Islamic finance arm known as "Islamic

Windows", and also many Multinational institutions like General Motors (GM), and IBM have raised cash through an Islamic leasing fund (Abdus-samad et.al, 2013).

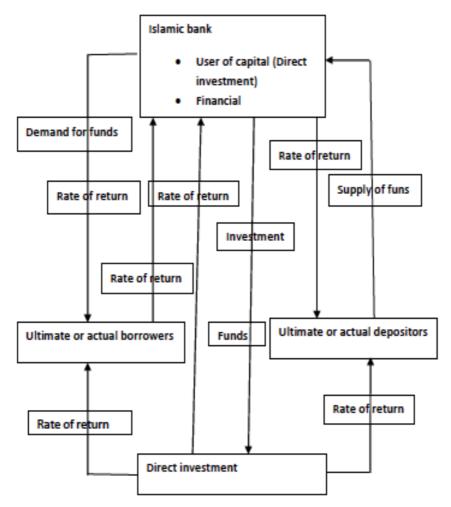


FIG 1 This shows the financial Structure of Islamic Banking and Finance (Source: Zineldin, 1990)

# 2.1.1 SHARI'AH THEORY IN ISLAMIC BANKING AND FINANCE

The word Shari'ah refers to all laws of the Islamic religion, which includes all its religious, liturgical, moral, and jurisprudence systems. It is also generally referred to as everything written by Muslim scholars throughout the ages, which are carefully interpreted. The law of Shari'ah is derived from the undoubted principles of the Qur'an which is the holiest book of the Islamic religion, which Muslims believe are the exact words of God, and the Sunnah, which refers to the

sayings and actions of Prophet Muhammad (SAW), these two sources are the primary sources of the Shari'ah. Shari'ah law resolutions are arrived through a deliberation of a group of legal evidences that will moreover lead to an evident knowledge of shari'ah verdict or make a sensible notion regarding the same made by those competent to make such verdicts. Islamic scholars may use the primary sources to arrive at the rulings regarding finance and banking by referring to main or competent authority in the views of the companions of Prophet Muhammad (SAW) along with consensus of Islamic scholars (Julio, 2011). The Sunnah comprises of four schools of thought, which are Hannafi, Shafi'I, Maliki, and Hanbali schools of thought and are followed by majority of Sunni Muslims around the World and the Shia Muslims follow the Ja'afari school of thought even though both of them agree with two other main sources of Shari'ah. There are also secondary sources of Shari'ah and they include Ijma, which refers scholar's consensus on a specific issue, Qiyas that is analogical interpretations from verdicts already derived from the Qur'an, Sunnah, and Ijma, and lastly Urf, which are the common practices and Customs (Roderick and Habiba, 2008).

#### **2.1.2 INTERST AND MAJOR RELIGIONS VIEW**

The word Interest can trace back its roots from the Latin name of "Interesse" in which it means a rise in the principal. Interest is forbidden in all the major three religions of Christianity, Islam, and Judaism. Islam is the only religion that still sustains the ban of interest in all financial activities (Mehboob, 2005). There are also three mentions of interest in the Old Testament, and also Judaism also forbids Jews from taking part in any business transactions that involves interest or even to serve as middlemen to such business activities between themselves (Mehboob, 2005). The verse below is taken from the Torah

"If thou lend money to any of my people that is poor by thee, thou shall not be to him as usurer, neither shall thou lay upon him usury (Exodus 22: 25)".

Also in the Bible, there are four places where it explains interest is forbidden between people; in this research two will be mentioned.

"Do well, and lend, hoping for nothing again; and your reward shall be great, and ye shall be children of Highest" (Luke 6: 35) and the second one states "Thou shall not lend upon usury to thy brother; usury of money, usury of victuals, usury of anything that is lent upon usury" (Deuteronomy, 23:19).

In the Qur'an, there are twelve verses that talk about the issue of interest or riba, in which the word riba is stated eight times (Mohammad, 2004). For this research, two of the twelve verses will be stated. "O you who believe! Devour not usury, doubling and quadrupling (the sum lent). Observe your duty to Allah, that you may be successful" (Surah Ali – Imran 3:130), and the second one state "That which you give in usury in order that it may increase on (other) people's property has no increase with Allah; but that which you give in charity, seeking Allah's countenance, has increase manifold" (Surah Ar-rum 30:39). As seen from above, all the three major religions clearly oppose the use of interest in business activities.

# 2.1.3 INTEREST, THE JUSTIFICATION BEHIND THE ISLAMIC OPINION

There are some key five reasons, which Islamic Scholars use a reason for justifying the ban on the use of interest in business activities and they include,

- **1.** Interest is just about taking the property of an individual without any counter worth which is in conflict of the saying of the Prophet that a person's property is unlawful to the other as his blood (Mervyn, 2010).
- **2.** Interest is not allowed since it does not allow individuals to undertake active professions, and earning their means of survival through the means of trading or other activities (Mervyn, 2010).
- Interest leads to a nervy relationship between persons, which will lead to conflict and discord and also remove people of its goodliness (Mervyn, 2010).
- **4.** Interest also does not allow sharing of risk and reward between the rich and poor when they carry out business transactions (Muhammad and Kaviyarasu, 2014).

**5.** The ban of Interest is proved by the sayings in the holy Qur'an and which is not important for an individual to know the reason behind it since the Muslims believe it is actual words of God (Mervyn, 2010).

For a business transaction that has interest to be forbidden under Islamic Shari'ah, it must fulfill the minimum of three conditions and they are, the rate of the interest that is going to be paid must be a fixed rate because the outlook is not known in which a loss can occur, the Islamic Shari'ah opposes to this. The second condition is that the interest must be entwined to a certain time period and also the sum of the credit, which implies that during this period, the borrower will never make any profit, and lastly, the third condition is that the payment of the interest is certain irrespective of the result of the business transaction that is embarked upon (Mallat, 1988). The reason for the ban of a fixed rate of return for an investment before undertaking it is that the profit that is going to be gained from the investment in the future is not actually known and also there might be a likelihood of a loss that can occur, this is not ethically justified in the Islamic law. Also according to Islamic instructions, the contributor of the principal should also share the risk if he is prepared to share the profit with his other business partner and also according to Islamic Shari'ah it is not permissible to generate income without any effort involved or any risk undergone (Mehboob, 2005). The western academics have a different point of view in which they stated that there is effort involved because the contributor of the principal delays his use of his cash while he is capable to make its utilization at the present time (salad, 2012). Islamic scholars criticize this view of western academics in which the argue that such reward is all only acceptable if such cash were used for business activity that will generate extra capital and also cash (Mervyn, 2010). Islam forbids mistreatment and supports rational and rightful dealings among individuals. The charging of interest on an individual that is not efficient in taking debt to meet his basic demands clearly amounts to exploitation in Islam. This habit often leads to imbalances in the society which implies that the poor in the society will become poorer, and rich become much more richer (Mehboob, 2005).

# 2.2 DIFFERENCES BETWEEN ISLAMIC BANKING AND CONVENTIONAL BANKING

This section of the literature review will explain the key differences between Islamic banking and conventional banking.

One of the basic essential points that is known to differentiate Islamic banking and convectional banking is the unacceptability of the use of Interest in financial activities, and also early Islamic scholars stressed the significance of the aspect of social welfare in regards to those financial activities, the difference will be explained below.

- **1.** Conventional banking Institutions function under the beliefs of capitalism which is the core philosophy behind their activities and it is man made, while Islamic banking institutions operate under the principle of Islamic law or shari'ah which is not man made but divine law from God (Hanif, 2011).
- 2. Islamic banking institutions do not involve themselves in any type of financial activity that do not comply with shari'ah or Islamic law like transactions that involve speculation which is known as Gharar, excessive risk taking, Investments in pork, alcohol and, gambling, while conventional banks can take part in business or financial activity that they deem fit or they can make profit from (Ali et.al, 2013).
- **3.** Islamic banking institutions are required to pay a mandatory tax known as Zakat which is a tax that paid to the poor of the society. This tax is paid by Islamic banking institutions if their level of profits reaches the required level that the tax can be deducted, while conventional banks do not have to pay zakat or tax to the poor of the society (Abdus samad et.al, 2010).
- **4.** Another key difference is how both banking institutions manage the deposits of their customers. The reward for the deposits in conventional banking institutions is fixed and predetermined no matter the outcome

of the investment that is carried out with it, while in Islamic banking it is not fixed but it changes and are accepted through services such as Mudarabah or Musharakah will be discussed in another subsection of this research. Conventional banks carry the total risk, while the their clients or depositors carry the total reward, In Islamic banking both the total risk and total reward are shared accordingly with the depositors (Hanif, 2011).

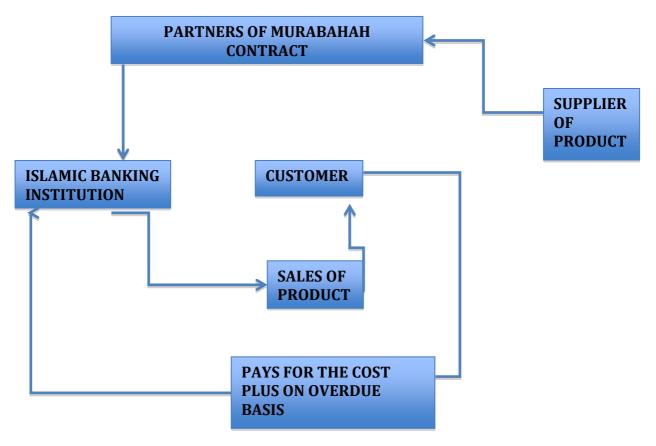
**5.** Another key difference between Islamic banking institutions and the conventional banking institutions is the association between themselves and their customers. The association between a conventional banking institution and its customer is that of creditor and borrower association, while that of Islamic banking Institution is that of a buyer and seller, or Investor and trader association. Lastly conventional banking institutions put much emphasis on the credit worthiness of their customer while Islamic Institutions give much priority to the feasibility of the investment that is going to be undertaken (Salad, 2012).

# 2.3 BASIC SERVICES OFFERED BY ISLAMIC BANKING INSTITUTIONS

Having discussed in the previous section how Islamic banking institutions are very different from their conventional counterparts by not making use of interest in transactions, In this section the services been offered by Islamic Institutions will be explained which are also quite very different from what conventional banking institutions offer. The services offered by Islamic banking institutions are many but the most basic ones will be discussed in this section.

**2.3.1 MURABAHAH:** This is also referred to as mark-up. It is a service that is offered by Islamic banking institutions, it is a resale of a product with a markup on buying cost, and also can be referred to as a cost plus. The Islamic banking institution provides and sells the product to a client needs and the client accepts to pay for the product which is higher than the current market price at an upcoming date. The Islamic banking institution only buys the product only after getting the assurance from their client that he will buy the product. Also

part of the client's assurance or pledge is that he agrees that the price he is going pay for the product is going to be higher than the price the Islamic banking institution bought it by certain figure or percentage, and also the amount to paid cannot be increased even if the client delays his payment (Mohammed, 2004).



**FIG 2** Figure 2 above shows the partners that are involved in a Mudarabah Contract or a Mark-up Contract.

**2.3.2 MUSHARAKAH:** It is a financial service that is offered by Islamic banking Institutions in which all business partners in investment or business share equity as well the management of the investment and it is also known as equity participation. In this type of financial service offered by Islamic banks, all profits that are made are shared based on the agreed percentages and also losses made are shared to the contribution of each partner in the investment (Chapra, 2007). This type of financial service can be used by organizations to secure financing of projects and is also similar to equity markets where by a country's central bank and government can procure shares (Zineldin, 1990). This type of Islamic banking service is used by big organizations and even governments for long term project financing (Luca, and Mitra, 1998). It is also used for home financing. For example, when a customer wants to buy a home for which he do not have enough cash to buy, he goes to an Islamic bank who agrees to partake with him in buying his desired home. The customer will contribute 30 percent of the amount and the Islamic bank will contribute the rest of the 70 percent. This implies that the Islamic bank has 70 percent share of the home while the customer has 30 percent share. After buying the house, the customer will then use the home for his own personal use and pays the rent to the Islamic bank for using its own 70 percent in the property which means that the customer pays the 70 percent to the Islamic Bank because he only has 30 percent share in it. At the same time the share of the Islamic bank in the property is divided into seven equal components with each component indicating 10 percent share of the property. The customer then agrees with the Islamic bank that he will purchase one component of the share or 10 percent share after every four months in which the Islamic bank's share reduces from 70 to 60 percent. This process continues with the same procedure for like two years in which the customer purchases all the shares or components owned by the Islamic bank (Usmani, 2002).

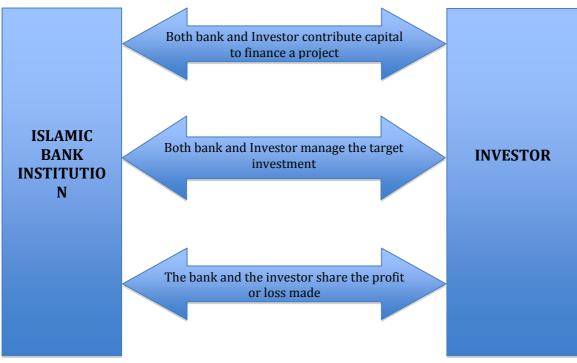
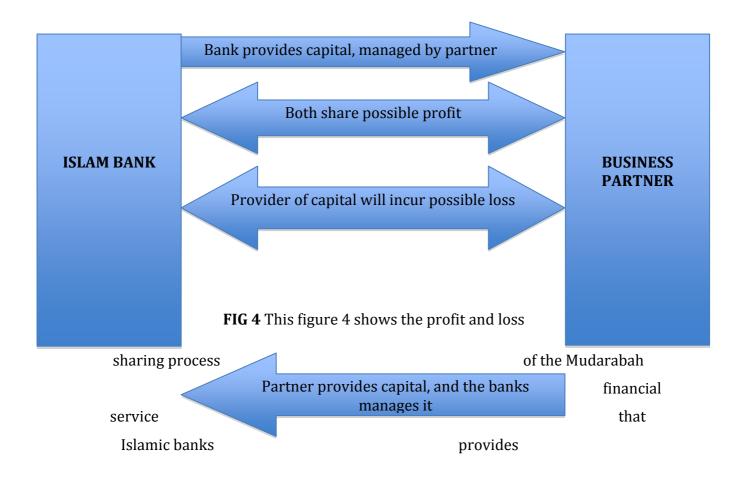


FIG 3 The figure 3 above shows the process or procedure involved in Musharakah type of financing by Islamic banking institutions

**2.3.3 MUDARABAH:** This type of financial service involves an agreement between two or more people in which one or more provide capital to carry out a business or investment, while the others will employ the use of their skills in the managing the capital of the investment with the sole aim of making profit. They share the profit made in the investment in a ratio agreed by them. When a loss is made in the investment, all those that provided the capital bear it all while those that manage it only lose their reward and effort in the managing the investment (Chapra, 2007). If for example, an Islamic banking institution issues the capital for a specific investment and then engages with an associate who will manage the capital with the aim of making profit and a loss is made, only the Islamic bank will bear the loss, while the associate will only lose his reward and effort provided he was not negligent (Zineldin, 1990). This type of service can divides into the restricted and unrestricted types. The restricted type involves an agreement or contract between the Islamic bank and their associate in an investment and is on the asset side of the bank's statement of financial position. The unrestricted type is the type in which the depositors of an Islamic bank agree that their deposits are used for unlimited investments that will generate

profit but they do have voting privileges and do not have their representatives in the board of directors (Luca and Mitra, 1998).



**2.3.4 IJARAH:** Also known as leasing and is allowed under Islamic law but without the use of interest. It refers to an agreement between an Islamic bank known as lessor and its customer known as the lessee who shows his interest in using the Islamic bank's asset and paying them rent and it is also based on profit sharing arrangement in which the Islamic bank purchases the product for an agreed amount that is going to paid by its customers known as the lessee in segments for a certain period of time. The rent paid by the customer is collected by the Islamic bank and calculated on the bases of the profitability of the product not on the bases of bank's money involved (Zineldin, 1990). The agreement of Ijarah is often used in the framework of a house or a vehicle leased out to particular individual. This type of service consists of the description of the repayment arrangement or likely compensation requirements in the procedure. With these points, the process of this service will have to be stated to keep the

other partner conversant and sustain transparency in the agreement or contract. It is also very important to know that without any of these points made, the Ijarah agreement made is going to be viewed as unacceptable and invalid (Sabina, 2010).

#### **2.4 THE GLOBAL FINANCIAL CRISES**

The recent global financial crises showed that in a globe of large differences of Information of complicated financial advances and outdated monitoring structures it does not work and also the Government intervention policies have not work either also. When the United States mortgage crises occurred before September 2007, it was translated as small crises that will be restricted to the United States only. With the rapid response of the Government, it eventually developed into global crises in the face of tough credit conditions, which slowed economic activities and forced developed countries into recession by the middle of 2008 (Helmut, 2010). The recent world financial crises is said to have undergone four phases and is presently in its fifth phase. The first phase started in January of the year 2007 in which large financial organizations particularly in the United States reported a severe decline in profits which was attributed to defaults on mortgages, the second phase began from October of the same year when constant declining housing price in the already hit global economy brought about enormous loss to the housing markets in Britain, and some European Union Countries as was the same in the United States. The third phase started a year later in January, which saw the world banking credit spreads expanded by more than 170 points for organizations rated AA- which lead to a complete halt of assets securities markets and this made way for phase four in September of 2008 in which many global financial organizations from the united states at the core of the housing market in America had to be bailed out by the Government (Peter, 2009).



**FIG 5:** The figure 5 above shows the financial crises in relation to the subprime mortgages in which banks in the United States give their clients with poor credit history high-risk loans, and bonds, assets, collateralized debt obligations, and are sold to investors around the world (Crotty, 2009).

# 2.4.1 CAUSES OF FINANCIAL CRISES FROM THE PERSPECTIVE OF ISLAMIC BANKING AND FINANCE

The western banking interpretation of the Global financial crises is that extra high liquidity, reckless loan practices, and also the speedy swiftness of financial engineering caused it, which also created complicated and obscure financial mechanisms used in the transfer of risk. There was also a flaw or problem in the lender-borrower relationship and information problems that was due to the lack of transparency in Asset market value especially in the market for systematized credit instruments. There was also the problem of obsolete, moderate regulatory process or practice, poor risk management and accounting practices and also the emergence of an incentive configuration that allows excessive taking of risk and a complicit group many financial organizations, real estate developers, Insurance institutions, and credit rating institutions whose practices caused the deliberate undervaluing of risk. This financial crises will not happened under the system of Islamic banking and finance because almost all the issues mentioned which contributed to the global financial crises are not allowed under the rules and regulations of Islamic banking and finance which is the Islamic Shari'ah (Rasem and Kabir, 2011). Another reason according to the Islamic perspective is the absence of risk sharing or profit and sharing between the banking institutions and their customers which implies that if a profit is made both the bank and the customer share it according to their agreement and likewise if a loss is made both of them will bear it according to their contributions. The purpose of this concept according to the Islamic perspective is to ensure justice among people in the society (Chapra, 2007).

# 2.4.2 THE IMPACT OF FINANCIAL CRISES ON ISLAMIC BANKING AND FINANCIAL INSTITUTIONS

There have been few evaluations of the impact of the world financial crises on Islamic financial institutions and both of them have made different conclusions on the impact of the crises on them. There are those that have concluded that the observance to the Islamic financial rules and regulations has helped protect Islamic banking and financial institutions from the impact of the financial crises. These rules and regulations contain the obligation of moral conduct in all financial dealings, the concept of profit and loss or risk sharing, the accessibility of credit for the sole purpose of buying real goods and services, limitations on sale of debts, and extreme uncertainty in business activities. On October 2009 at the conference on Islamic Finance in Turkey, the Malaysian Central Bank Governor stated that the close link between financial dealings and the physical economy or production, and corporate governance and risk management has contributed to the strength of Islamic banking during the financial crises (Maher and Jemma, 2010). Meanwhile Chapra (2009) and Saddy (2009) stated that conclusions made by some that compliance to Islamic finance rules by Islamic financial institutions are not endured out by facts, and as a result were not excused from the financial crises. Also the Economist (2009) and Elsaid (2009) agree to the fact that Islamic financial Institutions have managed to avoid exposure to the world financial crises, but the argue that they are subject to the second effect of the crises. They stated that the financial crises started from the mortgage market and Islamic financial institutions were not affected because their transactions are based on close relationships between finance and production flows and as the crises progressed it affected the Islamic financial institutions as well because all their financial dealings are based on asset backed transactions.

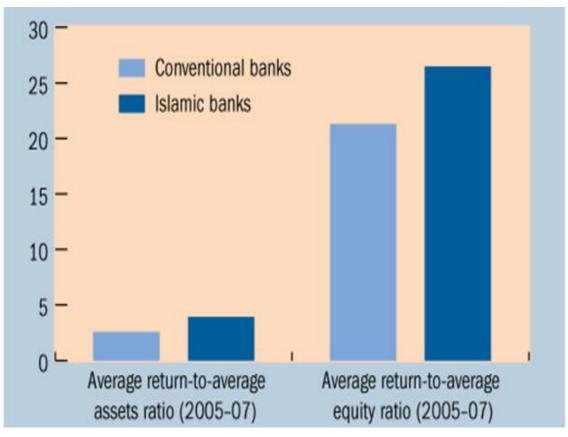
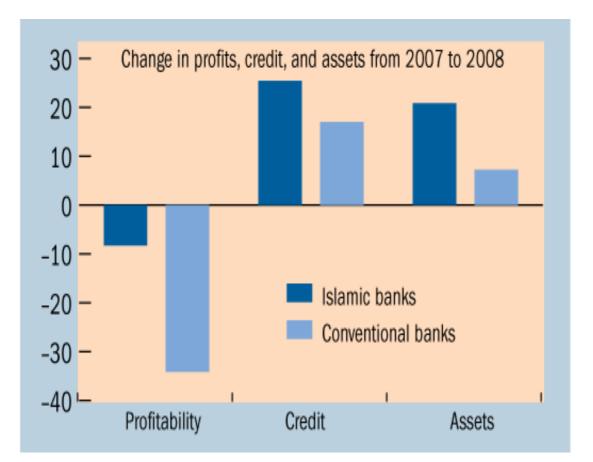


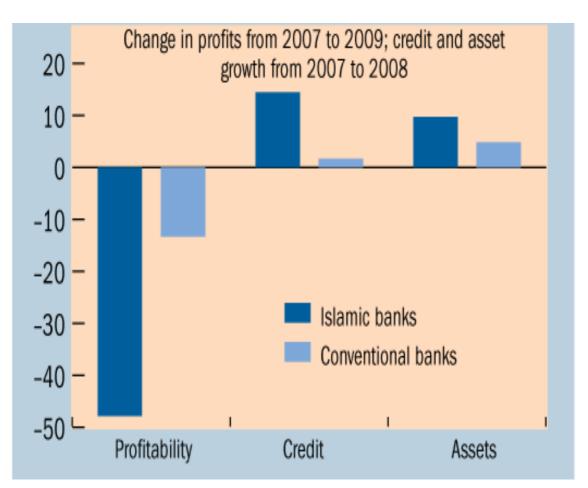
FIG 6 AVERAGE RETURN OF ISLAMIC AND CONVENTIONAL BANKS (SOURCE: IMF SURVEY, 2010)

The figure 6 above shows the average return on assets and equity of Islamic banks and conventional banks before the start of the global financial crises. It shows that the Islamic banks where doing much better than the conventional banks.



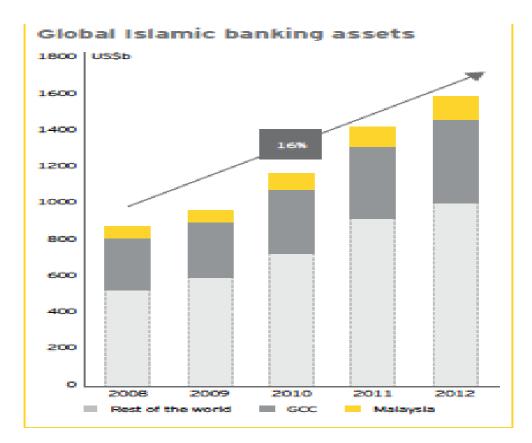
### FIG 7 THE CHANGE IN PROFITS, CREDITS, AND ASSETS DURING THE INITIAL PHASE OF THE CRISES (SOURCE: IMF SURVEY, 2010)

The figure 7 above shows the initial effect of the financial crises on Islamic banks and conventional banks. From the figure, it can be seen that the Islamic banks felt a minor effect on their profits, credit, and assets than their conventional counterparts.



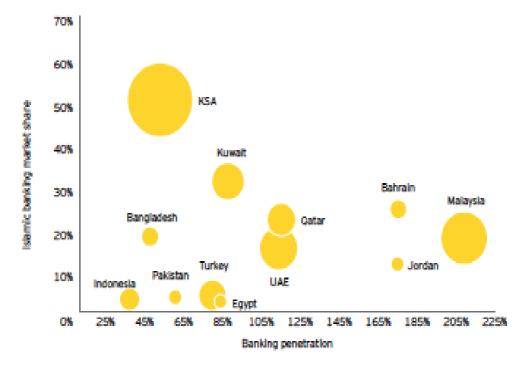
#### FIG 8 DEEP IMPACT OF THE CRISES (SOURCE: IMF SURVEY, 2010)

The figure 8 above shows the deep impact of the crises in 2009 when the financial crises started to affect the actual real economy which in turn lead to a sharp decline in the profits of Islamic banks.



### FIG 9 GLOBAL ISLAMIC BANKING ASSETS (SOURCE: World Islamic banking Competitiveness Report 2013 – 2014)

The figure 6 above shows the global Islamic banking assets from the year 2008 to the year 2012. It includes Malaysia, Gulf corporation council countries (GCC), and the rest of the world. From the above chart it is shown that the average growth of the assets of Islamic banks is 16 percent, which implies that it has steadily risen throughout the years 2008 to 2012 as shown above.



# Banking penetration and Islamic market share

### FIG 10 MARKET SHARE AND PENETRATION OF ISLAMIC BANKS (SOURCE: World Islamic banking Competitiveness Report 2013 – 2014)

The figure 7 above shows the market share and penetration of Islamic banks in some countries with Saudi Arabia having the largest market share with a value of 50 percent followed by Malaysia with a value of 20 percent.

#### **3. RESEARCH METHODOLOGY**

In this chapter of research methodology, the research method, collection of data, and validity of the research will be outlined. The research method is first outlined and also the reason why it was used to carry out this research will be mentioned. The collection of data, which is the second sub-heading, will be outlined and also how it was carried out, and the last sub-heading, which is the validity and reliability of the research, will be outlined briefly.

#### **3.1 RESEARCH METHOD**

The research method used to carry out this piece of dissertation is the quantitative method of research and also descriptive in nature since it specifies the nature of a given issue or fact and also an evaluative process. It also shows how things are rather than advocating how they should look like. Quantitative method of research is a method that uses the logical form of empirical analysis of a given problem using mathematical, numerical data or computational procedures. This implies that the main aim of a quantitative research method is to collect numerical or mathematical data to explain a specific issue or problem. Also the process of measurement or analysis of quantitative method of research is very important due to the fact that it provides a core link between the experimental observation and arithmetical illustration of quantitative associations. Data's from quantitative method of research are numerical and they consist of percentages, statistics and many more and they are also expressed in variables. The research findings in a quantitative method of research are basically presented in forms of tables, charts, and graphs. The reason why this method of research was chosen is because it allows the researcher to measure and analyze numerical and helps to study the link between an independent and dependent variable in detail that is understandable. This is helpful to the researcher because it helps him or her to be more impartial about his or her findings. Finally, this method of research can be used efficiently to test hypothesis in experimentations because it has the capability to measure figures using measurements. The research philosophy adopted for this piece of dissertation is the pragmatist point view or pragmatism. This view point of research philosophy was adopted for this dissertation because it provides the best way to answer the research questions efficiently and also enables the researcher to have a view point of world through both sides of the divide which are multiple or external sides.

#### **3.2 COLLECTION OF EMPIRICAL DATA**

The Empirical data for this research was obtained from the Bloomberg financial system. The data obtained was from eleven fully-fledged Islamic banks from the Middle East and Asia. The data's obtained of the Islamic banks includes Return on Assets (ROA), Return on Equity (ROE), Capital Adequacy Ratio (CAR), and Total Assets (TA). The financial data obtained from the Bloomberg financial system are from the year 2008 to 2013. Below are the lists of the banks.

- 1. Abu Dhabi Islamic Bank.
- 2. Dubai Islamic Bank.
- 3. Sharjah Islamic Bank.
- 4. Bank Islam.
- 5. CIMB Islamic Bank.
- 6. Hong Leong Islamic Bank.
- 7. Alliance Islamic Bank.
- 8. Al-Rajhi Bank.
- 9. Qatar Islamic Bank.
- 10. Qatar National Bank.
- 11. Bank Asya.

The financial data of these eleven Islamic banks where processed using Eviews to carry out a panel data or regression analysis which will be explained in the next chapter. Eviews is a software package that is used to carry out statistical analysis like panel data or regression analysis and also econometric analysis.

#### **3.3 VALIDITY AND RELIABILITY OF THE RESEARCH**

The validity of a research refers to whether a researcher is scrutinizing the research question he or she is supposed to be studying. It is compromised if the outline and conduct of the research are such that he or she involuntarily studied more than or less than the stated research questions he is studying. Reliability on the other hand refers to whether the researcher is going obtain data, which he or she can depend on to carry out his research activities. There are some factors that could harm the validity and reliability of a research and they are favoritisms of the researcher, restrictions and complications of the individual intellect and lastly limitations in the access of data (Jill, 1988). To the address the above mentioned limitations or factors, the data's obtained for the purpose of this research were gotten from the Bloomberg financial system which provides access of data of numerous financial institutions in world and are very reliable and valid.

# 4. EMPIRICAL FINDINGS AND ANALYSIS

#### 4.1 Data Collection and Sample Period

A sample of data's from eleven Islamic Banks where analyzed using the E-views software in which the panel data analysis was carried out on them and can be defined as a type of multi-dimensional data that is commonly associated with some measurements over a certain period of time. It also contains numerous observations of numerous data's acquired over many periods of time for different companies. The data's of the eleven Islamic banks where obtained from Bloomberg financial information system and they include, Return on Assets (ROA), Return on Equity (ROE), Total capital Ratio, and Total Assets from 2008 to 2013 so as to analyze the impact of the financial crises on them. The table 1 below summarizes the definition of variables used for this financial data used for this research and also Table 2, which contains the list of Islamic banks with their Bloomberg tickers.

Variables	Abbreviation	Estimation method	Sample period
Return on Equity	ROE	Net Income/shareholder's equity	2008 - 2013
Return on Assets	ROA	Net Income/Total Assets	2008 - 2013
Capital Adequacy Ratio	CAR	Tier 1 capital + Tier 2 capital /Risk weighted assets	2008 - 2013
Total Assets	ТА		2008 - 2013

### **Table 1 definition of Variables**

The table 1 above shows the definition of the variables or performance measures used for this research with their estimation methods and their sample periods, which is from 2008 to 2013.

ISLAMIC BANK	BLOOMBERG TICKER
1. Abu Dhabi Islamic Bank.	ADIB
<b>2.</b> Dubai Islamic Bank.	DIB
<b>3.</b> Sharjah Islamic Bank.	SHIB
<b>4.</b> Bank Islam.	BI
<b>5.</b> CIMB Islamic Bank.	CIMB
6. Hong Leong Islamic Bank.	HLISB
<b>7.</b> Alliance Islamic Bank.	AISB
8. Al-Rajhi Bank.	ALRB
9. Qatar Islamic Bank.	QIB
<b>10.</b> Qatar National Bank.	QNB
<b>11.</b> Bank Asya.	ASYA

### TABLE 2 ISLAMIC BANKS AND THEIR BLOOMBERG TICKERS

The table 2 above shows the list of the eleven Islamic banks with their Bloomberg tickers.

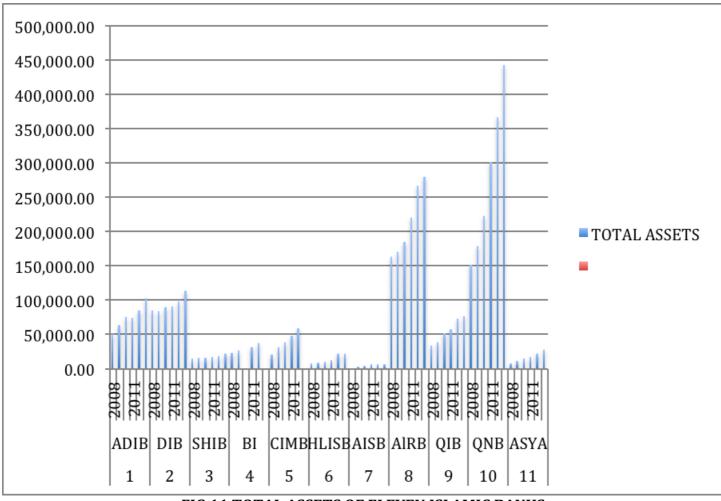


FIG 11 TOTAL ASSETS OF ELEVEN ISLAMIC BANKS

The figure 11 above shows a graphical representation of the average total assets of eleven Islamic banks from the years 2008 to 2013. From the graphical representation, it can be deduced that Alliance Islamic bank (AISB) has the lowest average total assets and Qatar National Bank (QNB) has the highest average total average assets among them.

Date: 07/10/14 Time: 13:17						
Sample: 2008 2013						
	ROA	ROE	CAR	ТА	REGION	
Mean	1.900000	15.57672	17.57492	79669.19	0.545455	
Median	1.585000	13.91500	16.72000	39173.80	1.000000	
Maximum	5.990000	49.86000	35.54000	443486.1	1.000000	
Minimum	-0.290000	-3.070000	10.72000	3171.900	0.000000	
Std. Dev.	1.144177	8.574562	5.815116	94922.11	0.501745	
Skewness	1.079266	1.072826	1.832667	1.918331	-0.182574	
Kurtosis	4.629841	5.948614	6.083974	6.427299	1.033333	
Jarque-Bera	17.67947	32.13720	58.31997	68.37142	11.00306	
Probability	0.000145	0.000000	0.000000	0.000000	0.004081	
Sum	110.2000	903.4500	1072.070	4939490.	36.00000	
Sum Sq. Dev.	74.62100	4190.817	2028.935	5.50E+11	16.36364	
Observations	58	58	61	62	66	

#### **4.2 ANALYSIS OF EMPIRICAL DATA**

**TABLE 3:** The Table 3 above shows the result of the descriptive statistics of the panel data that was carried out using Eviews with the financial data of eleven Islamic banks that were imported from Bloomberg. From the table above it can be viewed that it contains variables such as Return on Assets (ROA), Return on Equity (ROE), Capital Adequacy Ratio (CAR), Total Assets (TA) which are classified as performance indicators and lastly Region which is the dummy variable in which from the available data, 1 represents Middle east and 0 represents Asia. From the table 3 above, the value of the mean of ROA is 1.900, ROE is 15.57672, CAR is 17.57492, TA is 7966.9 and that of Region is 0.545455. Also from the table 3, the median of ROA is 1.585000, ROE is 13.91500, CAR is 16.7200, TA is 39173.80 and that of region is 1.000. The descriptive statistics of the financial data also contains the maximum value of each variable and they include for ROA is 5.990000 which is for Qatar Islamic Bank (QIB), ROE is 49.8600 which is for CIMB Islamic bank, CAR is 35.5400 which is for Sharjah Islamic bank, TA is 443486.1 which is for Qatar National Bank and region is 1 since it is a dummy variable that represents Middle east. The minimum value for

ROA is -0.29000 which is for Alliance Islamic Bank, ROE is -3.07 which is also for Alliance Islamic bank, CAR is 10.7200 which is Hong Leong Islamic Bank, TA is 3171.900 which is for Alliance Islamic bank and Region is 0 which represents Asia. Also the Standard deviation (STD. DEV.) for ROA is 1.144177, ROE is 8.574562, CAR is 5.815116, TA is 94922.11, and Region is 0.501745. The table also contains the value of Skewness and kurtosis of each performance measure or variable. Skewness is the amount of a symmetry in data distribution and kurtosis is the measure used to find out if a data is peaked to a normal distribution which implies that data sets or distribution with high value of kurtosis usually have a distinct peak near the mean and drop quite quickly and those with lower value of kurtosis are the complete opposite. From the table, the value of Skewness of Return on Assets (ROA) is 1.079266, for Return on Equity (ROE) is 1.072826, for Capital Adequacy Ratio (CAR) is 1.832667, Total Assets (TA) is 1.91881 and region is -0.182574. For kurtosis, the value for Return on Asset (ROA) is 4.629841, Return on Equity (ROE) is 5.948614, Capital Adequacy Ratio (CAR) is 6.083974, Total Assets (TA) is 6.427399 and region is Also 1.0333. Also from the table, each variable has its value for Jarque-Bera. It is used to test if errors in a regression analysis or model are distributed normally and its primary aim is to have a normal distribution that has a Skewness factor of zero and a kurtosis factor of three, which implies that it has no excess kurtosis. The value of Jarque-Bera for Return on Assets (ROA) is 17.67947, Return on Equity (ROE) is 32.13720, Capital Adequacy Ratio (CAR) is 58.31997, Total Assets is 68.37142 and Region is 11.00306. Lastly from the table, there is the value of probability of each of the used variables and they are, 0.000145 for Return on Assets (ROA), 0.004081 for region, and the rest of the variables of a probability value of zero. From the descriptive statistics we then estimate the effects of the performance of banks. For this panel data or regression analysis, Return on Assets (ROA) and Return on Equity where chosen and which will be outlined below.

# 4.2.1 Eq1 (ROA)

Redundant Fixed				
Effects Tests				
Equation: EQ1				
Test period fixed				
effects				
Effects Test	Statistic	d.f.	Prob.	
Period F	3.377332	(5,48)	0.0108	
Period Chi-square	17.182137	5	0.0042	
Period fixed effects				
test equation:				
Dependent				
Variable: ROA/100				
Method: Panel				
Least Squares				
Date: 07/10/14				
Time: 13:24				
Sample: 2008 2013				
Periods included: 6				
Cross-sections				
included: 11				
Total panel				
(unbalanced) observations: 57				
(ROA/100)=C(1)+C( 2)*(CAR/100)+C(3)* LOG(TA)+C(4)*RE GION				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.020752	0.021319	-0.973403	0.3348
C(2)	0.007177	0.030008	0.239168	0.8119
C(3)	0.003363	0.001924	1.747394	0.0119
C(4)	0.003861	0.001924	0.760487	0.0804
C(4)	0.003661	0.005077	0.760487	0.4503
R-squared	0.226441	Mean dependent var	0.019026	
Adjusted R-squared	0.182655	S.D. dependent var	0.011542	
S.E. of regression	0.010435	Akaike info criterion	-6.219802	
Sum squared resid	0.005771	Schwarz criterion	-6.076430	
Log likelihood	181.2644	Hannan-Quinn criter.	-6.164083	
F-statistic	5.171494	Durbin-Watson	0.481488	
Prob(F-statistic)	0.003293	stat		

Likelihood ratio te	st		

#### TABLE 4: Likelihood Ratio Test

In order for the first regression result to be validated, the Likelihood Ratio test is carried to know if there is any uniformity. The likelihood ratio test is a test that is used in comparing the fit of two models in which one is nested within the other. This takes place when testing whether a streamlining assumption of the model is valid or not. Since the value of the probability equals to zero, this regression is ignored and the Null postulation, and so the Hausman test is carried out so as to know the impact of the variables.

NOTE: From the table 4 above the variables C(1) represents Return on Assets (ROA), C(2) represents Return on Equity (ROE), C(3) represents Capital Adequacy Ratio (CAR), and C(4) represents region which is a dummy variable

# 4.2.2 HAUSMAN TEST (ROA)

Correlated Random Effects - Hausman Test				
Equation: EQ1				
Test period random effects				
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Period random	15.520938	3	0.0014	
** Warning: estimated period random effects variance is zero.				
Period random effects test comparisons:				
Variable	Fixed	Random	Var(Diff.)	Prob.
CAR/100	0.044799	0.007177	0.000103	0.0002
LOG(TA)	0.005249	0.003363	0.000000	0.0002
REGION	-0.002051	0.003861	0.000003	0.0002
Period random effects test equation:				
Dependent Variable: ROA/100				
Method: Panel Least Squares				
Date: 07/10/14 Time: 13:27				
Sample: 2008 2013 Periods included: 6				
Cross-sections included: 11				
Total panel (unbalanced) observations: 57				
	Coefficient	Std. Error	t-Statistic	Prob.
С	-0.044066	0.020228	-2.178463	0.0343
CAR/100	0.044799	0.028958	1.546999	0.1284
LOG(TA)	0.005249	0.001813	2.894366	0.0057
REGION	-0.002051	0.004854	-0.422578	0.6745
	Effects			

	Specification			
Period fixed (dummy variables)				
R-squared	0.427759	Mean dependent var	0.019026	
Adjusted R-squared	0.332385	S.D. dependent var	0.011542	
S.E. of regression	0.009430	Akaike info criterion	-6.345804	
Sum squared resid	0.004269	Schwarz criterion	-6.023217	
Log likelihood	189.8554	Hannan-Quinn criter.	-6.220436	
F-statistic	4.485084	Durbin-Watson stat	0.416999	
Prob(F-statistic)	0.000410			

#### **TABLE 5 HAUSMAN TEST (ROA)**

The Hausman Test above is carried out so as to futher confirm the values, and has the probability value of 0.14%, which implies that the results can acceptable and making the equation taking the following consideration;

- 1) 3.43% probability that constant (C) coefficient is 0, means that we will use the constant from the table (C=-0.044066)
- 2) 12.84% probability that CAR coefficient is 0 means that we will use it as 0 (X1=0, everything above 12% means accepting the hypothesis of this research)
- 3) 0.57% probability that Log (TA) coefficient is 0 means that we will use the coefficient for this variable from the table (X2= -0.005249).

From this, we can deduce the final equation as follows.

ROA = 0.0044066 + 0 (CAR) + (-0.005249) (TA).

This result of Return on Assets (ROA) shows that the capital adequacy ratio (CAR) does not affect it and Total Assets slightly affects it negatively by decreasing its value 0.005249 for every Total Asset unit increase.

## 4.2.3 FINAL REGRESSION (ROA) WITH PERIOD FIXED

Dependent				
Variable: ROA/100 Method: Panel				
Least Squares				
Date: 07/10/14				
Time: 13:27				
Sample: 2008 2013				
Periods included: 6				
Cross-sections				
included: 11				
Total panel (unbalanced)				
observations: 57				
	Coefficient	Std. Error	t-Statistic	Prob.
С	-0.044066	0.020228	-2.178463	0.0343
CAR/100	0.044799	0.028958	1.546999	0.1284
LOG(TA)	0.005249	0.001813	2.894366	0.0057
REGION	-0.002051	0.004854	-0.422578	0.6745
	Effects Specification			
Period fixed (dummy variables)				
R-squared	0.427759	Mean dependent var	0.019026	
Adjusted R-squared	0.332385	S.D. dependent var	0.011542	
S.E. of regression	0.009430	Akaike info criterion	-6.345804	
Sum squared resid	0.004269	Schwarz criterion	-6.023217	
Log likelihood	189.8554	Hannan-Quinn criter.	-6.220436	
F-statistic	4.485084	Durbin-Watson stat	0.416999	
Prob(F-statistic)	0.000410			

### **TABLE 6 FINAL REGRESSION (ROA)**

The above table 6 shows the final regression of Return on Asset with fixed period

# 4.2.4 Eq2 (ROE)

## Likelihood ratio test

Redundant Fixed Effects Tests				
Equation: EQ1				
Test period fixed				
effects				
Effects Test	Statistic	d.f.	Prob.	
Period F	4.341558	(5,48)	0.0024	
Period Chi-square	21.267330	5	0.0007	
Period fixed effects				
test equation:				
Dependent Variable: ROE/100				
Method: Panel				
Least Squares				
Date: 07/10/14 Time: 13:31				
Sample: 2008 2013				
Periods included: 6				
Cross-sections included: 11				
Total panel (unbalanced) observations: 57				
	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.445893	0.146334	-3.047099	0.0036
CAR/100	0.062071	0.205975	0.301351	0.7643
LOG(TA)	0.061677	0.013209	4.669353	0.0000
REGION	-0.115052	0.034852	-3.301198	0.0017
R-squared	0.340156	Mean	0.157228	
		dependent var S.D. dependent		
Adjusted R-squared	0.302807	var Akaike info	0.085777	
S.E. of regression	0.071622	criterion	-2.367243	
Sum squared resid	0.271873	Schwarz criterion	-2.223871	
Log likelihood	71.46643	Hannan-Quinn criter.	-2.311524	
F-statistic	9.107358	Durbin-Watson stat	1.319244	
Prob(F-statistic)	0.000058			

#### TABLE 7 LIKLIHOOD RATIO TEST

In order for the first regression result to be validated, the Likelihood Ratio test is carried to know if there is any uniformity. The likelihood ratio test is a test that is used in comparing the fit of two models in which one is nested within the other. This takes place when testing whether a streamlining assumption of the model is valid or not. Since the value of the probability equals to zero, this regression is ignored and the Null postulation, and so the Hausman test is carried out so as to know the impact of the variables.

# 4.2.5 HAUSMAN TEST (ROE)

Correlated Random Effects - Hausman				
Test				
Equation: EQ1				
Test period random effects				
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Period random	17.436351	3	0.0006	
	17.430331			
Period random effects test				
comparisons:				
Variable	Fixed	Random	Var(Diff.)	Prob.
CAR/100	0.329630	0.088212	0.004062	0.0002
LOG(TA)	0.076233	0.063235	0.000010	0.0000
REGION	-0.159083	-0.119579	0.000098	0.0001
Period random effects test				
equation: Dependent				
Variable: ROE/100				
Method: Panel				
Least Squares Date: 07/10/14				
Time: 13:32				
Sample: 2008 2013				
Periods included: 6				
Cross-sections included: 11				
Total panel (unbalanced) observations: 57				
	Coefficient	Std. Error	t-Statistic	Prob.
С	-0.622763	0.133958	-4.648950	0.0000
CAR/100	0.329630	0.191772	1.718863	0.0000
LOG(TA)	0.076233	0.012009	6.347940	0.0000
REGION	-0.159083	0.032143	-4.949232	0.0000
	Effects Specification			

Period fixed (dummy variables)				
R-squared	0.545639	Mean dependent var	0.157228	
Adjusted R-squared	0.469912	S.D. dependent var	0.085777	
S.E. of regression	0.062451	Akaike info criterion	-2.564916	
Sum squared resid	0.187209	Schwarz criterion	-2.242329	
Log likelihood	82.10009	Hannan-Quinn criter.	-2.439547	
F-statistic	7.205363	Durbin-Watson stat	1.433772	
Prob(F-statistic)	0.000003			

#### **TABLE 8 HAUSMAN TEST (ROE)**

The Hausman test is carried out so as to confirm the random effects. The Probability of 0.06% means that we are rejecting the Random-effects and therefore accepting the Fixed-effects results from one of the previous tables. Examination of that table will allow us to use the following assumptions:

- 1) 0.00% probability that constant is 0, means that we will use the constant from the table (C=-0.622763)
- 9.21% probability that Capital Adequacy Ratio coefficient is 0 means that we will use it as 0 (X1=0, everything above 9% means accepting the hypothesis of this research)
- 3) 0.00% probability that Log(TA) coefficient is 0 means that we will use the coefficient for this variable from the table (X2= -0.076233).

With these, the final equation will be outlined below:

ROE = 0.622763 + 0 (CAR) + (0.076233) (TA).

Even though we used fixed-effects, we got similar effects of capital ratio and but different with Total Assets (TA) on the ROE like on ROA. Capital ratio has no impact, while Total Assets (TA) Increases the ROE for 0.076233 on every unit increase.

## 4.2.6 FINAL REGRESSION (ROE) WITH PERIOD FIXED

Coefficient	Std. Frror	t-Statistic	Prob.
			1100.
-0.622763	0.133958	-4.648950	0.0000
0.329630	0.191772	1.718863	0.0921
0.076233	0.012009	6.347940	0.0000
-0.159083	0.032143	-4.949232	0.0000
Effects Specification			
0.545639	Mean dependent var	0.157228	
0.469912	S.D. dependent var	0.085777	
0.062451	Akaike info criterion	-2.564916	
0.187209	Schwarz criterion	-2.242329	
82.10009	Hannan-Quinn criter.	-2.439547	
7.205363	Durbin-Watson stat	1.433772	
0.000003			
	0.329630 0.076233 -0.159083 Effects Specification 0.545639 0.469912 0.062451 0.187209 82.10009 7.205363	-0.622763       0.133958         0.329630       0.191772         0.076233       0.012009         -0.159083       0.032143         -       -         Effects       -         Specification       -         0.545639       Mean dependent var         0.469912       S.D. dependent var         0.062451       Akaike info criterion         0.187209       Schwarz criterion         82.10009       Hannan-Quinn criter.         7.205363       Durbin-Watson stat	Image: Mark and the system         Image: Mark and the system <th< td=""></th<>

### **TABLE 9 FINAL REGRESSION (ROE)**

The table 9 above shows the final regression of return on equity (ROE)

#### **4.2 CONCLUSION**

Considering these two performance measures (ROA and ROE) of the eleven Islamic banks presented above with the empirical evidence, it can be concluded that the Capital Adequacy ratio from equation 1 (ROA) has no impact whatsoever while the Islamic bank's Total assets (TA) has a negative impact on the bank's profitability, and also from the equation 2 (ROE), it can be deduced that the capital adequacy ratio has a positive impact with Islamic banks from Asia performing better than their counterparts from the middle east. Lastly from the data used for this panel data analysis, which is in the appendix of this dissertation, it shows a steady rise of eleven bank's total asset from 2008 to 2013 despite the global financial crises, which shows that the financial crises had a less impact on the Islamic banks.

## **5. CONCLUSION**

#### **5.1 SUMMARY OF THE DISSERTATION**

This piece of Dissertation investigated the impact of the global financial crises on Islamic banking and financial institutions. The data of eleven Islamic banking institutions from the Middle East and Asia were used to carry out an empirical analysis of this research. It also enumerated how Islamic banking institutions work and what financial services do they offer. The primary research question that this research answered is what are the impacts of the financial crises on Islamic banking and financial institutions, and this were sub-divided into four sub-questions which are:

- What are the differences between Islamic banking and conventional banking?
- What financial services do Islamic banking Institutions offer?
- How does Islamic banking works compared to the conventional system?
- What are the causes of the financial crises through the perspective of Islamic finance?

This dissertation is by type descriptive because it presents how things actually are but not suggest how things should be. This dissertation looked into journal that talks about the existing theories about Islamic banking and also in the empirical part of the dissertation data of eleven fully fledged Islamic banks from the Middle East and Asia were collected from Bloomberg system and a panel data analysis carried out on them.

#### 5.2 CONCLUSION OF THE DISSERTATION

The main objective of this dissertation was to investigate the impact of the global financial crises on Islamic banking and financial institutions. The theoretical section of this dissertation outlined the existing literature and journals that discussed about this area so as to understand the reason why Islamic banking and financial institutions performed well during the peak of the global crises. The Shari'ah concept in Islamic banking and finance was explained and then also the differences between Islamic banking and finance were outlined. Also due to the fact that Islamic banking is different from conventional or western banking, the basic services offered by Islamic banks were outlined. The dissertation then

went futher into the reasons of the financial crises from both the general or western view and Islamic point view and lastly from the theoretical section, the Impact of the financial crises on Islamic banking and financial institutions was outlined in which a study conducted by the International Monetary Fund (IMF) in 2010 was outlined. The Study showed the impact of the crises on both Islamic banks and Conventional banks. The study contains the profitability, credit and Assets of both banks and concluded that the Islamic banks performed better than their conventional counterparts during the peak of the financial crises. Also the Impact of the crises contains a competiveness of world Islamic banking in shows the total assets of Islamic banking steadily rising during the peak of the crises and also the market share of Islamic banking and finance with Saudi Arabia the largest market share followed by Malaysia.

The empirical part of this dissertation is based on quantitative data analysis in which data of eleven fully-fledged Islamic banks were obtained for the purpose of this dissertation. The data contains the return on assets (ROA), return on equity (ROE), capital adequacy ratio (CAR), total assets (TA), with region as a dummy variable from the year range of 2008 to 2013. The data shows a steady rise in Total assets of the Islamic banks despite the crises and was analyzed using the panel data analysis with Return on Assets (ROA) and Return on Equities (ROE) used as performance indicators in which the ROA performance indicator shows no effect whatsoever while ROE performance shows a positive effect with Islamic banks from Asia performing better than the Middle-East Islamic banks.

In the last part of this conclusion, Islamic banking and finance is gaining attention especially in the west because the recent financial crises has opened a way to find an alternative finance system that can withstand this type of crises with many seeing Islamic finance and banking as the type of system needed or the combination of both Islamic and western banking systems as seen in Malaysia. With the steady rise of Islamic banking and finance, it can become a force to be reckoned with the future to come.

# 5.2.1 WEAKNESS OF THIS DISSERTATION AND FURTHER RESEARCH

This dissertation discussed the Impact of the financial on Islamic banking institutions using the data eleven Islamic banks to carry out further analysis which is a small number considering the time which is also small given to carry out this dissertation. Due this constraint or weakness, this dissertation may not be considered to be generalized for all Islamic banks around the globe which gives room for more further research to carried out on this area of specialization.

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## **APPENDIX**

						CAPITAL	TOTAL		
			ROA		ROE	RATIO	ASSETS	REGION	
1	ADIB	2008		1.79	15.4	11.84	51,210.10		1
		2009		0.13	1.22	13.52	64,084.00		1
		2010		1.47	13.42	16.03	75,245.50		1
		2011		1.54	13.85	17.39	74,335.10		1
		2012		1.5	11.34	21.42	85,664.60		1
		2013		1.53	11.3	16.89	103,160.50		1
2	DIB	2008		1.84	16.22	12	84,756.60		1
		2009		1.43	13.62	17.9	84,304.30		1
		2010		0.64	6.04	17.8	89,884.40		1
		2011		1.12	10.94	18.2	90,588.50		1
		2012		1.22	12.62	17.4	98,611.20		1
		2013		1.52	13.78	18.2	113,288.40		1
3	SHIB	2008		1.75	7.25		15,535.90		1
		2009		1.65	6.18	34.47	15,974.50		1
		2010		1.63	6.19	35.54	16,667.20		1
		2011		1.46	5.74	35	17,733.10		1
		2012		1.51	6.15	34.71	18,316.20		1
		2013		1.53	6.84	31	21,731.90		1
4	BI	2008		1.83	32.9	13.15	23,556.40		0
		2009		0.63	11.36	13.87	27,488.50		0
		2010							0
		2011				16.72	32,207.30		0
		2012		1.23	14.46	13.99	37,422.90		0
_		2013							0
5	CIMB	2008				11.69	20,528.60		0
		2009		0.95	21.8	11.34	31,805.80		0
		2010		2.42	49.86	17.21	39,074.90		0
		2011		1.64	27.47	14.21	47,863.00		0
		2012		1.53	23.71	13.27	58,907.90		0
c		2013				17.07	0 1 2 0 9 0		0
6	HLISB	2008 2009		0.86	10.59	17.97	8,120.80 9,142.00		0 0
		2009		0.88	10.59	22.85 20.78	9,142.00 9,962.00		0
		2010		0.88	8.42	20.78	9,962.00		0
		2011		0.85	8.42 14.15	13.24	21,902.50		0
		2012		1.04	14.15	13.24	21,902.30		0
7	AISB	2013		1.04	17.80	10.72	21,728.30		0
'	AISD	2008				13.92	3,171.90		0
		2009		-0.29	-3.07	13.92	4,881.80		0
		2010		1.01	12.69	13.21	4,881.80 6,223.10		0
		2011		1.14	12.03	13.37	6,508.20		0
		2012		0.84	9.78	14.19	6,825.10		0
		2013		0.04	5.70	13.72	0,025.10		0

8	AIRB	2008	4.53	25.77	21.39	163,373.20	1
		2009	4.05	24.27	19.39	170,729.70	1
		2010	3.81	22.93	20.63	184,840.90	1
		2011	3.64	23.37	20.03	220,813.40	1
		2012	3.23	22.76	19.83	267,382.60	1
		2013	2.75	19.87	19.60	279,870.70	1
9	QIB	2008	5.99	27.91	17.04	33,543.20	1
		2009	3.63	16.37	17.33	39,272.70	1
		2010	2.77	13.98	17.37	51,877.20	1
		2011	2.48	13.48	18.58	58,286.10	1
		2012	1.89	10.95	15.05	73,192.10	1
		2013	1.77	11.45	16.51	77,354.20	1
10	QNB	2008	2.74	23.95	13.90	151,973.60	1
		2009	2.54	23.13	13.20	179,328.90	1
		2010	2.83	25.97	15.30	223,382.40	1
		2011	2.86	22.67	22.00	301,955.30	1
		2012	2.49	18.72	21.00	366,853.80	1
		2013	2.34	18.98	15.60	443,486.10	1
11	ASYA	2008	3.3	21.19	13.22	8,156.30	0
		2009	3.07	19.78	14.81	11,738.60	0
		2010	1.99	14.47	13.46	14,661	0
		2011	1.39	10.91	13.48	17,348.50	0
		2012	0.93	8.06	13.57	21,574.00	0
		2013	0.72	7.32	14.06	27,903.60	0

### FINANCIAL DATA OF ELEVEN ISLAMIC BANKS