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Keywords: gap, interest margin, commercial banks. GJMBR-C Classification: JEL Code: G21



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Impact of the Resources Gap on the Interest Margin in the Jordanian Commercial Banks (1990-2011)

Yousef Ali Al-Hayek ^a & Dr. Ghazi Abdulmajeed Al-Rgaibat^a

Abstract- This study aims to analyze the impact of the resources gap on the interest margin in the Jordanian Commercial Banks. Since the interest margin is the main source of profit in commercial banks, the existence of a gap have a negative impact on the interest margin. In addition, as the change in sensitive assets to interest rate and sensitive liabilities of interest rate has an impact on the bank's profits; especially when the commercial banks pay the costs of some sources of funds to increase what they get from the benefits derived from credit facilities of credit interest and the debt interest. This is all embarked upon within a sample that included eight Jordanian commercial banks (out of thirteen are banks in Jordan)..The analysis relies on the annual data for banks to identify the resource gap in the Jordanian commercial banks, their impact on the interest margin and sensitive assets, sensitive reductions. The result of this study aim to provide Jordanian banks with up-to-date feedback which can help in advancing the Jordanian banking sector. The study used methods of econometrics where the Simple Linear Regression model is used. The study shows the existence of statistically significant effect of the resources gap in the Jordanian commercial banks on the interest margin. And it also shows the existence of statistically significant effect for the resources gap in the Jordanian commercial banks on the debt interest. Finally, the study shows the existence of statistically significant effect for the resources gap in the Jordanian commercial banks on the payable interest.

Keywords: gap, interest margin, commercial banks.

I. INTRODUCTION

ommercial banks are considered from the most important specialized financial institutions and intermediary between surplus units and deficit units ,more that the oldest, and considered its basic function accepting deposits from individuals, institutions and re-used in the granting of credit to individuals, institutions or units for various economic, as can invest these funds in assets that yield the greatest return in light of carrying a minimum level of risk, as a result of the multiplicity of functions carried out by the commercial banks and the expansion of its operations savings and credit exposed the banking sector for many of risks and foremost of which is interest rate risk, that would affect the performance of commercial banks, which may extend to failure an achievement the

Author α σ: Department of Banking and Finance - Faculty of finance and Business administration / Al al-Bay University- Jordant. e-mail: ghazi.alrgaibat@yahoo.com expected return on its investments. The risk of fluctuations and the fluctuation of interest rates is an important subjects to the commercial banks, the emergence of the so-called (with a gap of resources) which arise through the comparison between the assets sensitive to changes in interest rates and liabilities are sensitive to changes in interest rates when the commercial banks pay the costs of some sources of funds (deposits and borrowing) to increase what you get from the interest accrued from credit facilities.

The interest margin in the commercial banks is the main goal of his works and the goal sought by and included in the constant quest to increase the present value of the institution, so the gap is negative will affect the interest margin, which can lead to achieve the losses in commercial banks. The most important activities of internal departments in commercial banks is how to manage the resource gap and control interest margin, that requires constant work to improve the interest margin achieved in light of the changes that take place on interest rates, and there is a possibility to achieve the yield and avoid risk through flexible management Bank of amendments to the composition of both sides of assets and liabilities, especially rolling them in order to obtain the desired gap.

II. PROBLEM OF THE STUDY STUDY SIGNIFICANCE

As a result of the change in assets sensitive to interest rate compared with the change liabilities sensitive to interest rate and due to sudden changes in interest rates at the commercial banks, the inability to predict, leading to a lack of balance between the interest rates on a portion of assets and liabilities components, which contributes to creation of so-called resource gap (when banks face higher debt interest rates, which contributes to increase cost sources of funds in return for lower interest rates payable and thus lower income from lending, which achieves significant losses and negative impact on the interest margin in the commercial banks). From above problem can be formulated as:

1. Is there an impact to the resources gap on the interest margin in Jordanian commercial banks during the period (1990-2011)?

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- 2. Is there an impact to the resources gap on the debt interest in the Jordanian commercial banks during the period (1990-2011)?
- 3. Is there an impact on the resources gap for interest payable in the Jordanian commercial banks during the period (1990-2011)?

III. Importance of the Study Study Importance

The importance of the study came from their usefulness to the departments of commercial banks through by studying risk of the resources gap to maintain the safety of banking and reduce risks to commercial banks, thus achieving the equilibrium constant and positive between the interest rates payable and the debt on each of assets and liabilities to be permanent work on the restructuring to ensure success and obey the instructions of the permanent monetary authority.

Objectives of the study Study Objective: This study aims to achieve the following objectives:

- 1. Identify the impact of the resources gap on interest margin in the Jordanian commercial banks.
- 2. Identify the impact of the resources gap on the debit interest rate in the Jordanian commercial banks.
- 3. Identify the impact of the resources gap on the Credit interest rate in the Jordanian commercial banks.

Hypotheses Study Hypothesis: Based on the study problem, hypotheses of the study were formulated as follows:

The first major hypothesis:

H01-: No statistically significant effect of the resource gap on the interest margin in the Jordanian commercial banks for the period (1990-2011).

H02-: No statistically significant effect of the resource gap to debit interest in the Jordanian commercial banks for the period (1990-2011).

H03-: No statistically significant effect of the resource gap on the payable interest in Jordanian commercial banks for the period (1990-2011).

Literature Review: In study of Ahmed (2012), entitled (factors influencing the interest rate margin). this study aimed to determine the factors affecting the interest margin in the Syrian commercial banks. The study sample included six commercial banks, the researcher collected the necessary data for commercial banks from Damascus stock Exchange, also problem of the study address the factors affecting the interest margin, which in turn affect the size of the banks returns ,so because of disparity between the interest payable and debit interest, whether from fluctuations in interest rates or liquidity risk the operational costs, the researcher used in the analysis of data simple

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regression, this study reached to a set of results which is a positive relationship between interest margin and operating expenses and index loans, also a positive correlation but weak between interest margin and growth index, in addition to the existence of an inverse relationship between interest margin and the index of property, and in study of Ala (2009), entitled :the impact of monetary policy on interest rates in the Jordanian commercial banks (1993 - 2007)., This study aimed to identify the impact of monetary policy in Jordan, tools used by central bank which influenced the activity of commercial banks through (credit ceilings and interest rates), then he used tools of monetary and quantitative represented (rate of discount, and open market operations, the legal reserve ratio) to influence on the commercial banks and the impact on interest rates at the commercial banks, the researcher believes that the problem of the study lies in attempt to demonstrate the impact of monetary policy on interest rates at commercial banks, also to achieve the objectives of this study the researcher adopted in analysis of data on multiple regression analysis, the study concluded a set of results the most important that there is a negative impact on the size of the rediscount interest rates at the commercial banks, in addition to having a positive impact statistically significant for open market operations on interest rates, and there is a positive impact and moral reserve compulsory on interest rates, Finally there is a negative impact and a moral to the money supply on interest rates at the commercial banks, either study Mohammed (2008), entitled: "The Impact attenuators credit risk on the value of banks, Empirical Study on the Jordanian commercial banks". Where this study aimed to analyze the impact of using of techniques that mitigate credit risk on value of banks, and the study sample included a ten commercial banks during the period (2001-2006), the researcher believes that the problem of this study crystallized about the extent impact of these risks on the interest margin and its impact on the returns accruing to owners and shareholders, the researcher adopted for achieving this study on the multiple regression analysis, the researcher treated this problem through using of techniques, tools and strategies that mitigate these risks to ensure the profit margin is acceptable, which reached this study to a positive impact between value of bank's revenues and techniques of risk mitigation, also the importance of maintaining the composition and quality of credit facilities with reduce risks within acceptable levels in order to maintain profit margins, while the study of Bahia (2008), entitled "factors affecting the degree of safety of commercial banks operating in Palestine" analytical study. Which aims to develop a standard model based on the financial analysis of the financial statements published by banks that standing on the extent of the influence for some factors as the degree of security in Palestinian banking system, in order to achieve high rates of return on assets and to achieve this purpose it had been selected (5) financial ratios for a sample of (12) licensed bank with PMA for the period (1997-2007), which came up with results that help departments of banks to improve their performance banking in terms of risk management, especially the interest rate risk (Interest Risk) (price fluctuations), and the risk of capital (Capital Risk) and credit risk (Credit Risk), the researcher believes that the problem of this study lies in the Net interest income (Net Interest Income) constitute (7-90%) of the total income in bank, where the interest rate risks are particularly significant rise in interest rates creates banks are risks that pay higher rates on their deposits compared with what you get from the revenues were used method of multiple regression analysis, also researcher addressed this problem by strategies derivatives after the formation of insurance cover, in order to reduce risk of bankruptcy, and through the conclusion of the swap contracts interest rates, whereby the place to swap fixed interest rate on loans at an interest rate variable, while the results showed an inverse relationship between the degree of safety of banks and bank,s risk of credit (CR) with a positive relationship between degree of banking safety and all of risks related to fluctuations in the interest rate (IR), and the rate of return on total assets (ROA), as well as in the study of Suhaila (2006), entitled "The impact of interest rate fluctuations on the performance of the institution." This study was carried as attempt to analyze and highlight the impact of fluctuations the interest rate on the organization performance by clarifying the various dangers that could be exposed to the institution as a result of changes in interest rates associated with various financing methods, the researcher try to study problem crystallize when exposed organization that relies on funding by borrowing from banks, researcher has adopted of regression analysis, the researcher addressed this problem lies in coverage media to protect against the risk of fluctuations in the interest rate, for each institution to choose the appropriate means, which allow them to adapt fluctuations in the interest rates, and that higher or lower interest rates have an impact on financial institutions represented by the costs borne by the commercial Bank, the results of this study showed that the current decisions and future of the institution affected by fluctuations in the interest rate and the interest rate affects the market value of shares for institution, either study waat (2004), entitled: "The banking risks and their impact on credit facilities for Jordanian commercial banks for period (1988-2002)." This study aims to analyze the impact of interest rate risk on credit facilities for commercial banks during the period (1988-2002), the researcher believes that the problem of this study lies in the extent to which the credit facilities provided by Jordanian commercial banks, through using multiple Linear Regression model, the researcher address this problem by improving the level of risk management in banks and through using of internal rating systems for credit risk and improve the methods of measuring the interest rate risk commensurate with the standards Basel Committee 2007, the results showed that there is a disparity in effect of interest rate risk on credit facilities, which is due to the difference in the credit policy from bank to another, and different management for each bank facing risks in banking business, in addition to the difference in size of the assets and liabilities from bank to another. And added study of Celebrity (2003), entitled: analysis of revenue sources of Jordanian commercial banks. Empirical Study. (1980-2000). "which aimed to measure the interest rate risk and volatility which adversely affect on interest income of commercial banks, the researcher believes that the problem of this study lies in comparison between the sensitivity of interest income to changes in assets returns with the sensitivity of the interest expense for changes in the interest cost to the litigants or which so-called gap of resources, and to identify and evaluate the changes in interest income with the changes that occur at market interest rates, also the researcher have adopted for the purposes of the analysis the study multiple regression method, and the researcher addressed this problem through get rid of fluctuations in interest rates by directing investment portfolio to short-term investments are less susceptible to fluctuations in interest rates, so the researcher the following results: the risk of interest rates increasing in case of non-availability of information system at commercial banks allows to stand on the rates of cost obligations and the rate of return on assets and determine how much the gap between assets and liabilities with the extent of sensitivity to changes in interest rates, while a study Ayman (2002), entitled: "The determinants of profitability in the Jordanian commercial banks.". where the study aimed to identify and measure the impact of various determinants of profitability in Jordanian commercial banks (leverage, the cost of deposits, liquidity, the size of banks, interest rate risk, and the capital risk), the study sample included of (Arab Bank, Bank of Jordan, and the Jordanian Kuwaiti Bank). so the researcher believes that the problem of this study lies in the monetary policy, the state of economic recession and low credit policy followed by the decline in employment of substantial financial resources to those banks and low profitability, the researcher adopted to analysis on multiple Linear Regression, so this study concluded that the impact of interest rate risk on the profitability of commercial banks which was very weak due to high interest rate spreads, the effect of capital risk on profitability for the Arab Bank and Bank of Jordan is very weak due to capital adequacy, but liquidity did not have an impact on profitability for each of the Arab Bank and Jordanian Kuwaiti Bank, with had a negative impact on profitability for Bank of Jordan, also size of bank affected on the profitability of

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commercial banks. On the other hand, study of the Ritz (2012), entitled: (How do you deal with commercial banks when prices instability funding). Which aimed to analyze the banking activities in the economy, the importance of the banking sector in the provision resources for investment which achieves revenue for banks, but financial and economic crises have had a significant impact on lenders and borrowers, especially fluctuations in the interest rate on lending and deposits that lead to lower interest margin, the problem of the study specific non-banks' ability to predict changes to interest rates on loans and deposits, what are the actions that can be taken by the central bank about the interest rates, the researcher used model (VAR) for the purposes of analyzing data statistically, the researcher addressed this problem by reducing the rates of loans to deposits and setting interest rates gyroscopic of loans and deposits to avoid the risk of fluctuations in interest rates and increased interest margin, so the results of this study cleared that the inability of banks to hedge because the large number of banking risks, in addition to high operational costs on both sides of the budget. Then came study of Roman and others (2010), entitled: (exposure interest rate risk on revenues of linear and non-linear in Spain). Which aimed to conduct a comprehensive analysis of impact for interest rate risk on all types of Spanish companies industries, especially the banking industry and its negative impact on the interest margin (yield), the problem of this study identified the extent which affected on the banking industry and their vulnerability to changes and fluctuations in interest rates , because they are more sensitive to interest rate others, they have been using the multi regression -methodology statistic in this study, the researchers treated this problem by hedging interest rate risk, and pointed out the results of this study indicated that the changes and fluctuations in the interest rate is not homogeneous, non-linear, non identical for all industries and Spanish banking industry, thus its impact on the profit margin, either study Marinkovic and Radovic (2010), entitled: "The determinants of the interest margin in the banking sector of Serbia." The aim of this study was to analyze the interest margin and the determinants of the interest margin in the commercial banks, what importance of the interest margin in the banking sector which provides an indication about profitability of bank as well as the cost of deposits, the researchers reached that the risk of interest rates have a negative impact on the margins of bank interest, the researchers tested by used multiple regression, and treatment very accessible to the interest margin ideal through the design of an existing system to protect deposits along with building credit guarantees, and the study concluded that the results showed a positive relationship between profit margin and interest rate risk, a negative relationship with banking risks, also a positive relationship and but less correlated with credit

risk, but not affected by interest margin for foreign banks when entering domestic banking sector. As well as the study of Saha et al (2009), entitled: (impact of interest rate risk on the interest margin of indian commercial banks)., This study aimed to clarify the impact of the volatility for interest rates on interest margin in Indian banks during the period (2002-2004) as the first study of its kind in the period for Basel II, the problem of this study indicated that interest rates rose and fell adversely affect on loans and size of interest which paid on deposits, the purposes of achieving the goal of the study was used and relyed on linear regression, the researchers found that the political and economic conditions, regulatory, and re-pricing of risk may losses greater than indicated by previous studies, because the loss was achieved up to 99% of a sample study for Indian banks. Then study William (2008), entitled "The risk of banks.". Which aimed to analyze the impact of interest rate risk on the commercial banks, the researcher believes that the problem of this study all banks share the same risks that negatively affect revenues (net interest margin) and the most important of interest rate risk, to achieve the goals and objectives of this study were researcher was adopted on the statistical tools to analyze the data through VAR, also addressed the researcher this problem by necessity directed banks to make long-term loans based on floating interest or changing to reduce the proportion of losses arising from changes in interest rates, also showed the result of this study that the matching of assets sensitive to reduce risk of interest rates, while study Omaatosh (2004), entitled: "Is the banking security official for tight cost of funding?". How can the characteristics of different economic variables and the decisions of the commercial banks that affect on degree of security banking, thus the decisions of commercial banks included in this study a sample of banks numbered (8000) Bank for more than (25) View guarterly during the study period (1997-2003), the researcher believes that the problem of this study lies in the changes and fluctuations in interest rates, which would affect the commercial banks by increasing the burden owed by banks and reducing interest margin, handles researcher this problem by relying on derivative contracts because of its positive impact in reducing the unit of external shocks to the policy of the banks, which contributes to facilitate the movement of cash in periods of shocks macroeconomic, also to achieve the objective of the study the researcher adopted methodology multiple Linear Regression to analyze data of the study, the study concluded in its results the existence of a correlation and direct correlation between the probability of bankruptcy of the bank and the decisions of the security banking, between the interest rate risk and the decisions of the security banking, when increasing the of interest rate price by 10% this would lead to a decrease in the gap of interest by 0.25%, which means

increasing the burden on the banks owed, thereby increasing safety banking decisions, also leads to a lack of significant fluctuations in the interest rate and credit margin on the decisions of the banking safety.

What distinguishes the study. This study focussed specifically on the agent causing which affecting to appear the resources gap and its impact on the banking sector, while previous studies have focused on factors affecting the financial market in general, it was all influential factor on the financial market deals with one study.

Data of the study: Society and the study sample: The study population consists of all commercial banks operating in the Hashemite Kingdom of Jordan, while including a sample study of eight Jordanian commercial banks (Bank of Jordan, the Jordan Kuwait Bank, the Housing Bank, Union Bank, the investment bank, the National Bank, Jordanian Commercial Bank, Cairo Amman,) for the period (1990-2011).

Sources of information and data collection: - Secondary sources: books and periodicals reports, theses and scientific journals, official reports and Web sites.

Primary sources: related to data that have been obtained from the annual reports, monthly bulletins of commercial banks, the websites of the study sample for commercial banks and the Central Bank, in addition to the data, which requires the researcher collected and analyzed during the study period.

Procedural definitions: the resources gap (Resources Gap): the difference between assets sensitive to interest rate with liabilities sensitive and the interest rate. And this gap can be measured as follows: *Gap* = *sensitive assets to interest rate - sensitive liabilities for interest rate.* interest margin (Interest Margin): the difference between the interest rate on deposits and the interest rate on the loans, which includes the banking risks and operational costs, tax expenses. The interest rate (Interest): the price

of money capital or contrast to be used, also represents the price of swapping the present value with future value in return for lending, Debit Interest (Interest Expenses): the amount has paid by bank during the year on various types of accounts and deposits. Interest payable (Interest Income): the size of interest received to the interest paid. Interest rate risk = sensitive assets for Interest rate / Liabilities sensitive for interest rate to interest rate Where assets and liabilities are affected by fluctuations in interest rates. Sensitive assets to interest rate volatility with vulnerability and interest rate investments are in short-term securities (for the purpose of trafficking, and not for the purpose of retention), loans, advances and securities discounted short-term. Liabilities sensitive to interest rate volatility with vulnerability to interest rate and deposits are characterized by not limiting term such as: bank deposits, financial institutions, central banks and deposits, cash margins and customer deposits.

Study Methodology: this study has been rely on all of descriptive analytical method and curriculum standard in the presentation data and analyzed by using the program (spss) for statistical indicators and evaluated interpreted in conformity with the study through using simple linear regression

Study Model: Model was built simple linear regression, which connects between the variables of the study. Variables of the study is as follows:

The independent variable (Independent Variable): and confined in the resource gap (Resources Gap).

The dependent variables (Dependent Variable) and are:

- 1. Interest Margin (Interest Margin).
- 2. Debit Interest(Interest Expenses)).
- 3. Interest payable (Interest Income)).



Figure 1 : Model study

Independent variable

dependent variables

So based on previous studies, study of (Barbour, 2003), a study of (Ayman al, 2002), a study for (Roman, 2010), a study for (Sahaw et al, 2009) and study for (William, 2008) were building a model study as follows:

 $Mar = \alpha + \beta_1 R G + e \dots l$

$$Exp. = \alpha + \beta_1$$

$$Inc. = \alpha + \beta_I R G + e.....3$$

Where is:

(R G): Resources Gap Interest Margin:(Mar) (Exp):Interest Expenses (Inc):Interest Income

e: random error, which represents the change in the resource gap wildly as a result of other factors not included in the study model.

α: Fixed regression equation

 $\beta_1 + \beta_2 + \beta_3$: regression equation, which reflects the change in the sensitivity of the resources gap due to the change in the dependent variables of the study, according to their ranking.

Method of data analysis Statistical Analysis: Data were analyzed using a variety of statistical tests, depending on the program (spss), through using of (Simple Linear Regression), and OLS) as well as using of correlation coefficients and descriptive statistical methods that showed the impact of variables of the study within timeseries of financial statements.

Results of statistical analysis Descriptive statistics. The following table illustrated the results of descriptive statistics through using of statistical software (spss) during the period (2000-2011):

Min.	Max.	Kurtosis	torsion	Standard deviation	Arthmetic mean	Variable
-79.160933	64.998636	1.722444	0.336172	49.421562	-11.899918	resources gap
0.4999549	33.229584	2.818884	-0.212977	9.086518	18.990842	Interest margin
9.198431	36.526744	1.679978	-0.252278	9.972689	24.530493	Debit interest
24.737085	63.154043	1.313841	0.049264	15.612344	43.521335	Inerest payable

Table 1 : A	summary of	descriptive	statistics	results
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Source: Prepared by the authors

Note from Table (1) as follows:

- the resources gap: The arithmetic mean of the variable resources gap (11,899918-), a negative value indicating a high sensitive liabilities, compared sensitive assets, while the value of the standard deviation (49.421562), which is high compared to the value in rural arithmetic.
- Interest Margin: The arithmetic mean of the variable interest margin (18.990842), which indicates the high profitability of Jordanian commercial banks through the awarding of loans return for the interest that payed on deposits, while the value of the standard deviation has reached (9, 086 518), this value is considered low.
- Debit Interest: The arithmetic mean of the variable debit Interest (24.530493), a positive value which indicates the amount of cost incurred by the Bank as a result of receiving a deposit, which used to fund investments in assets side, whereas the standard deviation was (9.972689).
- Interest Income: The arithmetic mean of the variable interest payable (43.521335), a positive value indicates the size of the interest received and other income derived from loans, advances, financial investments and commercial paper discounted, also for the standard deviation the valued (15.612344), This value is considered low.

Interest margin	Inerest payable	Debit interest	resources gap	
			1.000	resources gap
		1.000	0.66124	Debit interest
	1.000	0.836994	0.830439	Inerest payable
1.000	0.799565	0.340587	0.701121	Interest margin

Table 2: The correlation between the vari

Source: Prepared by the authors

Note from Table (2) as follows: • linked to variable resource gap of the highest power of correlation with interest income, which amounted to the power of correlation about (83%), the strength of correlation is positive and strong, that indicating the significant impact that can be caused by a change in the resources gap with respect to the change in the size of the interest received and income from loans, advances, financial investments and commercial paper discounted, for power of the correlation between the gap and interest margin amounted resources approximately (70%), the correlation is positive and strong, that indicating the significant impact that can be caused by a change in the resources gap with respect to the profitability of Jordanian commercial banks through the awarding of loans against the interest you pay on deposits in its possession As for the strength of the correlation between the variable resources gap with debit interest that amounted about (66%), also representing the correlation strength is positive and strong, but less powerful than the rest of the variables, which shows impact that can be caused by a change in the resources gap with respect to the cost by bank as a result of receiving deposits used to fund investments in assets side. • also the interest payable correlation is positive and strong with debit interest (83.6%), while the strength of the correlation between interest income and interest margin about (80%), and for variable interest margin has been correlated strongly and positive but it is weak with debit interest reached (34%).

IV. Test Hypotheses of the Study

First, the results of the first hypothesis

H01: No statistically significant effect of the resources gap in the Jordanian commercial banks on the interest margin for the period (2000-2011).

Table 3 : Test results normal distribution

Probability	Jarque- Bera	Variable
0.491582	1.420254	Interest margin

Source: Prepared by the authors

Table 6 : The results of regression analysis for the first hypothesis

Probability t.test		Laboratories	Variable
0.0111	3.10941	0.128906	resources gap
0	10.14714	20524816	Fixid value
	R ²		

Source: Prepared by the authors

From table (6) the value of the R² between variables (resource gap and interest margin) amounted (49%), which indicates that the amount is explained by

the independent variable (the resource gap) changes in the dependent variable (interest margin) is (49 %), and that there is a value (51%) other factors influenced on

From table (3) the probabilityfor (Jarque- Bera test) for normal distribution has reached (.491582), that is not statistically significant, indicating that the data normally distributed.

Table 4 : The results of data smoothing Homoskedasticity test (interest margin)

Scaled explained SS	Obs*R- squared	F-statistic	Variable
0.7403	0.6665	0.7	Interest margin

Source: Prepared by the authors

From table (4) that the values of statistical significance to homogeneity test that relating to interest margin amounted to (0.7), (0.6665), (0.7403) for each of the F-statistic, R-squared, and Scaled explained SS, respectively, which values not statistically significant (greater than 5%), which indicates that there is no problem of data heterogeneity.

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Obs*R-squared	F-statistic	Variable
0.3825	0.4975	Interest margin

Source: Prepared by the authors

Note from Table (5) that the values of the statistical significance of the autocorrelation test on interest margin amounted to (0.4975), (0.3825), each of the F-statistic, and R-squared, respectively, are non-statistically significant (greater than 5%), which indicates the absence of autocorrelation problem.

the dependent variable, as the value of probability (0.0111), which is value of a function for statistical significance level ($\alpha \leq 5\%$), and therefore there is no statistically significant effect of the resources gap in Jordanian commercial banks on the interest margin for the period (2000-2011), so we can explain it financially by the change in bank's assets or obligations either rise or fall will lead to change size of profitability for Jordanian commercial banks through the awarding of loans return for the interest that you pay on deposits. Accordingly, we accept the alternative hypothesis for the third study, the regression equation can be written as follows:

Resource gap = $20524816 + 0.128906 \times$ interest margin .And this result is consistent with a study (Roman, 2010) the existence of a negative impact to the

Second, the results of the second hypothesis test

H02: No statistically significant effect of the resources gap on the debit interest for Jordanian commercial banks for the period (2000-2011).

Probability	Jarque- Bera	Variable		
0.789016	0.473936	debit		
		interest		

Source: Prepared by the authors

From Table (7) the value of probabilistic test (Jarque- Bera) for normal distribution has reached (.789016), a value that is not statistically significant, indicating that the data normally distributed.

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Scaled explained SS	R-squared	F-statistic	Variable
0.381	0.1427	0.1706	debit interest

Source: Prepared by the authors

From table (8) the values of statistical significance to the homogeneity test to variable debit interest has reached (0.1706) (0.1427) (0.381) for each of the F-statistic, and R-squared, And Scaled explained SS, respectively, which is statistically significant values (greater than 5%), which indicates that there is no problem of heterogeneity of the data.

Table 9: Autocorrelation test results *

R-squared	F-statistic	Variable
0.0462	0.0565	debit interest

Source: Prepared by the authors

From table (9) the values of the statistical significance of the autocorrelation test on debit interest (0.0565), (0.0462), each of the F-statistic, and R-squared, respectively, which are statistically significant (less than 5%), that indicates the existence of the autocorrelation problem. As a result and in order to address this problem to reach a more credible results it have been used Heteroskedasticity Autocorrelation Correction (HAC) in form of regression analysis (OLS), and Table 10 below shows the results of regression analysis for the second hypothesis.

Table 10 : The results of	of the regression	analysis
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Propability	t.test	element	Variable
0.0095	3.197083	0.13343	resources gap
0	9.979159	26118305	Fixed value
0.437239			R ²

Source: Prepared by the authors

From table (10) the value of R² between the resources gap and debit interest amounted (43%), which indicates that the amount is explained by the independent variable (the resource gap) of changes in the dependent variable and that there is a value (57%) other factors influenced the dependent variable, also the value of probability (0.0095), which means thestatistical significance level ($\alpha \leq 5\%$), therefore there is statistically significant effect of the resources gap in Jordanian commercial banks on debit interest for period (2000-2011), therefore accepted the alternative hypothesis of

the first study, and the regression equation can be written as follows: Resources gap = $26118305 + 0.13343 \times debit$ Interest.

Third Tesults of the third the hypothesis test

H03: No statistically significant effect of the resources gap in the Jordanian commercial banks on the interest payable for the period (2000-2011).

Table 11 : Test results normal distribution

Probability	Jarque- Bera	Variable
0.616843	0.966281	Payable interest

From table (11) value of probabilistic test (Jarque- Bera) for normal distribution has reached (.616843), this value is not statistically significant, which indicating that the data normally distributed.

From table (13) values of the statistical

significance for autocorrelation test on payable interest

amounted (0.9142), (0.8755), for F-statistic, and R-

squared, respectively, which are the values of non-

statistically significant (greater than 5%), which indicates

there is no autocorrelation problem.

Source: Prepared by the authors

Table 12: Results of the Homoskedasticity test data (payable interest)

Scaled explained SS	R-squared	F-statistic	Variable
0.5762	0.3549	0.4014	Payable interest

Source: Prepared by the authors

From table (12) values of statistical significance to homogeneity test of payable interest amounted (0.4014) (0.3549) (0.5762) for each of F-statistic, Rsquared, and Scaled explained SS, respectively, which values not statistically significant (greater than 5%), which indicates that there is no problem of heterogeneity of data.

Table 13 : Autocorrelation test results

R-squared	F-statistic	Variable
0.8755	0.9142	Payable interest

Source: Prepared by the researchers

Table 14 : Results of regression analysis for the third hypothesis

Probability	t.test	element	Variable
0.0008	4.713751	0.262337	resources gap
0	17.17733	46643122	Fixed value
		0.689628	R ²

Source: Prepared by the researchers

From table (14) the value of R² between resources gap and payable interest amounted (69%), which indicates that the amount that explained by the independent variable of changes in the (interest payable) is (69%), that means there is (31%) other factors influenced the dependent variable, also value of the probability of (0.0008), which is is statistical significance at level ($\alpha \leq 5\%$), so there is statistically significant effect for the resource gap on the payable interest for period (2000-2011). Accordingly, we accept the alternative hypothesis for the study, the regression equation can be written as follows:

Resource gap = $46643122 + 0.262337 \times \text{credit interest}$

V. Conclusions

This study aimed to determine the impact of the resources gap on the interest margin and the study were used to test the regression model, and the results were as follows :

- 1. There is a negative impact to the resources gap in the Jordanian commercial banks on the interest margin, the low interest margin is achieved due to rise in interest rates, which leads to lower interest income on loans, high debit interest on deposits, which has a negative impact on the interest margin in Jordanian commercial banks, especially when you find the difference between interest income because it is the high debit interest on the interest income, which achieves a reduction or loss in net interest margin.
- 2. there is a negative impact to the resource gap in the Jordanian commercial banks on the debit interest, where the changes in interest rates decline an impact on lower costs of funding sources which affected on depositors by lower interest rates on their deposits, also when changing interest rates on investments (payable interest) at faster rate of change for interest rates on the financial resources that used to finance these investments, with

increased lending from commercial banks because the low value of sources for funds, which leading to increase profits for commercial banks.

there is a negative impact to the resource gap in the 3 Jordanian commercial banks on credit interest, which means that changes in interest rates rose an impact and decline income from credit facilities, because the terms are normally short, also because the rate of paid interest on deposits and short-term of loans are sensitive to interest rates in the short term while the rate of interest earned on long-term liabilities creates risk interest rate, so the degree of risk of interest rates will rise, which causing banks to pay more for his opponents, when changing interest rates on financial resources (debit interest) rates faster than changes in interest rates on the investments that have been funded from these resources, they affect the flow of credit interest through the differences in the timing of the accrual rates for fixed and re-pricing of floating rates related assets and liabilities.

VI. Recommendations

According to the conclusions that have been reached through the theoretical framework for the study and from previous studies, also reached the reality of statistical analysis of the study was out for the following recommendations:

- The commercial banks must be linked the interest margin with level of risk, and to identify those levels of risk which can be accepted, as well as to measure the gap and identify target them to reduce market risk and sudden changes in interest rates on loans and deposits, to diversify its investments in order to increase the interest margin.
- 2. The Jordanian commercial banks must operate well to reduce the interest payable, and in order to increase the employment of financial resources to achieve more profits, and improve the management of credit facilities so as to minimize risk of credit facilities.
- 3. The Jordanian commercial banks preferre that to attract deposits with low interest rates, in order to reduce the cost of deposits so as to avoid risk of sudden fluctuations in interest rates. Finally, the researcher recommends conducting more research on the resource gap and its impact on the interest margin using the ways and means of assessing interest rate risk and market sensitivity.

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