



**A COMPARATIVE STUDY ON THE IMPACTS OF THE  
2007-2008 FINANCIAL CRISIS INTO ISLAMIC AND  
CONVENTIONAL BANKS' FINANCIAL  
PERFORMANCE IN THE GULF COOPERATION  
COUNCIL COUNTRIES**

**BY**

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**A thesis submitted in fulfilment of the requirement for the  
Degree of Doctor of Philosophy in Islamic Banking and  
Finance**

**Kuliyah of Economics and Management Sciences  
International Islamic University  
Malaysia**

**SEPTEMBER 2013**

## ABSTRACT

The 2007-2008 global financial crisis has given a significant impact on the banking industry worldwide. On the other hand, Islamic banks are claimed that they are either not affected or less affected by the crisis (Smolo and Mirakhor, 2010; Ahmad, 2010). However, such claims need to be proven empirically. Therefore, this study aims to compare financial performance of Islamic and conventional banks in the Gulf Cooperation Council (GCC) member countries via financial statements using 21 Islamic banks and 35 conventional banks as samples which are available on Bankscope database as an attempt to compare the impacts of the global financial crisis on the financial performance of both types of banks. The study uses financial ratios to comparatively analyze financial performance of Islamic and conventional banks in terms of profitability and efficiency, asset quality, capital adequacy and liquidity for each country in the region during 2005-2010. The study also uses standard deviation, the Mann Whitney and/or t-test to compare the stability of financial performance between Islamic and conventional banks in the GCC during the 2005-2010. This study also uses panel data regression analysis in order to examine the factors that significantly influence financial performance of Islamic and conventional banks in the GCC during the period and to evaluate the influence of the financial crisis into financial performance of both banks. The results of the ratio analysis show both Islamic and conventional banks' financial performance is affected by the financial crisis. However, the ratios are unable to conclude which type of banks performed better during the period since the results in each country indicate different inferences. The only common results across the GCC member countries is conventional banks in the GCC have better asset quality than their Islamic counterparts. The result of standard deviation reveals that during 2005-2010, financial performance of Islamic banks in the GCC is less stable than their conventional counterparts in terms of profitability and efficiency, asset quality, capital adequacy and liquidity. In addition, the Mann Whitney and t-test indicate that there are significant differences in the stability of all aspects of financial performance between Islamic and conventional banks in the GCC. The results of panel data regression analysis reveal that the financial crisis significantly affects both Islamic and conventional banks in the GCC. The impacts of the crisis are even worse in the two years after the crisis. The regression results also identify that equity, short term funding, GDP per capita significantly influence financial performance of Islamic and conventional banks in the GCC. It is also found that overhead expenses only significantly influence financial performance of Islamic banks while total assets and total financings only significantly influence financial performance of conventional banks. The study adds value to the existing literature by providing comparative empirical evidences on the impacts of the recent financial crisis into Islamic and conventional banks' financial performance in the GCC. The study is also expected to benefit regulators, bankers and other stakeholders of Islamic and conventional banks in the GCC in understanding the factors that influence GCC banking financial performance and minimizing the impacts of any future financial crises.loss.

## خلاصة البحث

ان الأزمة المالية العالمية لعام 2007-2008 كان لها الأثر الكبير والمهم على القطاع البنكي العالمي. وبهذا الصدد نجد ان البنوك الإسلامية اعلنت عن عدم تأثرها بهذه الأزمة المالية. ولكن لا بد من التحقق من مدى مصداقية هذا الادعاء. لذلك، فان هذه الدراسة تهدف للقيام بعمل دراسة تحليلية مقارنة للقوائم المالية لـ 21 بنك اسلامي و 35 بنك تقليدي في منطقة مجلس التعاون الخليجي. وتم الاعتماد على القوائم المالية المتوفرة في قاعدة بيانات Bankscope. حيث تمت مقارنة أثر الأزمة المالية العالمية على أداء كل من البنوك الاسلامية والتقليدية. ان هذه الدراسة تستخدم النسب المالية لتحليل ومقارنة الأداء المالي للبنوك الاسلامية والتقليدية من حيث الربحية، الكفاءة، جودة الأصول، Capital adequacy والسيولة لكل دولة من دول مجلس التعاون الخليجي للأعوام 2005-2010. تستخدم هذه الدراسة كل من الانحراف المعياري ، Mann Whitney و t-test وذلك لمقارنة الاستقرار في الأداء المالي بين البنوك الإسلامية والتقليدية في هذه المنطقة وخلال الأعوام 2005-2010. كما أن هذه الدراسة تستخدم Panel data regression analysis لتحديد العوامل التي لها تأثير مهم على الأداء المالي للبنوك الإسلامية والتقليدية ضمن دول مجلس التعاون الخليجي خلال فترة الدراسة وكذلك لتقييم تأثير الأزمة المالية على الأداء المالي لكلا النوعين من البنوك. ان نتائج تحليل النسب بينت ان اداء كل من البنوك الاسلامية والتقليدية تأثر بالأزمة المالية. من ناحية أخرى لم تكن النسب المالية قادرة على استنتاج اي القطاعين كان اداءه أفضل من الاخر حيث ان النتائج في كل دولة تبين استلالات مختلفة. ولكن النتيجة امشركة الوحيدة التي تم التوصل لها بين جميع دول مجلس التعاون الخليجي هي ان البنوك التقليدية في هذه الدول كان لديها جودة الأصول أفضل من البنوك الإسلامية. نتائج الانحراف المعياري كشفت انه خلال الأعوام 2005-2010 كان الأداء المالي للبنوك الإسلامية في منطقة دول مجلس التعاون الخليجي أقل ثباتا من قطاع البنوك التقليدية من ناحية الربحية والكفاءة، جودة الأصول، الملاءة

والسيولة المالية. بالإضافة فان اختبار Mann Whitney و t-test كشفنا بان هنالك فروقات مهمة وذات تأثير من ناحية ثبات جميع مؤشرات الأداء المالي بين البنوك الإسلامية والتقليدية في منطقة دول مجلس التعاون الخليجي. كما أن نتائج تحليل Panel data regression بين بأن الأزمة المالية العالمية كان لها الأثر المهم على كل من البنوك الاسلامية والتقليدية في منطقة دول مجلس التعاون الخليجي. ان أكبر وأسوأ تأثير للأزمة المالية كان في السنتين الاحقتين للأزمة المالية. ان نتائج Regression بينت بأن حقوق المساهمين، التمويل قصير الأجل، اجمالي الناتج المحلي لكل فرد أثرت بشكل مهم على الأداء المالي للبنوك الإسلامية والتقليدية في دول مجلس التعاون الخليجي. ان الدراسة الحالية وجدت بأن التكاليف والأعباء الإضافية أثرت بشكل كبير فقط على الأداء المالي للبنوك الإسلامية، بينما اجمالي الأصول وجمالي التمويل أثر وبشكل مهم على الأداء المالي للبنوك التقليدية. ان هذه الدراسة تضيف للدراسات السابقة في هذا المجال وذلك بتوفير أدلة مقارنة عملية حول تأثير الأزمة المالية الأخيرة على أداء البنوك الإسلامية والتقليدية ضمن منطقة دول مجلس التعاون الخليجي. ومن المتوقع ان يستفيد كل من المشرعين، والمصرفيين واصحاب المصالح الاخرين في البنوك الاسلامية والتقليدية في منطقة دول مجلس التعاون الخليجي من نتائج الدراسة الحالية. ان هذه الفائدة تتمحور حول تحديد العوامل التي تؤثر على الاداء المالي للقطاع البنكي في دول مجلس التعاون الخليجي وبالتالي العمل على الحد من تأثير أية أزمات مالية مستقبلية.

## **APPROVAL PAGE**

The thesis of Sutan Emir Hidayat has been approved by the following:

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## DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Sutan Emir Hidayat

Signature .....

Date .....

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

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Date

*My Small Contribution to the Development of Islamic Banking and Finance Industry*



## ACKNOWLEDGEMENTS

*Alhamdulillahirabbil'alamin*, with Allah's blessings, I finally completed and fulfilled all the requirements to obtain the degree of Doctor of Philosophy in Islamic Banking and Finance in year 2013 at the age of 32. This achievement is purely Allah's blessings through his kind creatures. Therefore, at this part I would like to express my sincere gratitude to them.

First of all, I would like to extend my utmost thanks to Associate Prof. Dr. Hafiz Majdi Abdul Rashid and Dr Sheila Nu Nu Htay; my respected supervisor and co-supervisor who sincerely guided me throughout the whole process of completing this degree. I also would like to express my uncountable thanks and loves to my parents, the best educators that Allah has chosen for me, Soetan Moehammad Taufiq Thaib, SH and Dra. Putri Rachma Oesman, who have been sacrificing their life to raise me and stressing the importance of education since the earliest stage of my life. I also have to convey my huge gratitude to my lovely wife Riza Fitriasia, SE. Thank you for your love, patient, and passion. Your understanding, sacrifices, and supports during the entire period of my study are really precious. This is indeed our great achievement. Allah has sent you to successfully accompany me to achieve it. I also wish to articulate my thankfulness to my parents in law: H Amrizal Amir and Hj Erita Suardi who have given their full supports, prayers and specifically let me marrying your gorgeous daughter. I also would like to thank my brother Sutan Muhammad Arif Muningsyah and my brother in law Angga Maulana, ST, MA for your valuable supports and prayers. Specifically for Angga, thank you for introducing Ivan Adi Kristianto to me. I also would like to dedicate this achievement to my children, Nala Amirah Putri Denza, Adam Arsyad Muningsyah and Sutan Ahmad Mirza Muningsyah. I really hope this achievement can be a good example for all of you.

Secondly, I would like to thank University College of Bahrain (UCB) management especially H.E. Shaikh Dr Khalid M Al-Khalifa and Shaikha Saeeda Al-Khalifa who financially sponsored my study. Without them, I would not accomplish this success. I also would like to appreciate my respected external and internal examiners, YBhg Prof Dato' Dr Sudin Haron and Dr Noraini Mohd Ariffin for your valuable comments and suggestions to improve my research and most importantly for making "a pass with minor corrections" decision in my PhD viva voce. Without your decision, valuable comments and suggestions, there will be no PhD degree for me.

Thirdly, I would like to thank my brothers and sisters in Islam whom participated in supporting the success of my PhD journey. The first thank goes to my best friends Dr. Ronald Rulindo, Amy Mardhatillah, MSc and Alia Athaya Rulindova. They are indeed my family. I feel very much comfortable around them. They have provided me with a lot of supports. The second thank goes to Al-Fatih Gessan Aryasantana, Ivan Adi Kristianto, Dr. Muhammad Abduh, Nafiu Oladokun, Tika Arundina who directly helped and supported me in preparing this research either in data analysis or thesis editing. The third thank goes to Dr Abdul Rasyid and Muhammad Fany Al-Farisi who helped me in solving the administrative matters related to my study. The fourth thank goes to all IAEI Malaysia members who gave me a chance to present the results of the research in a public discussion in January 2013. The fifth thank goes to my brothers in PhD lab, Hidayatul Ihsan, Mohammad Asmy, Fuad, Anwar AP, Asafa Yanka, Dr Abdullah, Ghani, Dr Yusuf, Asif, Dimas

and others who accompanied me during my frequent short stays in Malaysia. Sharing knowledge and experience with them are among the key to how I can successfully passed this process. Similar appreciation needs to be conveyed to Dr Raditya Sukmana for sharing his PhD thesis as a guideline for me to do my own and for involving me as his research co-author.

Fourthly, I would like to thank all my relatives. My uncles and my aunties, Sutan Muhammad Farid Thaib, Eliza Suardi, Raja Nasharuddin bin Raja Shahminan, Tengku Afzan, Raja Dato' Zainal Abidin bin Raja Tachik, Prof Dr Puti Reno Raudha Thaib, Puti Reno Yuniarti Thaib, Puti Reno Soraya Thaib, Puti Reno Rahima Thaib, Sutan Muhammad Rusydi Oesman, Sutan Akmal Oesman, Sutan Ridwan Oesman, Putri Widya Oesman, Putri Sri Darma Oesman, Raja Hamizah binti Tan Sri Raja Khalid, Raja Nazimah binti Raja Shahminan, Raja Nazrihisam bin Raja Shahminan and others whom I cannot mention their names one by one here. Thanks for your prayers, supports and wishes. Finally, I would like to express my thanks to all members of Islamic Economic Forum for Indonesian Development (ISEFID) and UCB staffs. While ISEFID is the best community where I develop my research skill, UCB is the best place where I can do my PhD and at the same work and earn for my family.

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## LIST OF ABBREVIATIONS

AAOIFI	Accounting and Auditing Organization for Islamic Financial Services Institution
ADIA	Abu Dhabi Investment Authority
ARM	Adjustable Rate Mortgage
ATCR	Reserves and Net Profit After Tax as a Percentage of Total Capital and Reserves
AU	Asset Utilization
BIMB	Bank Islam Malaysia Berhad
BITA	Bank's Portion of Income as a Percentage of Total Assets
BTCR	Net Profit Before Tax as a Percentage of Total Capital
BTP	Before Tax Profit
BTTA	Net Profit Before Tax as a Percentage of Total Assets
CB	Conventional Banks
CDO	Collateralized Debt Obligation
CRA	Community Reinvestment Act
CRS	Constant Return to Scale
CSTFTA	Consumer and Short-Term Funding to Total Assets
DE	Debt to Equity Ratio
DEA	Data Envelopment Analysis
DF	Degree of Freedom
EMH	Efficient Market Proposition
ES	Earning Spread
FIBS	Faisal Islamic Bank of Sudan
GCC	Gulf Cooperation Council
GDPPC	GDP per capita
GLS	Generalized Least Square
HHI	Herfindahl-Hirschman Index
IAS	International Accounting Standard
IB	Islamic Banks
IBS	Islamic Banking Scheme
IDB	Islamic Development Bank
IE	Income to Expense Ratio
IFIs	Islamic Financial Institutions
IIFM	International Islamic Financial Market
IIRA	Islamic International Rating Agency
IL/GL	Impaired Loans to Gross Loans
IRF	Impulse Response Function
KIA	Kuwait Investment Authority
LLR/GL	Loan Loss Reserves to Gross Loans
LM	Lagrangian Multiplier
LMC	Liquidity Management Centre
LSDV	Least-Squares Dummy Variables
LTA	Loan to Assets Ratio

LTD	Loan to Deposit Ratio
M&A	Merger and Acquisition
MBS	Mortgage Backed Securities
NIM	Net Interest Margin
NPL	Non Performing Loan
NPM	Net Profit Margin
OIC	Organization of Islamic Conference
OOI/TA	Other Operating Incomes to Total Assets
OLS	Ordinary Least Square
RI	Risk Index
RIR	Real Interest Rate
ROA	Return on Asset
ROD	Return on Deposit
ROE	Return on Equity
SFA	Stochastic Frontier Analysis
SWF	Sovereign Wealth Funds
TA	Total Assets
TC/TI	Cost to Income Ratio
TD/TA	Total Deposits to Total Assets
TE/TA	Total Equity to Total Assets
TE/TL	Total Equity to Total Liabilities
Tex/TA	Total Expenses to Total Assets
The U.S	The United States
The UAE	The United Arab Emirates
TIBS	Tadamon Islamic Bank, Sudan
TITA	Total Income as a Percentage of Total Assets
TL/TA	Total Loans to Total Assets
Tnie/Tex	Non Interest Expense to Total Expense
VDA	Variance Decomposition Analysis
VRS	Varying Return to Scale

# CHAPTER 1

## INTRODUCTION

### 1.1 BACKGROUND OF THE STUDY

The global financial crisis that started in the U.S. in late 2007 and hit the world in 2008 has resulted to significant impacts on the operating and financial performance of many banks globally<sup>1</sup>(Ellaboudy, 2010; Smolo and Mirakhor, 2010; Kassim and Majid, 2010). As a result, many banks across the world reported unprecedented financial loss on their financial report. This is due to their connections with the subprime mortgage in the United State of America (U.S.) or the consequence of economic recession in their own countries. The gravity of the crisis has forced about 123 banks in the United State of America (U.S.) to file for bankruptcy during that period. Among the affected financial institutions is American giant bank Lehman Brother, which is one of the banks considered as too big to fail<sup>2</sup>.

The crisis has inadvertently exposed some of the weaknesses in the current banking and subsequently endeared public's interest towards Islamic banks based on the belief that, they are relatively less affected by the crisis. Some of the experts and officials of Islamic banks have even indicated that Islamic banks are either not or less affected by the global financial crisis compared to their conventional counterpart due to the nature of Islamic banking which stipulated that, financial transactions must be trade based and asset linked. (Smolo and Mirakhor, 2010; Ahmed, 2010).

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<sup>1</sup>The causes of the crisis and types of financial crisis will be explained in details in chapter 2 of the thesis

<sup>2</sup> <http://martuasilaban.wordpress.com/2010/02/17/sekilas-tentang-subprime-mortgage/> (translated into English by the author)

It is thus argued that if the principles of Islamic finance had been followed, the financial crisis would have been prevented (Ahmed, 2009). Hence, the general belief that Islamic banking system is more stable compared to the conventional banking system (Kaleem, 2000; Kia and Darrat, 2003; Samad, 2004). Even though the claims need to be empirically investigated, more people are increasingly interested to understand Islamic finance and its principles as applied in Islamic banks than ever before following the global financial crisis. For an example, the Vatican has called for the adoption of Islamic finance principles in all financial dealings (Totaro, 2009).

Currently, Islamic banks are spread all over the world both in Muslim and non Muslim countries. One of the important regions and a catalyst to the development of Islamic banking and finance is the Gulf Cooperation Council (GCC) region. The GCC is a regional association of six countries located in the Arabian Gulf<sup>3</sup>. The member states have unique characteristics in the sense that all of them are Arab and Muslim majority states. One of its members, Saudi Arabia is the guardian of the two Muslim holiest cities<sup>4</sup> and the birth place of our noble Prophet Muhammad (p.b.u.h) and the place where he spread the teaching of Islam during his life.

The member states are also characterized as oil and gas rich countries in which Saudi Arabia is acknowledged as the world's biggest oil producer while Qatar is regarded as one of the largest liquefied natural gas exporters in the world<sup>5</sup>. As oil prices rose for several years before the 2007-2008 global financial crisis, the GCC member states are enriched with excess of liquidity available to be invested. The increase in oil price has therefore made the GCC countries wealthier than before. In

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<sup>3</sup> The member countries are Bahrain , Kuwait, Oman, Qatar, UAE, and Saudi Arabia.

<sup>4</sup> The Muslim holiest cities are Mecca and Madina

<sup>5</sup> <http://en.wikipedia.org/wiki/Petroleum>

2009, Qatar is even regarded as the richest country in the world by the International Monetary Fund (IMF)<sup>6</sup>.

Other member states ranked in between 12<sup>th</sup> to 38<sup>th</sup> richest nations on earth. Table 1.1 below describes the GDP per capita as a measure of wealth of the GCC countries and their world's ranks.

Table 1.1  
List of GDP per capita of The GCC countries in 2009

<b>COUNTRIES</b>	<b>GDP PER CAPITA (USD)</b>	<b>THE WORLD'S RANK</b>
State of Qatar	83,841	1
Kuwait	38,304	12
UAE	36,537	15
Bahrain	27,068	32
Oman	25,110	35
Saudi Arabia	23,221	38

Source: International Monetary Fund (IMF) available at [www.wikipedia.com](http://www.wikipedia.com)

Being a regional association of Muslim majority states, all member countries encourage and support the development of Islamic banking and finance in their respective countries. Among the member states who accept the idea of Islamic banking, the Saudi government is considered as the least advocate of the Islamic banking industry despite its huge potential to become an Islamic financial centre. Up to 2009, there was no specific law governing Islamic finance in the Saudi Arabia's banking legislation and the capital markets law (Wilson, 2009). The rest of the GCC

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<sup>6</sup> [http://en.wikipedia.org/wiki/List\\_of\\_countries\\_by\\_GDP\\_\(PPP\)\\_per\\_capita](http://en.wikipedia.org/wiki/List_of_countries_by_GDP_(PPP)_per_capita)

members are currently much more supportive to the development of Islamic banking industry than previous years.

Bahrain notably has the most developed Islamic finance infrastructures among the GCC members. The kingdom actively promotes itself as an international hub for Islamic finance. In order to achieve this goal, the Central Bank of Bahrain (CBB) through its comprehensive regulatory framework opens its border to both local and international Islamic financial institutions to operate in the country. The kingdom is also the host to several organizations such as i) the Accounting and Auditing Organization for Islamic Financial Institutions ('AAOIFI'); ii) Liquidity Management Centre ('LMC'); iii) the International Islamic Financial Market ('IIFM'), iv) and the Islamic International Rating Agency ('IIRA'). Those institutions are central to the development of Islamic finance<sup>7</sup>.

In 2004, Kuwait passed an amendment to the Central Bank Law 32 of 1968 aimed at ensuring fair competition within the Islamic financial sector. As a result, more Islamic banks emerged in the industry in addition to the long established KFH brand that used to be the only Islamic bank in the country since 1977 (Wilson, 2009).

In the UAE, the authority considers the introduction of the new law that facilitates the establishment of a higher *Shariah* council. This council is responsible to supervise the work of the *Shariah* boards of all Islamic banks operating in the country (Elewa, 2008). The purpose is to address the issues of lack of standardization of the *fatwa* among *Shariah* boards of Islamic banks operating in the U.A.E. This idea is actually similar to what is currently being practiced in Malaysia whereby a national *Shariah* board exists serving both the central bank and the securities commission. In Malaysia, only this body has the authority to issue *fatwa* while the *Shariah* boards of

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<sup>7</sup> The information is taken from official website of Central Bank of Bahraian [http://www.cbb.gov.bh/page.php?p=islamic\\_finance](http://www.cbb.gov.bh/page.php?p=islamic_finance)

each financial institution are responsible to ensure that, activities of the institutions comply with the *fatwa*.

The state of Qatar has also established financial centers in a free zone governed by their own laws and regulations which are based on English common law as applied to finance (Wilson, 2009). Any disputes within the free zone are not subjected to the civil law applied outside the zone. Interestingly, Qatar is found to have the highest proportion of *Shariah* compliant bank deposits compared to GCC states (Wilson, 2009). Even though the sources of deposits are mainly from the domestic market, many conventional commercial banks in the state have established their Islamic affiliates. This also may be attributable to the impressive performance of Qatar's GDP per capita which is regarded as the highest (Table 1) in the GCC which thereby resulted to huge savings for the local people. Until 2009, there was no Islamic bank established in Oman due to political reasons.

The GCC region is equally well known as home to many large pioneers in Islamic banking industry. 1970's and 1980's<sup>8</sup> saw tremendous up-rise of the Islamic banks established within the region among which are Dubai Islamic Bank, Kuwait Finance House, Al-Rajhi Bank and Bahrain Islamic Bank. The GCC countries collectively accounted for about 41% of the total *Shariah*-compliant assets worldwide by the end of 2007 (Wilson, 2009). In addition, the financial performance of Islamic banks in the GCC during 2007 was also very impressive, with most of the banks recording impressive profits<sup>9</sup>.

Another important point to note is the expansion of GCC based Islamic banks to other parts of the world. For examples, Saudi based Islamic bank Al-Rajhi has

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<sup>8</sup> The periods where the earliest Islamic banks were established

<sup>9</sup> The Banker, supplement on the top 500 Islamic Financial Institutions, October 2008, p.34