THE IMPACT OF COMPETITION ON THE FINANCIAL PERFORMANCE OF ISLAMIC BANKS OPERATING IN JORDAN

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ABSTRACT

This study aimed to identify the impact of competition in the Islamic banking market on the financial performance of Islamic banks operating in Jordan, the study sample consisted of Jordanian Islamic banks operating in Jordan. The study included the period (1992-2017), divided into three sub-periods according to the number of Islamic banks operating in each period, the study used competition as an independent variable and relied on the number of banks operating in the market as an indicator of the level of competition in the Islamic banking market, profitability, solvency, stock market prices, and the level of activity of Islamic banks were also used as dependent variables. One-Way analysis of variance was used to test the study hypotheses, and the Bonferroni test to determine which of the periods had the greatest effect on the differences between the mean of indicators, the study did not reach a prove or denial the existence of the impact of competition on the profitability of Islamic banks, on the solvency where one of the indicators was affected by each and the other was not, as for the prices of shares of Islamic banks, the study concluded that competition had no effect, Finally, the study concluded that competition had an impact on the activity rates in Islamic banks, the study recommended that Islamic banks offer new products and improve their services, and to increase their share of the banking market so that it can improve the indicators of profitability, solvency, and exploitation of its resources, and improve the levels of prices of its shares in the financial market.

Keywords: Islamic Banks, Competition, Financial Performance, Financial Ratios.

INTRODUCTION

The concept of Islamic banking has emerged in the modern era to meet the desires of a wide range of customers in the Islamic world, and those who wish to practice their acts in accordance with the provisions of the Islamic Charter, which prohibited usury and made it a major sin, the Islamic banks witnessed a huge turnout from a wide range of individuals and investors, where they found a solution to what they were suffering from dealing with banking institutions dealing in an unacceptable manner from the point of view of legitimacy for them, this has made these institutions work when they originated in a market devoid of real competition in some Islamic countries, and then increased the level of competition with the succession of the entry of institutions that provide Islamic banking services to the markets of Islamic countries, including Jordan, therefore, this study came to identify the impact of competition on the financial performance of Islamic banks operating in Jordan.

The Jordanian market represents a limited market when compared to regional or international markets, it is the same for many goods and services, but for Islamic banking services it is considered more limited, it is for the services of Islamic banks are more limited, due to the restrictions imposed by the nature of the work of these banks on institutions operating in

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the Islamic banking sector, which requires from the point of view of the researcher to study the extent of the impact of increased competition between Islamic banks on the performance of the sector in general, and therefore the problem of the study is to answer the following question:

Did the competition affect the financial performance of Islamic banks operating in Jordan?

The following sub-questions arise from this question:

1. Did the competition affect the profitability of Islamic banks operating in Jordan?
2. Did the competition affect the solvency of Islamic banks operating in Jordan?
3. Did the competition affect the prices of shares of Islamic banks operating in Jordan?
4. Did the competition affect the activity of Islamic banks operating in Jordan?

This study aims to identify the impact of competition in the Islamic banking market in Jordan on the performance of Islamic banks operating in this sector, this in terms of profitability, solvency, activity and share prices of Islamic banking institutions in the financial market, which will help in judging the market need for more Islamic banks.

The importance of this study in its attempt to identify the impact of the entry of banking institutions operating in accordance with the provisions of Islamic law on the financial performance of banking institutions operating in the Islamic banking sector in Jordan in general, by comparing some of the financial ratios used as indicators of profitability, solvency, activity and prices of shares of Islamic banking institutions in the financial market, where the result of this study could be a guide to the relevant authorities on the extent to which the Islamic banking services market is satisfied or the need to enter into more banking institutions operating in accordance with Islamic Sharia.

The study included testing the following hypotheses:

1. The first main hypothesis HO1: There is no impact of competition on the profitability of Islamic banks in Jordan. The following two sub-assumptions has been emerged:
a. The first sub-hypothesis HO1.1: There is no effect of competition for return on assets in Islamic banks in Jordan.
b. Second Hypothesis HO1.2: There is no effect of competition for the return on equity in Islamic banks in Jordan.
c. The second main hypothesis HO2: There is no effect of competition on the solvency of Islamic banks in Jordan.
2. The first sub-hypothesis HO2.1: There is no effect of competition on the liquidity of Islamic banks in Jordan.
a. The second sub-hypothesis HO2.2: There is no effect of competition on the indebtedness of Islamic banks in Jordan.
3. The third main hypothesis HO3: There is no effect of competition on the prices of shares of Islamic banks in Jordan.
b. The first sub-hypothesis HO3.1: There is no effect of the competition on the ratio of the market value of the share to the earnings per share in the Islamic banks in Jordan.
c. The second sub-hypothesis HO3.2: There is no effect of competition on the ratio of the market value to the share value in Islamic banks in Jordan.
4. The fourth main hypothesis HO4: There is no effect of competition on the activity of Islamic banks in Jordan and the following two hypothesis has been emerged from it:
a. The first sub-hypothesis HO4.1: There is no effect of competition on the proportion of investment deposits in Islamic banks in Jordan.
b. Second Hypothesis HO4.2: There is no effect of the competition on the resource utilization ratio in Islamic banks in Jordan.

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Studies dealing with Islamic banks in Jordan face a major limitation in the lack of data, due to the limited number of Islamic banks operating in Jordan, especially in the early years of the study period, this study was conducted to ensure the stability of the remaining factors that can affect their variables during the study period. This study was conducted on Jordanian Islamic banks operating in Jordan during the period 1992-2017. The study relied on the following sources to obtain the necessary data to achieve its objectives:

1. Secondary sources of data: These sources include books, scientific journals, and the Internet, and were used to form the theoretical framework for the study, especially with regard to Islamic banks and the legal frameworks governing their work, competition among them, and methods of evaluating their performance.
2. Main Sources: The study relied on obtaining the necessary data for analysis, and testing the hypotheses on the Jordanian Public Shareholding Companies' manual issued by the Amman Stock Exchange for the period 1992-2017, as well as on the annual reports issued by banks for the same period, to obtain information that was not available in the directory of companies.

LITERATURE REVIEW

A study of (Battal & Dulaimi, 2018) entitled "*The impact of using the Herfindhal-Hirshchman Index-HHI"* to measure competition among banks operating in the Iraqi banking sector for the period (2011-2016).

This study aimed to measure the level of competition in the Iraqi banking market using the above model, the study included forty-nine banks, including governmental, local and foreign banks, as well as traditional and Islamic banks. The study found that the level of competition between government banks is low, and high among traditional private banks, while in the Islamic banks, the study found that there is monopolistic competition, in the sense that there is a leading bank among Islamic banks, taking a large share of the market at the expense of the rest of the banks operating in the market of Islamic banking in Iraq, the study also used the concept of concentration ratio in the banking market, and this proportion is inversely proportional to the number of banks operating in the market, the study recommended Islamic banks to improve their competitive position through the innovation and introduction of new products.

The study of El-Sakhry (2017) entitled Evaluation of the financial performance of Islamic and conventional banks, a comparative study using the financial ratios of a sample of banks operating in Algeria during the period 2010-2015).

This study was conducted in Algeria, where it included four traditional banks with one Islamic bank, the t-test was used to study the differences between the average liquidity ratios, the return on assets and the ratio of investments to deposits, the ratio of investments to resources and equity to assets as indicators of liquidity, profitability, activity and solvency of both types of banks; the study found that the Islamic Bank outperformed the liquidity and profitability ratios over commercial banks, but commercial banks are more active than the Islamic Bank, and that both types have a proper solvency (Brockhaus, 1982).

A study of (Hussein & Bashir, 2015) entitled *"The impact of the strategy of excellence in the financial performance of commercial banks 2014"*.

The field study was conducted on Sudanese commercial banks in general, and ten commercial banks were selected representing the study population, and the sample of the study was chosen purposefully from the study community, which is the departments of technology, planning and e-services, the study aimed to know the impact of the strategy of excellence on the financial performance of commercial banks, in terms of making profits, attracting and maintaining deposits and knowing their impact on capital, the problem of the study was the weak

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financial performance of the commercial banks, which represented the distribution of small percentage of profits to depositors and shareholders, and the inability of banks to attract and retain deposits as we find that the large monetary mass is outside the banking system and is therefore outside the circle of policies and control of the Central Bank, the study reached a set of results, the most important of which is that the application of the excellence strategy positively affects both profits and deposits in commercial banks, it also has no impact on the capital of commercial banks, and the study recommended the need for banks to adopt a deeper application of the strategy of excellence and the constant pursuit of review and improvement. The study of (Srouji et al., 2015) entitled *"Assessment of banks profitability ratios evidence from Jordan"*.

This study aimed to evaluate the performance of Islamic banks operating in Jordan in terms of profitability during the period (2011-2014), the study used descriptive statistics methods and t-test to compare the differences between the average rates of return on assets and return on equity, the gross profit and the same ratio for the banking sector for the same period, the study concluded that the profitability of Islamic banks in 2014 was better than in 2011, with the exception of Arab Islamic International Bank, and modern banks have achieved high profit rates, which indicates that it may have taken part of the market share of Arab Islamic International Bank, the study recommended conducting further studies using other indicators such as risk and liquidity, and conducting other types of comparisons such as comparing the performance of Jordanian Islamic banks with Arab Islamic banks operating in Jordan.

The study of (Milhem & Istaiteyeh, 2015), entitled *"Financial performance of islamic and conventional banks, evidence from Jordan"*.

This study aimed to evaluate the performance of Islamic banks compared to conventional banks in Jordan. The study sample consisted of thirteen commercial banks, and three Islamic banks during the years (2009-2013), the study used thirteen indicators, covering aspects of profitability, liquidity and solvency, it also used (t) test to test the significant differences between the performance of both types of banks, the study found that Islamic banks are less profitable, less risky and less efficient but more liquid than commercial banks, although the differences in profitability are not statistically significant other than the rest of the ratios, as the study recommended that Islamic banks to exploit their cash surplus, and the central bank to help them in this so that they can compete in the banking market.

The study (Obeidat et al., 2013) entitled *"Evaluating the profitability of islamic banks in jordan"*.

This study was conducted in Jordan and aimed to identify the most important internal and external factors affecting the profits of Islamic banks in Jordan during the period (1997-2006), Deposits, volume of expenses, speculative loans, and restricted investment deposits were used as internal factors, while the volume of internal funds of Islamic banks, and their market share, were used as external factors, the study used the multiple regression model to determine the nature of the relationship between internal and external factors and the profitability of Islamic banks expressed by the return on assets, it concluded that there is a statistically significant relationship between internal and external factors and profitability of Islamic banks, the banks' departments were recommended to strengthen the role of factors that have a positive impact and to reduce the role of factors that have a negative impact on the profitability of Islamic banks in Jordan.

The study of (Momani & Srouji, 2005) entitled *"Comparing the performance of Islamic and conventional banks using financial ratios in Jordan"*.

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This study was conducted in Jordan and aimed at comparing the performance of the Jordan Islamic Bank with that of some commercial banks, the sample of the study consisted of Jordan Islamic Bank and 11 traditional banks using financial ratios during the period (1992-2001). The study used the descriptive analytical method and the t-test to study the differences between the averages of Islamic bank performance indicators and the performance indicators of conventional banks. The study concluded that there are no statistically significant differences between the performance of the Jordan Islamic Bank and the performance of conventional banks with respect to the ratios representing profitability, the rest of the ratios showed that their mean differences were statistically significant, the study recommended that Jordan Islamic Bank improve liquidity ratios and maintain profitability rates. It also recommended conventional banks to open branches operating in accordance with Islamic Sharia.

What distinguishes this study from previous studies?

This study is distinguished from other previous studies that it dealt with the performance of the Islamic banking sector operating in the Jordanian banking market as a whole, and compare it to itself over different time periods, using a set of indicators, this is not addressed by any of the previous studies as far as the researcher is aware, where most of the previous studies focused on comparing the performance of Islamic banks with conventional banks, or evaluate the performance of an Islamic bank as a case study (Assi, 2010).

METHODOLOGY

Study Variables and Dimensions Measured

The study used the following variables to achieve its goal: The independent variable: Competition: The competition for the purposes of this study is the competition between the Islamic banks operating in Jordan, which is due to the increase in the number of Islamic banks operating in the market, where the number of competitors of the structural dimensions of the competition (Batal & Dulaimi, 2018). The dependent variables are:

Profitability: The study used the two dimensions of the return on investment and the return on equity to measure the profitability of Islamic banks, the studies of (Momani & Srouji, 2005) used these two dimensions to measure profitability, and the study of (Shammari, 2017) used the dimensions of return on assets, return on equity and the study of (Obeidat et al., 2013) used the dimensions of the return on assets only.

Solvency: refers to the extent to which the company is able to meet its financial obligations in the short and long term (Qatar Financial Markets Authority www.qfma.org.qa.

The study used the dimensions of the rapid liquidity ratio, the percentage of indebtedness to measure it, the study of (Momani & Srouji, 2005) used the rapid liquidity ratio, the study of (Elserougy et al., 2015) used a cash-to-deposit ratio, and the study of (Elryah, 2014) used a liquidity ratio, and a customer-to-asset deposit ratio.

Share prices reflect the expectations of investors towards the company in the future, the study used the market value to earnings per share and market value to book value, the study of (Momani & Srouji, 2005) used market value / book value ratios, and the ratio of return to market value as two dimensions to measure investors' expectations about the shares of companies addressed.

Activity: The investment activity is considered one of the most important activities of the Islamic Bank, it also represents the main source of revenue and profitability (Shehata, nd), activity ratios also indicate the bank's ability to employ its sources of funds.

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The study used the ratio of investment of deposits and the proportion of investment of resources as dimensions to measure the activity of Islamic banks, and the study of (Sakhry, 2017), and the study of (Momani & Srouji, 2005) have used these ratios to measure the activity of institutions addressed in the study.

Procedural Definitions

Competition: means for the purposes of this study competition between Islamic banks in Jordan, therefore, the study adopted the number of banks operating in the Islamic banking sector as an indicator of the level of competition in this sector. The study period was divided into sub-periods based on the number of banks operating in each period (Ahmed & Al-Dulaimi, 2018).

Return on Assets: Measures the ability of the company's assets to achieve profits according to the following equation: (net profit / total assets)* 100%) (Khalayleh, 2004, p: 93).

Return on equity: Measures the share of dinar or monetary unit of equity from net profit after tax according to the following formula: (Net profit / total equity) * 100% (Al-Khalayleh, 2004, p. 93).

Debt Ratio: Measures the bank's financial risk and its ability to repay in the long run, calculated according to the following formula: (Total Liabilities / Total Assets) * 100% (Momani & Srouji, 2015).

Quick Ratio: Measures the ability of the Bank to meet its obligations in emergency situations, calculated according to the following equation (cash and balances with the Central Bank, banks and Islamic banking institutions / customer deposits and deposits of Islamic banks and banking institutions) * 100% (Momani & Srouji, 2015; Elryah, 2014).

Price / Earnings ratio: It is an indicator of the future trends of the share price in the future and is calculated according to the following formula: Market share price / earnings per share (Khanfar & Matarneh, 2011, p: 152).

Price / Book Value Ratio: This ratio measures the investors' perception, their assessment of the performance of the enterprise and is calculated according to the following formula: Share price / book value per share (Khanfar & the Matarneh, 2011, p: 153).

Deposit utilization ratio (net credit facilities / total deposits): Measures the ability of the bank to invest the funds deposited with it, calculated according to the following equation: (Net Credit Facilities / Total Customer Deposits and Deposits of Banking Institutions) 100% (Momani & Srouji, 2015; Al-Sakhry, 2017).

Asset utilization ratio (net credit facilities / total assets): Measures the ability of the Bank to utilize the resources available to it and is calculated according to the following formula: (Net credit facilities / total assets) * 100% (Momani & Srouji, 2015).

Study Sample and Population

The study population consists of four Islamic banks operating in the Jordanian market during the study period, its sample was intentionally selected from only three Islamic banks in Jordan.

The study period included the time period (1992-2017), which was divided into three sub-periods, according to the number of Islamic banks operating in each period, namely:

The first sub-period includes the years (1992-1997) where the Jordan Islamic Bank was the only bank operating in accordance with the provisions of Islamic Sharia.

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The second sub-period includes the years (1998-2007), where it worked in accordance with the provisions of the Sharia during this period, Jordan Islamic Bank and Arab Islamic Bank, which was founded in 1998.

The third sub-period includes the years (2008-2017). During this period, four banks were operating according to Islamic Sharia, namely Jordan Islamic Bank, Arab Islamic International Bank, Safwa Islamic Bank (formerly Dubai Islamic Bank) and Al Rajhi Bank

HYPOTHESIS

H1: *The first main hypothesis*

HO1: *There is no impact of competition on the profitability of Islamic banks in Jordan.*

HO1.1: *There is no impact of competition on the return on assets of Islamic banks in Jordan.*

HO1.2: *There is no impact on the return on equity of Islamic banks in Jordan.*

H2: *The second main hypothesis*

HO2: *There is no effect of competition for the Solvency of Islamic banks in Jordan; it includes two sub-hypothesis: The first sub-hypothesis*

HO2.1: *There is no effect of competition on the Liquidity of Islamic banks in Jordan.*

HO2.2: *There is no impact of competition on the Indebtedness of Islamic banks in Jordan.*

H3: *The third main hypothesis*

HO3: *There is no effect of competition on the prices of shares of Islamic banks in Jordan. It includes two sub-hypothesis: The first sub-hypothesis*

HO3.1: *There is no effect of the competition on the ratio (market value to earnings per share) of the Islamic banks in Jordan.*

HO3.2: *There is no effect of competition on the ratio of (market value to book value per share) of Islamic banks in Jordan*.

H4: *The fourth main hypothesis HO4: There is no impact of competition on the activity of Islamic banks in Jordan and it includes two sub-hypothesis arise: The first sub-hypothesis.*

HO4.1: *There is no effect of competition on the investment Deposits ratio in Islamic banks in Jordan. The Second Hypothesis HO4.2: There is no impact of the competition on the resource utilization ratio in Islamic banks in Jordan.*

The first main hypothesis HO1: There is no impact of competition on the profitability of Islamic banks in Jordan; One-Way analysis of variance test was used to show differences between the three competition periods, the results of this first sub-hypothesis were shown in Table 1, Table 2: Bonferroni test results to determine which periods were the most difference.

The first sub-hypothesis HO1.1: There is no impact of competition on the return on assets of Islamic banks in Jordan.

Table 1
ONE-WAY ANALYSIS OF VARIANCE TO TEST THE FIRST SUB-HYPOTHESIS (THE

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IMPACT OF COMPETITION ON THE RETURN ON ASSETS) OF THE ISLAMIC BANKS IN JORDAN*						
Variable**	Period	N	Mean	Standard deviation	F value	Sig
Return on Assets	1992 – 1997	6	1.65	0.09	3.73	0.031
	1998 – 2007	19	1.79	0.34		
	2008 – 2017	28	1.95	0.24		

* Prepared by the researcher based on the results of statistical analysis.
** The values in the table are expressed in logarithmic form.

Table 1 shows the results of the analysis of the single variance to test the hypothesis of the effect of competition on the return on assets of the Islamic banks in Jordan. The value of (3.73) has a statistically significant effect of competition on the values of returns on assets in Islamic banks, this is because the value of the significance level of the test (0.031) was less than 0.05. This result indicates that the three investment periods under study differ among them in the average return on assets values (expressed in logarithmic form). To determine which periods had the greatest impact on this result, different from other periods, the Bonferroni test was used and the following table shows the results of this test.

Table 2 BONFERRONI TEST RESULTS TO DETERMINE THE PERIODS IN WHICH THE ROI VALUES VARY *				
Variable **	Mean	Period	1998 – 2007	2008 – 2017
Return on Assets	.65	1992 – 1997		***
	.79	1998 – 2007		
	.95	2008 – 2017		

** Prepared by the researcher based on the results of statistical analysis.*
*** The values in the table are expressed in logarithmic form.*
**** means that the difference in the mean of the two periods is statistically significant.*

The table 2 shows that the start period (1992-1997) and the period (2008-2017) are different in the variable return on investment values, and based on the arithmetic averages shown in the table, the last competition period (2008-207) shows that the average return on assets was the largest compared to the first value (1992-1997). With this result and through the value of the significance level, this hypothesis is rejected and it is concluded that there is existence of the impact of competition on the variable return on assets.

The Second sub-hypothesis HO1.2: There is no impact on the return on equity of Islamic banks in Jordan.

Table 3 ONE-WAY ANALYSIS OF VARIANCE TO TEST THE SECOND SUB-HYPOTHESIS (THE IMPACT OF COMPETITION ON THE RETURN ON EQUITY) FOR ISLAMIC BANKS IN JORDAN*						
Variable**	Period	N	Mean	Standard deviation	F value	Sig
Return on equity	1992 – 1997	6	0.87	0.18	1.01	0.369
	1998 – 2007	19	0.76	0.31		
	2008 – 2017	26	0.91	0.39		

** Prepared by the researcher based on the results of statistical analysis.*
*** The values in the table are expressed in logarithmic form.*

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Table 3 shows the results of One-Way analysis of variance to test the second sub-hypothesis (the effect of competition on the return on equity) of the Islamic banks in Jordan. The value of f (1.01) shows that there is no statistically significant effect of competition on the value of returns on equity in Islamic banks, this is because the value of the test significance level (0.369) was greater than 0.05, this finding indicates that the three periods of investment under study are not different in the values of the ROE, With this result and through the value of the level of significance, the second sub-hypothesis is accepted and it is concluded that there is no effect of competition on the return on equity variable.

Based on the results of the two sub-hypotheses arising from the main hypothesis of the study, including the rejection of the first sub-hypothesis and acceptance of the second sub-hypothesis, the first major hypothesis cannot be accepted or rejected, i.e, the existence or absence of a trace of competition on the profitability of Islamic banks, where the result of the analysis that one of the indicators (dimensions) showed statistical significant differences, and the other did not show statistically significant differences between periods.

The second main hypothesis HO2: There is no effect of competition for the solvency of Islamic banks in Jordan, it includes two sub-hypothesis:

The first sub-hypothesis HO2.1: There is no effect of competition on the liquidity of Islamic banks in Jordan.

Table 4
ONE-WAY ANALYSIS OF VARIANCE TO TEST THE FIRST HYPOTHESIS (THE EFFECT OF COMPETITION ON LIQUIDITY IN ISLAMIC BANKS IN JORDAN) *

Variable**	Period		Mean	Standard deviation	F value	Sig
Liquidity in Islamic banks	1992 – 1997		1.51	0.12	4.59	0.015
	1998 – 2007	9	1.75	0.15		
	2008 – 2017	7	1.58	0.25		

** Prepared by the researcher based on the results of statistical analysis.*
*** The values in the table are expressed in logarithmic form.*

Table 4 shows the results of One-Way analysis of variance to test the first sub-hypothesis (the impact of competition on liquidity in Islamic banks), the value of f (4.49) shows a statistically significant effect of competition on liquidity in Islamic banks, this is because the value of the test indication level (0.015) was less than 0.05. This finding indicates that the three study periods under study differ among themselves in the average liquidity ratios of Islamic banks, to determine which periods had the greatest effect and differ from other periods, the Bonferroni test was used. The following table shows the results of this test.

Table 5
RESULTS OF THE BONFERRONI TEST TO DETERMINE THE PERIODS WHERE LIQUIDITY VARIABLE VALUES VARY IN ISLAMIC BANKS*

Variable **	Mean	Period	1998 – 2007	2008 – 2017
Liquidity in Islamic banks	1.51	1992 – 1997	***	
	1.75	1998 – 2007		
	1.58	2008 – 2017	***	

** Prepared by the researcher based on the results of statistical analysis.*
*** The values in the table are expressed in logarithmic form.*
**** means that the difference in the mean of the two periods is statistically significant*

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Table 5 shows that the period of the second sub-study (1998-2007) differs significantly from the first sub-period (1992-1997) and the third period (2008-2017) in the liquidity ratios of Islamic banks. Based on the values of the arithmetic averages shown in the table, the second sub-period (1998 - 2007) was the highest in the liquidity ratios between the three study periods, with this result, and through the value of the level of significance, the first sub-hypothesis is rejected, and accept the alternative hypothesis and the conclusion of the impact of competition on the liquidity ratios in Islamic banks.

The Second sub-Hypothesis HO2.2: There is no impact of competition on the indebtedness of Islamic banks in Jordan.

Table 6
ONE-WAY ANALYSIS OF VARIANCE TO TEST THE SECOND SUB-HYPOTHESIS (THE IMPACT OF COMPETITION ON INDEBTEDNESS) OF ISLAMIC BANKS IN JORDAN

Variable**	Period		Mean	Standard deviation	F-value	Sig
Debt in Islamic banks	1992 – 1997		.97	0.01	.31	0.279
	1998 – 2007	9	.95	0.03		
	2008 – 2017	8	.94	0.05		

** Prepared by the researcher based on the results of statistical analysis.*
*** The values in the table are expressed in logarithmic form.*

Table 6 shows the results of the analysis of the variance to test the second sub-hypothesis (the impact of competition on indebtedness in Islamic banks), The value of f (1.31) shows that there is no statistically significant effect of competition on debt ratios in Islamic banks, this is because the value of the level of significance of the test (0.279) was greater than 0.05. This result indicates that the three study periods under study do not differ among themselves in the average ratios of indebtedness in Islamic banks. With this result, and through the value of the level of significance, the second hypothesis is accepted, and it is concluded that there is no impact of competition on the debt ratio in Islamic banks.

Based on the test result of the two sub-hypotheses emanating from the second main hypothesis of the study, which includes rejecting the first sub-hypothesis and accepting the second sub-hypothesis, the second major hypothesis can not be accepted or rejected, that is, the existence or absence of an effect of competition for the debts of Islamic banks, where the results of the analysis showed that one of the indicators (the dimensions) showed statistically significant differences, and the other showed no statistically significant differences between the periods of the sub-study.

The third main hypothesis HO3: There is no effect of competition on the prices of shares of Islamic banks in Jordan. It includes two sub-hypothesis:

The first sub-hypothesis HO3.1: There is no effect of the competition on the ratio (market value to earnings per share) of the Islamic banks in Jordan.

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Table 7
ONE-WAY ANALYSIS OF VARIANCE TO TEST THE FIRST SUB-HYPOTHESIS (THE IMPACT OF COMPETITION ON THE RATIO OF THE MARKET VALUE OF THE SHARE TO EARNINGS PER SHARE) FOR ISLAMIC BANKS IN JORDAN*

Variable**	Period		Mean	Standard deviation	F-value	Sig
The ratio of the market value of the share to the earnings per share	1992 – 1997		1.40	0.27	.98	0.383
	1998 – 2007	0	1.31	0.15		
	2008 – 2017	0	1.24	0.26		

** Prepared by the researcher based on the results of statistical analysis.*
*** The values in the table are expressed in logarithmic form.*

Table 7 shows the results of the analysis of variance to test the first sub-hypothesis (the impact of competition on the ratio of the market value of the share to earnings per share in Islamic banks), the value of f (0.98) shows that there is no statistically significant effect of competition on the ratio of the market value of the share to the earnings per share in Islamic banks, this is because the value of the test significance level of (0.383) was greater than 0.05. This result indicates that the three sub-study periods do not differ among themselves in the ratio of the average market value of the share to the earnings per share in Islamic banks, with this result and through the value level of the significance, the first sub-hypothesis is accepted, and it is concluded that there is no effect of competition on the ratio of the market value of the share to the earnings per share in Islamic banks.

The second sub-hypothesis HO3.2: There is no effect of competition on the ratio of (market value to book value per share) of Islamic banks in Jordan.

Table 8
ONE-WAY ANALYSIS OF VARIANCE TO TEST THE SECOND SUB-HYPOTHESIS (THE EFFECT OF COMPETITION ON THE RATIO OF MARKET VALUE TO THE VALUE PER SHARE) OF THE ISLAMIC BANKS IN JORDAN*

Variable**	**Period**		**Mean**	**Standard deviation**	**F value**	**Sig**
Ratio of market value to value per share	1992 – 1997		0.18	0.12	1.26	0.295
	1998 – 2007	0	0.10	0.27		
	2008 – 2017	0	0.03	0.19		

** Prepared by the researcher based on the results of statistical analysis.*
*** The values in the table are expressed in logarithmic form.*

Table 8 shows the results of One-way analysis of variance to test the second sub-hypothesis (the effect of competition on the ratio of market value to the value of the shares in Islamic banks). The value of f (1.26) shows that there is no statistically significant effect of competition on market value ratio for the share in Islamic banks because the value of the test significance level (0.295) was greater than 0.05, this result indicates that the three sub-study periods do not differ among themselves in the average ratio of market value to book value per share in Islamic banks, with this result and through the value of the level of significance, the

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hypothesis of the study is accepted , and the conclusion that there is no impact of competition on the ratio of market value to the value of the share in Islamic banks.

Based on the results of the test of the two hypotheses arising from the third main hypothesis, including the acceptance of the first sub-hypothesis and the acceptance of the second sub-hypothesis, the third main hypothesis, which states that *"there is no effect on the competition on the prices of shares of Islamic banks operating in Jordan"* was accepted.

The fourth main hypothesis HO4: There is no impact of competition on the activity of Islamic banks in Jordan and it includes two sub-hypothesis arise:

The first sub-hypothesis HO4.1: There is no effect of competition on the investment deposits ratio in Islamic banks in Jordan.

Table 9
ONE-WAY ANALYSIS OF VARIANCE TO TEST THE FIRST SUB-HYPOTHESIS (THE EFFECT OF COMPETITION ON THE INVESTMENT DEPOSITS RATIO IN ISLAMIC BANKS IN JORDAN)*

Variable**	Period		Mean	Standard deviation	F value	Sig
The percentage of investment of deposits in Islamic banks	1992 – 1997		1.89	0.04	12.60	0.000
	1998 – 2007	9	1.68	0.12		
	2008 – 2017	5	1.90	0.18		

** Prepared by the researcher based on the results of statistical analysis.*
*** The values in the table are expressed in logarithmic form.*

Table 9 shows the results of the analysis of the variance to test the first sub-hypothesis (the impact of competition on the investment of deposits ratio in Islamic banks in Jordan), this finding indicates that the three sub-periods differ in the average values of investment ratio of deposit in Islamic banks, to determine which of the sub-periods had the greatest effect and different from the other periods, the Bonferroni test was used. The following table shows the results of this test.

Table 10
RESULTS OF THE BONFERRONI TEST TO DETERMINE THE PERIODS THAT DIFFER IN THE VARIABLE OF DEPOSIT INVESTMENT RATIO IN ISLAMIC BANKS*

Variable**	Mean	Period	1998 – 2007	2008 – 2017
The percentage of investment deposits in Islamic banks	1.89	1992 – 1997	***	
	1.68	1998 – 2007		
	1.90	2008 – 2017	***	

**Prepared by the researcher based on the results of statistical analysis.*
***The values in the table are expressed in logarithmic form.*
****Means that the difference in the mean of the two periods is statistically significant.*

Table 10 shows that the second sub-period (1998-2007) differed with statistically significant differences from the first sub-period (1992-1997) and the third sub-period (2008-2017) in the values of the variable deposit investment ratio in Islamic banks, based on the average values shown in the table, the medium competition period (1998-2007) was the lowest in the average value of the investment ratio of deposits in Islamic banks compared to its value in the other two periods.

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With this result and through the value of significance level, the second hypothesis is rejected and the conclusion of the existence of the impact of competition on the proportion of investment of deposits in Islamic banks.

Second Hypothesis HO4.2: There is no impact of the competition on the resource utilization ratio in Islamic banks in Jordan.

Table 11
ONE-WAY ANALYSIS OF VARIANCE TO TEST THE SECOND SUB-HYPOTHESIS (THE IMPACT OF COMPETITION ON THE RESOURCE UTILIZATION RATIO IN ISLAMIC BANKS IN JORDAN)*

**Variable ** **	**Period**	**N**	**Mean**	**Standard deviation**	**F value**	**Sig**
Percentage of resources utilization in Islamic banks	1992 – 1997	6	1.85	0.05	9.27	0.000
	1998 – 2007	19	1.46	0.44		
	2008 – 2017	29	1.77	0.10		

** Prepared by the researcher based on the results of statistical analysis.*
*** The values in the table are expressed in logarithmic form.*

Table 11 shows the results of One-way analysis of variance to test the second sub-hypothesis (the effect of competition on resource utilization ratios in Islamic banks). The value of F (9.27) shows a statistically significant effect of competition on resource utilization rates in Islamic banks, this is because the value of the level of test significance with the amount of (0.000) was less than 0.05. This result indicates that the three sub-periods of study vary from each other on the average of rates of resources utilization in Islamic banks, in order to determine which period had the greatest effect and different from other periods, the Bonferroni test was used. The following table shows the results of this test.

Table 12
BONFERRONI TEST RESULTS TO DETERMINE THE PERIOD WHICH DIFFER IN THE VALUES OF RESOURCE UTILIZATION RATIO IN ISLAMIC BANKS*

**Variable ** **	Mean	Period	1998 – 2007	2008 – 2017
Percentage of employment of resources in Islamic banks	1.85	1992 – 1997	***	
	1.46	1998 – 2007		
	1.77	2008 – 2017	***	

** Prepared by the researcher based on the results of statistical analysis.*
*** The values in the table are expressed in logarithmic form.*
**** The difference between mean of the two periods is statistically significant.*

Table 12 shows that the period of the second sub-study (1998-2007) differs significantly from the period of the first sub-study (1992-1997) and the third sub-period (2008-2017) in the ratios of resource utilization in Islamic banks, based on the values of the arithmetical averages shown in the table, the second sub-study period (1998-2007) was the lowest in the average value of resource utilization rates in Islamic banks compared to its value in the other two periods. With this result and through the value of the level of significance, the hypothesis of the study is rejected and it is concluded that the impact of competition on the variable resource utilization ratio in Islamic banks.

Based on the test result of the two sub-hypotheses arising from the fourth main hypothesis, including the rejection of the first sub-hypothesis and the rejection of the second hypothesis, it rejects the fourth main hypothesis, which states that *"there is no effect of*

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competition on the activity of Islamic banks operating in Jordan," and accept the alternative hypothesis, which provides for the impact of competition on the activity of Islamic banks.

RESULTS

The study relied on the previous literature, which dealt with the subject of the study in the composition of the theoretical framework of the study, and choose their variables and dimensions measured, the study used the descriptive analytical method, where the data was collected, and converted to the algorithmic image so that it is more homogeneous, and then to analyze the data descriptively to extract the arithmetic mean, and the standard deviation of the financial ratios used in the study, One-Way analysis of the variance was then used to determine whether there were statistically significant differences between the sub-study periods in terms of the mean ratios used in the study, to achieve the objective of the study, the study period was divided into three sub-periods depending on the number of Islamic banks operating in each period, after that, the financial ratios used in the study were extracted for the operating Islamic banks according to the sub-periods, and testing it statistically to achieve the objectives of the study and answer its questions. Table 13 below shows the Islamic banks operating in Jordan, the year of their entry into the market, and their nationalities.

Table 13
ISLAMIC BANKS OPERATING IN JORDAN*

Bank name	Year of establishment	Nationality
Jordan Islamic Bank	1978	Jordanian
Arab Islamic International bank	1997	Jordanian
Safwa Islamic Bank **	2009	Jordanian
Al Rajhi Bank	2011	Saudi

**Source: Prepared by the researcher based on the data of the Association of Jordanian Banks.*
*** Previously he worked under the name of Dubai Islamic Bank.*

The study used the one-way ANOVA test to analyze the study data and test its hypotheses. This test is the best method for testing differences between averages for more than two samples (Al-Tal et al., 2006, p. 348) (Newbold et al., 2007, pp637). This method was used to test the extent of statistically significant differences between the mean of the indicators used in the study at the significance level ($\alpha \leq 0.05$), and rely on this in testing the hypothesis of the study and answering its questions, the Bonferroni test was used as a subsequent step to test the hypotheses, where this test is used to determine which pair of subgroups or sub-periods had the most significant effect on the existence of statistically significant differences.

CONCLUSION

The study conclude the following results: The impact of competition on the profitability of Islamic banks: The results of analysis of the study data showed that the three periods of study witnessed a rapid growth in the return on assets of Islamic banks, and witnessed growth but at a lower rate of return on property rights (not statistically significant), this indicates that the competition has had a positive impact on the profitability of Islamic banks in Jordan, and this result is not in consistent with the findings of (Obeidat et al., 2013) study, However, it is consistent with the study of Srouji et al. (2015), which indicates the growth of the Islamic

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banking market in Jordan, and the entry of new Islamic banks to the market did not have a negative impact on the profitability of banks operating in the market.

The impact of competition on the solvency of Islamic banks: The results of the test hypotheses of the study showed that competition has an impact on the liquidity of Islamic banks, where the period of the second sub-study witnessed a clear rise in the liquidity ratios of Islamic banks compared to the first and third periods, at the same time, the study concluded that the competition did not have an impact on the ratios of indebtedness of Islamic banks, which were close to the three sub-study periods, i.e. it can be said that the competition had a positive impact on the solvency of Islamic banks, and this result is consistent with the findings of (Melhem & Istaiteyeh, 2015) study.

The Effect of Competition on the Prices of Islamic Banks Shares: The study concluded that the competition did not have an impact on both ratios of (share price to earnings) and ratios (share price to book value), the two dimensions used by the study to measure the movement of the shares of Islamic banks during the periods of the sub- study, and more clearly means that the entry of new Islamic banks to the market did not affect the prices of shares of Islamic banks operating in the Jordanian market during the study period.

The effect of competition on the activity of Islamic banks: The results of the statistical analysis of the study data showed that there was a statistically significant difference between the three study periods in the deposit investment ratios and the resource utilization ratios. The second sub-period was the lowest for both ratios compared to the first and third periods.The results of the study support each other, the study found a decrease in the rates of investment of deposits, and ratios and employment of resources during the second sub-study period, and also reached an increase in the ratio of liquidity, and low rate of return on equity during the same period, which is correlated with each other.

Based on the findings of the study, the study gives the following recommendations, the islamic banks have to provide new products that meet the needs of all economic sectors, and improve their services, which will help them achieve profitable levels that meet the ambition of investors.

That Islamic banks haveto strengthen the indicators of liquidity and indebtedness reached during the period of the third sub-study, which shows a decrease in the proportion of liquidity, and stability in the ratios of indebtedness, which enhances the financial solvency of these banks.

Islamic banks should improve their share of the banking market in general so that they can improve their activity, enhance their competitiveness, and help them grow and expand but not at the expense of each other. The competent governmental agencies should study the license of new Islamic banks to enter the market, unless there are other barriers outside the study.

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