Comparison of Profitability Indicators of Commercial Banks: The Case of Jordan and Palestine

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ABSTRACT

Banking system could be determined as one of the major drivers of the economy. Moreover, the banking sector is the most important financial intermediary as a channel of funds from people who have extra money (savers), to those who do not have enough money to carry out a desired activity (borrowers). Thus, indicators which are related with profitability of the banking system needs to be rated. The primary goal of the current study is to compare experimentally and measure the financial performance of conventional banks which are operating in Jordan and Palestine during the period of 2008-2014. Furthermore, in the current study, macroeconomic variables as well as financial ratios within a CAMEL approach. To create a good evaluation in terms of experimentally, most commonly practiced ratios are employed for the present study. Two profitability indicators which are used in the current study are dependent variables. Moreover, data is also monitored for sturdiness of the model and OLS method is utilized through adoption E-views program. Moreover, numerous articles which are related with banking literature were surveyed to shape most appropriate model. According to the result of this study it is shown that the profitability indicators are almost the same for both countries, in other words, can be said that there is no statistical difference between them.

Keywords: Banking system, profitability, conventional banks, OLS, CAMEL, Jordan, Palestine.

ÖZ

Banka sistemi, ekonominin itici erkenlerinden birisi olarak nitelendirilebilir. Dahası,banka sektörü, para fazlası olan insanlardan fazla kaynakları para fazlası olmayan insanlara aktarmada çok önemli bir aracıdır. Bu yüzden bankacılık sisteminin karlılık göstergeleri irdelenmesi gerekmektedir. Bu çalışmanın amacı, 2008-2014 yılları arasında Ürdün ve Filistin ülkelerinde faaliyetlerini sürdüren yerel bankaların finansal performanslarını mukayese etmektir. Mukayese, Makroekonomik değişkenler ve CAMEL yönteminde kullanılan finansal oranlar ışığında gerçekleştirilmişir. Karlılık göstergeleri bağımlı değişken olarak ele alınmış, elde edilen veriler En Küçük Kareler Yöntemi (OLS) ile E-Views programını kullanarak analiz edilmiştir. Bu bağlamda mecvut çalışma ile modelin örtüşebilmesi için bankacılık alanında çeşitli literature taramaları gerçekleştirilmiştir. Bu çalışmanın sonucuna göre, karlılık göstergeleri, her iki ülke için hemen hemen aynı olduğu gösterilmiştir ya da aralarındaki istatistiksel farklılık bulunma maktadır olduğunu söyleyebiliriz.

Anahtar Kelimeler: Bankacılık Sistemi, karlılık, yerel bankalar, OLS, Camel, Ürdün, Filistin.

This thesis is dedicated to my

father Ali, my mother Nawal,

and my siblings

For the endless love, support, and

encouragement.

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LIST OF ABREVIATIONS

ASQL   Asset quality

CPTLAD   Capital Adequacy

ERNQL   Earning quality

LIQUID   Liquid assets over total deposit

MNGQL   Management

ROA   Return on assets

ROE   Return on equity

Chapter 1

INTRODUCTION

1.1 Background

Ever since its foundation, banking systems played a role of high-importance in Middle East societies, where they were linked with almost everything. Governments utilize banking systems in order to promote countries' economies. Banking system could be defined as a system that provides assistance to borrowers so that they can find lenders. This enables people in need of money to find other people willing to provide the funding. It could be indicated that any person may require a bank's support for any kind of deals, anytime and anywhere. Moreover, it could be argued that banking systems facilitate our lives since they enable borrowing and lending activities in a safer context. The banking system is an essential element that plays a key role in the local and international economies; thus, it is not possible for the global economy to function without. There is a solid relationship between banking systems and economies' condition of nations, thus if the performance of the banking sector is successful, this will also positively impact the economy's development. It is stressed that the banking system empowers circulation, trade, and utilization of economy in an easier manner. If the banking system does not perform well, its influence will impact all sectors of production in the world. This impact will even affect poor or malfunctioning economies. It is essential to conduct some research regarding banking fields to create well-functioning banking sector, so that possible failures related banking system could be prevented. Numerous studies have been

carried out concerning the banking sector. Therefore, this study's objective is to discover a good model and employ it to increase banks' efficiencies and profitability in Jordan and Palestine.

1.2 Aim of Study

In this study determinants of profitability will be studied for conventional banking systems in Jordan and Palestine, and will be compared between both countries. The study analyzed 6 commercial banks in Jordan and 6 banks in Palestine between the years 2008-2014. The primary goal of this study is to find out how the profitability indicators are differing among the stated countries. The banks in Jordan and Palestine work under the same discipline and structure of banks, thus we can express that the financial performance of these two countries may not differ. This study employed E-views software to complete a simple and multiple regression analysis to measure the counterweights of Jordan's and Palestine's conventional banks. In addition, criterion financial ratios are to be used in this study by referring to CAMEL methodology since they were also applied in literature, and were categorized as dependent variables and explanatory variables. The indicators of financial interpretation are proxies, which are stated as dependent variables for current study.

The CAMEL rating system could be explained as a system that evaluates the banks' creditworthiness; it also attempts to discover possible risks that may result in some failures. In other words, this system gives an insight about how the banks are dependent on their capacity facing short-term and long-term commitments (Kumar et al. 2012). CAMEL consists of Capital sufficiency, Asset Management, Asset Quality, Liquidity Risk, and Earnings Ability. The application of CAMEL methodology was surveyed in numerous studies.

1.3 Scope of Study

A financial interpretation would be formed as a comparative analysis which would be carried out between the commercial banks of Jordan and Palestine through the years 2008-2014. Several important questions need to be answered by conducting this experimental research, such as;

- Is there any statistical variation in the indicators of profitability between the commercial banks of Jordan and Palestine?

- Which variables have significant influence on the commercial banks profitability indicators in the two states?

- Also, whether the evaluated model is dependable (trustworthy) or not? It is quite important for Jordan and Palestine to obtain an adequate and confirmed answer with explanation, as well as it is important for the rest of the world.

1.4 Structure of the Thesis

The current study consists of 6 chapters. Introduction it is the first chapter. Chapter 2 covers literature review. Overview of the banking system for both states is discussed in Chapter 3. Data and Methodologies will be in chapter 4. Moreover, Empirical Analysis of the banking sector for Jordan and Palestine will be discussed in chapter 5. Accordingly the conclusion and recommendations will be the last chapter of this study, which is Chapter 6.

1.5 Justification of Study

In the start of this study, researcher found that it is valuable to try to discover the effects of Israeli occupation on the Palestinian banking sector in relation and comparison with the neighboring country "Jordan". A study was performed to measure the profitability indicators of several commercial banks in the two countries. Keeping in mind, that Jordan suffers from being the weakest economy among the

countries of the Middle East. Considering these factors, the researcher was curious to find out how would the banking sectors of Palestine and Jordan perform under these circumstances. Expectations were that there would be a difference between the sectors of both stated countries.

Chapter 2

LITERATURE REVIEW

Many recent researches were conducted on profitability determinants of commercial and conventional banks. Berger (2006) mentioned that the extension of the banking system in America was going on a constant path inside and outside a country during recent years. The distance separating the biggest banks and associate banks were increased up to 50% during 1985-1998 in the USA. The banking industry, as they say, encounters the increases in the costs that arising from the increasing of the size of the firm it is an agency problem. The researchers detected that by upgrading information handling and telecommunication technologies they can decrease agency cost. It is mostly known that highly capitalized financial institutions with high capitals have a lower risk of financial distress, Bourke (1989) selected 12 countries for his research to gauge the interpretation of banks and he find out a significant relationship between profitability and capital adequacy. To be presides when there is an increase in capital there will be an increase of the banks' profitability. Therefore, as it was said that there is an advantageous relation between profitability with capital adequacy, it was discovered that, in the US, banks that are highly capitalized making profit more than the low capitalized ones in proportion with the researches of Berger (1995) and Anghazo (1997).

Regarding the case of Malaysia, Sufian f. (2011) data regression analysis was conducted. According to the banks results, it shows that the banks who generating

revenues from interest-free financing and focusing on expense preferences more fruitful banks. The results of the research show as well that technological results are causing a raise of the commercial banks' profitability in Malaysia. This study used two dissimilar methods: DEA and MPI. The major goal of the study was experimentally examining the competence of the banking sector in Malaysia through the use of panel data regression analysis.

The bounded numbers of studies were made on the profitability of commercial banking in both Malaysia and Pakistan. One of Katib's (2004) studies included 20 commercial banks in Malaysia during 1989-1996. Applying robust evaluation methodology, he utilized some controlled variables as a part of expansion to money related proportions to gage hazard elements and little methodologies towards banks in Malaysia, the outcomes lead to a conclusion that proficiency is not the prime element affecting the benefit determinants and pieces of the pie. Yet, bank focus impacts benefit pointer positively and it is factually critical.

According to Molyneux and Thornton's (1992), study which were based on an analysis, findings were indicating that there is an advantageous relation between profitability determinants and capital ratios in the European counties' banking industry. Eighteen countries were analyzed through 1986-1989 in order to examine the linkage between other separate variables and profitability indicators and the main focus in their study is on capital adequacy or sufficiency. Thus, The good link between both the profit of banks and their capital, according to their study, was found to be present not only in the US, but also it was experimentally proven to exist in European countries also knowing that this was only applied for the banks owned by the state.

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Kunt and Huizinga (1999) made an extensive research concerning the banking industry. The research included 80 countries selected from all over the world, these countries where classified as developed and developing countries during 1988-1995. The study revealed that in the creating nations the outside banks made more profit than local banks which was factually critical; while then again, in created nations, the local banks made more benefit contrasted with remote banks. Also, as said prior, the general conclusions expresses that the favorable link between capital sufficiency and proportion productivity determinants.

Kosmidou (2004) tentatively gaged the budgetary translation and fitness of both routine business banks and agreeable banks in Greece and Europe amid 2003-2004. For his study, he chose sixteen agreeable banks and fourteen ordinary business ones. In this exploratory pursuit, he grouped banks as huge banks and little banks as per their sizes. He made this trial study utilizing CAMEL system, where budgetary proportions where utilized as free variables like aggregate value to aggregate resources, gaining before expense over the measure of the banks, procuring before assessment over aggregate value, all out advances to aggregate resources. The multi standard technique is utilized to assess budgetary understanding of traditional business keeping money framework and helpful saving money framework. Business banks, not at all like helpful banks, are prone to add to their records, and piece of the pie in like manner will too increment.

Awdeh (2005) studied the variation between the indicators of profitability of domestic banks and foreign banks in Lebanon for the period of 1993-2003. Awdeh observed that when compared to all domestic banks, foreign banks are likely to earn higher profits knowing that all these banks were in one market. There was also a

difference in the determinants of profitability between the two banks. It also indicates in this study that foreign banks were better at dealing with the countries' macroeconomic factors comparing to domestic banks.

Matthew & Esther (2012) have conducted a study and compared between the interpretation of domestic and foreign banks the case of Ghana for the period of 2005-2011. Their comparison of the banks was concerning the quality of assets, profitability, size, capital adequacy and liquidity. This result detected that when contrasting domestic and foreign banks, we find that the domestic banks have a comparatively higher outputs on assets and equity, while their assets quality, liquidity ratio, capital adequacy and size was lower than foreign banks.

Hussein (2003) has conducted a research aimed to experimentally gauge the Islamic banks' cost competence in Sudan. For his study, he utilized 17 banks during 1990-2000. According to the findings, foreign banks in Sudan were proved to be cost efficient, when compared state owned banks, just to prove the cost inefficiency of state owned banks. He categorized the banks in Sudan into small and large banks, and explained that the large banks' efficiency is comparatively lower than the small banks'. In addition to that, the efficiency of the banks that have a low rate of mudarabah and musharakah finance relative to their size are lower than the ones with high mudarabah and musharakah finance relative to their size.

Perry (1992) carry out a study in which he find out that whether the distension is predicted or not predicted is what determines the effects of distension on the bank's profitability determinants. If the distension was predicted, the profitability averages will get higher more rapidly than cost averages that will then have a good effect on

financial performance of the bank. While when the distension is not predicted, banks will face slowness and difficulties to regulate their rate of interest because the increase of cost is faster than that of income which in turn reverses effects on banks' profitability indicators.

In a study by Athanasoglou et al. (2005) on banks in Greek between 1985 and 2000, the researchers wanted to find out the interior and exterior origins of profitability in the banking sector. To designate the profitability factors they utilized Generalized Method Moment (GMM) technique. They discovered, because of their statistical regression outcome, that macro-economic variables have a noticeable impact in regards of the banking profitability. They, as well, saw that the interpretation indicators of the banking sector have a significant role. For example, the chance for the increase of banks' profit increases if the banks have more capital in their balance sheet. Because then they will have more courage to invest at various levels of chancy instruments.

Herwany (2006) carried out a research in which he included the Indonesian banking sector, the aim of his research was to define the variables that affects the profitability of banks. He analyzed, in his research, banks owned by state and private banks. They utilized return on equities and return on assets as profitability proxies. The researchers studied which macro-economic variables and banks-specific variables had influenced the dependent variables presented as ROEs and ROAs. The variable that mostly affected the proxies was the Capital adequacy rate. Moreover, the credits over deposits and the ratios of capital over assets had an important influence on ROE and ROA of private and state-owned banks in Indonesia.

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Alper (2011) made a research in Turkey for the banking sector as they tried to find the indicators of the profitability dependents of the markets. In their research 10 commercial banks that traded in the Stock Market of Istanbul between 2002 and 2010 were analyzed. The bank size was their major dependent on banking profitability. What the results lead to, is that the bigness of banks size has an advantageous relationship with the profitability of the bank. The study also included searching if bank particular indicators had a part in profitability. They noticed, after examining the link of net interest margin and capital adequacy, deposit amount, liquidity and profitability, it shows the advantageous dependence of profitability was not trapped on these bank particular variables.

The profitability factors of banks for the market of Taiwan was studied by Ramlall (2009), where he surveyed macro-economic indicators and bank particular indicators as well; knowing that the industrial factors were also being studied in this research. The years 2002 through 2007 were covered in this research and the data of this period of time were used in the form of quarters for obtaining a considerable outcome. The major finding suggested that capital is an influential determinant, since the higher capital banks have the more they can reach a greater amount of clients by leverage ratio low. He observed that the credit risk is unfavorably associated with the profitability of banks, and if we compared the firms with higher credit risk with other banks in the same sector, the banks with a higher credit risk seem to be less profitable.

Davoydenko (2011) studied the profitability of the banking industry in Ukraine in the years between 2005 2009; he used the panel data in his research relying on examples of banks he took through this time period. Davoydenko also examined internal and

external agents that could have an impact on the banking sector in Ukraine. The findings revealed that banks do not rely on the deposits of clients because of the bad quality of their loans. Thus, it seems like, in Ukraine, also there is a disadvantageous relationship amidst the amount of deposits, banking profitability and liquidity. Surely, it was shown that there is significant factor which is the credit risk that leading to the decrease in the profitability of banks. Moreover, the overall findings tell that inflation and the banks, in the banking sector, being foreign-owned lead to a negative connection in banking profitability. While, bank size, concentration ratio and currency depreciation were found to have a positive influence in this case.

Chapter 3

BACKGROUND REVIEW

3.1 Overview of Commercial Banking System Globally

It could be expressed that banking sector is the most important system in an economy of any nation. The banks act as intermediaries between borrowers and lenders, and they act as lenders and borrowers at the same time. Thus, the banking sector is considered as one of the main source and sector globally, because the financial sector is governed by the banking sector in most states (Allen, Chui, and Maddaloni, 2004).

Nooruldeen Al-Behadili (2013) stated that the elements of banks are diverse over the world. There are a wide range of sorts of banks, for example, Commercial, Investment, Industrial, Islamic, Retail, Central, Exchange, and Co-operative Banks. The Central Bank exists in all economies all over the world and the main objective of the central bank is to provide guidance and supervision to other banks. Furthermore, the central bank acts like the mother of other kinds of banks. Similarly, Central Bank is a non-profit monetary organization. Commercial Banks are set up to meet the general population requests. At the end of the day, they are included in giving fleeting credits to organizations, acknowledge stores, and offer advances to clients. Just to say, they are going about as a monetary mediator in between contributors and borrowers. They buy foreign exchange as well as precious metals and gold from their customers. Saving Banks is a miniature model of commercial banks; they manage little endeavors, for example, little ranchers, salaried workers etc. The clients of

saving banks usually are poor people and working class of people. The Industrial Banks are engaged in long-term periods transactions. Moreover, they fund the industries and require a huge amount of financial needs. Likewise, they impose an interest on money related resources, for example, purchasing offers, securities and debentures of organizations which help industrial banks to alter the capital of these financial firms. Imperative elements of these sorts of banks are: tolerating long-term stores, long haul modern credit and offers consultancies over deals of buying shares and debentures (Allen, Chui, and Maddaloni, 2004).

3.2 The Review of Banking System in Palestine

Palestine could be described as one of the developing countries while suffering from a poor economy as a result of inattentiveness. Since it was weakened over the years due to Israeli occupation. Moreover, the economic growth in Palestine is slow due to the struggle with Israeli occupation. Palestinian territories have been limited due to enforced laws and so far there is negligible industries, this signals a malfunctioning future economy. Nowadays, the Palestinian economy is supported by foreign aid (Wesam, 2014).

In fact, the Palestinian economy links the economies of the East Jerusalem, West Bank, and Gaza. Palestinian economy began to acquire a well-built infrastructure over the past seven years, this helped Palestinian industries grow and create firms improving the Palestinian economy over their territories.

The banking system in Palestine controls the financial sector; the vulnerable banking system stilled its independence on the system banks of Jordan and Israeli point of view. Thus, the banks in Palestine are facing different structural crises such as shortage of appropriate guarantees and inappropriate debt collecting measures.

Palestinian Monetary Authority (2014), PMA takes into consideration a lot of steps to get better stabilize the banking system. PMA still works on developing the financial needs, credit office, payments system, and the essentials of guarantees for credit in the Palestinian banking system.

Bank of Palestine (2012) states that there are sixteen banks operating within Palestinian territories, and only seven banks out of these sixteen are locally owned by Palestinians. The potential development of saving money in Palestine is exceptionally encouraging. There are presently 258 branches that serve the whole Palestinian population of 4.6 million. Without considering the development in the Palestinian population, the quantity of bank offices in Palestine should be multiplied, to meet the world's standard of one branch for every 10,000 individuals.

Table 1: List of Banks Operating in Palestine

#	Bank name	Ticker	Origin	Type
1	Bank of Palestine	BOP	Local	Commercial
2	Arab Islamic Bank	AIB	Local	Islamic
3	Palestine Islamic Bank	ISBK	Local	Islamic
4	Palestine investment Bank	PIBC	Local	Commercial
5	Al Quds Bank	QUDS	Local	Commercial
6	National Bank	TNB	Local	Commercial
7	Palestinian commercial Bank	PCB	Local	Commercial
8	Arab Bank	ARBK	Foreign	Commercial
9	Cairo Amman Bank	CABK	Foreign	Commercial
10	Bank of Jordan	BOJX	Foreign	Commercial
11	Housing Bank	THBK	Foreign	Commercial
12	Egyptian Arab Land Bank	-------	Foreign	Commercial
13	Jordan Ahli Bank	AHLI	Foreign	Commercial

14	Jordan commercial Bank	JCBK	Foreign	Commercial
15	Jordan Kuwait Bank	JOKB	Foreign	Commercial
16	HSBC Middle East	-------	Foreign	Commercial

Source: PMA. Palestine Monetary Authority

Table 2: Total Assets in USD$ million for selected Palestinian Banks

Bank Ticker	**2011**	**2012**	**2013**	**2014**
BOP	1,654.0	2,004.5	2,348.0	2,424.8
PCB	168.8	186.2	236.6	279.4
PIBC	243.5	258.7	288.4	320.8
QUDS	467.7	480.9	532.6	669.4
TNB	247.4	350.9	529.6	679.7
AIB	300.1	373.9	468.3	561.9

Source: Bank Scope Database

Table 3: Palestinian Banking Sector Indicators in USD$ million

Indicator	2011	2012	2013	2014
Total Assets	9,110.2	9,797	11,195.2	11,542
Total deposits	6,972.4	7,484.1	8,603.2	8,935.3
Total Loans	3,487	4,111.3	4,480.2	4,895.8

Source: Bank of Palestine

3.2.1 The GDP of Palestine

Ever since the Six-Day war in 1967, Palestinian economy has been dependent on Israel because it controls the movement of goods and labor and solely collects customs' revenues. As a result, production capacity and access to natural resources has been significantly reduced. Thus; services are by far, the most important sector of the economy in Palestine (nearly 83 percent of GDP). Palestine remains heavily dependent on foreign aid to support the government's budget and fund infrastructure development. Nonetheless, recently Palestinian National Authority's efforts to ease tensions with Israel have resulted in growth returning to Palestine. Yet, the growth cannot be sustainable without addressing security problems and high unemployment rates among young people. The Palestinian GDP was 6.90 billion USD in 2013 this value of GDP represents 1% proportion of the world's economy (Trading economics, 2015).
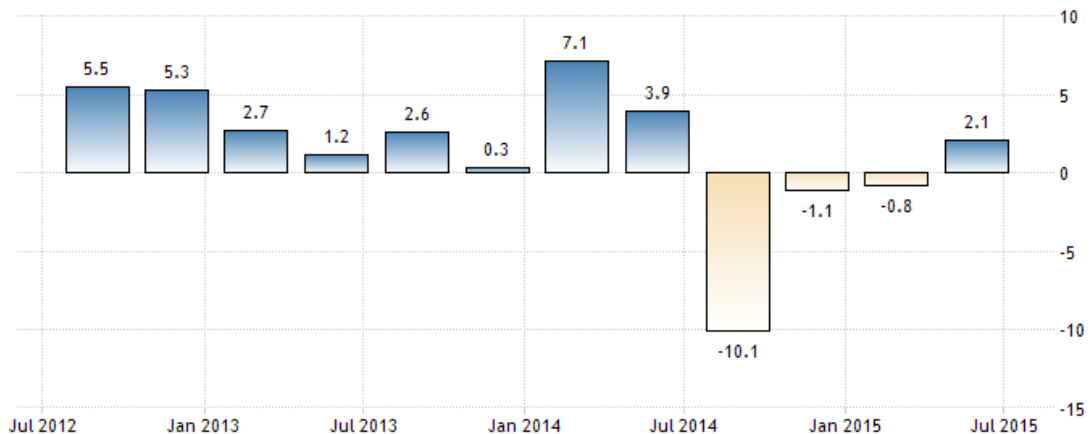
Figure 1: Palestine Gross Domestic Product Annual Growth
(Source: Trading Economics, 2015)

Table 4: Important Points of Palestinian GDP

Actual value	2.1
Previous	-0.8
Highest	7.1
Lowest	-10.1
Dates	2012-2015
Units	Percent
Frequency	Quarterly

Source: Trading Economics, 2015

The GDP of Palestine was almost stable for the second half of 2012, then started to decrease at the beginning of 2013. The end of 2013 showed the lowest growth by 0.3%. In the beginning of 2014, Gross Domestic Product level rose to 7.1% then decreased consistently to reach 3.9%. In the second half of 2014 it is observed that the GDP fell sharply and reached -10.1%, and in the second quarter of 2015 started to increase to 2.1%. Therefore, there are too many variances in Palestinian GDP growth, it unexpectedly decreases and increases also.

3.2.2 The Effects of Global Financial Crisis on the Banking Sector in Palestine

It is stressed that the Palestinian banking sector has been largely isolated from the global financial crisis for two reasons. Firstly, unlike other financial systems around the world, the main challenge is the political situation that keeps the entire economy in a state of ambiguity in respect to future investment. Secondly, the banking sector in general has a restricted introduction to the worldwide budgetary markets, reflecting tight prudential regulations and traditionalist bank loaning rehearses. For instance banks have to apply strict concentration limits in terms of their lending exposure by borrower, sector, and region; as well as in terms of their investment

exposure by region, currency and institution. Moreover, even prior to Basel III rules on capital, an 8% common equity Tier 1 ratio was imposed on all banks.

3.3 The Review of Banking System in Jordan

As in many countries, the banking sector in Jordan is considered one of the main pillars of the Jordanian economy. Regardless of the plenty occasions that occurred subsequent to the start of 2011 Arab springs. The division at present comprises of 26 banks; 15 of these banks are recorded in Amman Stock Exchange. The banking sector of Jordan turns out to be more appealing after the 90's for the speculators. Furthermore not influenced by the emergencies period because of its restricted introduction to the abroad capital business sector.

Taha (2013) mentioned that, the banking sector in Jordan is more developed compared to other sectors such as, industrial and agricultural. This change has offered Jordanian banks to pull in the external organizations to assist with the participation and entrance into the Jordanian market to invest in. In the 1980s and 2002 the Jordanian banking sector revealed enormous scandals that reflected in diminishing the notoriety. Since then the national bank of Jordan is focused on upgrading the saving money regulations to monitor the works of the Jordanian banks.

Table 5: List of Banks Operating in Jordan

#	Bank Name	Ticker	Origin	Type
1	Arab Bank	ARBK	National	Commercial
2	Arab Banking Corporation	ABCO	National	Commercial
3	Arab Jordan Investment Bank	AJIB	National	Commercial
4	Bank Al Etihad	UBSI	National	Commercial
5	Bank of Jordan	BOJX	National	Commercial
6	Cairo Amman Bank	CABK	National	Commercial

7	Capital Bank of Jordan	EXFB	National	Commercial
8	Invest bank	INVB	National	Commercial
9	Jordan Ahli Bank	AHLI	National	Commercial
10	Jordan Commercial Bank	JCBK	National	Commercial
11	Jordan Kuwait Bank	JOKB	National	Commercial
12	Societe Generale de Banque Jordanie	SGBJ	National	Commercial
13	The Housing Bank for Trade and Finance	THBK	National	Commercial
14	Jordan Islamic Bank	JOIB	National	Islamic
15	Jordan Dubai Islamic Bank	JDIB	National	Islamic
16	Islamic International Arab Bank	Not listed	National	Islamic
17	Banque Audi	Not listed	Foreign	Commercial
18	Blom Bank	Not listed	Foreign	Commercial
19	Citi Bank	Not listed	Foreign	Commercial
20	Egyptian Arab Land Bank	Not listed	Foreign	Commercial
21	HSBC Bank Middle East	Not listed	Foreign	Commercial
22	National Bank of Abu Dhabi	Not listed	Foreign	Commercial
23	National Bank of Kuwait	Not listed	Foreign	Commercial
24	Rafidain Bank	Not listed	Foreign	Commercial
25	Standard Chartered	Not listed	Foreign	Commercial
26	Al Rajhi Bank	Not listed	Foreign	Islamic

Source: Central Bank of Jordan

Table 6: Total Assets in USD$ million for selected Jordanian Banks

Bank Year	2011	2012	2013	2014
ARAB	45,613	45,64	46,400	48,813
HOUSING	6,938.0	7,091.6	7,227.1	7,594.9
AHLI	2,616.7	2,650.3	2,702.6	2,325.1
CAPITAL	1,395.8	1,606.9	1,886.6	2,061.7
CAIRO	1,940.4	2,024.3	2,213.0	2,353.1
BOJX	2052.9	2016.6	2076.9	2190.2

Source: Bank Scope Database.

Table 7: Jordanian Banking Sector Indicators in USD$ million

Indicator	2011	2012	2013	2014
Total Assets	53,137.8	55,378.1	60,351.9	63,264
Total deposits	34,372.8	35,207.2	38,906.4	42,668
Total Loans	22,350.1	25,140	26,704.9	27,177

Source: Central Bank of Jordan 2014.

3.3.1 The GDP of Jordan

The economy of Jordan depends on financial services, transportation, manufacturing, tourism, and remittances of Jordanians who work outside the country. Jordan is poor in lands suitable for agriculture and water due to its desert-like environment; hence the agricultural sector is weak. It means that agriculture is generally not well developed, and the country invests heavily in water recycling. Jordan's economy is highly influenced by the state. However, recently the efforts to reduce business barriers have increased. The Total national GDP of Jordan is worth 35.83 billion USD in 2014, this value of GDP represents 6% proportion to the world economy.
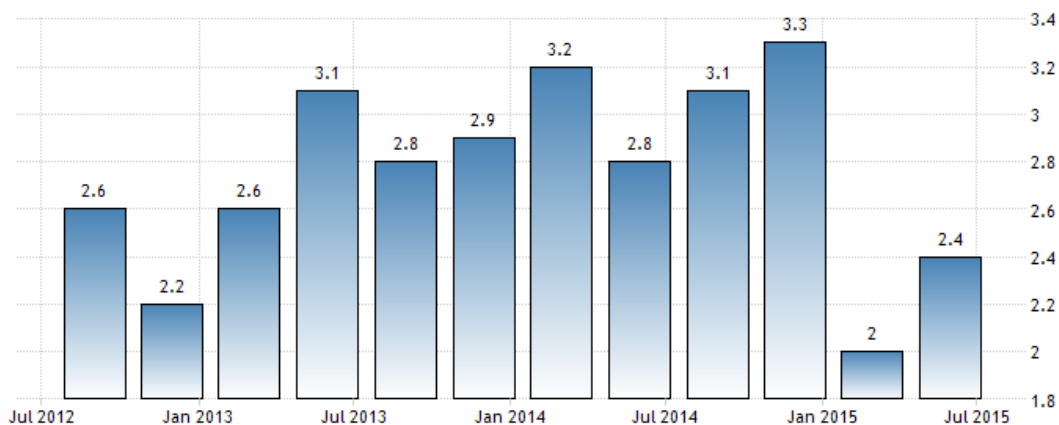
Figure 2: Jordanian Gross Domestic Product Annual Growth
(Source: Trading Economics, 2015)

Table 8: Important Points of Jordanian GDP

Actual value	2.4
Previous	2
Highest	3.3
Lowest	2
Dates	2012-2015
Units	Percent
Frequency	Quarterly

Source: Trading Economics, 2015.

The GDP of Jordan started increasing at the beginning of 2013 and reached 3.1%, then slightly decreased in the third quarter of 2013 at 2.8%. After that, in the last quarter of 2013 the GDP started increasing again till the first quarter of 2014 to reach 3.2%. In the second quarter of 2014 the GDP dropped to 2.8% and increased to reach the highest GDP among these years at 3.3%. In the beginning of 2015 the GDP ratio fell down to 2%, then started increasing in the second quarter of 2015 to reach 2.4%. The GDP of Jordan was almost stable between the years 2013-2015, with some variation at the end of 2012 and the beginning of 2015 (Trading Economics, 2015).

3.3.2 The Effects of Global Financial Crisis on the Banking Sector in Jordan

As it is known, the global financial crisis broke out in USA. It could be argued that the USA is the major trading partner of many nations around the world. This leads to rapid spread of global financial crises to other nations. In other words, Ahid and Ayuba (2012) found that the global financial crisis left domestic and international effects on several international economies. Domestically, it began to influence the saving money habits of the population. Universally, the effect of the crisis was clear on nations everywhere throughout the world; particularly on countries that had open financial associations with USA. Such nations were more influenced than others. This implies that the nations with fewer connections to the worldwide monetary business sector were modestly influenced by the crisis. Perceptibly, the principle reason of the crisis was unguaranteed loans (Ahid & Ayuba, 2012).

From the Jordanian perspective, the crisis did not have an immense influence on the economy. Jordan's particular monetary policy helped protect the financial sector as well as other sectors. At the first stage of the crisis, the Jordanian economic ministry reported that they expected positive effects of global financial crisis on the Jordanian economy. These positive effects may include reduction of inflation rates and continuing the growth by at 5% in 2009. These expectations were established on the declining of oil prices.

Al-Jazeera (2008) specified that, in the first phase of the crisis, Jordanian monetary service notified that they look forward for beneficial outcomes of the world money related crisis on Jordanian economy.

Ahed and Ayuba cited in European economy (2009) state that the banking sector and Central Bank of Jordan were conscious of the emerging risk. Thus, in order to conserve the banking sector, the Central bank of Jordan executed a rigorous loan classification and provided guidelines for the banking sector. They also helped banks reduce unnecessary expenses. Therefore, interest rates for housing loans were set 10.5%. Thus, the Central Bank of Jordan restricted the ambit of growth while the long-term stability is ensured.

In short, the effect of the world money related crisis is similar to a chain, where nations and people were influenced. Yet the effects cannot be the same from one nation to another. Depending on its commitment to the world's economy and the view of its openness to the world's economy. With respect to the effects of world remittances crisis on Jordan, it is observable that the effects are not noteworthy. Jordan was not an uncommon case in light of the fact that the crisis began to influence Gulf nations, where the larger part of Jordanians work at. Therefore, the numbers of Jordanian workforce diminished because some of them were laid off (Zeitun & Benjelloun, 2013).

Chapter 4

DATA AND METHODOLOGY

4.1 Data

First of all, in this study, we utilized panel data in order to test the financial performance by running an empirical analysis for Jordanian and Palestinian banks. The researcher used the financial statements of the banks to analyze the dependent variables which are the consistent of the financial performance. To do the comparative analysis for dependent variables and independent variables we used the financial ratios. Thus, depending on the official website of database and official websites of banks in Jordan and Palestine the data has been collected. The banks in Jordan and Palestine are specifically selected in order to do the comparative analysis to check the financial performance of these banks for the period 2008-2014. Moreover, in order to conduct this study we choose six banks from each country which is Jordan and Palestine as it shown below.

Table 9: Commercial Banks in Jordan and Palestine 2008-2014

#	Banks in Jordan	Banks in Palestine
1	Capital Bank of Jordan	Al Quds Bank
2	Bank Of Jordan	Arab Islamic Bank
3	Arab Bank	Bank of Palestine
4	Cairo Amman Bank	National Bank
5	Housing Bank	Palestine Investment Bank
6	Jordan Ahli Bank	Palestinian Commercial Bank

Source: Central Bank of Jordan and Palestine Monetary Authority

4.2 Variables

Hassan at al. (2004) and Spathis (2002) mentioned that there is a common model utilized to check the profitability indicators of conventional and Islamic banks. Nevertheless, researcher utilized two variables that are independent variables as a representative of financial performance that include return on assets (ROA), and return on equity (ROE). The dependent variables are given as follows:

$$ROE=\alpha 1+\beta_1(INT/D)_t+\beta_3(C/R)_t+\beta_4(PLL/TL)_t+\beta_5(LIQ/D)_t+\beta_6(TE/TA)_t+\varepsilon_t (1)$$

$$ROA=\alpha 1+\beta_1(INT/D)_t+\beta_3(C/R)_t+\beta_4(PLL/TL)_t+\beta_5(LIQ/D)_t+\beta_6(TE/TA)_t+\varepsilon_t (2)$$

So that a , Total of Interest Expenses over Deposits represented as INT/D, Cost over Revenue represented as C/R, Provision of Loan Losses over Total Loans represented as PLL/TL, Liquid assets over Deposits represented as LIQ/D, Total Equity over Total Asset represented as TE/TA, and error term represented as E.

4.2.1 Dependent Variables

In this study, regression analysis will be utilized to examine empirically the monetary execution of all banks taking into account CAMEL approach. The most widely

recognized proportions are connected in writing audits are ROE and ROA which are agents for benefit pointers.

Return on assets, net profit divided by total assets considered as one of profitability ratios which is using to check if the assets gain a profit in an efficiency way or not, and Naceur (2003) mentioned that the return on assets represents the proportion of gains by utilizing the assets of particular firms.

Return on equity is likewise benefit indicator that allude extent it is also one of profitability ratios which is calculated as net income divided by shareholders equity. It indicating how proficiently the firm uses its own particular funding to make benefit, as it were, it underscore the administration of stockholder's value. The arrival on value says the rate of benefit earned by utilizing the value (Gul et al, 2011).

4.2.2 Independent Variables

Capital sufficiency measuring if the firm have sufficient capital or not toward prospect dangers. Proportion of capital ampleness utilized as a part of this study is absolute value over aggregate resources. The higher proportion, therefore the more steady and effective banks are.

Asset items belong to balance sheet, and it is shown on the left side of the balance sheet. The structure of advantages is money, advances, account receivables and so forth. The nature of advantages in financial institutions is critical for potential speculators, investors, and other money related establishments. The advantage quality demonstrates the reliability of budgetary establishment, whether the banks are fit to create enough money to pay their obligations. The proportion of advantage

quality utilized as a part of this study is Procurement of advance misfortunes to aggregate credits, PLL/TL.

Management quality is interest expenses divided by total deposits. Moreover, management quality measures how the banks are efficient in terms of interest expenses to deposits. At the point when proportion goes down, the banks bring about lower costs and make more benefit.

Earnings quality ratio is the cost divided by revenue measures the earnings productivity of the banks. Moreover, it demonstrates the effectiveness of operations of the banks, what amount ought to be spend to increase one dollar, the cost brought about to pick up a dollar, the better the bank is.

Liquidity is the convertibility of advantages into cash within a year. In case the liquidity of banks is low, the likelihood of having liquidity issues is low and less probability it will lead into liquidation. In order to be very fluid, the banks ought to keep more trade out hand, however keeping more money decreases the productivity of banks, and this philosophy is proportionate with the observational discoveries of Molyneux and Thorton (1992).In this study, liquidity ratio is a liquid asset to total deposits, its represents a liquidity indicator.

4.3 Methodology

In this study, the information has been checked by unit root test, so as to check that the information is stationary or not. In agreement to created philosophies of Levin Lin and Chu, and Pesaran and Shin the board root test is utilized. The sturdiness of model has been contemplated, as it was, heteroscedasticity, autocorrelation, and multicollinearity is checked. In chapter five we will offer the sturdiness tests.

Likewise, in this study we used correlation analysis in order to examine if the multicollinearity problem exist or not between variables which are independent ones so we can easily seen in tables below that there is no high enough correlation between independent variables to have a multicollinearity problem. According to these result we can continue the analysis.

In this study regression analysis is used in order to check the variation of profitability indicators of Jordanian and Palestinian banks which are in total 12 banks for the period 2008-2014. Thus, an empirical analysis is done for both countries according to the following regression models:

$$ROE = \alpha 1 + \beta_1 (INT/D)_t + \beta_3 (C/R)_t + \beta_4 (PLL/TL)_t + \beta_5 (LIQ/D)_t + \beta_6 (TE/TA)_t + \varepsilon_t \ (3)$$

$$ROA = \alpha 1 + \beta_1 (INT/D)_t + \beta_3 (C/R)_t + \beta_4 (PLL/TL)_t + \beta_5 (LIQ/D)_t + \beta_6 (TE/TA)_t + \varepsilon_t \ (4)$$

Where,

The capital adequacy, total equity divided by total assets

The asset quality, provision of loan losses divided by total loans

The management quality, interest expenses divided by total deposits

The earnings quality, cost divided by revenue

The liquidity, liquid assets divided by total deposits

$\alpha 1$ is the intercept

β is the slope

Chapter 5

EMPERICAL ANALYSIS AND RESULTS

5.1 Correlation

Correlation analysis aimed to measure the power of linear significance relationship between tested variables. Our aim is to examine if independent variable affect the profitability indicators or the dependent variables which are ROA and ROE. The dependent and independent variables are presented in chapter 4. Correlation coefficients lies between -1 to +1 ; it is zero coefficient which means that there is no linear relationship between variables, -1 coefficient means that there is a negative linear relationship between variables and +1 coefficient means that there is positive linear relationship between variables. If the coefficient of the correlation lies between 0 to 0.50 that means there is a positive weak correlation if the coefficient of the correlation lies between 0 to -0.50 that's mean there is a negative weak correlation if the coefficient of the correlation lies between 0.50 to 0. 90 that means there is a positive strong correlation and if the coefficient lies between -0.50 to 0.90 that means there is a negative strong correlation. Now according to our results we will discuss the relationship between variables which is dependent and independent variables that obtained from E-views program. In this study we have done two different types of correlation analysis: one for Jordanian banks and one for Palestinian banks. It is shown in the tables below that there is negatively and positively correlation between the variables.

Table 10: Correlation of Jordanian Banks Variables

	ROA	ROE	CPTLAD	ASQL	MNGQL	LIQUID	ERNQL
ROA	1.00						
ROE	0.90	1.00					
CPTLAD	-0.14	-0.51	1.00				
ASQL	-0.55	-0.63	0.37	1.00			
MNGQL	-0.16	-0.22	0.31	0.01	1.00		
LIQUID	-0.27	-0.007	-0.54	-0.35	0.03	1.00	
ERNQL	-0.28	-0.22	-0.12	-0.04	-0.25	-0.0005	1.00

There is negative correlation between ROA and CPTLAD ratio by -0.14 that means if the return on assets increased the capital adequacy of Jordanian banks will decrease. Furthermore, ROE has a negative correlation with CPTLAD ratio by -0.51.

There is negative correlation between ROA and ASQL ratio by -0.55 that means if the return on assets increased the asset quality of Jordanian banks will decrease. Moreover ROE has a negative correlation with ASQL ratio by -0.63.

There is negative correlation between ROA and MNGQL ratio by -0.16 that means if the return on assets increased the management quality of Jordanian banks will decrease. Also the ROE has a negative correlation with MNGQL ratio by -0.22.

There is negative correlation between ROA and LIQUID ratio by -0.28 that means if the return on assets increased the liquidity of Jordanian banks will go down. Therefore, there is a negative correlation in ROE related with LIQUID ratio by -0.22.

There is negative correlation between ROA and ERNQL ratio by -0.27 that means if the return on assets increased the earnings quality of Jordanian banks will decrease. Otherwise ROE has a negative correlation with ERNQL ratio by -0.007.

Table 11: Correlation of Palestinian Banks Variables

	ROA	ROE	CPTLAD	ASQL	MNGQL	LIQUID	ERNQL
ROA	1.00						
ROE	0.93	1.00					
CPTLAD	-0.33	-0.51	1.00				
ASQL	0.04	-0.09	0.46	1.00			
MNGQL	-0.36	-0.37	0.24	0.15	1.00		
LIQUID	-0.92	-0.84	0.28	-0.09	0.41	1.00	
ERNQL	-0.26	-0.36	0.41	0.25	0.41	0.14	1.00

As we seen in the table above that all the variables has a negative relation with ROA and ROE and there are only two strong negative correlations which are between ROA and LIQUID ratio by -0.92 and also between ROE and LIQUID ratio by -0.84.

5.2 Hausman test

The aim of Hausman test is to estimate uniformity that shows whether statistical model corresponds to the data. In this research we run Hausman test in order to check which regression we should choose between redundant Fixed effect estimation and correlation Random effects, in order to reject or fail to reject these null hypotheses:

Random effect **H0**: Random effect is appropriate to the model.

Fixed effect **H0**: Fixed effect is not appropriate to the model.

In order to accept or reject the null hypotheses the probability value should be less than all levels of significance that are 1%, 5%, and 10%.

5.2.1 Effect testing for Jordanian banks

Table 12: Random Effect Testing for ROA Model

Test summary	Chi-Sq. statistic	Chi-Sq. d.f.	Prob.
Cross-section random	26.373	5	0.0001

Here we cannot use Random effect estimation because we reject the null hypothesis which is states that the random effect is appropriate and we accept the alternative one which says that the Random effect is not appropriate.

Table 13: Fixed Effect Testing for ROA Model

Effects test	Statistic	d.f.	Prob.
Cross-section F	5.274	(5,31)	0.0013
Cross-section Chi-square	25.854	5	0.0001

In this case we choose Fixed effect estimation because we accept the alternative hypothesis in Random effect which states that the Random effect is not appropriate and we reject the null hypothesis in Fixed effect which is says that the Fixed effect is not appropriate.

Table 14: Random effect testing for ROE model

Test summary	Chi-Sq. statistic	Chi-Sq. d.f.	Prob.
Cross-section	39.641	5	0.000

After we checked the Random effect for ROE we can reject the null hypothesis that the Random effect is appropriate according to the lower probability value that lead us to choose Fixed effect.

Table 15: Fixed effect testing for ROE model

Effects test	Statistic	d.f.	Prob.
Cross-section F	7.928	(5,31)	0.0001
Cross-section Chi-square	34.592	5	0.0000

Moreover, for ROE we choose Fixed effect estimation in order that we reject the Fixed effect null hypothesis which says that the Fixed effect is not appropriate.

5.2.2 Effect Testing for Palestinian Banks

Table 16: Random effect testing for ROA model

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.000	5	1.000

On the other hand, for ROA model we choose Random effect estimation because we cannot reject the Random effect null hypothesis which says Random effect is appropriate.

Table 17: Random effect testing for ROE model

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	25.300	5	0.0001

According to the lower probability value we can reject the null hypothesis for Random effect estimation which is the Random effect is appropriate. It means we have to choose Fixed effect estimation.

Table 18: Fixed effect testing for ROE model

Effects test	Statistic	d.f.	Prob.
Cross-section F	5.060	(5.28)	0.002
Cross-section Chi-square	25.105	5	0.0001

Also for Palestinian banks ROE we choose Fixed effect estimation in order that we reject the Random effect null hypothesis which is says that the Random effect is appropriate and reject the Fixed effect null hypothesis which is says that the Fixed effect is not appropriate.

5.3 Regression

Table 19: Regression analysis for Jordanian banks ROA

variable	coefficient	Std. Error	t-statistic	Prob.
C	0.0379	0.0047	7.919	0.000
CPTLAD	0.0241	0.0331	0.729	0.471
ASQL	-0.3020	0.0667	-4.524	0.000
MNGQL	0.0044	0.0916	0.048	0.961
LIQUID	-0.0134	0.0042	-3.188	0.003
ERNQL	-0.0438	0.0086	-5.058	0.000
R-squared	0.864			
Adjusted R-squared	0.821			
F-statistic	19.833			
Prob(F-	0.000			

stat)

Durbin-Watson	1.662	

Table 20: Regression analysis for Jordanian banks ROE

variable	coefficient	Std. error	t-statistic	Prob.
C	0.342	0.028	11.953	0.000
CPTLAD	-0.509	0.224	-2.268	0.030
ASQL	-1.918	0.340	-5.635	0.000
MNGQL	0.334	0.496	0.673	0.505
LIQUID	-0.079	0.038	-2.066	0.047
ERNQL	-0.286	0.043	-6.607	0.000
R-squared	0.914			
Adjusted R-squared	0.887			
F-statistic	33.189			
Prob(F-statistic)	0.000			
Durbin-Watson	2.047			

5.3.1 Jordanian Banks Analysis

According to the results in the case of Jordanian banks from table 5.10 and 5.11 it is shown that the capital adequacy was statistically insignificant in ROA model but in ROE model it was statistically significant and it is negatively correlated with ROE model by -0.509 it means that if the capital adequacy of Jordanian banks increased by 1 unit the ROE will decrease by 0.509 units. This ratio helps banks to check if they can meet financial obligations or not.

Moreover, the asset quality ratio was statistically significant at 1% level of significance in both models ROA and ROE. It was negatively correlated in both models also. It is equal to -0.302 in ROA model and it is equal to -1.918 in ROE model. It means that if the asset quality of Jordanian banks increased 1 unit the ROA will decrease by 0.302 units and if ASQL of Jordanian banks increased by 1 unit the ROE will decrease by 1.918 units. In addition the profitability of banks increases when the default on loan via costumers is low.

Furthermore, management quality was statistically insignificant in both models ROA and ROE that shows no influence of MNGQL on profitability.

Liquidity ratio was statistically significant at 5% level of significance in both models ROA and ROE. It is equal -0.013 in ROA model and -0.079 in ROE model. It mean that if the liquidity of Jordanian banks increased by 1 unit the return on assets will go down by 0.013 units and if the LIQUID of Jordanian banks increased by 1 unit the ROE will decrease by 0.079 units. This ratio helps banks to judge if they can cover their short –term debt or not.

Moreover, the earning quality ratio is significant at 1% in ROA and ROE models. It is equal -0.043 in ROA model and equal -0.286 in ROE model. It is mean that if the earning quality of Jordanian banks increased by 1 unit the return on assets will go down by 0.043 units and ERNQL of Jordanian banks increased by 1 the ROE will decrease 0.286 units. Furthermore, the lower F-probability shows that our estimated model was statistically significant in ROA and ROE models. According to R-squared a 86% of variations in return on assets can be explained by the variations in explanatory variables which are the independent one and according to ROE R-

squared that 91% explained the variations in return on equity can explained via the

variations in explanatory variable.

Table 21: Regression analysis for Palestinian banks ROA

variable	Coefficient	Std. Error	t-statistic	Prob.
C	0.041	0.002	16.173	0.0000
CPTLAD	0.016	0.018	0.869	0.391
ASQL	-0.015	0.008	-1.876	0.069
MNGQL	0.058	0.042	1.362	0.182
LIQUID	-0.003	0.0009	-3.786	0.0006
ERNQL	-0.048	0.0059	-8.125	0.0000
R-squared	0.899			
Adjusted R-squared	0.883			
F-statistic	58.847			
Prob(F-statistic)	0.0000			
Durbin-Watson	1.375			

Table 22: Regression analysis for Palestinian banks ROE

variable	coefficient	Std. error	t-statistic	Prob.
C	0.251	0.014	17.469	0.0000
CPTLAD	0.106	0.161	-0.657	0.516
ASQL	-0.170	0.037	-4.579	0.0001
MNGQL	0.866	0.616	1.405	0.170
LIQUID	0.019	0.008	-2.209	0.035
ERNQL	-0.240	0.029	-8.231	0.0000
R-squared	0.913			

Adjusted R-squared	0.882
F-statistic	29.445
Prob(F-statistic)	0.0000
Durbin-Watson	1.334

5.3.2 Palestinian Banks Regression

According to the result in the case of Palestinian banks from table 5.12 and 5.13 it is shown that the capital adequacy is statistically insignificant and negatively correlated in both models ROA and ROE. Moreover, the asset quality ratio is statistically significant at 10% level of significance in ROA model and at 1% level of significance in ROE model. It was also negatively correlated in both models.

Management quality was statistically insignificant in both models ROA and ROE that shows no influence of MNGQL on profitability.

Furthermore, the liquidity ratio was statistically significant at 5% level of significance in both models ROA and ROE. It is equal -0.003 in ROA model and equal -0.019 in ROE model. It means that if the liquidity of Palestinian banks increased 1 unit the return on assets will go down 0.003 units and if the LIQUID of Palestinian banks increased 1 unit the ROE will decrease by 0.019 units. As we mentioned before that this ratio helps banks to judge if they can cover their short-term debt or not.

Moreover, the earning quality ratio statistically significant at 1% level of significance and negatively correlated in both models ROA and ROE. It is equal -0.048 in ROA

model and equal -0.240 in ROE model. It is means that if the earning quality of Palestinian banks increased 1 unit the ROA will decrease by 0.048 units and if ERNQL of Palestinian banks increased 1 unit the ROE will decrease by 0.240 units. Likewise, the lower F-probability shows that the whole estimated model was statistically significant at 1% level of significance in both models ROA and ROE, according to R-squared it tells us that 89% of variation in ROA can be explained by variations in independent variables and 91% of variation in ROE can be explained by variations in independent variables.

5.4 Diagnostic Testing

In this research all diagnostic testing has been checked likewise autocorrelation heteroscedasticity and multicolleniarity. In order to these results we can continue the analysis that we used white cross-section in Hausman test which is correcting the heteroscedasticity and autocorrelation problem. According to the correlation analysis it can be seen that there is no high enough correlation between independent variables to have multicolleniarity problem.

Chapter 6

CONCLUSIONS AND RECOMMENDATIONS

Banks have become a necessity in the current era and there is no nation able to survive without its services, and its relation to other sectors such as economic or social sectors. Furthermore, without banking operations it is not possible that commercial, industrial, and agricultural institutions continue on their productive and trading activities. So a well-banking system is considered as a controller of economic growth.

In this research we studied and analyzed the profitability of commercial banks in Jordan and Palestine and their indicators that are used to measure it. Also identify the factors that affect the profitability. Moreover, by conducting this experimental research we answered several important questions such as; is there any statistical difference in the determinants of profitability between the commercial banks of Jordan and Palestine? Which variables have the greatest influence on the commercial banks' profitability indicators in the two countries? And whether the estimated model is dependable or not?

First of all, according to Faysal (2005) the earning quality that is cost to revenue affect on the profitability of banks in all models. It means when the ratio increases the profit will increase as well. Thus, we recommend Jordanian and Palestinian banks to monitor their disbursement management. This study shows that the

Jordanian and Palestinian banks almost have the same high earning quality ratio. So for more efficient process the banks should reduce costs.

According to ASQL, the asset quality ratio in Jordan and Palestine were negatively related to the models of ROA and ROE. This means that the banks must observe the provision loans loss. Bad debts affect profits negatively. This result is also similar to the result of Berger (1995). So we recommend managers of these banks to take into consideration the credit-enquiring activities.

Moreover, liquidity ratio was negatively related to ROA and ROE in both countries. This means that when banks plan to increase their market share or increase a loan write off, their profit will decline.

Finally, the capital adequacy ratio and management quality ratio were statistically insignificant in all models for Palestine. However, for Jordan they were negatively related to the profitability determinant, which is return on equity. This might happen due to the expansion of the financial firms.

The difficulties encountered in this research were lack of time and availability of data. So if the number of variables and years increased, more logical and experimental results will be obtained. Finite data may lead to illogical relationships between variables, so when the researcher collected data from "Bank Scope Database" he will perform much better.

For further studies, researchers may try to add more independent variables. For instance, the size and the sensitivity to market risk, especially; interest rate risk in a try to enrich the analysis.

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APPENDICES

Appendix A: Unit Root Test for Jordanian Banks

Variables		LLC	IPS	PP
ROA	τ_T	-15.66*	-2.84*	61.51*
	τ_μ	-3.40*	-2.00**	35.21*
	τ	7.97	-	8.51
ROE	τ_T	-8.82*	-1.05	45.88*
	τ_μ	-6.13*	-1.85**	34.75*
	τ	2.17	-	10.47
CPTLAD	τ_T	-4.41*	0.09	22.43**
	τ_μ	-4.97*	-0.33	27.05*
	τ	0.40	-	18.51
ASQL	τ_T	-6.34*	-0.25	38.07*
	τ_μ	-6.20*	-1.94**	36.63*
	τ	-0.19	-	10.02
MNGQL	τ_T	-9.44*	-0.21	25.29**
	τ_μ	-9.53*	-3.21*	39.90*
	τ	-2.43*	-	28.16*
LIQUID	τ_T	-4.28*	0.39	15.19
	τ_μ	-4.31*	-1.23	28.60*
	τ	-0.18	-	10.55
ERNQL	τ_T	-5.86*	-0.13	25.97**
	τ_μ	-1.24	0.68	10.77
	τ	-2.99*	-	23.28**

Note: LLC is a methodology of Levin Lei and Chu; IPS – methodology of IM Pesaran Shin; PP – methodology of Phillips Perron. * denotes rejection of null hypothesis at 1% level. ** denotes rejection of the null hypothesis at the 5% level. *** denotes rejection of the null hypothesis at the 10% level. τ_T represent intercept and trend. τ_μ represent intercept. τ none. Test for unit root was carried out in E-views 7.1.

Appendix B: Unit Root Test for Palestinian banks:

Variables		LLC	IPS	PP
ROA	τ_T	-28.74*	-3.86*	53.85*
	τ_μ	-24.20*	-8.94*	56.05*
	τ	-2.52*	-	50.28*
ROE	τ_T	-13.96*	-1.52***	47.73*
	τ_μ	-11.81*	-3.79*	48.70*
	τ	-2.32**	-	31.82*
CPTLAD	τ_T	-5.38*	-0.03	24.46**
	τ_μ	-4.75*	-1.13	35.56*
	τ	-3.96*	-	38.67*
ASQL	τ_T	-17.16*	-3.03*	58.46*
	τ_μ	-18.12*	-9.73*	75.79*
	τ	-12.52*	-	87.36*
MNGQL	τ_T	-15.22*	-1.91**	75.21*
	τ_μ	-14.40*	-5.56*	76.98*
	τ	-4.63*	-	41.90*
LIQUID	τ_T	-26.59*	-3.24*	58.13*
	τ_μ	-15.36*	-4.79*	49.02*
	τ	0.97	-	12.35
ERNQL	τ_T	-11.30*	-0.69	34.18*
	τ_μ	-3.57*	-1.16	28.15*
	τ	-7.65*	-	20.05***

Note: LLC is a methodology of Levin Lei and Chu; IPS – methodology of IM Pesaran Shin; PP – methodology of Phillips Perron. * denotes rejection of null hypothesis at 1% level. ** denotes rejection of the null hypothesis at the 5% level. *** denotes rejection of the null hypothesis at the 10% level. τ_T represent intercept and trend. τ_μ represent intercept. τ none. Test for unit root was carried out in E-views 7.1.

Appendix C: Regression Analysis for Jordanian banks ROA

Dependent Variable: ROA
Method: Panel Least Squares
Date: 01/13/16   Time: 10:57
Sample: 2008 2014
Periods included: 7
Cross-sections included: 6
Total panel (balanced) observations: 42
White cross-section standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.037902	0.004786	7.919709	0.0000
CPTLAD	0.024153	0.033111	0.729445	0.4712
ASQL	-0.302023	0.066755	-4.524373	0.0001
MNGQL	0.004466	0.091629	0.048744	0.9614
LIQUID	-0.013431	0.004213	-3.188209	0.0033
ERNQL	-0.043815	0.008662	-5.058026	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.864825	Mean dependent var		0.012968
Adjusted R-squared	0.821220	S.D. dependent var		0.005230
S.E. of regression	0.002211	Akaike info criterion		-9.170187
Sum squared resid	0.000152	Schwarz criterion		-8.715083
Log likelihood	203.5739	Hannan-Quinn criter.		-9.003373
F-statistic	19.83322	Durbin-Watson stat		1.662186
Prob(F-statistic)	0.000000			

Appendix D: Regression Analysis for Jordanian Banks ROE

Dependent Variable: ROE
Method: Panel Least Squares
Date: 01/13/16   Time: 11:01
Sample: 2008 2014
Periods included: 7
Cross-sections included: 6
Total panel (balanced) observations: 42
White cross-section standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.342820	0.028679	11.95389	0.0000
CPTLAD	-0.509947	0.224785	-2.268597	0.0304
ASQL	-1.918357	0.340413	-5.635380	0.0000
MNGQL	0.334533	0.496358	0.673975	0.5053
LIQUID	-0.079876	0.038660	-2.066118	0.0473
ERNQL	-0.286256	0.043323	-6.607429	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.914575	Mean dependent var	0.101918
Adjusted R-squared	0.887019	S.D. dependent var	0.043550
S.E. of regression	0.014638	Akaike info criterion	-5.390219
Sum squared resid	0.006643	Schwarz criterion	-4.935115
Log likelihood	124.1946	Hannan-Quinn criter.	-5.223405
F-statistic	33.18935	Durbin-Watson stat	2.047260
Prob(F-statistic)	0.000000		

Appendix E: Regression analysis for Palestinian banks ROA

Dependent Variable: ROA
Method: Panel EGLS (Cross-section random effects)
Date: 01/13/16   Time: 11:04
Sample: 2008 2014
Periods included: 7
Cross-sections included: 6
Total panel (unbalanced) observations: 39
Swamy and Arora estimator of component variances
White cross-section standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.041836	0.002587	16.17366	0.0000
CPTLAD	0.016189	0.018624	0.869233	0.3910
ASQL	-0.015819	0.008432	-1.876136	0.0695
MNGQL	0.058559	0.042989	1.362183	0.1824
LIQUID	-0.003752	0.000991	-3.786697	0.0006
ERNQL	-0.048368	0.005952	-8.125695	0.0000

Effects Specification		
	S.D.	Rho
Cross-section random	6.65E-10	0.0000
Idiosyncratic random	0.003602	1.0000

Weighted Statistics			
R-squared	0.899156	Mean dependent var	0.007155
Adjusted R-squared	0.883876	S.D. dependent var	0.010704
S.E. of regression	0.003648	Sum squared resid	0.000439
F-statistic	58.84748	Durbin-Watson stat	1.375847
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.899156	Mean dependent var	0.007155
Sum squared resid	0.000439	Durbin-Watson stat	1.375847

Appendix F: Regression Analysis for Palestinian Banks ROE

Dependent Variable: ROE
Method: Panel Least Squares
Date: 01/13/16   Time: 11:09
Sample: 2008 2014
Periods included: 7
Cross-sections included: 6
Total panel (unbalanced) observations: 39
White cross-section standard errors & covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.251820	0.014415	17.46975	0.0000
CPTLAD	-0.106479	0.161975	-0.657379	0.5163
ASQL	-0.170771	0.037291	-4.579427	0.0001
MNGQL	0.866886	0.616855	1.405333	0.1709
LIQUID	-0.019018	0.008609	-2.209062	0.0355
ERNQL	-0.240643	0.029234	-8.231534	0.0000

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.913167	Mean dependent var	0.058016
Adjusted R-squared	0.882155	S.D. dependent var	0.073161
S.E. of regression	0.025115	Akaike info criterion	-4.297960
Sum squared resid	0.017661	Schwarz criterion	-3.828750
Log likelihood	94.81021	Hannan-Quinn criter.	-4.129611
F-statistic	29.44585	Durbin-Watson stat	1.334315
Prob(F-statistic)	0.000000		