

The Profitability Determinants of Qatari Domestic Banks

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ABSTRACT

No doubt that the banking sectors plays a vital role in the economy of all countries. In this sense, the stability of the economy depends basically on the banks' well-organized in a country. This study is aimed to examine the profitability determinants of Qatari domestic banks, these banks are Islamic and conventional. The profitability determinants include Return on Assets (ROA) , Return on Equity (ROE), and Net-Non Interest Margin (NNIM). In order to evaluate and compare these profitability variables among two types of banks, 3 Islamic and 6 Conventional banks were selected. The study used panel data which were extracted from the bank's annual financial reports for the period between 2007 and 2013. Applying Stata- software some correlation and regression analysis findings were carried out on data and tried to measure the effect of some independent variables such as; bank-specific factors, which including capital adequacy (CAR), liquidity (LIQD), asset quality (ASQ), management quality (MGQ). In addition to, control factors in term of macroeconomic variables like, the inflation (INF) and Growth domestic product gross (GGDP). Furthermore, we added corporate governance factors in terms of board size and composition (BS) and (BC). In addition, a dummy variable is used in the form of [1] in regards to Islamic banks, otherwise [0] for commercial banks. Regarding our empirical analysis, there was no difference between the two types of banks in terms of ROE and NNIM. However, Islamic banks' performed better in term of ROA. In regard to factors of macroeconomic and corporate governance, our findings revealed some influence for the board composition (BC), board size (BS), and the inflation (INF). Furthermore, no effect was predicted of the (GGDP) among the profitability determinants.

Keywords: Islamic Banks, Conventional banks, Profitability determinants. Financial ratios

ÖZ

Bankacılık sektörünün tüm ülkelerin ekonomisinde önemli bir rol oynadığı şüphesiz bir gerçektir. Bu bağlamda bir ülkedeki ekonomik denge, bankaların ne kadar iyi organize edildiği ile yakından ilişkilidir. Bu çalışmanın amacı, İslami ve geleneksel bankalar olan Katar'ın yerli bankalarının karlılık determinantlarını incelemektir. Karlılık determinantları arasında Yatırım Getirisi (ROA) , Özsermaye Karlılığı (ROE) ve Net Faiz Dışı Payı (NNIM) bulunmaktadır. Karlılık değişkenlerini değerlendirebilmek ve karşılaştırabilmek amacıyla 3 İslami ve 6 geleneksel banka seçilmiştir. Bu çalışmada, 2007-2013 dönemi arasında bankaların yıllık mali raporlarından çıkarılan panel verileri kullanılmıştır. Stata yazılımları kullanılarak, verilerde korelasyon ve regresyon analizleri yapılmıştır. Bu analizlerde, sermaye yeterliliği (CAR), likidite (LIQD), malvarlığı kalitesi (ASQ) ve yönetim kalitesi (ASQ) gibi faktörlerin etkileri, bağımsız değişken olarak ölçülmüştür. Bunlara ek olarak, makroekonomik bağlamdaki kontrol faktörleri olarak enflasyon (INF) ve gayrisafi yurtiçi hasılanın büyüme oranı (GGDP) kullanılmıştır. Ayrıca, kurul büyüklüğü (BS) ve kurul yapısı (BC) gibi kurumsal yönetim faktörleri de eklenmiştir. Buna ek olarak, İslami bankalar için [1] ve ticari bankalar için [0] olmak üzere kukla değişkenler de kullanılmıştır. Ampirik analiz sonucunda, ROE ve NNIM bağlamında iki banka türü arasında herhangi bir fark gözlemlenmemiştir. Ancak ROA anlamında, İslami bankaların daha iyi bir performansa sahip olduğu görülmüştür. Sonuçlara göre, makroekonomik ve kurumsal yönetim faktörlerinde, kurul yapısı (BC), kurul büyüklüğü (BS) ve enflasyon (INF) üzerinde bir etki gözlemlenmiştir. Ancak, karlılık faktörlerinden GGDP üzerinde herhangi bir etki sonucuna varılamamıştır.

Anahtar Kelimeler: İslami Banka, Geleneksel banka, Karlılık determinantları, Mali oran.

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LIST OF ABBREVIATIONS

ASQ	Asset Quality
BC	Board Composition
BS	Board Size
CAR	Capital Adequacy Ratio
CB	Conventional Bank
CEO	Chief Executive Officer
CG	Corporate Governance
COB	Chair of Board
GCC	Gulf Co-Operative Council
GGDP	Growth Domestic Product Gross
IAHs	Investment Accountant Holders
IB	Islamic Bank
IBS	Institute of Banking Studies
IMF	International Monetary Fund
INF	Inflation Rate
IRR	Investment Risk Reserve
KSA	Kingdom of Saudi Arabia
LIBOR	London Interbank Offered Rate
LIQD	Liquidity
MGQ	Management Quality
NNIM	Net-Non Interest Margin
OPEC	Organization of Petroleum Exporting Countries
PER	Profit Equalizer Reserve

PLL	Provision for Loan Losses
PLS	Profit Losses Sharing
QCB	Qatar Central Bank
QIB	Qatar Islamic Bank
QR	Qatar I Riyal
QSE	Qatar Stock Exchange
RGMs	Rapid Growth Markets
ROA	Return on Assets
ROE	Return on Equity
TD	Total Deposits
TL	Total Loans
UAE	United Arabs Emirates

Chapter 1

INTRODUCTION

The banking industry play very important role in the whole economic life of any nation. As known, Arab Gulf countries are a part of the Islamic world. They have large amounts of oil resources which reflects on their economic outlook. Also, these countries have demonstrated steady economic growth in the last two decades. The Muslim investor, who attempt to engage in an investment matters, which would not be completed without a banking system. However, the Muslim must follow the 'Quranic' principles, which prohibits the interest that emerge from the conventional banking system. Whereby, some Islamic countries have chartered Islamic banks, that are operating besides their conventional banks. On the other hand, some countries have fully adopted the Islamic banking system.

In this study, we will examine the performance of the Qatari domestic banks by using well-known financial ratios such as profitability ratios, capital adequacy ratio, liquidity ratio, asset quality ratio, management quality, growth domestic product gross, the Inflation, and corporate governance factors in form of board composition and size. Afterwards, there will be a comparison between two type of banks that operate in Qatar, the Islamic banks and the conventional banks. Qatar is considered as an important member of Gulf Co-operation Council (GCC, that resulted in a huge financial resources which emerges from exporting gas and oil. In addition to this, its limited population also influences the status .

The study is aimed to examine the Qatari domestic banks' profitability determinants for the period between 2007 and 2013. Furthermore, the data will be brought from the bank's annual report. In addition to, other sources such as, the annual reports of the central bank of Qatar, Qatar Stocks Exchange (QSE), and the Institute of Banking Studies (IBS), which is located in Kuwait and concern of conducting annual financial reports about all banking sectors in the GCC region.

1.1 The Importance of The Banking System

Today to measure a country's economic strength you have to consider their banking system. If their banking system is efficient and stable then these countries' economic outputs would be healthy. Hence, the banking system stability reflects strong macroeconomic conditions. However, the credit and lending concentration increases competition and credit risk, hence there must be an equilibrium. On the other hand, in order to see whether the wealth of any nation, has been distributed in an equal way among their people or not (the income per capita), that could be achieved mainly through the banking system. Therefore, the banking system is the cornerstone of the economic development. Furthermore, the failure of the banking system, or in other words, the inefficiency of the banking system would lead directly to an economic failure. However, the macroeconomic policy relies heavily on the banking system to implement the suitable monetary policies in order to manage the economic activity. For example, in order to control the money supply in an economy, that could be done only via the banking system by different methods, such as, reserve requirement, open market operations, and discount rate. So the mentioned instruments will translate in the real economy by affecting the interest rate and lending. The Qatari domestic banks are operating in the form of the dual banking

system (Islamic and conventional). There are six conventional commercial banks operating in the country besides three Islamic banks.

1.2.1 The Islamic Finance Industry Background

Since our study included two types of banking system (conventional and Islamic), the conventional banking system is well known while the Islamic is a new phenomenon. The Islamic banking industry has been growing rapidly for the past two decades around the whole World, but the growth has mostly been concentrated in the Islamic countries especially in the Arabs region. The expansion of the Islamic banks phenomenon appeared on the surface of the Muslim financial landscape during the 1980s and 1990s, with networks spanning more than 50 countries and an asset base of over \$166 billion,(Kabir. Hassan, 1999). There are also International financial Institutions in Europe and United States, which are adopting some Islamic Instruments to attract investors who prefer to use the Islamic credit instruments, known as ‘window’’. The main feature of the Islamic banking industry is the prohibition of interest in banking transactions. However, interest is the cornerstone of the whole conventional financial industry, but the Quran (the great book of Muslim people) prohibits any transaction that deals with interest. Moreover, Muslim scholars developed Islamic instruments as to be used in all financial sectors instead of using the interest.

In the light of the growing importance of the Islamic finance, and its main anchor the (Shariah) compliant financial products, which is to avoid the interest that is governing the whole conventional banking system. The Islamic banking system provides new Islamic financial products, which are matching the global banking system, but have a little difference in respect of interest. However, for the Islamic

banks to be integrated into the global financial system they must promote the soundness and stability of their Islamic financial services, (Malcom, 2007). So the joint mission of capital adequacy, risk management, and corporate governance should strengthen the integration of the Islamic financial system into the international financial markets and services. There is a difference in terms of financial intermediation between the two types of banks, Islamic and conventional. The conventional banks intermediation is largely interest based, while the Islamic banks are mainly asset based. As mentioned earlier in this study, the Islamic banks do not deal with interest. However, their financing method relies on assets, which will be applied in each Islamic financial instruments. Fore example, in the Musharakah, both parties paying their share as a capital, and then buying an asset in order to resell it. Consequently the return on this type of Islamic instrument, whether it was profit or loss will be shared.

Thirty years have passed since the first Islamic bank was found in Egypt in 1963. Furthermore the Islamic bank phenomenon has been developed gradually. Soon after the main expansion had appeared in the 1970s, whereby the incorporation of the Islamic development bank located in (Jeddah, KSA), was the first international credit agency concerned with giving credit free of interest; which is substantially different from the conventional commercial banks, Rodeney and Wilson, (1990). On the other hand, Dubai Islamic bank was incorporated In 1970s, followed by Faisal Islamic Bank in 1977s, which runs its operation in Egypt and Sudan. Then a year later, the Jordon Islamic bank for finance emerged, and then followed by Qatari and Bahrani Islamic banks. In the late 1990s up to early 2000s the Islamic banks have been spread among all Muslims countries. Furthermore, the international financial

institution keep looking for this newborn system with some of them even attempt to adopt it. So the outlook of the Islamic finance industry has got a really high reputation around the globe. Due to that the western financial institutions have established an Islamic window within their interest based system to serve the investors who prefer these instruments. Whereby, those Islamic windows strengthen the Islamic financial system to be integrated into the global banking system. With respect to globalization of the Islamic financial industry, we can find a lot of Islamic financial institutions which have been chartered abroad, such as; Albaraka investment company which was incorporated in Geneva in 1983s. And in the same year Al-Rajhi, the giant Saudi Islamic bank also opened an Islamic branch in London to promote the Islamic banking industry around the whole world. Finally, we could observe that the early established Islamic institutions have now matured, and have achieved a success in terms of market penetration. There is a well-known saying that imitation is the sincerest form of flattery.

Certainly, it is an excellence on the success of Islamic banks, that many conventional commercial banks are now offering their clients Islamic financial services, (Rodeney and Wilson,1990). There are some financial terms which are widely used in the financial intermediary institutions such as; interest, uncertainty (risk), which correspond to Islamic prohibited transactions like, Riba, Gharar, Maysar respectively. Here in [Table1.1] below, we defined these prohibited transactions.

Table 1-1: Definitions of some financial terms of the two banking system

Commercial Term	Corresponded Islamic Term	Definition of the Islamic Term
Interest	Ribaa (usury)	Is the predetermined proportion in financial transactions
Uncertainty (Risk)	Gharar (deception)	The whole ignorance of the transaction between the buyer and seller
Betting	Maysar	Maysar is a type of gambling

Yet, it is well known that in the financial industry the interest is the main source of the financing activities's returns, and also it represents the cost of borrowing funds. Therefore, the Islamic financial system is to be engaged in the financial industry. Whereby, the Islamic scholars have developed Islamic products with respect to the Shariah Islamic law like Profit and Loss Sharing (PLS), which exist in the (Mudarabah), and mark-up in (Murabaha).

1.2.2 The Islamic Financial Instruments

The previous literature introduces and defines the Islamic instruments. However, their main concentration was on (Murabaha) which represent a lion's share in the Islamic banks financing portfolio. The main question that might be raised is what is the Shariah law, and why do the Muslims follow it?, Garis and Pellegrini, (2006) have explained this question regarding the Shariah as " Islamic law extracted from Quran and Sunna (prophet saying and deeds)".

In their study, they indicate that the first oil price shock in 1973-1974 has led to a surge in liquidity. Therefore, the demand of the Muslim population for financial services that comply with the Shariah principle has been increased, so this has led to

an increase in the financial products. Also, they pointed out that the Islamic finance has helped in strengthening the economic growth in the Muslim world and even around the globe.

The most important distinguishing features of Islamic banks compared to their counterparts, the commercial banks, are their lending methods, famous among which are Mudarabah, Murabaha, Musharaka, Ijara, *qard hassan* (free loan / without profit), Istisnaa (Line of financing). So in this study, we would like to introduce and define these instruments as follows:

Murabaha; (interpreted as cost-plus trade financing): under this mode, an Islamic bank, finances the purchase of commodities, which are requested by their customers and then resell it to them. In this, the Islamic banks added mark-up plus the initial cost of finance. Payment of such financing can be deferred or made in installments. However, actual no losses occur in this type of financing, the customer must pay the initial cost plus the mark up.

Musharaka; which is a participation in financing: under this mode an Islamic bank provides a part of the equity plus working capital of a project and shares in profits or losses (Khaleefa, 1990).

Ijarah; which can be interpreted as rental or leasing financing : this instrument, which has provided the bulk of the operating income of Islamic banks, covers both long-term leasing or lease financing and most growing financing instruments, the short-term hire-purchase, (Iqbal et.al., 1999).

The rewards on the above Islamic instruments would be considered as an investment profit, except for Murabaha, which is considered as an Islamic financing activity. Recently, as innovations in financial products have increased due to the rapid rhythm

of the lifestyle. In addition to, the vast technology development in the whole life aspects. Moreover, there is a need to create new financial products in order to move with the same line with the spirit of the modern life. In this manner, the Islamic banks have developed a new financial product that's satisfying their customers such as, Istisnaa which can be defined as the type of financing applied to manufacturing corporation or firms, as well as in financing construction buildings.

1.2.3 Islamic Finance Industry and Risks

In the mid stages of Islamic banking growth, many claims have been made regarding its performance and risk level, those claims have been highlighted by many scholars and researchers. Therefore, we are going to review some findings of the most important studies in this respect. The main Islamic banking principle is the profit sharing in the loss and profit (PLS), which represented clearly in (Musharaka), the Islamic instrument, which can be defined as, the Islamic bank gives a share in the capital of the operations and the investor also pays his share in the capital. Moreover, the investor is responsible for the managing sphere. Finally the outcomes of the project would be shared between the bank and the investor, whether it was a loss or profit. And from the experience and previous literature the Islamic principle of profit and loss sharing (PLS), is more stable than conventional bank interest-based, (Siddqi, 1983). Moreover, regarding risk exposures the Islamic banks responding in a different way in order to manage and recognize these risks, unlike commercial banks. (Khan, Tariquallah and Habib, 2001), argue that there are a unique risks which might be facing the Islamic banks as well as the conventional, which are; Liquidity risk, Market risk, Credit risk, in addition to Operational risk.

In this context, for Islamic banks the kind of these risks are changing due to the (Shariah) principles. Where the Islamic scholars have developed many alternatives

that far differ from the commercial banks. Islamic banks have experienced special risks due to their result of a different way of operations, and furthermore to the unique asset and liability structures. Islamic banks use two ways to keep reserves so as to mitigate business risk. Hence, these methods are, the retention of Profit Equalization Reserve (PER), and the Investment Risk Reserve (IRR). According to (Khan, Tariquallah and Habib, 2001), the profit equalizer reserve is calculated from gross income before determining the profit among all the beneficiaries. This reserve reduces the actual reward belong to both parties. On the other hand, the second method (IRR) is considered after deducting the share of the speculator. In this, PER lowers the volatility of the returns of the (IAHs) and should be prepared according to the return rate. Archer (1998), stated the importance of (IRR) order to cover expected losses in the funds of (IAHs).

The interest risk is one of the most important obstacles, that worries the commercial bank, therefore, the (CB) are hedging through the (LIBOR) to set their financial price in order to avoid the losses that is emerging from interest rate fluctuation. In the same manner, the Islamic banks have their tool to jump over this problem, in the case of (Murabaha) contract, they set markup added to a fixed risk premium, which would be considered as a benchmark for setting the Murabaha's price. So the Islamic banks immune themselves against the volatility in market interest rate, (Zainol and Kasim, 2010).

On the other hand, the Islamic bank may also be exposed to liquidity risk in many cases. That can be when the condition of borrowing is not reasonable for buying or selling an asset. Since the Islamic banks are not allowed to deal with interest by the Islamic law which governing these banks. Therefore, the only solution for Islamic

bank to survive from liquidity risk is the rational management of their portfolios, in addition to direct injection from the shareholders and depositors (Iqbal, 2005).

1.3 Importance of The Study

There are many studies which discuss the profitability determinants of Islamic banking against conventional banking. However, there are no recent studies regarding the Qatari domestic banks in term of profitability determinants, by taking into account the effect of corporate governance factors, macroeconomic variables, besides the bank-specific factors. Therefore, the main objective of this study is to shed more light on the determinants of profitability of Qatari banks in the form of the dual banking system (conventional and Islamic banks), for the period between 2007 and 2013, while the two systems are running under the same economic conditions. The researcher hopes that the result of this study can be helpful to the Muslim investors, who decide to engage into the Islamic financial instruments. In addition, different parties could benefit such as regulators, and policy makers in order to maintain the weaknesses in the banking system and create a conducive competitive environment, as well as to the bank's managers in the area of management efficiency and market share evaluation.

1.4 Research Questions

This study discusses the determinants of Qatari bank's profitability. Yet, the specific variables of the profitability determinants that will be used in this study are, return on equity (ROE), return on asset (ROA), and net non-interest margin (NNIM), which will be represented in the form of income from commissions and fees over the commissions and fees expenses. Furthermore, for the purpose of the study, we used some financial ratios as determinants or independent variables such as, liquidity ratio, capital adequacy ratio, management quality ratio, asset quality ratio. In

addition, there are four external factors that will be employed in order to see their effects on the profitability determinants. These factors are, corporate governance factors in term of the board of director composition and size, GDP growth and the inflation. As the main subject of this study is to examine the Qatari domestic banks profitability determinants, a lot of questions will be raised, looking for an answer as follows:

- i. Is there is a difference between the two types of Qatari banks in respect to the profitability area, like, ROE, ROA and NNIM?
- ii. What's the type of relation between the profitability determinants, which were mentioned above and the bank's specific factors?
- iii. What are the effects of the governance factors? These will be: the board member as an inside member over the whole board size, in addition to the size of the board
- iv. What is the effects of macroeconomic variables such as the GDP gross and the inflation of the Qatari bank's profitability?

1.5 Research Methodology

The research methodology in this study is an exploratory as well as an empirical study in order to answer the research questions. Also, this method introduces the specific profitability determinants in a form of dependent variables. In other words, the factors that will be on the left side of the regression analysis equation, which will be used in this study. The right hand side of the econometric model, will be the proxy variables in a form of two types: bank specific factors such as, liquidity ratios, capital adequacy ratio, asset quality ratio, management quality ratio, board composition and size, in addition to, the GDP growth rate, board of directors size and the inflation (INF) as macroeconomic factors. All the ratios which are

mentioned above will be examined in a manner of empirical data for the two types of the Qatari banks, in order to see whether these ratios are adequate or not. A sample of six commercial banks, and three Islamic banks are selected for the period between 2007 and 2013. The data will be brought from those banks' financial annual reports, Qatari central bank annual reports, Qatar Stock Exchange annual reports, all of these sources of data are for more assurance regarding the targeted bank data.

Furthermore, panel data and the method of regression analysis will be employed in this study to predict and answer the research questions that have been raised earlier in this study. Moreover, the Qatari banks profitability determinants for the two types of banks will be evaluated. The method and the econometric model will be introduced later in chapter three of this study.

1.6 Organization of the Study

This study comprises of six chapters: Chapter one includes the introduction which provides the main aims of this thesis. In addition to, the research questions, the methodology, as well as the contribution of the study. Furthermore, the second chapter presents an overview of the GCC's economy and banking system. Chapter three includes the previous studies regarding, liquidity, interest-rate risk, asset quality, management quality, capital adequacy, and profitability determinants, which focus on Islamic banking compared to commercial banking in different countries. Chapter four discusses the methodology used in the study, which mainly depends on panel data and regression analysis by using Stata software, while chapter five reviews the result of the empirical study and discussion that will be deployed. Finally, chapter six summarizes the findings as well as giving recommendations for future research.

1.7 Conclusion

The result of our regression model showed that: the bank's specific factors such as liquidity, management quality and capital adequacy are statistically significant against the Return On Equity (ROE). However, the correlation seems to have different directions. Furthermore, for our second dependent variable (ROA), the Islamic banks are different in responding to this variable, and this showed a higher liquidity ratio because the dummy variable we used is statistically significant. Moreover, CAR is negatively affected ROA while LIQD is positively related. Then after, (NNIM) variable showed no difference between the two types of banks. However, the control variables such as, inflation INF, board size (BS), board composition, and GGDP are showing different effects upon the dependent variables. The GGDP and BODS are insignificant statistically to the ROE while the inflation (INF) is significant, and positively affected ROE. Furthermore, the same external factors have been examined against the dependent variable the return on equity ROA, the only one is statistically significant is the BS and positively related the dependent factors. Finally, the dependent variable NNIM is positively related to the corporate governance factors BS and BC, while it does not show any effects of the macroeconomic variables such as the inflation (INF) and Growth Domestic Products Gross (GGDP)

Chapter 2

GCC's ECONOMY AND BANKING SYSTEM

2.1 Introduction

The globalization has placed the banking industry in a direct competition across countries. The commercial banking services has also been existing a long time ago. Therefore, this sector has ability to cope with all the new issues in the banking arena. Also the other part of the banking system is the Islamic banking, which is considered as a new player in this industry. Some Islamic countries have completely adopted the Islamic financial system due to the desires of their Muslim investors, which are complying with Shariah principles. While other countries are adopting the Islamic services partially in the forms of an Islamic window within their commercial banks.

Mansor and Khan, (2008), in his paper states that; the Islamic banking and institutions have acquired booming grounds in the middle east, southeast and south east of Asia, these growing Islamic hubs have acted as a launching pad to promote the Islamic banking instruments in the western business and financial markets. Furthermore, the Islamic banking industry is mostly adopted in (QISMUT) countries, which include Qatar, Indonesia, Saudia Arabia, Malaysia, United Arabs Emirates, and Turkey.

According to the annual report of RGMs, (2013), which is in charge of conducting an annual study, that is highlighting the position of Islamic banking industry in above mentioned countries find out that:

- i. Total Islamic banking assets were 1.7 trillion USD around the whole world in 2012, which include pure play Islamic banks and window players.
- ii. The asset growth for the period (2008-2012) was 16.4%.
- iii. Average profitability is ranging between 12.6 and 20%, compared with conventional banks' average, which was 15%.
- iv. Customers are 38 million.

The ratios above is an important indicator for the Muslim investors who are heavily adopting the Islamic banking instruments. In addition, we could find that an Islamic window, even outside the Muslim countries' borders is available in the west bank's system. Therefore, this is a sign of diversification adopted by some conventional banks in Europe and USA in order to provide an Islamic financial services to their Muslim residents. Also IMF and European central bank keep monitoring the issue of fast growing Islamic financial service industry. Moreover, they are issuing periodically report describing this phenomenon. In this manner, there are a lot of published papers that have investigated the Islamic financial system, and the findings of those studies, mostly agreed about the soundness, safety, and stability of Islamic financial instruments.

2.2.1 Financial System in (GCC) Region (an overview)

The banking system in the Arabs Gulf Cooperating Council (GCC) has shown rapid growth in the last two decades. That is, in fact, due to the huge oil revenue, which reflects into higher GDP per capita growth. Therefore, this study is aimed to examine the determinants of profitability of banks in Qatar as one of an important member of the (GCC) countries. And because of this, Qatar carry-on the features of the (GCC) economic outlook. This region consists of six countries as follows:

Table 2-1: GCC region's Countries

a) King of Saudia Arabia (KSA)	b) Qatar
c) United Arabs of Emirates (UAE)	d) Oman
e) Kingdom of Bahrain	f) Kuwait

All the countries above have an oil resources, higher economic outlook, and high robust growing GDP. However, their banking system is also very strong and stable. The international rating agencies such as, Moodys, Standard and Poors, give most of the (GCC) region's banks an acceptable rating, and some of them have a high rating rank like AA for the short term debt, and this is a sign of a healthy banking system. The (GCC) region reflects a strong financial system supported by huge foreign resources generated from oil exporting. The commercial bank controlled the banking markets. In addition to the strong presence of some banks and foreign financial institutions. In this, we observed that most of the GCC's banks, they have high capital which reflects their financial stability. In addition, the operations of the GCC banks are mostly domestic orientated.

The commercial banks are relying heavily on lending and private deposits, whereas Islamic banks are asset-based. According to RGM's (2013) report, we observed that the foreign banking operations in term of asset and liabilities represent a little share in the GCC's banking foreign operations. For example KSA has lower which is 8.6 per cent, while the Bahraini Banks have the highest one (47%) according to (Espinoza et.al,2010). That is because Bahrain, represents a hub for financial market in the Arabs Gulf Region, which consists lots of foreign financial institutions that deals directly with the global market

Generally, The banking industry phenomenon in (GCC)'s countries is considered relatively young. This industry started to grow after the oil have been explored in the region in the 1970s, and its prices had gone up. Several banks that are operating in the GCC region are government controlled, these are possible by, either through equity participation or direct supervision. The financial institution's ownership is controlled by only a few shareholders. In addition, most of them are from the ruling families everywhere in the (GCC) region. This phenomenon might reduce the threats of the market, because the shareholder would be able to inject additional capital when there is a need. In addition, we can say that the Islamic banking services in the (GCC) countries experience rapid growth over the last decade, except in Oman, because of the absence of Islamic financial services. That's why previous researchers avoid to include the Omani banks in their studies about the Islamic bank's performance in the GCC countries (Islamic finance web).

2.2.2 GCC's Crude Oil and Economy

The GCC countries, are mainly oil-based region with the largest approved crude oil reserve. The working paper of emerging market, ADBI (2012) states that the crude-oil of GCC countries represents 35.7 per cent of the world total reserve. Moreover, the GCC account for 52 per cent of the total OPEC reserve. The oil revenue for these countries represents 73 percent of their total exports, 63 percent of the government's total revenue, and 41 per cent of its GDP. The GCC country's economy is heavily dependent on the oil revenue, which is linking them directly with the international market, while these countries are connected strongly to the international market. In addition, they also carry-on some risks such as; oil price fluctuation, imported inflation, political stability or uprising in the key producers and consumers' countries. In this, the GCC countries are also vulnerable to any risk that could be emerging from global market volatility. Though that's why GCC countries attempt to diversify their source of revenue through their financial sectors such as, banks, mutual funds, and foreign direct investment. In the graphs below, some review of macroeconomic variables regarding the GCC countries, which shows its performance for the period between 2003 and 2010, but did not cover the period of 2012 and 2013 that's due to the availability of data.

According to [Graph 2.1] bellow, which was brought from the GCC economic statistics; 10th edition, 2011, represents the GDP growth for the whole GCC countries. The GDP of these countries was about 400,000 million US\$ in 2003, and gradually has increased to 1,080,000 US\$ in 2008. Then afterwards, it decreased to 900,000 US\$ in 2009, that's due to the international financial crisis, which was erupting in the mid of 2008 and boomed in 2009, after that the GCC gross domestic

production has gone up to 1,100,000 US\$ at the end of 2010, because the global economy has recovered from the financial crisis

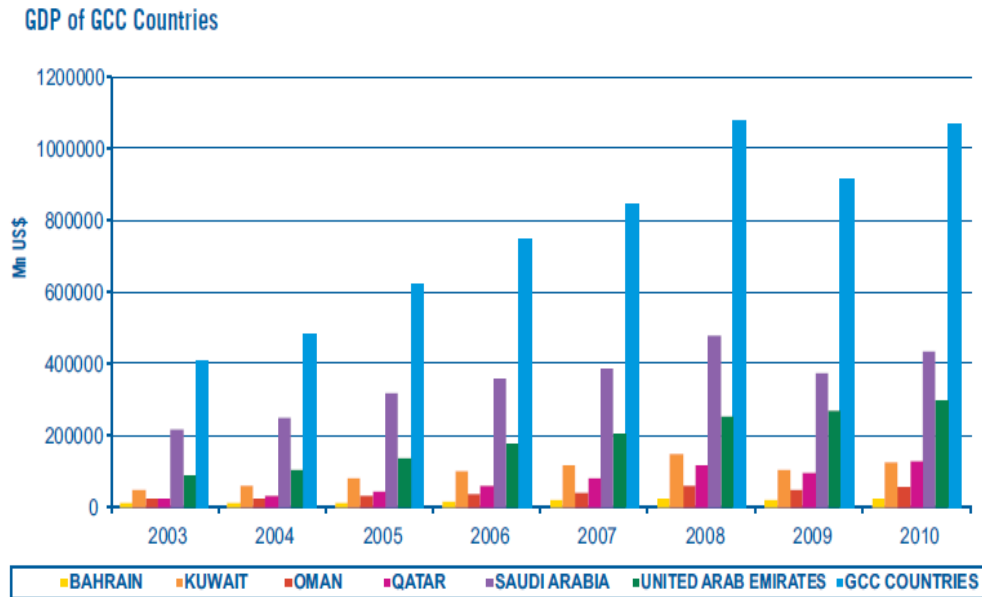


Figure 2.1: GDP of GCC's Countries Source: The Gulf data base

As shown above in the graph (KSA) has the greatest growth rate of GDP followed by (UAE), Kuwait, Qatar, Oman and Bahrain. The difference in the GDP growth is due to the amount of oil produced, which was high in the case of Saudi Arabia, and low for the rest of the GCC's country respectively. The gross domestic product, (GDP) is one of the most commonly used macroeconomic indicators for measuring the total economic activity. Hence, the GDP is attempting to influence numerous economic factors such as, supply and demand for loans and deposits. While GDP growth slows down, particularly during recessions, credit quality deteriorates, and defaults increase, consequently bank returns will be lowered.

In the case of GCC that the government is the main controller of the banks, either by regulations or monetary policy maker. This will affect the bank's position, as the

GDP is an external factor, so it could affect the banking system performance negatively or positively during the economic cycle between the recession and recovery.

2.2.3 GCC's Monetary Policy

The GCC's country's monetary policy focused on maintaining the policy of fixed rate regime with the US Dollar. However, Kuwait de-pegged its currency to a basket of international currencies. Moreover, the GCC region's monetary policies tend to limit its foreign borrowing, in order to keep liabilities at least level, and thus contributed clearly on their long-term stability, whether US Dollar is fluctuated against the Euro, Japanese Yen and British Pound or not. In addition, these countries are the main trading partner of the GCC region. The international oil demand will keep further the growth of the GCC region foreign reserve, which will have a positive effect on their GDP growth. Although, there is a serious debate for establishing an economic and political integration between the GCC countries, like monetary union. Whereas the central bank for this union is projected to be in Riyadh (KSA). This step will lead directly to currency unity as the European union's single currency (Euro). If this happens, it will form a strong economic outlook for these countries. In addition to the political power, these will facilitate and enhance the GCC region position within the international financial organization such as, International monetary fund (IMF), International bank (IB). In contrast, all the conditions for a successful economic unity are available for the GCC countries like, similarity in depending on the oil sector for the general budget. Also, they have same geography and climate aspects, and one religion governs their population, which may lead to similarity and integrity into their economic and

political issues. Since the creation of the Gulf cooperation council in 1981, the main goals it focuses on is the aspects of economic integration.

2.2.4 The GCC's region Population

The population in the GCC region witnessed a steady increase as shown in the [Figure 2.2] below. It was 32 million in 2003, and then after increased gradually up to approximately 50 million people. The large increases in the population number accompanied with the huge boom in oil and gas sector will create a strong market for the banking sector. In addition, about 50 percent of the GCC population is expatriates who are attracted by the golden jobs in the petroleum sectors, (Daily Telegraph, article, 22.11.2012). Thus, the banking sector could make benefit from the big size of population in manners of establishing more drive window (small branches) in marketing centers. Furthermore, the banking sector can take advantage of the population density, most especially the foreign workers who transfer their money outside frequently, and this creates benefits for banks in the form of non-interest income.

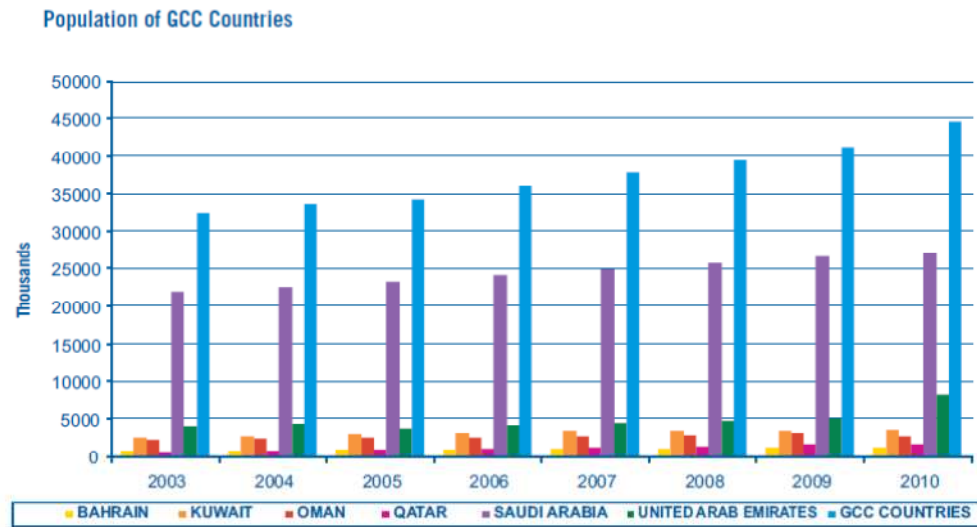


Figure 2.2 GCC's Region Population (in million). Source: The Gulf data base

2.3.1 Qatari Economy (an overview)

As the main subject of this thesis is to conduct a study regarding the profitability determinants of the Qatari banks. We give here some ideas about the Qatari economy. Qatari economy has experienced a fast and huge progress in various economic fields and social welfare in the last decade, supported by hydrocarbon industries. The Qatari government policy is built on the free market policy principle. This policy allowed Qatar to play freely in the international market with the acquisitions of key players of financial institutions in the USA, UK and Europe via Qatar investment authority, which represent the government's investment arm.

According to the Qatar economic outlook report (2013), this annual report confirms the emergent role of non-oil and gas economies in deriving aggregate growth, which one of them is of course the banking sector. The population of Qatar according to the recent census is closed to two million. Hence, from an economic point of view, the increasing in the population leads to an economic growth. In this, the increases in demand for services will hold up the consumer price index (the inflation). Furthermore, the inflation was 3.6 percent in 2012, and the real GDP

growth was 4.8, according to the latest Citigroup forecast. In addition, the same report states that, the financial services in Qatar represent 18.3 percent of the total labor force productivity. Also the Islamic banks in Qatar during 2012 had raised 8 billion (Qatari Riyal) through issuing sukuk (Islamic bond).

2.3.2 Qatari Banking System

The Qatari banking system is comprised of commercial banks, Islamic banks, foreign banks (offshore) operating in the country and other financial institutions. In addition to, non-banks such as, insurance companies, social funds, and mutual funds. Since the aim of this study concern about the profitability of Qatari domestic banks, then it is better to give an overview of the Qatari banks under the two systems. The Qatari conventional banking sector is comprised of six banks as follows; Qatar National Bank, Doha Bank, Alkhaliji Bank, Commercial Bank of Qatar, International bank of Qatar, and Ahli Bank. On the other hand, the Islamic banks are Qatar Islamic Bank, Qatar International Islamic Bank, and Alrayan Bank. In 1993 the central bank of Qatar was established to issue the national currency and to regulate and supervise all banks operating in Qatar in order to execute the country's monetary policy. In addition, Qatar Stock Exchange (QSE) which was incorporated in 1995, for the purpose of promoting the financial industry and to help in transferring the fund between lenders and borrowers.

2.3.3 Qatari Islamic Banks

Qatar has three fully Islamic adopted bank against six conventional banks. The recent report of Qatari Central bank (QCB) , which is showed that the Islamic bank's market share of 33.5 percent of the total market of all Qatari banking sectors with both of its types that are in manner of asset. Furthermore, the Qatari government bans its conventional banks to run Islamic window. Whereby, this step has increased

the Islamic bank's assets. These Islamic banks, namely, are Qatar Islamic bank, Alrayan Bank and Qatar International Islamic Bank.

The most important one among Qatari Islamic banks is the Qatar Islamic Bank (QIB), because of its a huge market share in the Qatari Islamic financial instrument. This bank has 35 percent of the total Islamic banks' market share (measured in a manner of deposit size), defended with a total asset of \$20.1 billion and US\$3. 2 billion as represented in the bank financial report for the year 2012.

In order to promote the Islamic financial industry globally, Qatar Islamic bank (QIB) has established a fully Islamic branch in the United Kingdom since 19882, which is located in the spirit of international financial center (London). The great vision of this branch is to become the leading Islamic financial institution in Europe. The Qatari commercial banks seem to have a big size of total bank's asset in the local market for the period of the study, in addition to, a large amount of loans and equity. Here below are some graphs explaining this position for the both types of banks.

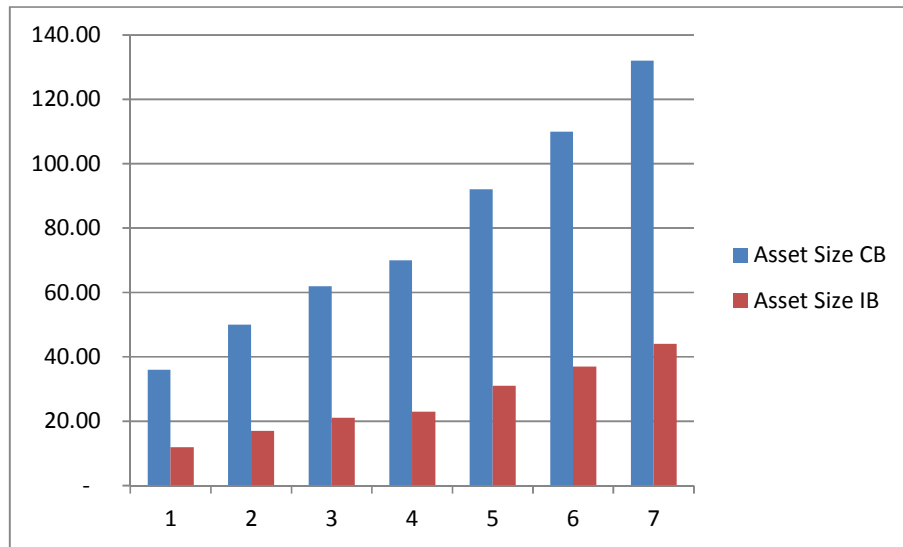


Figure 2.3: Asset Size for IB and CB, constructed by author

According to [Figure2.3] above, the Qatari commercial banks seem to have a greater share of the whole Qatari bank's asset. And because of Qatari conventional banks have been chartered early compared to the Qatari Islamic banks.

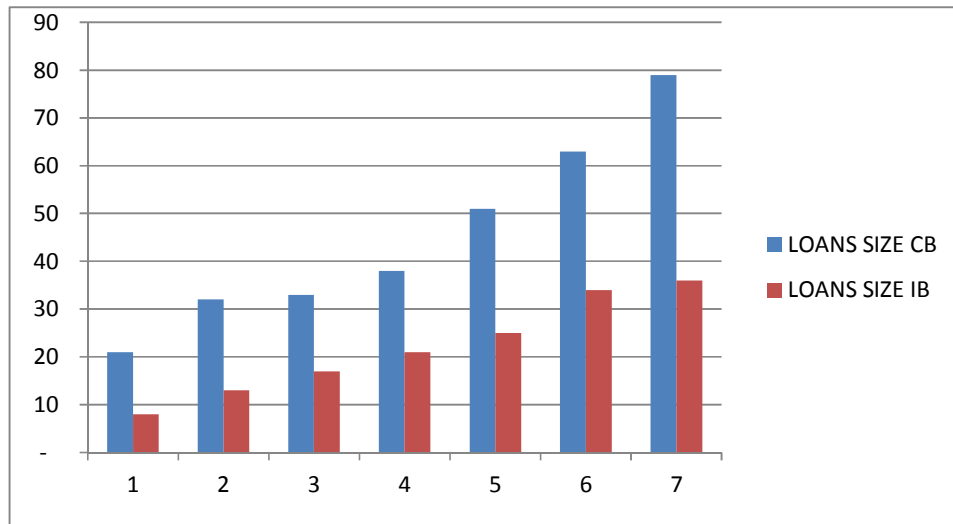


Figure 2.4: Loans Size for IB and CB , constructed by author

Furthermore, with regard to the large capital size of Qatari conventional banks. Hence, their loan size is shown greater than Islamic banks, as seen in [Graph 2.4], above. However, the Islamic banks do not give loan directly to their customers, but in forms of assets as we explained earlier in this study.

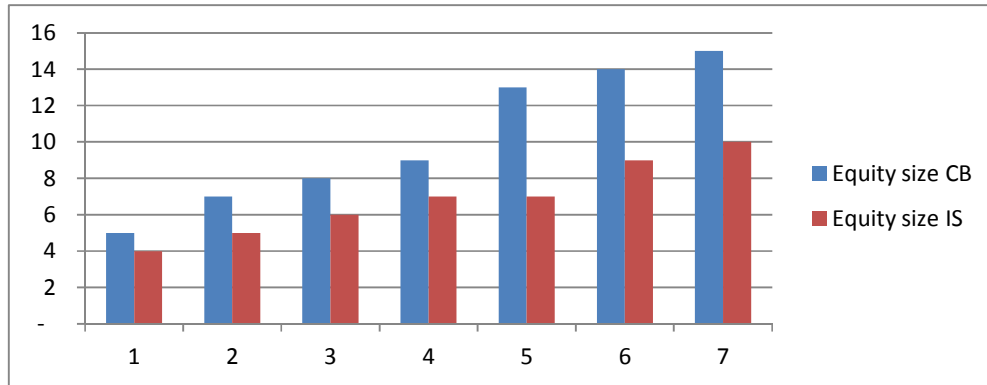


Figure 2.5: Equity Size for IB and CB, constructed by author

As shown in [Graph2.5] above, the equity size showed a little difference between the two types of banks for the period between 2007 and 2010. Then later the commercial banks' equity gradually increased, and also Islamic bank capital has been increased.

Chapter 3

LITERATURE REVIEW

3.1 Introduction

This study is aimed to shed light on the Qatari domestic banks in a manner of profitability determinants. In other words, we would like to investigate the effects of bank's specific factors upon the Qatari domestic bank's profitability determinants, in addition to, macroeconomic variables and corporate governance factors.

3.2 Previous Studies

There are many studies which discuss the performance of Islamic banking against conventional banking which has been issued. Some of those studies are done by, Mokhtar et.al (2006), Iqbal and Anjum (2012). Abdel-Hamed & Bashir (1999), Yudistria (2003), Parashar & Venkatesh (2010), Oloson & Zoubi (2007), Oliver Williamson (1998), Rosly & Abubakar (2003), Sara & Mohamad (2013), Ali et.al, (2011), Wasiuzzaman & Tarmizi (2010), Fotios & Kiryaki (2007), Rami Zeitin (2012), Omar et.al (2007) , Elsayed (2013). Hence, we would like to review the findings of the previous studies regarding the profitability determinants that have evaluated with bank-specific factor, in addition to some external factors.

Mokhtar et. al., (2006), in their study regarding the Islamic banks in Malaysia, for the period 1997-2003. Their findings figured out that, there is an increasing in Islamic financial services, while the commercial banking services were found more

stable. Their outputs have also shown an efficiency in the commercial banks more stable than Islamic banks.

Furthermore, 10 Pakistani banks have been examined by Iqbal and Anjum (2012). Their study covered the period between 2007 and 2010. The bank's specific factors they have used are; return on asset, capital adequacy ratio, and liquidity ratios. According to their results, Islamic banks revealed higher liquidity and capital adequacy more than the conventional banks.

Abdel-Hamed and Bashir (1999), they have studied two Sudanese Islamic banks, they are Faisal Islamic Bank (FISB), and Tadamon Islamic Bank (TIB) in the area of risk and profitability measures. They used regression analysis and they found that the relation between the size and profitability measures are statically significant.

Furthermore, Yudistria and Delight (2003), used non-parametric method and studied the efficiency of Islamic banking performance. They examined 18 Islamic banks from different countries for the period 1997-2000, and they found that the Islamic banks inefficiency is more than 10% compared to conventional banks.

Parashar and Venkatesh, (2010), they examined the performance of Islamic and commercial banks during the financial crunch 2006-2009 in the (GCC) countries, and they predicted that the Islamic banks have performed better in the terms of liquidity, return on average assets, and have lower performance in terms of leverage, capital ratio, return on average equity. However, they finally stated that the Islamic banks performed better all over.

Olson and Zoubi (2007), discussed in their paper, whether the Islamic and conventional banks in the (GCC) region are distinguishable from others on the basic financial characteristics. They collected observations of 141 conventional banks and 96 Islamic banks that operating in the (GCC) region during the period 2000-2005. They used panel data and conducted their study. They found that most accounting ratios are similar for both banks type.

3.3 Corporate Governance Factors

In this study, the financial ratios which rely on the accounting results of the bank's annual report will be used in order to run the comparison. Also a two macroeconomic variable will be added as an external factors such as, GDP growth and the Inflation Rate. In addition, there will be two more external variable such as, Board of Directors Size and composition; which we quoted in this study as (BS) and (BC) respectively. The corporate governance (CG) has become a pressing issue since the 2002 introduction of the Sarbanes-Oxley Act in USA, which is aimed to restore the public confidence in companies and market after an accounting fraud had bankrupted high profile companies such as Enron, and World Com. The (CG) can be defined as “the system of rules, practices and processes by which a company is directed and controlled” Oliver. Williamson, (1998). So, the (CG) works on balancing the interest of many stakeholders in a company, it provides a framework for allowing a company's objective it encompasses practically every sphere of management from action plan and internal controls to performance measurement and corporate disclosure. However, Basel Committee on banking supervision issued a new principle for enhancing (CG) on a yearly basis in 2010, identifying key areas of focus such as; board practices, senior management risks, management and internal control, compensation, disclosure and transparency, corporate structure.

Furthermore, the GCC countries in order to comply with the Basel framework, they have issued their own corporate governance code which goes with the international (CG) code, but with some respect to the circumstances of the region. Moreover, the structure of board member as one of Basel codes, which has been applied in the gulf region is maximum ten board members for each bank. In this regard, many studies have been conducted in order to evaluate the effects of corporate governance factors upon the firms' performance such as, Omar et.al,(2007), they have studied corporation ownership and performance of 660 firms in one year in order to show the corporate governance effects upon these firms, by using simulation equation models. Their finding goes with the previous literature line, that's there is a reverse causality between board of directors and the firms' financial performance. Moreover, they stated that the CEO owner has a positive effect on the company's financial performance. On the other hand, the result also shows that an executive board member has a little positive effect, while non-executive board member did not have effect regarding the financial performance of a company.

A new IMF report edited by Jemma and Maher (2010), they compared the Islamic bank's performance against the conventional banks during the global crisis, and found that the Islamic banks on average, showed stronger resilience during the recent crisis.

Rosly and Abubakar (2003), evaluated the profitability of Islamic banks in Malaysia compared to the mainstream banks. They also used data for the period 1996-2000, and they found that Islamic banks have recorded higher return on asset (ROA).

3.4 Macroeconomic Variables

The macroeconomic variables such as; the inflation rate and GDP are widely used in the previous studies, they are usually used as an external factor, in order to measure their effects on a bank's profitability. Hence, Sara and Muhammad, (2013), they have studied macroeconomic variables such as; INF, GDP and interest rate to see whether they affect the bank's profitability or not, their data are extracted from 15 Pakistani banks for the period between 2002 and 2011, and they found that the chosen macroeconomic variables do not have any effect on the examined banks' profitability.

Furthermore, Ali et.al,(2011), they examined the profitability determinants of the Pakistani Islamic banks during the period 2006 and 2009. In this, they stated that the Islamic bank's profitability has been positively related with the GDP growth and management efficiency, while the inflation has a negative effect on ROA.

Wasiuzzaman and Tarmizi, (2010), studied the Islamic banks specific characteristics and macroeconomic variables for 16 Islamic banks in Malaysia during the period 2005-2008, and they found that the capital and asset quality have an inverse effect on the banks of the study, while the liquidity and operation efficiency have a positive effect.

Fotios and Kyriaki, (2007), have examined the profitability determinants and macroeconomic conditions for 584 European banks during the period 1995-2001, by using panel data, they found that liquidity is statistically significant to the bank's profitability, also they found that the GDP growth and the Inflation are positively

related to the domestic bank profitability, but not to the foreign bank. Rami Zeitin, (2012), had examined 13 Islamic banks and 38 commercial banks in GCC countries, his study covered the period between 2002 and 2008. He used panel data, and, he states that the GDP is positively correlated to the whole bank profitability, while the Inflation is negatively correlated.

Furthermore, Elsief (2013), examined the performance of Qatari Islamic banks in the period pre and post financial crisis. In this context, he states that Islamic banks have been resilient against the financial crisis which erupted in 2008 and boomed in 2009. In addition, his findings also show that the Islamic banks are less profitable compared to the conventional banks, but in the manner of asset quality they are better. However, the Islamic banks are more liquid than the commercial banks. Moreover, in a part of risk indicators the Islamic banks are well capitalized, and they are less leverage than the commercial banks.

Chapter 4

DATA AND METHODOLOGY

4.1 Data

The panel data has been employed in this study in order to conduct the empirical analysis. Therefore, to evaluate the profitability determinants of Qatari banks, Islamic banks vs. Commercial banks. The evaluation of Islamic and conventional banks is made through the analysis of widely used financial ratios which are employed for measuring the banking performance. Such as, Return On Equity (ROE), Return On Asset (ROA), Net-Non Interest Margin (NNIM), Asset Quality ratio (ASQ), Management quality ratio (MGQ), Capital Adequacy ratio (CAR). In addition to macroeconomic factors such as, Gross Domestic Production growth as a percentage (GGDP), and inflation (INF). Moreover, the corporate governance factors will be added in terms of the Board of Directors Size and Composition (BS), (BC). The study covered a sample of 9 banks, which represented all the Qatari domestic banks, which comprised of 3 Islamic banks and 6 conventional commercial Banks. The data were extracted from secondary sources such as, the bank's annual financial reports and balance sheets over the period of 2007 – 2013. To mitigate biases in the findings, the sample included all Islamic and conventional banks located in Qatar, except one Islamic bank (Barwa Bank) because it was just incorporated in 2012. Moreover, the data for this bank is not available. Furthermore, we excluded the foreign bank's branches that operate in Qatar due to its different way of operations. This would also ensure that all the Banks in the sample have

undergone similar levels of economic conditions. In order to tackle the main research question in this study, which is, does the profitability determinants of Qatari domestic banks (Islamic and conventional) are responding differently to the banks specific factors or not?. Moreover, the panel data regression analysis will be used.

4.2 Methodology

The methodology of this study is regression analysis. In order to run a regression analysis, there will be an econometric model which consists of different variables, some dependent variables and others are independent variables in order to examine the hypothesis, which has been raised at the top of this study. So the econometric models that is widely adopted by researchers to tackle their research questions efficiently will be employed in this study. The researcher employed the per mentioned method because of the small numbers of the sample, which includes only 9 banks. The time period for the study is only 7 years. The Stata software program will be used to estimate the regression analysis equation. In addition, standard error robust has been carried out in our regression analysis, in order to clear the possibility of heteroscedasticity and auto correlation. In addition, E.Views is used to evaluate if the variables stationary or not.

The accounting ratios regarding this study are grouped as dependent variables and explanatory variables to create the regression analysis equation. Furthermore, the left-hand side of this equation is the dependent variables like, ROE, ROA, NIM, and on the right-hand side are the explanatory variables.

Yet, likewise the independent variables included internal variables like LIQD, MGQ, ASQ, CAR, BC in addition to the external variables as, GGDP, INF, BS. The table 4.1 below represent the study's financial ratio calculations.

Table 4-1: Financial Ratio Formula

Variable	Formula
Return On Equity (ROE)	Net Income / Total Equity
Return On Asset (ROA)	Net Income / Total Assets
Net-Non Interest Margin (NNIM)	(Commissions and fee income) ÷ (Commissions and fee expenses)
Liquidity to Deposit (LIQD)	Liquid Asset / Deposits
Management Quality (MGQ)	Total Loans / Deposits
Asset Quality (ASQ)	Provision of Loan Loses / Total Loans
Capital Adequacy Ratio (CAR)	(Tier1+Tier2) / Risk Weighted Asset
Gross Growth Domestic Production (GGDP)	Represented as a percentage on a yearly basis for the period of study
Inflation (INF)	Represented as a percentage
Board Composition (BC)	Inside board member/ Board size
Board Size (BS)	A predetermined number by regulator

All the mentioned above variables are framed in the regression analysis equations as below, which will be applied for each profitability determinant variable separately.

$$ROA = \beta_0 + \beta_1(LIQD) + \beta_2(MGQ) + \beta_3(ASQ) + \beta_4(CAR) + \beta_5(GGDP) + \beta_6(INF) + \beta_7(BC) + \beta_8(BS) + \beta_9(DUM) + \varepsilon_t .$$

$$ROE = \beta_0 + \beta_1(LIQD) + \beta_2(MGQ) + \beta_3(ASQ) + \beta_4(CAR) + \beta_5(GGDP) + \beta_6(INF) + \beta_7(BC) + \beta_8(BS) + \beta_9(DUM) + \varepsilon_t .$$

$$NNIM = \beta_0 + \beta_1(LIQD) + \beta_2(MGQ) + \beta_3(ASQ) + \beta_4(CAR) + \beta_5(GGDP) + \beta_6(INF) + \beta_7(BC) + \beta_8(BS) + \beta_9(DUM) + \varepsilon_t .$$

Where:

ROA as, the Return on Assets,

ROE as, the Return on Equity,

NNIM as, commission and fee income over commission and fees expenses

β_0 to β_9 represents the coefficients of the regression equation.

LIQD as, liquid asset to deposits

MGQ as, Total Loans to Deposits.

ASQ as, Provision for Loan Losses over Total Loans.

CAR as, Tier1 +Tier 2 over Risk Weighted Assets.

GGDP as, Growth Domestic Growth Product.

INF as, Inflation Rate of Qatar for the period between 2007 and 2013 on periodical basis.

BC as, Executive Board Members to None Executive Members.

BS as, Board Size for each bank.

ε as, error term in the regression equation.

4.3.1 Dependent Variables

These variables are located on the left hand-side of the econometric model, and their aims are to be examined by the right hand side model's variables with both external and internal factors. Hereafter, we defined each factor of the dependent variables and show how they could be calculated in addition to its importance for both types of banks.

1. Return On Equity (ROE)

This ratio is the most important one amongst all other profitability ratios, which can be measured as a net income divided by total equity. Return on Equity measures a company's profitability by explaining how much profit a firm generates with the

shareholder's money that have been invested. ROE is useful for comparison purposes precisely for comparing a firm's profitability within the same industry. It can also be considered as indicators for current investors and sign of health for potential ones.

2. Return On Assets (ROA)

It is one of profitability indicators, which is concerned with the measuring of the efficiency of a company's management about their usage of assets to generate earnings. ROA is calculated by dividing the net firm's income by total asset. The Return on Assets (ROA) is always displayed as a percentage, sometimes referred to as return on investment (ROI). This ratio is considered as a good indicator for investors on how a company uses the resource of money they have to generate earnings, in addition, high ROA ratio is better because it lead directly to the ability of a company to earn more by using less investment.

3. Net –Non Interest Margin (NNIM)

This variable is represented in this study as income from fees and commissions over the same itemized expenses, which is aimed to evaluate the banks' ability to generate returns from other sources than their ordinary business. So we used this ratio instead of using net interest margin, because Islamic banks do not deal with interest.

4.3.2 Independent Variables

1. Liquidity (LIQD)

Liquidity ratio is one of the most important financial ratio in the banking sector. Liquidity ratio can be defined as the degree at which assets can be easily converted to cash without incurring any loss. Moreover, the Liquidity ratio can be calculated as liquid assets divided by a deposit which represented liquid liabilities. The lack of liquidity in any firms might lead directly to insolvency problems, which is

considered as a sign of bankruptcy. The liquidity ratio must have an effect on a firm either higher or lower ratio. In general the greater the coverage of liquid asset of short-term debt or in other words liabilities, the more likely that a firm will be able to pay back its obligations when they are due. Whereby, a business with a low liquidity ratio might have problems meeting obligations.

2. Management Quality (MGQ)

The management quality is the second explanatory variable in our econometric model, it can be represented as Total Loans over Total deposits. The quality of loans or asset of any banks is very important for investors or depositors and even regulators. As loans are mostly main source of generating profits for any financial institution. Hence, the successes of management in creating a lot of loans with less source of funds would be considered. In this, we can say that the management of such firms are efficient and have a high quality.

3. Assets Quality (ASQ)

Asset quality, our third explanatory variables, is represented by Provision for Loan loss divided by Total Loans (PLL/TL). Historically referred to this factor as portfolio quality. Thus, it can be considered as an indicator of the creditworthiness of the bank. In addition, high ratio indicates that the loans are vulnerable to the defaults. Therefore, we employed this variable, in order to see its effects upon our study samples.

4. Capital Adequacy Ratio (CAR)

This variable is an important ratio, that is used to protect the depositors, and promote stability and efficiency of the financial system around the globe. It is expressed as a portion or a percentage of a bank risk weighted assets. The Basel Committee, which is in charge of all banking issues around the whole world increased the capital

adequacy for bank up to 8%, in a step to protect the depositors and renew the financial system's confidence after the recent financial crunch in early 2008 and boomed in mid 2009. During that crisis a lot of financial institutions have been bankrupted. The Qatar central bank adopted 10% as a capital adequacy ratio for Qatari bank, this ratio can be calculated as; Tier1 plus Teir2 divided by Average Risk Weighted Assets.

5. Growth Domestic Production Gross (GGDP)

There is a lot of debates regarding the effect of the (GGDP) on the bank's profitability factors. The GGDP represented in a percentage periodically. Some researcher assumed this ratio may affect the banking performance positively, while another considered no effects. The Qatar Domestic Production Growth for the purpose of this study was obtained from IMF website, this ratio covering the period of the study from 2007 up to 2013. Moreover, we used the GGDP as an external factor in our regression model, in order to measure its effect on the Qatari bank's performance.

6. Inflation (INF)

The inflation can be defined as a sustained increase in the general level of prices for all goods and services in a country. It is actually measured as a percentage on an annual basis. Hence, the inflation volatility could affect the lending and borrowing price. Therefore, we used the inflation rate in this study in order to see whether it might affect the Qatari banking system performance positively, negatively or no effect.

7. The Corporate Governance Variables (BC), (BS)

Corporate Governance is one of the hottest issues raised up after the global financial crisis. According to Solomon, (2007), he explained this matter as “the check and balance between the roles of the Chief Executive Officer (CEO), and Chair Of the Board of Directors (COB) can be compromised by their consolidation in a single individual with power concentrated in one person, there is a potential of diversification and independence that may impact the overall success of the corporation”. The Qatar central bank adopted the international governance requirement, which one of them is the Board Size (BS), and Board Composition (BC). Therefore, we employed these factors to measure their effect on Qatari bank's performance.

4.4 Panel Unit Root Tests

In order to run the regression analysis, as the main condition of such type of statistical test, the sample data must be stationary. Whereby, the independent variables have ability to explain the left-hand side of the regression equation, or in other words, the dependent variables. In this context, our data has been tested using ADF-Fisher Chai-Square and PP-Fisher Chai-Square unit root test. According to Levin, Lin and Chau (LLC) method, the unit root does not exist in the data. The result of unit root test is carried out in (Appendix A) at the end of this study.

Chapter 5

EMPIRICAL FINDINGS

5.1 Correlation Matrix Analysis

The Correlation matrix table [Table 5.1] what does it tell? . In this sense, we may define the coefficient correlation matrix as the measure of the linear association of the variables among themselves. Whereby, it tells the whole story between the variables, whatever the direction of the relation would be, it might be a positive or a negative relation. In this, all the variable correlations fall with (-1) and (+1). Moreover, the correlation between the variables when it is negatives, the movement would be in the opposite direction, and when it is a positive, however, they move together up and down.

The most important thing in the correlation matrix is; it can measure the multicollinearity between the independent variables. If the correlation between two independent variables is close to zero, hence we can say there is no relation. Therefore, the analysts and managers should consider the result of coefficient correlation early and thoroughly, that in order to take the right decision in an appropriate way.

Table 5-1: Coefficient Correlation Matrix

	roe	roa	nnim	liqd	mgq	asq	car	ggdp	inf	cg	bods	dummy
roe	1.0000											
roa	0.4694	1.0000										
nnim	0.2096	0.5107	1.0000									
liqd	-0.0623	0.5328	0.3332	1.0000								
mgq	0.1001	0.5198	0.2591	0.6968	1.0000							
asq	0.2184	-0.1508	0.0597	-0.3894	-0.3693	1.0000						
car	-0.3695	0.1479	0.1283	0.7379	0.2030	-0.2577	1.0000					
ggdp	0.1848	0.1309	0.0152	0.1077	0.0668	-0.0862	0.0980	1.0000				
inf	0.2799	0.2685	0.0670	0.1778	0.1094	-0.2284	0.2023	0.3763	1.0000			
cg	0.4340	0.1919	0.0780	0.0817	0.2586	-0.2000	-0.1033	-0.0000	-0.0000	1.0000		
bods	0.1198	0.2544	-0.3718	0.0661	0.1491	-0.3222	-0.1204	-0.0000	0.0000	0.4753	1.0000	
dum	0.1346	0.4713	0.0661	0.4079	0.4761	-0.3601	0.0633	0.0180	0.0466	0.0452	0.228	1.

As shown in correlation matrix in the page above, which carried out to predict how the explanatory variables are correlated with the profitability indicators. The independent variable (LIQD) shows a negative correlation with (ROE), hence this finding goes with previous literature, (Etieme and Christopher, 2010). Moreover, this negative relationship, it might be due to the bank's business model or to the state of the economy. On the other hand, the liquidity factor is statistically significant and positively correlated with ROA and NNIM respectively. Whereby, this goes with the previous researchers' findings such as; Fotios and Kyriaki, (2007). In addition, Wasiuzzaman and Tarimizi, (2011) in their studies of Malaysian commercial and Islamic bank's profitability, they confirmed the same result.

The Management Quality variable (MGQ) is calculated in this study as total loans divided by total deposits. The output of our correlation matrix shows a positive relation between the (MQG)'s variable among all the profitability determinants. Therefore, the direction of correlation is positively related to (ROE) but with low correlation, while it is very strong with (ROA) and this is a feature of Islamic banks. However, that is due to the Islamic instrument such as (Musharakah) and (Mudarabah), which is governed by the Islamic principle; profit and loss sharing (PLS), as we found in the regression result for the independent variable (ROA) see table [4.3]. Hence, the findings above goes with the previous literatures findings such as, Ali et.al (2011).

The asset quality variable (ASQ) which is represented in a form of provision for loans and losses divided by total loans, it is a sign of optimally uses of huge asset capacity in an appropriate way in order to generate more earnings. The result of our

correlation matrix output revealed a positive relation between (ASQ) and (ROA, NNIM) respectively, these finding goes the with the previous studies such as, (Faisal and Kasim, 2005). However, the correlation matrix revealed a negative correlation between (ASQ) and (ROE). Whereby, this also confirms the previous literatures prediction. Hence, this is a sign of low quality of loans which lead to increase the provision for loan losses, and this may affect the return on equity negatively. On the other hand, panel root tests, as presented in Appendix table A show that variables of this study are stationary at levels, therefore, regression analysis can be proceeded.

The last one of our bank's specific factor is the capital adequacy ratio (CAR). We observed that the (CAR) is correlated negatively with the return on equity (ROE). Then after, it is positively correlated with the (ROA) and (NNIM) respectively. This confirms the previous literature findings such as, Wasiuzzaman and Tarimzi, (2010). In addition, these findings go in line with the theory of finance, which indicates that the higher capital adequacy ratio the lower the availability of funds for givings loans, which affects the net profit and consequently decrease the ROE.

5.2.1 The Regression Analysis Results for ROE

Table 5-2: ROE Regression Analysis Results (bank-specific factors)

roe	Coef.	Robust Std.Err.	Z	P>[z]	[95% conf. interval]	
liqd	0.02229544	0.0095659	2.4	0.016	0.0042057	0.0417032
mgq	-0.0024432	0.0014221	-1.72	0.086	-0.0052305	0.0003442
Asq	0.2933643	0.6899998	0.43	0.671	-1.05901	1.645739
Car	-0.2317227	0.0844805	-2.74	0.006	-0.3973014	-0.0661439
dummy	0.0065746	0.0160373	0.41	0.682	-0.024858	0.0380072
- cons	0.1808864	0.0259549	6.97	0.000	0.1300156	0.2317571
Number of observations : 63						
Wald chi2 : 271.76						
R-square : within = 0.089						

The Return on Equity (ROE) in this study represented on the left-hand side of our regression model as the first dependent variable in the regression model. The researcher per defined (ROE) in the methodology chapters as the net income over shareholders' equity. The table [5.2] above, review the regression output, which measure the effects of bank's specific variables, in addition to the dummy variable upon ROE. Hence, the LQD is statistically significant and positively related to ROE, while MGQ is statically not significant at 5 percent, but at 10% it is significant and negatively affects the ROE and this confirmed the findings of Wassiuzzaman and Tarmizi, (2010). In their study regarding 16 Malaysian Islamic and conventional banks. They found that, the CAR and MGQ affecting the Malaysian bank's ROE negatively. In addition, they found that the LIQD have positive effects. According to the finance theory, while loans increase the return on equity must be improved, but our study's banks may be giving their loans to unqualified borrowers. Therefore, this will push the non-performing loans up, and then affect the return on equity at the end. Moreover, we observed that, the effect was very limited, because the coefficient of MGQ is -0.0024, and interpreted as; if the MGQ increased one percent, the ROE will decrease 0.0024.

The dummy variable in our regression models which represented by number one [1] for the Islamic bank otherwise is zero [0] for commercial banks. However, the dummy in our first regression results table [5.2] shown non-significancy. Therefore, no difference between the two types of banks in the manner of ROE. Furthermore, ASQ has been found statistically not significant, while CAR is statistically significant and negatively affects ROE, and this matching the findings of our previous referee Wassiuzamman and Tarmizi (2010). If the capital adequacy ratio increase, inversely ROE is decreased and vice versa. And because of this, the

increases in the capital adequacy leads to decreases in the fund available for giving loans. Hence, the loans are the main source of profit, in addition the shareholders will receive less benefits.

5.2.2 Control Factors

Table 5-3: ROE Regression Analysis Results (all explanatory variables)

Roe	Coef.	Robust Std.Err.	Z	P>[z]	[95% conf. interval]	
liqd	0.0292113	0.009819	2.95	0.003	0.0098236	0.048599
mgq	-0.0037554	0.0014567	-2.58	0.01	-0.0066105	-0.0009003
asq	1.526785	0.6282627	2.43	0.015	0.2954128	2.758157
car	-0.3090869	0.0702389	-4.4	0.000	-0.4467527	-0.1714211
bc	0.294166	0.0458195	6.42	0.000	0.2043615	0.3839704
bs	-0.0450249	0.0311358	-1.45	0.148	-0.1060501	0.0160002
ggdp	0.0994074	0.0644402	1.54	0.123	-0.0268931	0.2257079
inf	0.2795261	0.08979728	3.11	0.002	0.1035355	0.4555168
-cons	-0.0450164	0.0503384	-0.89	0.371	-0.1436778	0.0536451
Number of observations : 63						
Wald chi2 : 657.89						
R- square : within = 0.3431						

In order to isolate the effects of a bank characteristics upon the performance. It is necessary to control for factors that have been proposed in this study, as early as possible determinants of profitability. Therefore, we added two groups of factors to enrich our models. These factors are economic factors such as; GGDP and INF. In addition to, the corporate governance factors which are, the board composition (BC) and board size (BS). Table [5.3] shed a light to these control factor effects. The board composition variable (BC) shown as statically significant, and positively related to ROE, while the (BS) is not significant. Whereby, this result confirmed partially the findings of Omar et.al (2007). They examined the corporate governance effects on 660 financial firms in one year in Bangladesh. Moreover, their findings revealed that,

the BC was statistically significant and positively affected the financial firm's performance.

On the other hand, the macroeconomic variables appeared to have a different relation upon ROE. The GGDP is statistically not significant, so this confirms the finding of Sara and Mohammad (2013), while the inflation (INF) is statistically significant and positively affected ROE. Hence, this goes with previous literature such as; (Alexiou and Soloklis, 2009). The higher the rate of inflation the higher the increases in uncertainty, which affects the demand for credit. However, the increases in the inflation rate increases the return on loans, which were priced by fixed rate plus LIBOR. Therefore, banks attempt to manage this problem by reducing the cost of the intermediation, therefore this will reduce the profitability.

5.3 The Regression Analysis output for (ROA)

Table 5-4: Regression Analysis Results (ROA)

roa	coef.	Robust Std.Err.	Z	P> [Z]	[95% conf. interval]	
liqd	0.0092068	0.0040531	2.27	0.023	0.0012629	0.0171508
mgq	-0.0001911	0.0007166	-0.27	0.79	-0.0015956	0.0012133
asq	0.3723592	0.2075083	1.79	0.073	-0.0343497	0.7790681
car	-0.0497173	0.0221426	-2.25	0.025	-0.093116	-0.0063187
dummy	0.0072298	0.0034399	2.1	0.036	0.0004877	0.013972
bc	0.10104789	0.014074	0.74	0.457	-0.0171057	0.0380634
bs	0.0178721	0.0082339	2.17	0.03	0.0017339	0.340103
ggdp	0.0026466	0.0167335	0.16	0.874	-0.0301505	0.0354438
inf	0.0568564	0.0342623	1.66	0.097	-0.0102965	0.1240093
-cons	-0.0052988	0.0200205	-0.26	0.791	-0.0445382	0.0339406
Number of observations : 63						
Wald chi2 : 8741.12						
R-square : within 0.3407						

The Return On Asset (ROA) is represented in this study as net income over total assets, which is widely used ratio by the researchers and financial analysts, in addition to the investors and managers. Furthermore, table [5.4] above shows the regression analysis results. Surprisingly, the dummy variable is seen statistically significant, and positively affected the dependent variable ROA. Whereby, the dummy significance indicated that the Qatari Islamic banks differ from their counterparts the commercial banks in the manner of return on assets. This result confirms the findings of Rosely and Abubakar, (2003). Who then stated that, the Islamic banks have a higher ROA compared to their competitors the conventional banks. Furthermore, LIQD shown statistically significant at a level of 5 % and positively related to ROA. Moreover, the liquidity effects were very limited, which is represented in just 0.009 increases in ROA when the LIQD is increased by 1%. On the other hand, MGQ was found not significant, so we can say that it has no effects upon ROA. The asset quality variable (ASQ) is not significant at a level of 5 %, Capital Adequacy Ratio (CAR) is statistically significant and negatively related to ROA. Hence, this confirmation agreed of previous literature such as, Wasiuzamman (2010). According to his study of Malaysian Islamic and commercial bank performance. With respect to our remains explanatory variables, which were used as a control factors such as; Board Composition (BC), Board Size (BS), Gross Growth Domestic Production (GGDP), and the Infaltion Rate (INF). Whereby, our regression analysis results in the table [5.4] shows that; the (BC) is statistically not significant, while the (BS) variable is statistically significant at a level 5%, and moreover, is positively related to the ROA. In addition, this result confirms the finding of our per mentioned referee, Omer et.al (2007), who revealed that more the board size affects positively to bank's performance. Hence, this result indicated the new issues

regarding the corporate governance argument, exactly after the global crisis has erupted in 2008, and which leads to more governance more financial soundness.

The GGDP does not seem to have any effects on ROA, that due to their insignificance, therefore, this finding confirmed the previous study's result of Sara and Muhammad (2013). In accordance with economic theory, the more growth in GDP will affect the demand for credit positively. And then the banks will increase their portfolio, and this will increase their profitability. While the inflation (INF) is statistically significant and positively affected ROA.

5.4 The Regression Analysis output for NNIM

The net-non interest margin, is represented in this study in terms of fees and commission income over the expenses paid as fees and commissions. That's because of the different way of operations, the Islamic bank does not deal with the interest issues. However, for conventional banks the interest is the cornerstone of its whole operations. As the aims of this study is to compare the profitability determinants between the two types of banking systems in Qatar. Therefore, in order to avoid the biases we used for NNIM the ratio that mentioned above, which is available from the both type of banks.

Table 5-5: NNIM regression results for (specific bank's variables)

nnim	coef.	Robust Std.Err.	Z	P>[z]	[95% conf. interval]	
liqd	0.4008628	0.1077696	3.72	0.000	0.1896382	0.6120873
mgq	-0.0520004	0.0273737	-1.9	0.057	-0.105652	0.0015511
asq	6.497277	5.631624	1.15	0.249	-4.450504	17.53506
car	-2.18943	0.5554482	-3.94	0.000	-3.278088	-1.100772
dummy	-0.1442323	0.3369999	-0.43	0.669	-0.880474	0.5162754
cos	0.6133678	0.2253586	2.72	0.006	0.1716732	1.055062
Number of observations : 63						
Wald chi2 : 445.94						
R-square : within 0.1911						

The above regression analysis, see [Table 5.5] which reveals the bank's specific factors result. Firstly; the dummy variables are statistically insignificant, and that means no difference for both the banks in their NNIM. So we can say that, the banks in our study does not show any difference in a manner of collecting and paying the commission and fees. Secondly; the liquidity (LIQD) is statistically significant, and has related positively to NNIM. Hence, our results are in line with findings confirmed by,(Ronald and Chanelle, 2005). They studied the effects of non-interest income for Barbados's commercial banks. Moreover, they stated that, the higher the liquidity the higher the non-interest income. Hence, they referred that to the terms of technology development which offered the ATM's, and then increased the bank's fee income. The ASQ variable has no effects because it is not significant, While the MGQ is statistically significant and reversely related to NNIM. However, in this matter the management quality variable was calculated in forms of total loans to total deposits. Whereby, the increase in total loans decreases the NNIM, we say that the bank's portfolio composition is loans oriented. Moreover, this finding goes in line with Wassiuzzaman and Tarimizi (2010). Furthermore, the CAR is statistically significant and negatively affects the NNIM. In addition, this also confirms the finance theory, which states that the increase of capital adequacy ratio decreases the funds available for loans. However, the NNIM does not have direct relation with the loans. In this, the effects of CAR would be in term of shortage of the funds available to diversify the portfolio for non-interest items.

Table 5-6: NNIM regression result (all explanatory variables)

nnim	coef.	Robust Std.Err.	Z	P> [z]	[95% conf. interval]	
liqd	0.4273166	0.1675933	2.55	0.011	0.0988398	0.7557934
mgq	-0.0340787	0.036718	-0.93	0.353	-0.1060536	0.0378781
asq	4.844702	5.863421	0.83	0.409	-6.647393	16.3368
car	-2.550437	0.7821248	-3.26	0.001	-4.083373	-1.0175
bc	2.178978	1.099926	1.98	0.048	0.0231627	4.334794
bs	-2.70192	0.4451736	-6.07	0.000	-3.57444	-1.829395
ggdp	-0.4920765	0.628436	-0.79	0.432	-1.720667	0.7365144
inf	0.6123677	0.7804626	0.78	0.433	-0.9173109	2.142046
cos	1.164949	0.6866884	1.7	0.09	-0.1809352	2.510834
Number of observations: 63						
Wald chi2 : 757.29						
R-square : within 0.1255						

The Liquidity ratio (LIQD) is still showing its statistical significance, and also positively related to the NNIM, . This positive relation can be explained as follows; the LIQD ratio in our case was prepared as current asset over current liabilities, if the liquidity is higher, this may affect the ratio of the NNIM positively. However, the banks have received a commission and fees more than paying expenses as a commission and fees. The capital adequacy factor is also statistically significant and affects the NNIM negatively. The corporate governance factors BC and BS, also show statistical significance and affects the NNIM in different directions. The board size (BS) is statistically significant and negatively related to the profitability determinants in terms of NNIM. In this, our findings confirm the previous literature such as, Maria et.al (2009). They examined large European banks, in order to measure the board of directors structure and its effect on the banks' profitability. Their findings showed that the BS is statistically significant and negatively related to the bank's profitability. In this, the larger the board size the less monitoring and the higher the compensation of the board members.

Finally, the macroeconomic variables such as, the GGDP and INF as shown in our regression analysis result, see [Table5.6], they are not statistically significant. Therefore, they do not have any effects on NNIM as one of our profitability determinant factors. And then, this finding goes in a line with the prediction of Sara and Mohamad (2010). In this context, they found that, the inflation and growth domestic product do not have any effects on bank's profitability.

Chapter 6

CONCLUSION

The main goal of this study is to shed light on the Qatari domestic bank's profitability determinants by comparing the two Qatari banking systems, the Islamic and conventional banks. In addition, Qatar has been playing a vital role within the Arabs world in different aspect despite its small size of population. The huge foreign resources which are generated from the hydrocarbon exports has boomed the country's development. Furthermore, we used the bank-specific characteristics in order to measure their effect on the profitability determinant variables. Our methodology was the regression analysis, and we used the Stata Software. Moreover the Hausman test has been conducted, in order to choose the Random-effects or Fixed-effects GLS regression analysis. In addition, we used the macroeconomic variables (GGDP) and (INF) besides the corporate governance factors such as board composition (BC) and board size (BS) as control of the bank's specific factors.

In this regard, our findings state that there are no differences between the two types of banking systems in the aspects of the Return On Equity (ROE), and Non-Interest Margin (NNIM). However, our model output revealed a difference between the Islamic bank and commercial banks on one of the profitability determinants, which is the return on asset (ROA). Hence, we observed that the Islamic bank's performance is better than commercial banks in this manner. Accordingly, the

Islamic banks are promoting the equity financing as their main target, while the commercial bank follows the lending procedures. The higher the ROA ratio is due to the Islamic financing principle, exactly the profit and loss sharing (PLS). Whereby, the 50% of the profits whenever realized are going directly to the investors. Yet, likewise the equity shareholders receive the rest.

The capital adequacy ratio (CAR) was statistically significant among all the profitability variables. Moreover, it negatively affects all the dependent variables in this study. This finding goes with a lot of literature findings in such aspects. In this study the (CAR) variable is presented in a risk oriented form according to Basel indicators. Whereby, this ratio is calculated in the form of Tier1 plus Tier2 over the average risk weighted asset. In addition, this ratio targets the bank's financial stability and soundness. The Qatari banks are well capitalized, the Central Bank of Qatar sets CAR as 10%, however, this is higher than Basel indicators which is 8%.

Regarding the bank-specific factors, our findings pointed out that, the liquidity to deposit variable LIQD was statistically significantly and positively related to all our dependent variables. According to the finance theory the liquidity must affect the profitability negatively. However, our finding is the LIQD positively related to the profitability determinants. This result confirms some previous literature such as, Ali et.al (2011). That is to say the Qatari banks' portfolio composition is comprised of short term loans like the Islamic banks. Whereby, this type of loan decreases the loan's duration, and increases the profit as well as liquidity.

The Management Quality variable (MGQ), which is represented in this study in terms of Total Loans to Deposits (TL/TD), is statistically significant and negatively

affects the ROE and NNIM respectively. In this, we say that the Qatari bank's investment portfolio composition is lending oriented but with low quality loans. Moreover, it does not have any effects upon the ROA. The Asset quality variable is found insignificant at a level 5 % , therefore, it does not have any effects among the profitability determinants. However, from a financial point of view the ASQ in terms of Provision for loan losses to Total Loans (PPL/ TL) must affect the profitability either positively or negatively. In this, we say that due to limited access regarding the data, therefore, sometimes we get an unreasonable result. Furthermore, the most important finding was the Capital Adequacy variables, which revealed negative relation. Moreover, it was statistically significant among all the dependent variables. Regarding the corporate governance factors, our study revealed that the board composition factor (BC) positively affected the Return Of Equity (ROE), and the Net-Non interest margin (NNIM), while it does not have any effects on the Return On Asset (ROA). On the other hand, the Board Size factor (BS) seems to positively affect the (ROE) and (NNIM).

In spite of the Qatari higher Growth Domestic Production (GDP), unfortunately their banks aren't getting more benefits. When we employed the GGDP variable in our study, in order to see its effect upon the banks' profitability determinants. But later our findings predicted that there is no effects on the profitability. Furthermore, the inflation rate (INF) as one of macroeconomics in this study was found positively affecting the return on equity (ROE) and the return on asset (ROA).

However, the inflation factor does not have a direct relation to the net-non interest margin (NNIM). In this regard, we say, the NNIM variable as one of the study's profitability determinant, it was calculated as fees and commission income to the

same factor expenses. And because of that, there is no direct interaction with the inflation factor and the net-non interest margin variable.

According to this study's findings, and with regard to the limited numbers of Qatar population, we recommend Qatari banks to increase their banking operations abroad. And this can be done through chartering offshore branches or acquiring existing financial firms outside the country. Furthermore, the 2022 FIFA world cup will be hosted in Qatar. Whereby, a lot of infrastructure will be built, and this creates additional opportunity for the financial sectors. Hence, the Qatari banks should increase their capital in order to be able to seize this opportunity.

The study's sample size was small, and the time period was only seven years. In this regard, there might be an unreasonable relation between the study's variables. Therefore, in further research, if the bank numbers were increased and more macroeconomic variables were added, the banks profitability evaluation would have been more accurate.

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APPENDIX

Appendix A: Unit Root Test Result

Variables		Levels		
		LLC	ADF-Fisher	Fisher- PP
ROE	τ_T	-8.14*	30.13**	60.44*
	τ_μ	-	-	-
	τ	-2.15*	25.01	44.04*
ROA	τ_T	-10.97*	19.80*	31.03*
	τ_μ	-	-	-
	τ	-3.85*	17.90*	44.43*
NNIM	τ_T	-5.80*	37.82*	57.31*
	τ_μ	-	-	-
	τ	-4.37*	45.13*	40.24*
LIQD	τ_T	0.20	16.66	32.35**
	τ_μ	-	-	-
	τ	-4.16*	30.34**	52.11*
MGQ	τ_T	-5.47*	35.49*	33.10*
	τ_μ	-	-	-
	τ	-0.03	19.93	15.62
ASQ	τ_T	-6.27*	15.69*	10.22
	τ_μ	-	-	-
	τ	0.38	7.16	8.62
CAR	τ_T	-1.28**	27.28***	63.33*
	τ_μ	-	-	-
	τ	-1.75*	18.34	33.95*
GDP	τ_T	-1.14*	51.92*	77.32*
	τ_μ	-	-	-
	τ	-3.02*	20.93	10.52
INF	τ_T	-49.83*	133.55*	37.40*
	τ_μ	-	-	-
	τ	-30.48*	165.78*	88.69*

Note: ROE represents return on equity; ROA is a return on assets; NNIM is a non-interest margin; LIQD is a liquidity; MGQ is a management quality; ASQ is asset quality; CAR is a capital adequacy; GDP is a growth domestic product; INF is the inflation rate . τ_T represents the most general model with a drift and trend; τ_μ is the model with a drift and without trend; τ is the most restricted model without a drift and trend. Optimum lag lengths are selected based on Schwarz Criterion. *, **, *** denote rejection of the null hypothesis at the 1%, 5%, 10% level. Tests for unit roots have been carried out in E-VIEWS 6.0.