

Performance Analysis of Conventional Banks Vs. Islamic Banks in Jordan

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ABSTRACT

This study conducts a comparative performance analysis of Islamic and conventional banks in Jordan. The aim of this study is to analyze and compare the Islamic banks and conventional banks in terms of their profitability and safety. We choose a sample of two Islamic and three conventional banks for our analysis and used the CAMEL rating to compare performance of these two sets of banks. The analysis was conducted for a period of seven years between the years 2005-2011. Trend analysis is also used to examine how the performance of Islamic and conventional banks changed over these seven years. The findings of this research indicate that Islamic banks are performing well in management efficiency, liquidity management and ROA than conventional banks. While, conventional banks appears to have better capital adequacy, asset quality and ROE than Islamic banks.

Keywords: Islamic banks, conventional banks, Jordan, Camel rating, trend analysis,

ÖZ

Bu çalışma, Ürdün'de bulunan İslamik ve geleneksel bankaların karşılaştırmalı performans analizini yapar. Bu çalışmanın amacı İslamik ve geleneksel bankaları, kârlılık ve güvenlik açısından karşılaştırmaktır. Ürdün'de bulunan İki İslamik ve üç geleneksel bankayı örenkleme olarak alarak ve CAMEL değerlendirme methodunu kullanarak İslamik ve geleneksel bankaların performansı karşılaştırılmıştır. Araştırma 2005 ve 2011 yılları arasında yedi yıllık bir süreyi kapsamış ve trend analizi ile bu yıllar arasında İslamik ve geleneksel bankaların performansının nasıl değiştiği de mukayeseli olarak analiz edilmiştir. Bu araştırmaların bulguları İslam bankalarının yönetim etkinliği, likidite ve ROA rasyolarının geleneksel bankalara göre daha iyi olduğunu göstermiştir. Diğer yönden ise geleneksel bankaların sermaye yeterliliği, varlık kalitesi ve ROE rasyoları açısından daha iyi olduğu saptanmıştır.

Anahtar kelimeler: İslam bankacılığı, geleneksel bankacılık, Ürdün, trend analizi, CAMEL değerlendirme yöntemi

To My Beloved Family

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Chapter 1

INTRODUCTION

This study aims to analyze the performance of conventional banks versus Islamic banks in Jordan. The performance is evaluated under CAMEL (capital, assets, management, earnings and liquidity) and profitability (ROA & ROE) models to see which banking system is more efficient and playing an important role in Jordan's banking and financial sector. The study is based on two Islamic banks, Jordan Islamic bank (JIB), Islamic International Arab Bank (IIAB) and three major conventional banks, Jordan Kuwait Bank (JKB), Jordan Ahli Bank (JAB) and Bank of Jordan (BJ).

Banks are the backbone of every country's financial success and they are important for an individual and business to borrow money or to put their saving as deposits. As we know there are two main categories of banking system around the world, first known as conventional and another called Islamic banking system. These both banking systems have totally different approach of generating income. The major difference between Islamic and conventional banking system is the way they treat interest. The Islamic banking believes in free of interest rule and profit & loss sharing instead of interest charges for the loans that they give to borrowers (Arif, 1988).

The Islamic banking system is based on Islamic Shariah Law and governed under Islamic principles that strictly prohibit charging interest to borrowers. In contrast, conventional banks entirely rely upon interest based revenue. In this situation when

Islamic banks are completely acting in different perspective than conventional banks, it is worth to analyze which banking system is more profitable and safe for the customers to put their deposits in Jordan.

Conventional and Islamic banks both have an important role to play in Jordan's financial sector. The study aims to evaluate and compare the performance of Islamic banks and conventional banks in two different perspectives, as mentioned below:

- From the perspective of bank regulators (safety of the banking system)
- From the perspective of bank owners (profitability of the banks)

For each category, we will use different performance indicators. For the bank regulators, we will use CAMEL rating. For bank owners, we will use profitability indicators such as ROA (return on assets) and ROE (return on equity).

This study will be equally useful for the banks' owners and for the bank regulators. In addition the result of this research will indicate whether depositors are better off to put their savings into the Islamic banks or conventional banks. Also, the regulators will benefit from this comparative study as they will be able to compare the Islamic banks with the conventional banks on the basis of CAMEL rating.

The plan of thesis is as follows: chapter two presents the literature review on Islamic and conventional banking system and banks' performance indicators such as CAMEL, ROA and ROE. Chapter three covers the background and overview of the Jordan banking sector. Chapter four comprises the detailed methodology, data resources and study variables. Chapter five will present the analysis.

Chapter 2

LITERATURE REVIEW

2.1 Conventional Vs. Islamic Banks

The Islamic banking structure is established with the aim to comply with the Holy Qur'an teaching regarding the loan. In this system, maximizing the return on investment and assets is not accepted. The model of Islamic banking is governed under Shari'ah law and its fundamental principle is known as a "fair" and a "free" loan system where "fairness" is the primary goal. According to this Islamic rule, investors are free to enter, but with acceptance of Ribba (interest) and Gharar (risky or ambiguous sales) free transactions. For an Islamic bank, it is essential to be a partner in the business instead of giving a loan as in the conventional banks. The management structures of both banking systems are also different. Islamic banking must fulfill the Shari'ah rules and values of the Islamic community by following Islamic financing rules (Suleiman, 2001).

Conventional banking system in contrast depends on a present rate of interest. Banks are generally working as a mediator. They take money from savers with the condition that they will pay interest to the savers. Banks lend this money to borrowers and charge higher interest to them. In reality, the debtor-creditor relationship is the actual connection between banks and their customers. Banks act sometimes as a debtor and sometimes as a creditor. The bank is debtor, when it takes money from depositors but

it is accretor when it makes loans for borrowers. This conventional banking system aims to maximize profit and making high profit is their first priority relative to others (Chong, Beng Soon, & Liu, Ming-Hua, 2009).

The Islamic banking system works according to “Shariah Law” and make efforts to fulfill economic needs by providing interest free services. No individual should get the profit from others loss, this is the main value on the basis of which this system works. The declaration of the comeback from capital must be placed in one bearing the danger involved in creating the return. In the Muslim religion, interest is considered as a bigger sin than eating Haram (things not allowed to eat) or drinking alcohol (according to an Islamic holy textbook, Sunan-ibn-Majah).

In conventional banking system, no matter whether bank benefit from depositor’s money or not, they have to pay the interest amount to depositors anyway. This way, conventional banks carry some sort of risks, while the depositors enjoy interest amount on their deposit. On the other hand, borrowers also totally put themselves at risk, whether they benefit from the loan or not, they have to return the loan and interest amount as well. In contrast, Islamic banking system put more emphasis on risk sharing through an asset-based strategy, while the conventional banking system only believes on transferring the risk (Imam et. Al, 2010).

Cihak and Hesse (2008), in their study stated that the Islamic banking shares the risk, according to Mudaraba and Musharakah (fair participation). They also elaborate that in the Islamic banking system banks tolerate all economical risks and borrower is completely carefree of any loss or other factors that influenced banks’ business.

However in this system, the bank is solely responsible for any loss or gain and it doesn't affect depositors or borrowers in any aspect. In short, Islamic banks tolerate all consequences of loss and creditors and depositors only enjoy the benefits.

Hasan and Dridi (2010), in their studies proved that Islamic banks have more preference than conventional banks due to its interest free and loss sharing policy. The biggest difference between both Islamic and conventional banking is that unproductive assets, bogus securities and all other factors that negatively harm customers is prohibited in Islamic banks. The first thing is that, these investments are firstly not allowed in "Shariah Law" and are considered as gambling and making profits by speculating on the movement of money. As a result contradictory practices, Islamic banks and the whole Islamic system have higher capital ratios, also Islamic banks are less leveraged, minor investment portfolios, and a small volume dependency on deposits (Hasan & Dridi, 2010).

2.2 Bank's Performance Analysis Indicators

Many researchers have investigated about the banks 'financial performance with the help of various techniques such as financial ratio analysis, CAMEL rating analysis and trend analysis worldwide.

The performance evaluation of banks is equally crucial for banks' customers, regulators and owners. These all are known as the stakeholders of the bank and banks' performance analysis results to help them determine whether to deposit or invest their capital in those banks or not. Specifically, in times of competitive financial market this information works as a guideline for all of them. Although, bank managers can also take advantage of it by improving banks deposit or loan policy for the betterment

of their financial system. To monitor either bank is working well enough to meet banking system standards, regulators also used this performance analysis around the world (Samad and Hassan, 1998).

The performance analysis of Islamic banks of Bahrain has been performed by Samad (2004). The analysis has been performed in terms of credit risk, liquidity management and profitability ratio. In his study, he found that Islamic banks are performing much better than conventional banks, even though; Islamic banking system just introduced a couple of years earlier in Bahrain. With the help of t-test he concluded that there no significance difference for both banking system in terms of profitability and liquidity management (Samad, 2004).

The conventional and Islamic systems of Pakistan have been compared to evaluate their performance by Ashraf & Rehman, in 2011. They selected following five financial dimensions, including: Liquidity, income, profit, assets and credit risk ratios for their study analysis for the period of 3 years (2007 to 2010). Their study results prove that due to the higher operating expenses and inefficient management, conventional banks are performing much better than Islamic banks in Pakistan (Ashraf & Rehman, 2011).

A study has been done by using the CAMEL rating system to review the performance of not just conventional and Islamic banks but also mixed banks as well. The study conclude that the capital adequacy, asset quality, efficient management and earnings, Islamic banks have the higher rates in these all than other banking systems (Kouser and Saba, 2012).

The six conventional and Islamic banks have been taken to evaluate their performance analysis in Arab League countries for the period of 2005 to 2010. Assets, deposits, shareholders' equity, operating income and expenses, and profit ratio have been used as independent variables in the study analysis. The test has been performed in regulators' perspective to see ROA and ROE of both banking systems and the driven results shows that in comparison of conventional banks, Islamic banks have more return on assets and equity. The findings also show that the major financing source for conventional banks was borrowed funds, while Islamic banks were relying on equity. Overall, conventional banks were gaining more operating income than Islamic banks (Siraj & Pilai, 2012).

A CAMEL analysis of Islamic banks of Malaysia for the period of 1997 to 2003 has been done to review financial analysis of the overall banking system. According to the study results, Islamic banks were doing well to manage their deposits and assets efficiently and had a strong financial base. The study investigated that Islamic banks expanded rapidly in that period and stabled its positions in Malaysia but conventional banks were performing much better than Islamic banks (Mokhtar, et al.,2006).

For the period of 2005 to 2009, the financial performance analysis has been performed for conventional banks of Jordan. The end results being driven under regression analysis. In order to fulfill the study aim, ROA and return on interest income have been used as dependent variable while, bank size, operational efficiency, and asset management used as independent variables. The final results proved that

banks with higher ratio of total assets, deposits, equity and credits don't always have more profit (Almazari, 2011).

Conventional and Islamic banks of Pakistan, for the period of 2006 to 2009 have been analyzed for their profitability ratio (ROA & ROE). The study found that Islamic banks' performance is not significantly different than conventional banks in terms of capital. Though, in terms of liquidity Islamic banks were more liquid and in this aspect they had the lowest risk and also had a better income ratio. Thus, overall results were in favor of Islamic banks then conventional banks (Ansari and Rehman, 2011).

A massive comparative study of almost 6,562 branches of 48 banks of Bangladesh has been done for the period of 1999-2006. The CAMEL rating system had been used to evaluate financial performance of all branches. According to CAMEL rating, 3 banks out of 48 banks were rated better, 31 banks were rated as average, 7 banks were rated just good enough, 5 banks were rated as marginal and 2 banks obtained a poor rating (Nimalathan, 2008).

The conventional banks of Bangladesh have been analyzed to for the period of 1980 to 1995. The major aim of the study was to see the contribution of Bangladeshi conventional banks in the economy. The study reveals that conventional banks are performing well enough in terms of profitability; the collective result was near 0.09% for the entire period. The overall results conclude that conventional banks' performance was not fair enough in various aspects. However, it has a great

contribution and role in the entire economic development of Bangladesh (Siddique and Islam, 2001).

Chapter 3

BACKGROUND OF JORDAN BANKING SYSTEM

3.1 Overview of Jordan Islamic and Conventional Banks

The Islamic banking system started in Jordan approximately two hundred years ago, right since it is playing a key role in Jordan's financial and economic sector. The first conventional bank started with the Arab bank in early 1900's. In 1964, the Central bank of Jordan developed and was responsible for note issue, credit regulation and management of exchange assets. The CBJ function is to monitor and control the transaction processes of overall conventional banks and finance to build new financial institutions in Jordan. Therefore, we can say CBJ is a financial monetary agent for Jordan government. At the same time with the expansion of the government, the number of financial institutions increased and tripled. Arab countries were more interested to deposit their capital, savings and payments that used in supplying loan (JIR, 2005).

1980s was an era, when Jordan had significant value in the Arab World due to the expansion in its GDP and bank assets. In 1985, conventional bank assets increase from \$1.1 million to 2.3 billion, while total deposits rose up to \$1.7 billion, Central bank succeeds in saving and increased profit up to 7% and the liquid capital also rose to 900 million. In that era competition in the banking sector increased, due to the expansion of banks. Therefore, the expansion of new conventional banks in Jordan banned by central bank of Jordan (JIR, 2005). In the late 1980s, 8 conventional, 2

Islamic, 6 foreign and some small financial institutions were operated in entire Jordan. By the end of 2004 the number of institutions increased to 24 and 8 out of 24 banks was foreign, 14 were conventional and 2 were Islamic banks (JIB, 2005).

In Jordan all the financial dealings, are done through the banking sector. The banking sector of Jordan is entirely owned privately and it is well developed and very efficient. There is a very good network working throughout the kingdom and all 500 plus branches and 79 representative offices of Jordan perform all their transactions and operation under this network. Consequently, according to the directory of inhabitants shows approximately 10.2 thousand customers for each bank branch of Jordan. Although, the foreign branches of Jordanian banks reached up to 129 till the end of 2007. 24 of these 129 branches were being operated in the Palestine(CBJ, 2008).

2007 was a successful year for the Jordanian banking sector with aspect to capital. The year ended up with \$2,578.0 million growth. It was all due to the stable economic and political situation. In the following year private banking sector's deposits also reached up to \$1,232.4 million. While, foreign liabilities increased by \$577.3million. Moreover, the substances of unclassified liabilities & capital and reserves & allowances reached up to \$356.4 million respectively (CBJ, 2008).

For the expansion of banking sector credit accesses most important. The entire banking sector of Jordan was growing and progressing till the end of the year 2008, because a supply market bubble in the production it fuelled the general profitability. In addition, due to the fast growth of the real state sector, the banking sector was able

to take advantage to expand credit. Similarly, all other development projects required extensive financing. During this time, in the stock market, the business associations and individuals aggressively asking for more loans for additional investment funding (CBJ, 2008).

The main pillar of the Jordan's financial system is its banking sector. In spite of the overabundance of events that have been taking place since the beginning of the year 2011 and subsequently the Arab spring, the well-capitalized and extremely synchronized banking sector proved durable, maintaining its extension and enlargement during the first half of 2013.

3.2 Banking Sector Size

The entire banking sector of Jordan is comprised of 26 banks, with an approximately 695 branches across the country. These all branches are categorized into two main groups by the central bank of Jordan. These groups known as a foreign bank branch group and the national banks branch group and each of this group contain on both conventional and Islamic banks. The below mentioned figure 1 shows the structure of the entire Jordan banking sector.

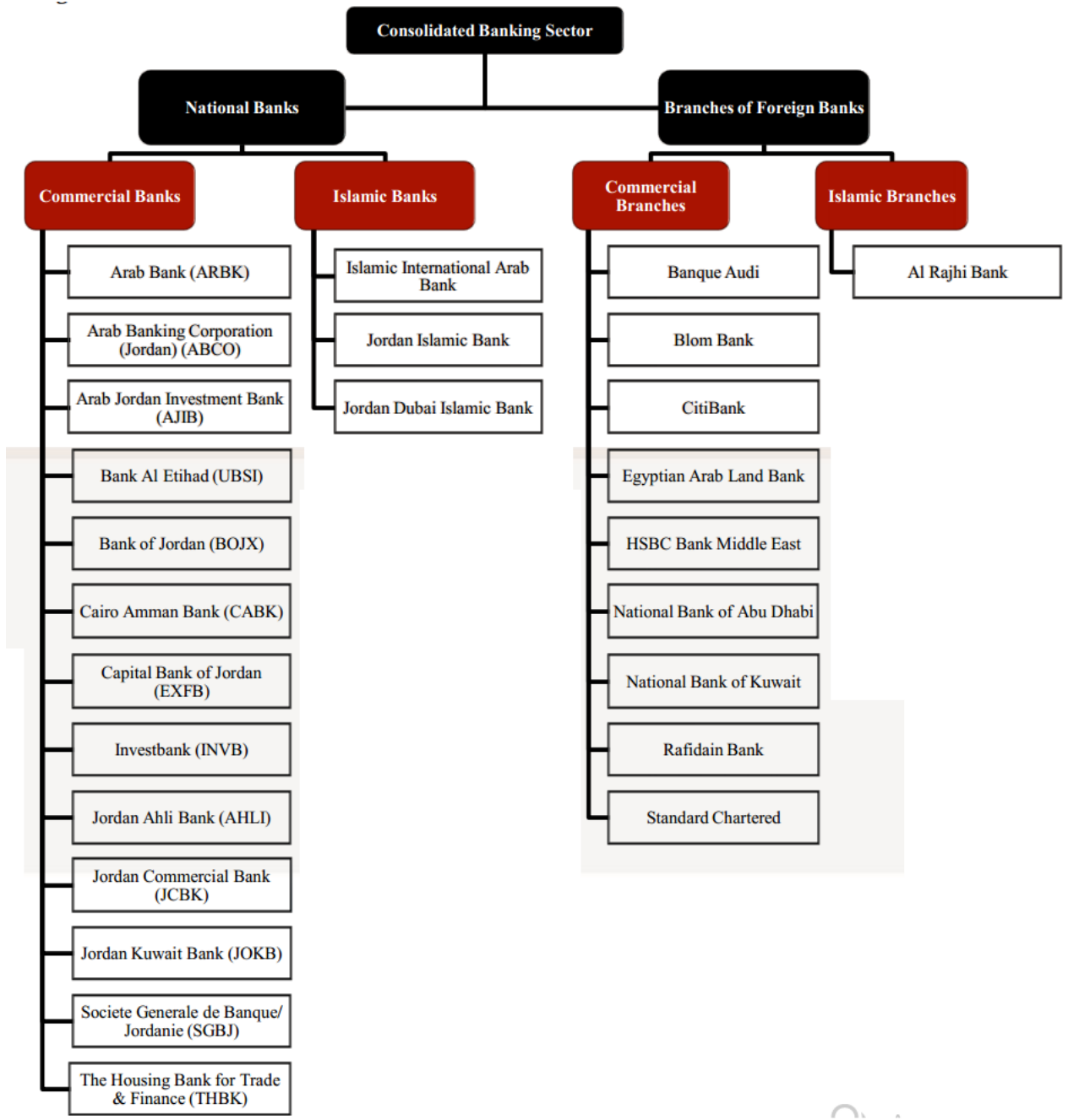


Figure 1: Banking sector of Jordan

3.3 Consolidated Balance Sheet

This section presents the consolidated balance sheet of the banking sector in Jordan in two predefined groups as national banks and foreign banks including conventional and Islamic banks in Jordan.

Table 1: The Consolidated Balance sheet of banks in Jordan (**Note:** amount in US\$)

	2007	2008	2009	2010	2011	2012 (May)
Foreign Assets	6,516.5	5,810.3	5,309.7	6,105.5	6,285.4	6,573.5
Cash in Vaults	96.1	125.7	98.1	14.5	135.3	212.1
Balances with Foreign banks	5,295.7	4,531.6	3,192.4	3,897.5	4,298.6	4,646.5
Portfolio	372.6	333.5	817.0	816.2	637.5	512.1
Credit Facilities to private sector	309.7	536.4	945.3	1,020.1	974.0	955.0
Other Foreign Assets	442.4	283.1	256.4	256.2	240.5	247.8
Domestic Assets	20,299.	23,96.3	26,647.	28,868.6	31,400.5	31,245.9
Claims on Public Sector	3,077.4	4,353.1	5,203.4	5,686.3	7,402.7	8,157.9
Claims on Private Sector	10,985.5	12,514.5	12,674.4	13,593.7	14,905.2	15,435.9
Claims on Financial Institutions	176.6	246.1	166.1	146.4	128.1	115.8
Reserves	3,630.7	4,013.4	6,009	6,477.8	5,639.0	4,236.4
Deposits with CBJ in Foreign Currencies	472.2	573.0	409.3	411.2	527.4	605.8
Unclassified Assets	1,956.6	2,286.2	2,185.0	2,553.2	2798.1	2,694.1
Total Assets	26,815.6	29,796.6	31,956.9	34,973.1	37,686.4	37,819.4
Demand Deposits	3,372.6	3,785.1	4,436.7	5,053.8	5,807.1	5,994.4
Time and Saving Deposits	9,999.7	11,639.3	12,816.5	14,377.3	15,272.2	15,490.0
Foreign Liabilities	4,793.2	5,522.2	5,674.8	5,990.8	6,614.0	5,752.8
Central Government Deposits	526.7	561.1	780.9	665.8	637.4	624.5
Credit from CBJ	436.3	373.1	371.7	414.6	449.0	564.5
Capital Assets CBJ	436.3	373.1	371.7	414.6	449.0	564.5
Unclassified Liabilities	4,146.4	4,112.3	3,501.5	3,521.1	3,959.5	3,831.6
Total Liabilities	26,815.6	29,796.6	31,956.9	34,973.1	37,686.4	37,819.4

Source: The Central Bank of Jordan (2013)

3.4 Regulatory Environment of the Jordanian Banks

The Jordanian banking sector operates under the Central Bank of Jordan (CBJ). At present, 80 people are working as specialized regulatory and administrative employees at CBJ. The major source of financing for CBJ is the government. CBJ operates as an independent regulatory supervision. In recent years, the Jordanian conventional banking industry has undergone frequent changes in laws and set of laws for the idea of bringing the banking sector operations in procession with global standards. After 1993, the CBJ de-regulated interest rates and liberalized the financial sector. It also introduced up to date prudential regulations (Bdour and Al-khoury, 2008).

To make sure that Jordanian banking sector regulations are up to international standards the CBJ implements firm controls on the financial institutions. These rules consist of bank payments, foreign money transactions, administrative and securities dealings, conventional papers, large and domestic loans, asset sufficiency, risk-based provisioning, domestic controls, liquidity supervision, expenditure issued by debit/credit cards, and deposit insurance. Surrounded by this regulatory atmosphere, there are no controls on deposit or lending charges. For the new banks (domestic and foreign), banks must accomplish a number of conditions: registration as a public shareholding company, the fee of the license, the appearance of a comprehensive business plan, minimum capital of \$40 million for domestic banks and \$20 million for branches of foreign banks, similar in permanent home country regulation, in addition to other conditions (see articles 6-20 of the Jordanian Banking Law, 2000). One time licenses have been allocated, there are limitations on banks' ability to sell or arrange these licenses.

Foreign banks have extra licensing necessities. For example, the bank must be approved to admit deposits in its home country, enjoy good quality status and must have a well-built economic position, and also have the permission of the proficient authority in the country of its head office to function in the empire.

Key features of the rules consist of minimum capital requirements of 12 percent for the foreign banks, whereas it is only 8 percent for the local banks. Prudential rules on the loan repayment require banks to report their loans which are not paid back over 90 days due. Banks are required by loan to take their bad loans off their assets and hold provisions for them. By Law, for all banks, it is mandatory to have deposit insurance arrangement and declare their financial statements at least once a year or semiannually. The CBJ is Jordan's lender of the last report and it is available for nationwide owned banks and for the foreign banks. Banks are subject to have annual off-site inspections and regular on-site visits.

Chapter 4

DATA & METHODOLOGY

4.1 Data

This study used the published data that are provided by banks in their official websites. We used banks 'balance sheet and income statement' to obtain raw data for our analysis. The data were extracted from the 5 Jordanian banks, including 3 conventional banks and 2 Islamic banks for the period of 2005 to 2011.

4.1.1 Data Sample

Below are the chosen 5 banks for this study.

Islamic Banks

- Jordan Islamic bank (JIB)
- Islamic International Arab Bank (IIAB)

Conventional Banks

- Jordan Kuwait Bank (JKB)
- Jordan Ahli Bank (JAB)
- Bank of Jordan (BJ)

4.2 Methodology

In order to analyze the performance of the banks, two models were used. First, CAMEL rating system is utilized to evaluate banks' performance from the regulators' perspective. Secondly, profitability analyses are performed from bank owners' perspective. For the efficient financial analysis of banks, these two models been used

often.

4.2.2 CAMEL Model

CAMEL stand for capital adequacy, asset quality, management efficiency, Earnings ratio and Liquidity management. These terms are defined below in detail:

Capital Adequacy: Capital adequacy ratio is usually achieved by dividing total shareholders' equity from total assets. This capital adequacy actually shows the banks' capital or weighted assets ratio to its risks that defines how well the bank is capable against to its risks (Chen, Guo, & Huang, 2009).

Asset Quality: This ratio illustrates the banks' ability to handle outstanding loans. Since making loans for borrowers have always been a major concern of banks and also it is a major source of minting money for banks. In this regards banks need to maintain their asset quality and it can be achieved by dividing non-performing loans to total loans.(Chen, Guo, & Huang, 2009).

Management Capability: Management efficiency of any bank can be evaluated by operating ratio, expenses and profit per labor or employee and gross earning assets to total assets. The bank considered healthy in financial terms, when it has sufficient profit as compared to its expenses. The management ratio actually expose, if the bank is properly using liabilities and assets internally (Apostolos et al, 2011).

Earning Ability: According to the CAMEL model earning ability of banks can be determined by ROA and ROE:

- **Return on Assets (ROA):**It reveals how much profit a company earns for every dollar of its assets. Assets include things like cash in the bank, accounts receivable, property, equipment, inventory and furniture. ROA is calculated like this:

$$\frac{\text{Annual Net Income}}{\text{Total Assets}}$$

- **Return on Equity (ROE):**Return on equity is a sign of a bank's best profitability management. This ratio actually indicates bank's profitability in term of shareholder's Equity. It shows well shareholders are earning over their investment amount (Gul et al. 2011).

$$\frac{\text{Annual Net Income}}{\text{Average Shareholders 'Equity}}$$

Liquidity Ratio: In this study the CAMEL two ratios of loan to deposit ratio and liquid asset to total deposit ratio are examined to find out the liquidity position of the Islamic and conventional banks. Liquidity management ensures the bank's ability to meet its short-term and long-term funding commitments while achieving optimal return on investments(Apostolos et al, 2011).

4.3 Data Analysis

The data analysis will be performed with the help of a statistical technique called "trend analysis". Trend analysis uses past data to predict future outcome, that can be achieve pursuing various cost and performance variations. This technique mostly used in project management field for project outcomes (Ac. Coach, 2013).

Chapter 5

FINDINGS AND ANALYSIS

This chapter presents the performance analysis of both Islamic and conventional banks of Jordan. According to financial management theory, bank's performance can be evaluated using various financial ratios, for example, profitability ratios and liquidity ratios. In this study, the analysis of each banking system is done in two aspects: first the CAMEL rating system and secondly, profitability ratio with the help of trend analysis.

5.1 Analysis under CAMEL Model

5.1.1 Capital Adequacy

The capital adequacy is measured with the formula: Total Equity/Total Assets

Table 2: Capital Adequacy of Islamic & Conventional banks (in US\$)

Year	Islamic Banks		Conventional Banks				
	JIB	IIAB	Average	JKB	BJ	JAB	Average
2005	5%	14%	10%	7%	10%	11%	9%
2006	8%	11%	9%	11%	10%	12%	11%
2007	8%	12%	10%	11%	11%	10%	11%
2008	9%	10%	9%	12%	11%	10%	11%
2009	8%	11%	10%	13%	11%	10%	11%
2010	7%	8%	8%	16%	12%	9%	12%
2011	7%	8%	8%	15%	11%	10%	12%

Source:(CBJ & ASE, 2013)

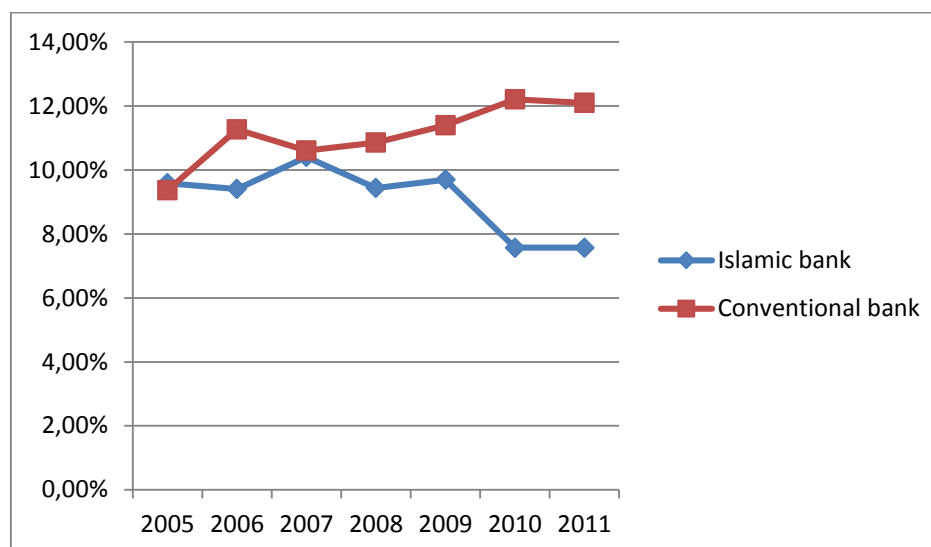


Figure 2: Capital Adequacy of Islamic & Conventional Banks (2005 – 2011)

Figure 2 shows the capital adequacy ratio of both Islamic and conventional banks of Jordan from the period of 2005 to 2011. The figure illustrates that the capital ratio of Islamic banks is less than conventional banks in respective years. Thus, results prove that conventional banks are efficiently managing its capital to protect its depositors and lenders.

5.1.2 Assets Quality

The asset quality ratio of both banking systems is achieved by the following formula:

Non-Performing Loans/Total Loans

Table 3: Assets quality (NPL) ratio of banks (in US\$)

Year	Islamic Banks			Conventional Banks			Average
	JIB	IIAB	Average	JKB	BJ	JAB	
2005	13%	18%	15%	14%	5%	29%	16%
2006	13%	14%	14%	13%	6%	21%	13%
2007	12%	12%	12%	10%	7%	18%	12%
2008	11%	13%	12%	10%	7%	15%	11%
2009	12%	12%	12%	10%	7%	14%	11%
2010	10%	9%	10%	10%	8%	11%	10%
2011	10%	9%	9%	7%	9%	10%	9%

Source: (CBJ & ASE, 2013)

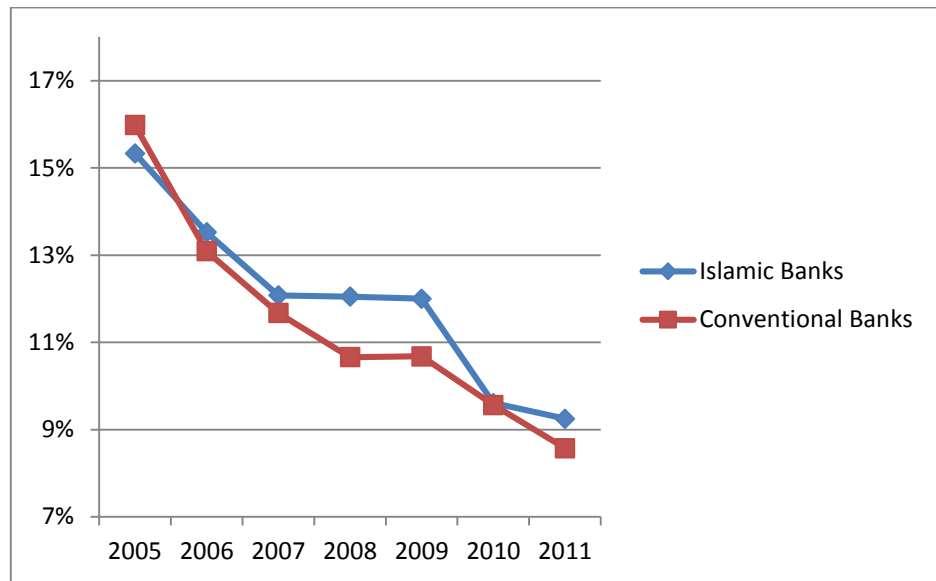


Figure 3: Assets quality ratio (NPL) analysis of banks

Figure 3 presents the non-performing loans (NPL) ratios of both banking systems, which shows that conventional banks have a consistent decrease in their NPL rate. Right since from the year 2005 conventional banks reduced their bad loans more than the Islamic banks. In particular during the financial crises period between 2008-2009 it appears that conventional banks managed their asset quality better than the Islamic banks.

5.1.3 Management Efficiency

There are various ratios to check the management efficiency of banks. In this study we use income per employee and expenses per employee (based on availability of data) to find out management efficiency ratios of both banking systems.

Table 4: Management efficiency based on Income per employee (in US\$)

Year	Islamic Banks			Conventional Banks			Average
	JIB	IIAB	Average	JKB	BJ	JAB	
2005	8,982	13,154	11,068	43,389	15,607	16,599	25,198
2006	10,329	26,512	18,420.5	44,891	16,634	12,926	24,817
2007	14,286	32,643	23,464.5	57,757	14,810	7,289	26,619
2008	21,256	17,878	19,567	57,332	18,755	10,179	28,755
2009	15,891	35,857	25,874	74,810	47,026	11,581	44,472
2010	15,907	43,620	29,763.5	82,561	58,114	14,361	51,679
2011	14,881	47,006	30,943.5	59,754	64,391	14,172	46,106

Source: (CBJ & ASE, 2013)

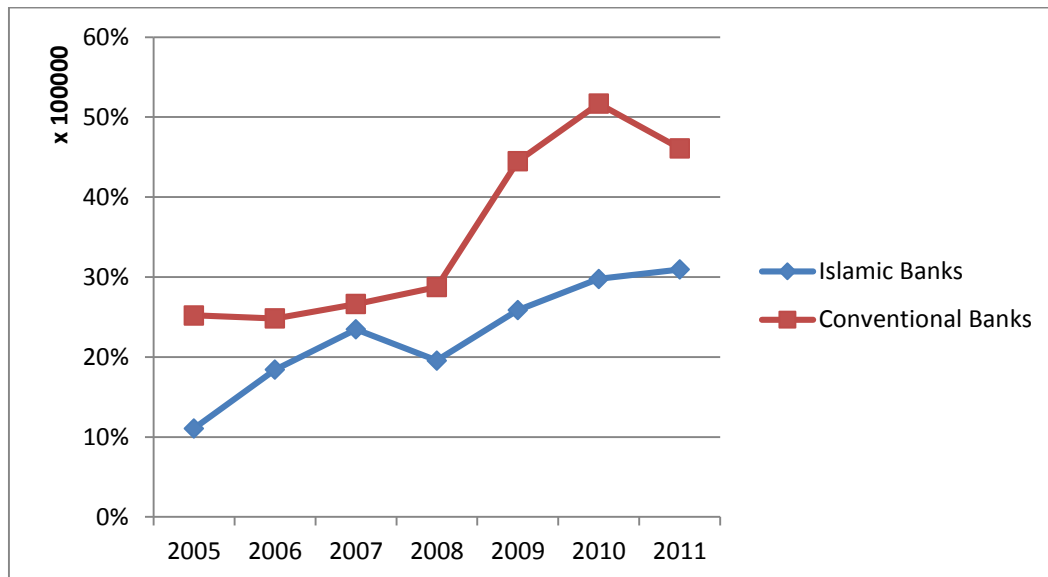


Figure 4: Management quality on the basis of per employee income

Table 5: Management efficiency based on Expense per employee (in US\$)

Year	Islamic Banks			Conventional Banks			
	JIB	IIAB	Average	JKB	BJ	JAB	Average
2005	17,129	21,581	19,355	32,013	23,698	39,892	31,868
2006	16,992	21,292	19,142	25,105	22,409	28,807	25,440
2007	18,076	31,634	24,855	40,288	26,052	44,893	37,078
2008	25,504	31,440	28,472	54,514	25,895	36,979	39,129
2009	16,521	25,622	21,072	95,740	26,472	38,252	53,488
2010	17,042	25,076	21,059	61,455	31,789	45,020	46,088
2011	20,241	23,509	21,875	80,418	35,966	47,296	54,560

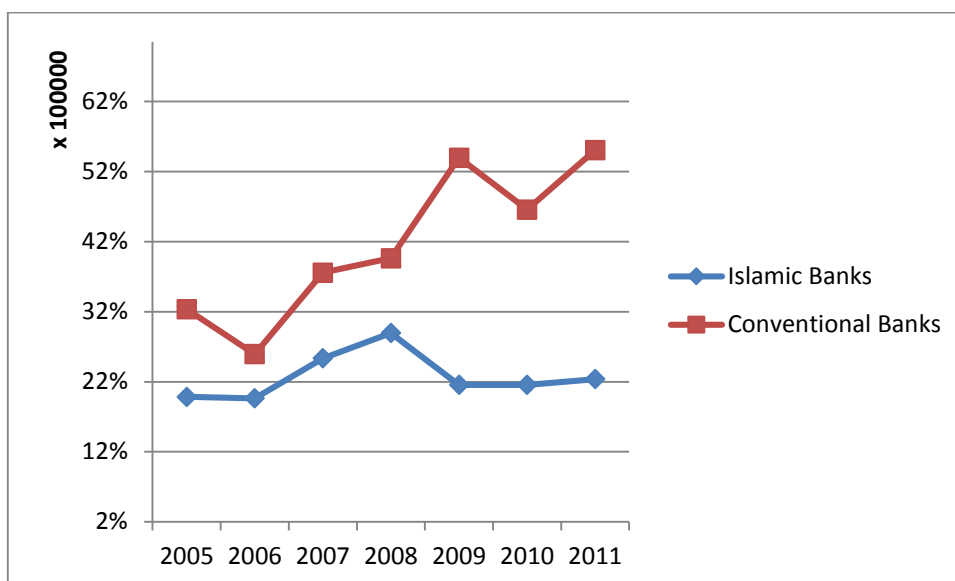


Figure 5: Management quality on the basis of per employee expense

The Figure 4 shows that the conventional bank is earning much better than Islamic banks on the basis of per employee. While figure 5 shows the management efficiency ratio of Islamic banks based on per employee expense is better than conventional banks. Comparatively Islamic bank's management efficiency ratio is higher than conventional banks, because conventional banks per employee earning is quite equal to their per employee expense, whereas, Islamic banks per employee income ratio is higher than per employee expense. This shows that Islamic banks are efficiently managing their operating expenses and income.

5.1.4 Liquidity Ratio

The liquidity ratio for both banking systems is derived as total loans/total deposits which shows banks liquidity based on loan to deposit ratio.

Table 6: Liquidity ratio analysis of banks (in US\$)

Year	Islamic Banks			Commercial Banks			
	JIB	IIAB	Average	JKB	BJ	JAB	Average
2005	49%	51%	50%	76%	55%	39%	57%
2006	47%	48%	48%	97%	59%	43%	66%
2007	45%	51%	48%	83%	63%	43%	63%
2008	49%	44%	47%	83%	62%	55%	67%
2009	48%	35%	42%	69%	57%	55%	60%
2010	46%	38%	42%	80%	61%	53%	64%
2011	47%	42%	45%	71%	64%	57%	64%

Source: (CBJ & ASE, 2013)

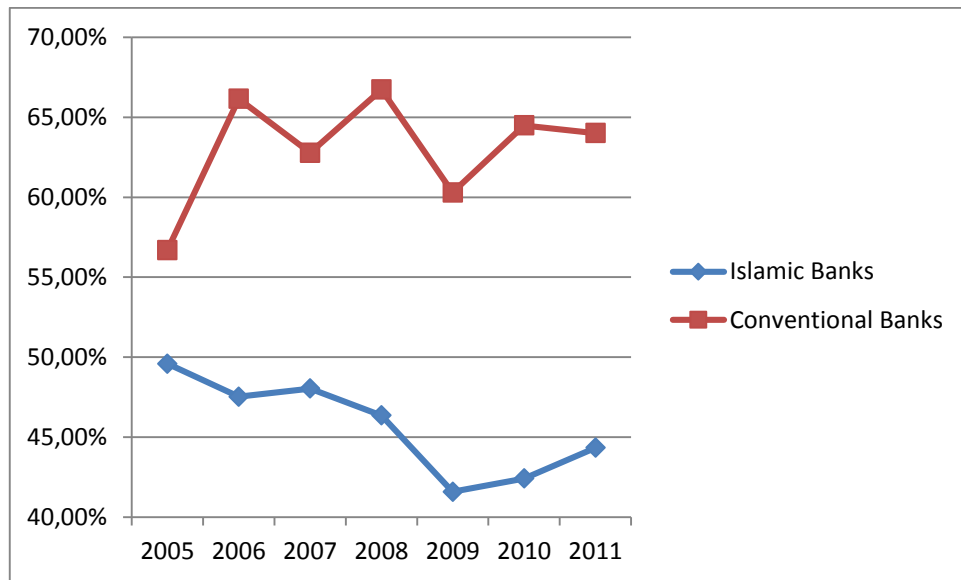


Figure 6: Liquidity ratio analysis of Islamic and conventional banks of Jordan

As liquidity means to have enough liquidity in the bank to deal with short term financing needs, like deposits withdrawals. Figure 6 shows that the loan to deposit ratio for both systems was higher in 2005, but after that, there is linear decrease for both banking systems. However, in comparison to conventional banks, Islamic banks have lowest ratio which it means a higher liquidity in comparison to the conventional banks.

5.2 Profitability Ratio or Earning ability

Profitability or earning is the major concerns of any bank's owner that can be defined on the basis of return over assets and returns on shareholders' equity. This section covers the banks' performance analysis according to owner's perspective. The amount to evaluate the earning ability of both Islamic and conventional banks is driven under ROA and ROE.

5.2.1 Return on assets (ROA)

The return on assets is calculated as: $ROA = \text{Annual net income} / \text{total assets}$

Table 7: ROA Ratio of Islamic and Conventional banks (in US\$)

Year	Islamic Banks			Conventional Banks			Average
	JIB	IAB	Average	JKB	BJ	JAB	
2005	0.97%	0.97%	0.97%	1.98%	0.05%	1.52%	1.18%
2006	1.06%	1.39%	1.22%	2.43%	0.04%	1.16%	1.21%
2007	1.44%	2.00%	1.72%	2.25%	0.06%	0.55%	0.95%
2008	1.90%	2.15%	2.03%	2.38%	0.05%	0.83%	1.08%
2009	1.28%	1.50%	1.39%	2.10%	0.04%	0.83%	0.99%
2010	1.12%	2.08%	1.60%	2.51%	0.04%	0.91%	1.15%
2011	0.98%	2.70%	1.84%	2.00%	0.05%	4.27%	2.11%

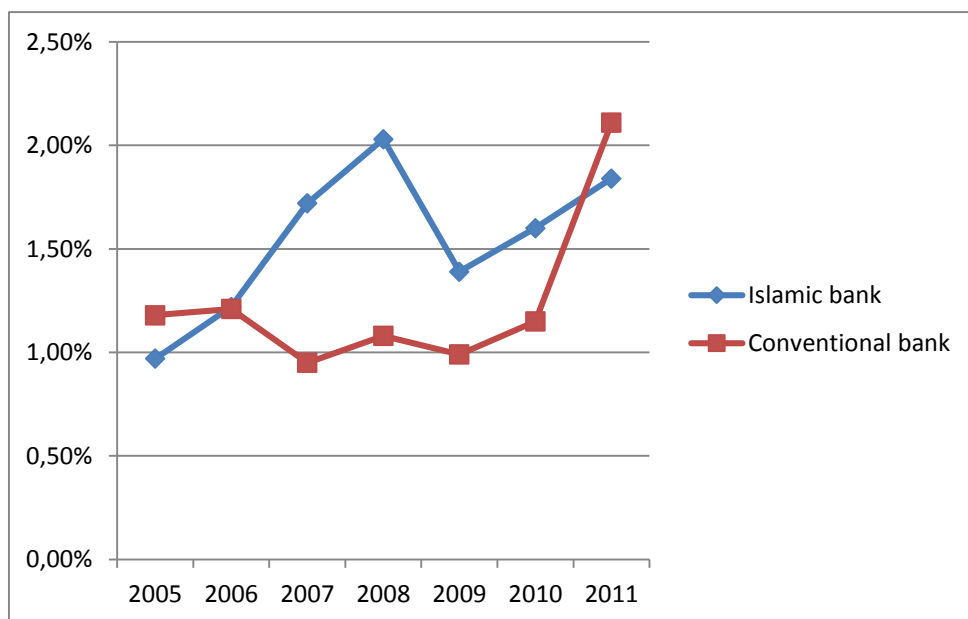


Figure 7: ROA ratio analysis of banks

The return on assets ratio for the conventional banking system is unstable, in 2005 it was around 1.2% and then it declined to 0.95%, again, it increase 1% in 2008 and there was ups and downs till 2010. However, 2011 was the most significant year with 2.1% of earnings on assets. On the other hand, Islamic banks earning was 1% only that reached up to 2% 2008 but it again declined in 2009 and 2010 but with a bit increase in 2011. 2008 was a significant year of ROA ratio for Islamic banks. Overall Islamic banks performed a much way better than conventional banks throughout all the period of 2005 till 2011.

5.2.2 Return on Equity (ROE)

The return ratio over equity is calculated as follows:

$$\text{ROE} = \text{Annual net income}/\text{shareholders 'equity}$$

Table 8: ROE ratio analysis of banks (in US\$)

Year	Islamic Banks			Conventional Banks			
	JIB	IIAB	Average	JKB	BJ	JAB	Average
2005	18.86%	6.93%	12.89%	27.12%	0.47%	14.02%	13.87%
2006	13.42%	12.71%	13.07%	21.39%	0.43%	9.51%	10.44%
2007	17.24%	16.02%	16.63%	20.93%	0.58%	5.48%	8.99%
2008	21.86%	21.18%	21.52%	20.50%	0.40%	8.57%	9.82%
2009	15.77%	13.26%	14.52%	15.66%	0.38%	8.65%	8.23%
2010	15.03%	26.95%	20.99%	16.09%	0.35%	10.06%	8.83%
2011	13.69%	33.74%	23.72%	11.00%	0.42%	43.88%	18.43%

Source:(CBJ & ASE, 2013)

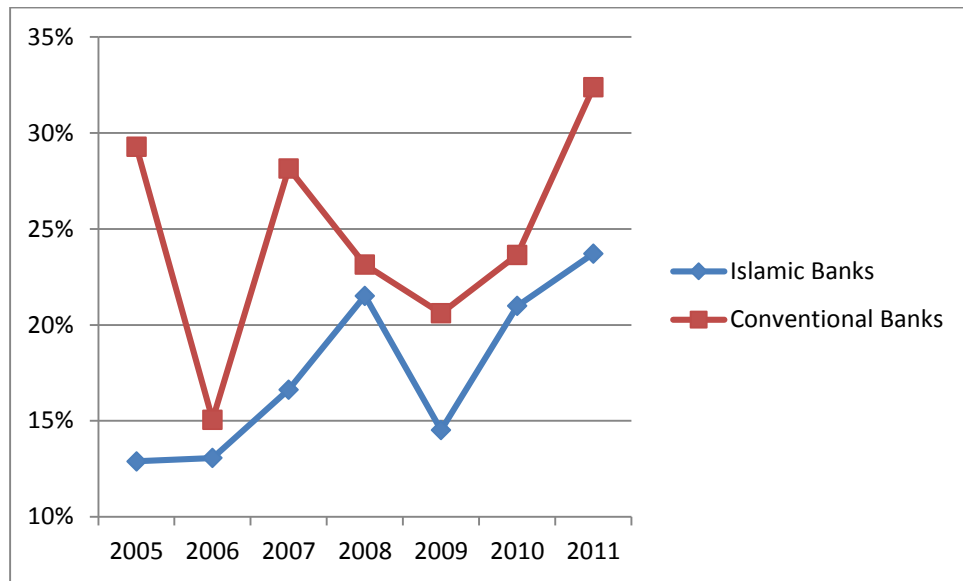


Figure 8: ROE ratio analysis of Islamic and conventional banks of Jordan

The average return on shareholders' equity for both banking systems from the period of 2005 to 2011 is shown in Figure 8. The figure clearly demonstrates that there is a significant increase in shareholders' equity for conventional banks than Islamic banks. However, only 2011 is the year, conventional banks made more than 100% earning on equities. If we compare both systems 'earnings ratio of equities for the entire period, it's visible that conventional banks are performing better than Islamic banks.

Chapter 6

EMPERICAL RESULTS

The Jordan's Islamic banks and conventional banks' performance have been compared in two major perspectives: First in regulator's perspective and secondly in owner's perspective. The CAMEL test variables such as capital adequacy, asset quality, management, earning ability and liquidity position for a period of 2005-2011 have been evaluated.

6.1 Results Analysis in Bank Regulator's Perspective

Capital availability to handle uncertain situations or risks to protect lenders and depositors' money, asset management to make more loans, higher interest income than interest expense, sufficient return on assets and shareholders' equity and better liquidity position to meet short and long term funding are the major concerns of bank regulators. If banks are able to manage at least three of these variables, it shows they are performing well enough to comply with financial laws and regulations (Jose A. Lopez, 2008).

The capital adequacy results as conducted in the previous section clearly show that Islamic banks needs to improve its performance in terms of their capital. During the entire period conventional banks had highest capital adequacy ratio, while Islamic banks' adequacy was consistently around 7% and 9%, which is lower than conventional banks. The trend analysis, as shown in figure 2 indicates continuous declined in Islamic banks adequacy and a constant increase in conventional banks'

adequacy. The adequacy ratio was 9.37% for conventional banks in 2005, and gradually it reached up to 12.10% in 2011.

The asset quality ratio is much higher for Islamic banks than conventional banks. In 2005, when Islamic banks have a 15.34% ratio, the conventional banks' ratio was 15.98%, there was not much difference, but in 2008 conventional banks' ratio came down to 10.66% which is much lower than Islamic banks' ratio of 12.05%. Thus, conventional banks' performance is much better than the Islamic banks in managing assets' quality.

The Islamic banks are leading in management quality by not spending much capital on operational expenses. As lower this ratio would be, the better the performance will be considered. Thus, the driven results in previous section shows Islamic Banks's management ratio between 3 to 3.8% throughout all periods. While, conventional banks had a lowest percentage of 3.86% in 2005, that increase up to 9.34% in 2010, and there was small decrement in 2011 with 0.01% of the ratio. Islamic banks maintaining the same level of management capacity, conventional banks on the other hand failed to do so, as there is a significant increase in the amount they spend over operational expenses.

The results of the liquidity ratio analysis are also favorable for Islamic banks. There is a huge difference between both banking systems in regards of liquidity ratio. The liquidity ratio for conventional banks rapidly increasing, there was no any single improvement noticed in the entire period of 2005-2011. However, the ratio is also increasing annually for Islamic banks as well, but it is still much lesser than

conventional banks. The last ratio for Islamic banks was 44.34% in 2011, while 64.02% were for conventional banks. Hence, Islamic banks have better liquidity management and are capable to meet any uncertain funding requirements.

6.2 Results Analysis in Bank Owners' Perspective

As we already mentioned that owners' are more concern with profit and loss over their assets and deposits, thus result driven in the previous section from ROA and ROE are parallel for both banking systems. Islamic banks are earning good enough on their assets, while the conventional banks are earning more on their equity. Although, an increase in year basis in ROA and ROE ratios for both banking system is noticeable. The increment on assets return is favorable, but not in the equity case. The highest ratio of return on assets was the 2.03% of Islamic banks and 2.11% of congenital banks. In the aspect of equity both banking systems had highest ratios just in 2011.

Chapter 7

CONCLUSION

The performance evaluation of any bank is crucial to measure its development and its capability of meeting all financial rules and regulations. It is customary in banking sector to evaluate their objectives and goals. The main objective of banks, as most conventional institutions, is profit maximization. On the other hand, Islamic banks also have other objectives besides making or maximizing profits, namely to foster economic and social well-being and to ensure that there is no exploitation of the customers. Both systems have totally opposed business frameworks.

As the aim of this study was to evaluate the performance of Islamic and conventional banks of Jordan, to see which banking system is playing better role in the growth of Jordan's economy. The Jordan banking sector is one of the world most active banking sectors, it consists of 13 conventional and 3 Islamic banks. The overall sector is playing a vital role in economic growth. The "CAMEL model" has been used in order to achieve study objectives. The CAMEL model describes the bank's performance in different aspects such as capital, assets, earning, management and liquidity. The bank needs to meet the criteria of each CAMEL factor.

To fulfill the study aim, 5 banks (2 Islamic and 3 conventional) have been selected to evaluate their performance under the CAMEL rating system. The data of each bank were collected from banks official website, annual financial reports and mostly from

central bank of the Jordan for the period from 2005 to 2011. To provide a clear picture of results trend analysis has been used. According to the analysis Islamic bank is performing well in management efficiency, better liquidity management and return on asset than conventional banks. While, conventional banks have better ratio of its capital, assets and return on equity than Islamic banks. Thus, the overall results demonstrate a tie between both banking systems, because in some aspect conventional banks are performing better than Islamic and in some cases Islamic banks are doing well. In short, we can conclude that both banking systems are playing their role at their best to contribute to the economy. According to the CAMEL testing system banks are doing well if they meet 3 of its criteria, but banks will be considered at a superior level if they meet all the criteria.

The biggest fact about the both banking sectors is their different way of business process and earning. We have already seen by reviewing various articles and studies about differences of both banking systems, which is a big feature that effect on their performance results. As both banking systems have different vision, mission, objectives and procedures of business operation, it's hard to say why one is better in asset management, while other one in equity return. The results indicate that both banking systems are better in their own aspects, if we consider their business policies. Thus, both are doing well, but in terms of financial regulation both banking system should improve their performance in all aspects.

Islamic banks should improve their capital adequacy ratio and assists quality, also should work on return on equity more to gain profit. Conventional banks should consider revising their policy, especially in the area of liquidity ratio, management efficiency and return on assets. Conventional banks need to reduce their operational

expenditures in order to increase management efficiency and liquidity quality.

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APPENDICES

Appendix 1: Total Assets for Islamic Banks (In US \$).

Total Assets	Jordan Islamic Bank	Islamic International Arab bank
2005	1,342,362,381	391,116,270
2006	1,462,609,231	574,758,562
2007	1,598,135,334	593,987,017
2008	1,848,373,078	906,311,975
2009	2,183,062,940	104,778,297
2010	2,603,683,927	1,133,111,480
2011	2,098,300,754	1,127,482,501

Source:(CBJ, 2013)

Appendix 2: Total Assets for Conventional Banks (in US\$).

Total Assets	Jordan Kuwait Bank	Jordan Ahli Bank	Bank of jordan
2005	1,986,420,567	1,674,647,045	1,182,082,026
2006	2,326,885,355	1,740,841,639	1,376,230,654
2007	2,844,467,709	1,976,151,767	1,455,719,079
2008	2,909,437,523	2,106,172,872	1,686,018,203
2009	3,016,727,996	2,256,082,381	1,907,991,848
2010	2,939,302,687	2,519,983,276	1,969,064,155
2011	2,273,649,683	2,616,668,995	1,915,421,193

Source:(CBJ, 2013)