

The Impact of Banking Supervision on Financial Performance:

A Study in a Model of Private Iraqi Banks

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Abstract

The global banking system has evolved over time, resulting in a heightened level of competition among banks, both domestically and internationally, which has posed a risk to the safety of these institutions. This has necessitated the establishment of a Committee for Banking Supervision, commonly referred to as the Basle Committee (IIBF, I, 2023). This research seeks to assess and evaluate the effect of banking risk on financial performance metrics.

The study used two independent variables. The first is represents banking supervision as mandated by the Basle Committee, and includes a collection of indicators (Capital Risk Index, Credit Risk Index, Interest Rate Risk Index, Operational Risk Index, and Liquidity Risk Index). The second is includes financial performance, which is represented by a group of indicators. These include profitability, as well as other indicators related to liquidity such as the trading ratio and the quick liquidity ratio.

The key finding of the study is (statistics of statistically significant relationship between banking risk indicators and most financial performance indicators) where the statistical results suggest that the hypotheses have a significant impact on the majority of financial performance indicators. According to the research, banks should not over-estimate their capital adequacy in order to meet their bank's goals and achieve the highest profit margins. The research also suggested that banks should use idle liquidity, which conflicts with the guidelines of the central bank and the Basel committee, to achieve the highest return on equity and maximize owners' wealth.

Introduction

The financial crisis of the 1980s forced central banks to take steps to protect themselves from financial risks. Basel I in 1988 was all about capital requirements and how to manage credit risk. Basel II in 1999 was all about minimum capital requirements and audit. It was all about supervision and how to manage markets. The first pillar focused on three kinds of risks: credit, market, and operational. The second pillar was all about banks finding out about interest risks, and once the mortgage crisis hit (2007-2008) financial institutions collapsed. This led to a huge recession from 2008-2012. It was all because of how easy it was to get loans from mortgage borrowers, and how much high-risk mortgages were worth.

CHAPTER ONE STUDY METHODOLOGY

First: Study problem

Does the presence of bank risks (credit risk, interest rate risk, operational risk, liquidity risk, capital ratio) affect the financial performance of the sampled banks in terms of liquidity and profitability?

Second: Study importance

The significance of the study stems from its focus on a fundamental aspect of banking operations, particularly in the context of the current crisis facing the banking system. The research also examines the effects of banking risks (capital adequacy, credit, interest rate, employment, liquidity), on (liquidity and profitability indicators) commercial banks in Iraq.

Third: Study objectives

1. Understanding Banking Risk and Financial Performance Indicators for Commercial Banks in Iraq
2. Quantifying the Impact of Banking Risks on the Financial Performance Indicators of Commercial Banks.

Fourth: Study hypothesis

There is no correlation between the occurrence of banking risks and the financial performance of commercial banks.

Fifth: Study Limits

Spatial boundary: Union Commercial Bank, National Bank of Iraq Commercial, Commercial Bank of Baghdad Mansour Commercial Bank Commercial Bank of Iraq. Study period: 2012 to 2021

CHAPTER TWO

THEORETICAL FRAMEWORK FOR THE STUDY

- A concept of the basic principles of banking supervision issued by the Basel Committee. The Basle Committee is a non-binding technical advisory committee created by the governments of the major industrialized countries to examine various aspects of banking supervision. It was initially known as the (Banking Regulation, Supervision and Oversight Committee) Committee and is composed of representatives from the following countries: Belgium, France, Germany, Greece, Italy, Ireland, Japan, the Netherlands, Spain, the United Kingdom, the United States, Switzerland, and Luxembourg. Its decisions are not binding, but rather serve as an analogous civil society organization to that of civil society organizations of our time (IIBF, I. ,2023).

The Basel Committee's definition of banking supervision is based on the following principles: Minimum capital adequacy, Elimination of undue competition between banks due to differences in capital control, Facilitation of information exchange regarding control methods, Competitive fairness among banks, Stability in the global system through reduction of debt Consolidated supervision across all banking units in line with global economic trends in view of movement of large capital, Reduction of risks associated with credit, liquidity, operations, and interest rates (Pratap, G. S. 2021).

The Basic Principles of Banking Supervision are a set of fundamental principles that are used by countries to assess the effectiveness of their banking supervision and supervisory processes. Established in 1997, the Core Principles Group is a body of

experts that is responsible for reviewing and updating the Basic Principles. The Group is composed of representatives from the Basel Committee, the non-Committee State and regional Groups of Banking Supervisors, as well as representatives of the International Monetary Fund, the World Bank and the Board of Banking Supervisors (Pratap, G. S. 2021).

The Core Principles have been used by the International Monetary Fund and the World Bank to assess the financial sector assessment programmed and to determine the adequacy of countries' banking supervisory systems and practices. The review was mandated by the Committee in order to take into account the evolution of global financial markets and the regulatory environment since October 2006, in order to incorporate the lessons learned from the post-2008 financial crisis and its effects on global markets, and to reinforce sound oversight systems (R., N. 2017).

The objective of the review was to ensure that the fundamental principles for the promotion of effective banking supervision across all countries remain applicable in the face of ever-evolving environments. The fundamental principles for banking supervision are divided into two groups, with Principles 1 to 13 focusing on the powers, Responsibilities and Functions of Supervisors, and Principles 14 to 29 focusing on Regulations and Prudential Requirements for Banks (PVT. LTD, A. 2021).

Second: Banking supervision

The role of banks in economic life is such that any financial issues they face will have a significant impact on a large part of society. This is why banking supervision is so important in all countries and in particular in Iraq, as it is constantly exposed to economic issues due to the current political and social unrest in the country. Banking supervision is defined by researchers as a set of guidelines, practices, and policies that are implemented or implemented by a country's central bank to maintain the soundness of the financial situation of banks and of the banking system as a whole, with the aim of achieving a sound banking system conducive to economic

growth and safeguarding... depositors, investors, and bank employees' rights (PVT. LTD, A. 2021).

Basically, the researcher thinks that banking supervision is a way for the central bank to make sure that monetary policy is being followed and that the banking sector is doing well. It looks at the problems that the banking sector has and takes action to fix them so that they don't happen again. This is to help people trust the banking system and make sure that depositors and investors are protected (Pratap, G. S. 2021).

The resilience of a nation's economy and the efficacy of its monetary policy are contingent upon the stability and effectiveness of its financial system, particularly the banks. Consequently, banking supervision is essential in order to preserve the strength and security of this sector in service of the nation's economy (Anderson, D. R. 2018).

The purpose of banking supervision is to safeguard depositors' funds, as well as to maintain the financial system's stability and the competitiveness of the sector. As banking activities have evolved and become more complex, the methods of banking supervision have changed. The significance of banking supervision can be summarized as follows: It is essential to oversee the banking sector in order to ensure the proper management of its investments, it is essential for the financing of economic development (Anderson, D. R. 2018).

Furthermore, banking supervision is of great importance due to its role in the payment and money creation processes, as well as its ability to affect the national currency's purchasing power. This includes the ability to assess the quality of a bank's assets, determine the level of risk they are exposed to, and then take action to reduce that risk. Additionally, banking supervision ensures that the bank is committed to its commitments and adheres to the instructions of the Central Bank. Finally, banking supervision helps to reduce risks that could lead to a loss of deposits, thus maintaining public trust in the financial system. It is important to avoid concentration in the banking market as this can lead to banks having too much

control over the market, which can have a negative impact on competition and banking services (Anderson, D. R. 2018).

Protecting the Funds of Depositors, Creditors and Investors: This is done by the intervention of the regulators to impose control and take appropriate preventive measures to prevent the risks to the funds in the event that the credit institutions fail to fulfill their obligations to depositors, creditors and investors, particularly regarding the safety of assets. Monitoring the extent to which the banks and financial institutions comply with banking laws, rules and regulations: As the supervisory authority monitor the bank's work and the extent to which it complies with the laws that govern the business of banking and the extent it refrains from carrying out illegal operations and assess its performance on that basis. In the event that the bank is found not to be following the instructions given by the Central Bank, it would have to take legal action, each according to its legal basis (Pratap, G. S. 2021)..

Third: Prerequisites for effective banking supervision (IIBF, I. 2023).

- Having the right authorities or people in charge of spotting and dealing with risks, making sure the right policies are in place, and having a system of cooperation and coordination between the people in charge of banking supervision.
- Having a strong infrastructure to keep the financial system stable. This includes laws to protect property rights, rules for doing business, a way to settle disputes, clear accounting rules, and an independent audit system.
- Having a lot of flexibility so that problems can be solved easily. Being lenient with failed market players and not paying attention to their mistakes can make it harder for strong competitors to grow and become more efficient in the banking industry.
- Having a comprehensive and acceptable system to make sure the financial statements accurately reflect the bank's financial position, proper oversight of financial markets, financial databases that can help assess risks, and an efficient and secure system for settling and clearing financial transactions.

- Having an appropriate level of regulatory oversight or public safety net to avoid the risk of undermining trust in the financial system or the contagion of the crisis to well-functioning banks, as well as reducing market discipline.
- Having a deposit insurance system to help restore trust in the banking system.
- Having a consistent set of responsibilities with the independence to carry them out; This independence is mainly political in nature, so that observers are not subject to political pressure from high-level decision-makers.

Supervisors should be able to set their own supervisory rules independently, while still consulting with major banks to make any necessary changes. Additionally, adequate training and technology should be available to employees of banking regulatory authorities. Also, information should be exchanged with other entities to plan for and manage difficult financial situations when they arise, while still protecting confidential information. Finally, effective market discipline should be achieved through the efficient flow of information to market participants, and corporate governance should be addressed to ensure borrowers are providing accurate, meaningful, and timely information to creditors and investors (M, P. I. 2021).

Forth: Banks Financial performance (R., N. 2017).

- The concept of financial performance: It's a measure of a company's ability to leverage the resources of its core business and generate revenue. It can also be described as a broad measure of companies' activity over time.
- The importance of financial performance: Financial performance is a reflection of the position and competitiveness of the bank. It helps managers, investors, and creditors to make informed decisions about strategic planning and investments. Financial performance helps maximize shareholder wealth. Financial performance has a significant effect on the assessment of financial risks and opportunities. Helps banks or companies keep track of liquidity and prepare final budgets. Evaluates the significance of financial indicators so that successful management solutions can be achieved by creating a unified

system for evaluating financial indicators in the framework of a comprehensive business performance analysis (R., N. 2017).

- Affecting Factors on financial performance: Banks' financial performance is impacted by a set of factors, both internal and external. Internal factors can be minimized or magnified because they are within the purview of management. External factors, on the other hand, cannot be minimized or amplified because they are outside of management's control and have a general impact on the economy.

In modern economic history, there have been two major crises. The first was the Asian financial crisis known as the Seven Tiger Economy. The collapse of these economies led to a global crisis in which the International Monetary Fund intervened and provided billions of dollars in loans and liquidated many financial institutions because of their inability to pay. This crisis occurred in 1997. The second crisis occurred in 2008 with the so-called mortgage crisis. This crisis hit all European countries, all Arab countries, and all Gulf countries whose economies are directly related to the US economy. The number of banks that failed in the United States during this crisis reached 19 high-profile banks. In economics, many previous research and studies focused on the financial performance of the financial sectors in general during these two crises in order to implement crisis measures and rethink building their investment portfolio (R., N. 2017).

The results of these previous research and studies concluded that financial performance is influenced by a number of factors. The first factor is the activity of the companies or banks. The second factor is external and can't be controlled. These factors can be crystallized as follows: (Chiang, & Wainwright, 2017).

- Internal factors: The size of a financial institution is one of the factors that influence its financial performance. This is due to the amount of resources available and the scale of its operations. Large banks have a greater capacity

to provide financial services than smaller banks, and this is reflected in liquidity, return on equity, return on loan, asset size, and performance rates. Additionally, the type of technology used by banks can have a significant impact on their performance, as banks that have sophisticated, modern, and advanced IT and control methods will be able to use fewer inputs to achieve a higher percentage of outputs, resulting in increased profits (Chiang, & Wainwright, 2017).

- External factors: Environmental factors are those external elements that have a significant influence on the performance of a bank and cannot be regulated. These factors can be classified into legal and political, regulatory, economic, and social. Legal and political factors are based on legislation and laws that regulate the bank's operations, while economic factors are based on economic recessions and recoveries. Social and cultural factors are based on the level of awareness of the bank. These are some of the most significant factors that affect banking performance (Chiang, & Wainwright, 2017).

The profitability of a bank is determined by a variety of elements, such as interest rates. When interest rates rise, the bank's profits are likely to increase. Conversely, when interest rates on loans are low, the bank's profitability is likely to decrease.

The bank's primary objective is to maximize profit, which is the difference between revenue and expenses. However, any risk-tolerant bank must also recognize that a risk return is necessary to reduce the bank's loss rate. The initial step in this process is to identify sources of risk, to analyze the expected risks, and to evaluate the outcomes of the highest expected risk price to determine how to address those risks (Chiang, & Wainwright, 2017).

The degree of competition is influenced by the level of the interest rate charged by banks. The higher the liabilities of the bank, the higher the liquidity requirement of the bank. As a result, the bank must increase the interest rate paid to deposit holders. The opposite is true: the higher the

liquidity of the bank and the higher the reserves, the more the bank needs to pay the interest rate. Therefore, to meet its liabilities, the bank works to lower the interest rate. This is where the expansionary (or contractionary) policy comes into play to obtain or exclude liquidity (Chiang, & Wainwright, 2017). Efficiency is a key way to measure how well a bank is doing. It's the ratio of what it outputs to what it inputs, and it's used to make decisions on a daily basis. It also means having an account for each amount, even if it's small, to make sure it's being used properly. It's a way of measuring how well the bank is able to use its assets to make money. It can cut back on spending without sacrificing the quality of what it provides (Pratap, G. S. 2021).

The size of a bank is determined by a set of metrics, such as its total capital, operating branches, total banking assets, total bank deposits, total book value, and historical depth in the minds of its customers. The size of a bank can have a positive or negative effect on its performance, as long as it obscures the most essential fundamental components of expansion, such as personnel and other resources. Numerous studies have demonstrated a direct relationship between banking performance and the size of a bank, with the larger the bank, the more financial analysts are likely to be interested in increasing its performance (Pratap, G. S. 2021).

Technology is all the tools and resources needed to create a work environment that improves the efficiency and effectiveness of the bank and enables it to better take advantage of opportunities and face challenges and prevent threats. For any bank, it is essential to understand how to leverage the technology resources at its disposal and what kind of technology is suitable for the nature of the work areas and objectives of the bank.

Due to the significant changes and revolutions in modern technology, especially in the last few years, as well as the increased competition, the growing size of markets and the transformation of the banking sector, traditional methods have not been able and continue to be unable to meet the

challenges of such developments. The challenge of finding a way to acquire... historical data related to similar matters, and the fact that most of the data is dispersed and disconnected with no possible unified way to standardize, document and understand the data, makes the process to meet today's growing and real business requirements difficult and complex (IIBF, I. 2023).

It all had a big effect on the way the bank works to spread and move data and info, taking into account computers and phones as basic tools for bank business, and using the methods and tools offered by info and communications networks. It's important to use info and smart data to get a competitive edge and make things better. The bank's capability and efficiency in terms of internal and external connections in terms of how data and info is moved and exchanged, and it needs to be more efficient in making and making decisions, as well as making and improving the whole banking process for all kinds of banking work (IIBF, I. 2023).

External factors that affect the bank's performance include things that the bank's management can't control, like the political situation in the country where the bank or branch is located, which affects the bank's performance indirectly. It also affects how bank customers think, which can lead to a disconnect between the bank's plan and how it's being implemented. Finally, there are the rules and regulations that countries put on banks because they want to keep inflation low and keep depositors' money safe. All of this has a direct effect on the bank's performance, and it can either be a good thing or a bad thing that makes it hard to improve the bank's performance (Chiang, & Wainwright, 2017).

Social and cultural factors are defined as the habits, customs, and beliefs of society, as well as the level of consciousness and culture that influence the decision-making process in relation to the nature of banking operations and services offered by banks (Chiang, & Wainwright, 2017).

Fifth: Improving the financial performance of banks through banking supervision

The role of banking supervision is to identify the vulnerabilities and deficiencies that banks may experience in the conduct of their business operations. The Basel Committee established the fundamental principles for banking supervision with the aim of quantifying the risks that banks may face, which encourages and incentivizes them to enhance their financial performance (Pratap, G. S. 2021).

Banking supervision plays an important role in enhancing banks' financial performance and reducing risks to their financial performance by: Feedback on the quality and effectiveness of work, Support decision-making and enhance management's capacity to focus on key priorities, Help managers better understand and measure performance, Encourage and define responsibility and support accountability and attribution, Create a common language between employees and managers, Provide a way to know if the strategic plan is effective or not, It serves as a foundation for banks to assess the trajectory of their performance towards predetermined objectives, and to assess their efficiency, responsiveness and effectiveness on a regular basis, in line with operational strategy, personnel, scientific knowledge, data, marketing and finance. It provides assistance and reinforcement to businesses and banks to direct their resources to enhanced activities. The focus is on the bank's capacity to offer liquidity, return on investment and lend, taking into consideration investment decisions and associated risks (Pratap, G. S. 2021)..

CHAPTER TREE

THE STATISTICAL ANALYZES

In this study, the researchers use three models (referred to as "panel data models"), the common effect model, the fixed effect model, and the random effect model, to test the impact of the return on ownership structure on the financial performance of the Iraqi banking sector. This is especially true given that the data used in the study are from multiple banks (both local and foreign) operating for various periods of time.

The researchers compared the common effect model and the fixed effect model using the statistical treatment method (Chow test) to compare the three models. In order to compare the fixed effect model and the random effect model, the researchers used the statistical analysis method (Housman test).

While the researchers used the Durbin-Watson test, a statistical treatment method, to determine whether or not there was a problem with self-correlation between the studied values and to test the study's hypotheses regarding the impact of the return on ownership structure on financial performance, the F-test was used in accordance with the best model among the three models (summative regression model, fixed effects model, and random effects model). Since the effect hypothesis is accepted if the probability value (Prob. (F-statistic): (P-Value)) is less than or equal to the level of significance used in the study, the value of (0.05), and therefore accepting the impact hypothesis with a confidence rate of (95%), (Return on equity, assets)

As for diagnosing the percentage of interpretation of the independent variables for the changes that occur in the dependent variable, the determination coefficient is relied upon or the dependence is on the modified coefficient of determination (the modified interpretation coefficient), and to obtain these results, researchers used the standard statistical analysis program (Views) tenth edition, the statistical analysis program (SPSS) twenty-sixth edition, and Microsoft Excel 2016. Where the study sample includes ten local Iraqi banks and four foreign banks operating in Iraq.

Table (1) Comparison among banks in Iraq during the period (2010-2020)

The best financial performance of banks according the Variation coefficient measure	Foreign banks			local banks			Variants
	Variation coefficient %	The standard deviation	The arithmetic mean	Variation coefficient %	The standard deviation	The arithmetic mean	
Local	31	2.502	8.0725	9.83	1.094	11.125	Bank Size
Local	79.04	8.966	11.344	30.38	5.365	17.659	Bank period

Foreign	59.99	26.65	44.422	1050	8415	801.66	Total income/ Non-interest income/
Foreign	57.06	17.38	30.457	62.09	19.31	31.094	Total Assets/ Total Loans
Foreign	88.52	1.122	1.2672	112.2	2.298	2.0487	Assets
Foreign	71.37	5.273	7.3886	123.7	5.693	4.6017	Equity

First: Analyzing study sample banks data (McClave, J. T 2005).

Based on statistical treatment measures (variation coefficient) and data from the banks studied in Iraq during this period, the following table (1) compares data between local and foreign banks operating in Iraq, and it is evident that local banks are preferred in terms of both size and period. The time frame is 2010–2020. While foreign banks operating in Iraq were preferred in terms of income, total income, total loans, return on assets, return on equity, and other metrics, the percentage of foreign banks operating in Iraq over local banks reached 66.67% among the indicators of the current study compared to 33.33% for local banks operating in Iraq (Gupta, S. C., 2020).

Second: Choosing the best sample among the Panel Data Samples.

Since the information relates to people, organizations, and nations over time, there will probably be differences between these different types of units. In light of the fact that it gives us more information about the data with higher variance, less internal correlation between variables, more degrees of freedom, and higher model efficiency, panel data is the result of the combination of time series data and cross-sectional data. Particularly, using panel data enhances the optional analysis's quality in a way that may not be possible when using only cross-sectional data or only time-series data. In testing the three models (the common effect model, the fixed effect model, and the random effect model), this study seeks to answer the following question: Does the variance of banks have random effects on the model under the time series (Agarwal, B. L. 2013).

Since the aggregate regression model does not account for the differences in the observations or the temporal effects of the collected data, it assumes that all the information about time and the observations is fixed. As for the fixed effects model, the slope coefficients are constant, but the cutoff part varies depending on the observations but does not change over time, while the random effects model (the components of variance model: the error elements model) assumes that the cutoff part is a random sample calculated from a larger population that contains all similar entities and has co-expectation. Random effects models are used in the analysis of the panel data under the assumption that the cutoff part is a sample of similar entities (Das, N. 2017).

The concealed heterogeneity is controlled using the random effects model. In order to compare the three models represented by Table (2) (the aggregate regression model, the fixed effects model, and the random effects model), It confirms that the aggregate regression model is the best model for simulating the effect of the return on ownership structure on financial performance, provided that the Chow Test result showed that its probability value was greater than a significant level (0.05).

The Hausmann test was relied upon when deciding between the fixed effects model and the random effects model, so the random effects model would be the best in the event that its probability value was greater than a significant level (0.05). On the other hand, the fixed effects model would be the most accurate in illustrating how ownership structure return affects financial performance.

Table (2) Rules for selecting of the best predictive model among Panel data models

Test Result (Resolution)	Testing standard	The type of the test	The comparison between the two models
Aggregate effects (Common effect model) is the best one	$P > 0.05$	CHOW TEST	Aggregate effects and stationary effects
stationary effects (Fixed effect model) Is the best one	$P > 0.05$		
Random effects (Random effect model) Is the best one	$P > 0.05$	HOUSMAN TEST	Static effects and Random effects
Static effects (Fixed effect model)	$P > 0.05$		

Is the best one			
P: The Probability Value			

The probability value	F-TEST	The percentage	D.W	Model	The dependent variable	Affecting variables
٠,٠٠٠	7.5974	21.01%	1.191	Common effect model	The return on assets	Bank size + age of the bank + non-interest income/total income + total loans/total assets + economic growth + inflation
٠,٠٠٠	9.997	26.74%	1.145		The return on equity	
٠,٠٠٠	3.6362	34.24%	1.517	Fixed effect model	The return on assets	
٠,٠٠٠	5.7523	54.22%	1.443		The return on equity	
٠,٠٠٠	8.5457	24.35%	1.359	Random effect model	The return on assets	
٠,٠٠٠	8.4929	22.73%	1.368		The return on equity	

Table 3 shows the existence of an effect of the variables (size of the bank + age of the bank + income excluding interest to total income + total loans to total assets) on the dependent variables (return on assets, return on equity (in percentages of) 21.01% and 26.74%, respectively). This is based on data from the banking sector in Iraq and data from the common effect model. The Darbin Watson test yielded a positive result, indicating that there is no autocorrelation issue with the data because the values of (D.W.) for the models were higher than the interpretation coefficient prior to multiplying by percent. However, the findings shown in Table 3 show that the variables (bank size, age, income before interest, total loans, and total assets) have an impact on the financial performance

The following table shows that the fixed effect model has a fixed effect on the dependent variables: return on assets and return on equity. The proportions of return on assets and return on equity are 34.24% and 54.22%, respectively. The Darbin Watson test showed that the data did not have autocorrelation problems, as the values of D.W. for the models were higher.

The previous Table (3) shows that the random effect model results in a random effect between the variables (Size of the Bank + Age of the Bank + Income excluding

interest to Total Income + Total Loans to Total Assets) and dependent variables. Return on Assets and Return on Equity Ownership have a percentage of 24.35% and 22.73%, respectively. The Darbin Watson Test showed a positive result, indicating that the data does not have an auto-correlation problem as the values of D.W. for the models are lower.

The random effect model is the most suitable model for the return on assets for banks in Iraq, compared to the common effect model, the fixed effect model, and the random effect model.

Fourth: Hypothesis testing

The F-TEST statistical treatment method was employed to demonstrate the acceptance or denial of the hypotheses regarding the financial performance of the banking sector in Iraq. The multiple linear regression analysis method was employed to illustrate the relationship between the size of the bank, the age of the banking institution, income excluding interest, total loans, and return on assets, as well as return on equity, when combined. The coefficient of determination (R²) will be used to illustrate the ratio between the returns generated by the ownership structure and the changes in financial performance (Das, N. 2017).

The primary hypothesis is that the return on ownership (ROI) of the ownership structure has a statistically significant impact on the financial performance of the banking sector in Iraq. This hypothesis is supported by four sub-hypotheses, which are as follows:

1. The return on ownership of the ownership structure is statistically significant for the return on assets in the banking sector.
2. The return on equity of the ownership structure for the banking sector is statistically significant.

Table (4) Choosing the best model for the impact of the ownership structure return on financial performance

The best model according to the test result	Testing		Type of testing	Comparison		Dependent variable
	P-Value	Statistic value		Second Model	First Model	
Fixed effect model	0.003	2.541	CHOW TEST	Fixed effect model	Common effect model	The return on assets
Random effect model	0.073	11.328	HOUSMAN TEST	Random effect model	Fixed effect model	
Fixed effect model	0.000	5.872	CHOW TEST	Fixed effect model	Common effect model	The return on equity
Fixed effect model	0.012	17.641	HOUSMAN TEST	Random effect model	Fixed effect model	

Table (5) supports the adoption of the primary hypothesis, particularly that the outcome of testing the two subsets derived from it was statistically significant, as calculated F values reached F values of 6.44 and 6.439, respectively. These values are statistically significant as the probability values corresponding to each sub-hypothesis were lower than the significance level (0.10). Furthermore, it confirms that the returns generated by the ownership structure of the Iraqi banking sector have a significant impact on both return on assets and return on equity, thus demonstrating the considerable influence of the return on assets structure on financial performance. The results of Table (5) further demonstrate that the revenue generated by the ownership structure of the banking sector in Iraq accounts for the greatest proportion of the changes in return on equity (51.22%) compared to the returns from the ownership structure within the banking sector, which account for the least proportion of changes in return on assets.

Table (5) test the influence of the variables affecting the dependent variables

Hypothesis testing	Result of the test	Testing		Percentage	The best model	The dependent variable
		Potential value	Statistic F			
Acceptable	OK	0,00	6,44	18,35	Random influences	Return on assets
Acceptable	OK	0,00	6,439	51,22	Static effects	Return on Equity
The approved level for testing hypotheses is 0.10						

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