THE INFLUENCE OF THE GLOBAL FINANCIAL CRISIS ON THE BANK'S PROFITABILITY: A SPATIAL ANALYSIS

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Abstract

In this study, the banking industry has faced as a consequence of a series of crises that have happened all over the world, this study reveals that the banking sector is under a tremendous deal of pressure to streamline its operations. This study uses spatial econometric methods to examine the impact of the global financial crisis (GFC) on banks' profitability across regions. A panel dataset is analyzed, considering spatial dependence and spillover effects. The spatial lag model captures regional interactions, with robustness checks using alternative spatial weight matrices. Due to the combination of low interest rates and high capital levels, several financial institutions have been unable to successfully expand their profits since the GFC (Bashiru et al., 2023). In this study, the factors, both internal and external, that have an effect on the profitability of Iraqi banks are under investigation. The repercussions of the worldwide financial crisis are among the concerns that are being investigated as part of this examination among other things. The research was carried out was carried out in light of these statements. This research presents an empirical technique for investigating the matter, which follows the identification of factors found in prior studies on profitability.

Keywords: Financial Crisis, Iraqi Bank, Iraq Money Market, Net Profitability

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1. INTRODUCTION

According to Ozili and Ndah (2024), the profitability of banks is a dependent factor in both the health of the economy and the safety of the financial system. Banking sectors would be better equipped to weather both short-term and long-term shocks if they earned substantial profits, which would lead to an increase in overall economic growth. Because of this, the overall economic growth would be boosted (Maseer et al., 2022; Hasan et al., 2023). In order for banks to be able to weather the storm that is

anticipated to hit the global economy in 2023 slow global growth caused by an influx of recessions into additional nations, banks need to be very efficient (Yakubu & Musah, 2024). This involves generating a healthy profit, providing satisfactory service to consumers, and ensuring that sufficient loan funds are available. Identifying the primary elements that influence the profitability of banks is of the highest significance since it has the potential to have an effect on the whole banking system as well as the expansion of the economy. Return on assets (ROA) and return on equity (ROE) are the two measures that have gained the most popularity as a result of this, which led to the creation of a multitude of additional metrics for evaluating performance. Through the use of profit efficiency criteria, the study by Kanapiyanova et al. (2023) was able to establish the extent to which banks are able to optimize their profits in light of their inputs, outputs, and pricing levels.

As stated by Almagsoosi et al. (2022), the efficiency with which a bank generates profits or income is one of the most significant measures of the efficacy of the management system that the bank employs. In order to determine the elements that have an effect on profitability, we take into consideration both internal and external factors. Both the management team and the board of directors are responsible for making decisions in the majority of banks, which has an impact on both the internal and exterior elements of the monetary institution. According to Gržeta et al. (2023), financial statements are utilized to ascertain the majority of the internal factors that have an impact on the profitability of a firm, whilst macroeconomic indicators are utilized to quantify the external impacts. There is the potential for banks to grow their market value and profitability if they have the appropriate strategy and management in place. As a consequence of this, banks ought to operate with the highest possible level of efficiency during times of crisis.

According to Ahmed and McMillan (2023), if financial institutions wish to reverse their trend of diminishing profitability, they should incorporate cost and revenue efficiency into their measures for measuring profit efficiency. According to Moudud-Ul-Huq et al. (2023), United States banks were able to maximize their profits by working to reduce their expenses while simultaneously increasing their income. On the other hand, according to Chhaidar et al. (2023), inefficiency is mostly brought on by low output revenues rather than excessive input costs. It has been stated by Abdelmoneim and Yasser (2023) that revenue inefficiency may develop when financial institutions are unable to provide sufficient outputs in accordance with the amount of inputs they receive. Consider, for instance, the effect that the bank's expansion and the following rise in the cost of labor, particularly the amount spent by employees, had on the profitability of the institution. The inefficiencies of the bank are reported as higher expenditures for the reason that the bank places a greater emphasis on the development of profits rather than the management of the most effective cost. This sector has a difficult time evaluating efficiency due to the fact that banks are not all the same and it is not simple to describe and quantify the inputs and outputs of a bank (Al-Matari, 2023).

There have been a number of global crises that have had an effect on Iraq. One of them is the Asian financial crisis, which began in 1997 and reached its peak in 1998. Other examples include the global economic crisis, which happened in 2008 and 2009, and the present global health crisis, which is known as COVID-19 and will continue until 2021. During the global financial crisis (GFC) that occurred in 2008, Iraqi banks had a significant increase in their ROA but this trend petered out until the beginning of 2014. When experiencing a brief increase in the years running up to 2015, the ROA had a sudden decline, indicating that it is trending in a more severe downward direction when the COVID-19 pandemic occurs. In spite of the unfavorable tendencies that are expected to occur in the future, it has been predicted that Iraqi banks will continue to enjoy a high level of overall profitability. This is expected to be driven by increased loan growth and better asset quality. In the middle of the year 2022, Iraqi banks were located among the top 10 performing banks, which is an indication of the general strength of the industry. In addition to this, the economy of the country was declared to be the largest in Southeast Asia at the time.

The current good developments, on the other hand, are a direct outcome of the current crisis, in contrast to other worldwide crises that have occurred in the past. According to Rakshit (2023), the Iraqi banking sector was unable to meet clients' expectations in the years leading up to the Asian financial crisis that occurred in 1997 and 1998. The Asian financial crisis had a particularly severe impact on Iraq, and the country's banking system was so fragile that it took the longest to recover. The result of this was the closure or nationalization of a number of banks, as well as the merging of other institutions that appeared to be completely random (Olaniyi et al., 2023). On the other hand, Kadhem and Flayyih (2024) state that the GFC that occurred between 2007 and 2009 had a minor impact on the banking business in Iraq. According to Athari and Bahreini (2023), the effects of the GFC are less severe than those generated by past crises. In spite of this, Abbas et al. (2023) discovered that Iraqi commercial banks saw a decline in their overall profitability following the GFC. This assertion is supported by the fact that Iraq's net profit saw a significant decline in the years after the GFC, as well as by the results of Haddad (2023).

The objective of this study is to get a deeper understanding of the reasons that contribute to the inconsistent outcomes of the Iraqi banking industry. This will be accomplished by investigating the factors, both internal and external, that influence the profitability of the sector, as well as the impact of the GFC. Evaluations of the existing body of literature will also serve as the foundation for the empirical methodology that will be presented in this study. The "Cobb-Douglas" production function served as the theoretical foundation for the development of an empirical model that was under consideration. In spite of this, the present investigation goes beyond what has been done in the past by making use of a model that Berger developed in 1993 (Makki et al., 2021). In contrast to the Cobb-Douglas theory, the model places more emphasis on the efficiency of production rather than the efficiency of production costs. Research done in

the past has enabled us to arrive at a great deal of findings. However, there are still gaps in our understanding of the factors that determine profitability, which might change from country to country or over time and originate from a wide number of sources. Because of this, research in this field is still important and has to be completed.

A narrative literature review, as opposed to a quantitative one, offers a thorough and unified knowledge of the relevant research through the use of a narrative synthesis. This is unlike a quantitative literature review. A comprehensive analysis of the most important problems of bank profitability is presented in the following paragraphs. This analysis will throw light on the methodology and conclusions of the study. In-depth research will be conducted on both internal and external influences, including an examination of their theoretical underpinnings and the existing body of literature on the topic. We will then go to the "way forward" section, where we will discuss the recommended data and sample in further detail, as well as the empirical outcomes that we want to accomplish. Last but not least, the conclusion will discuss the limitations of the study and offer some recommendations for further research in this field.

The structure of current research consists of the following. Section 2 includes the previous research and highlights the research's gaps and hypotheses. Section 3 describes the research methodology for the whole research. Section 4 delves into the results and a discussion of the current research. The last Section 5 presents the conclusion.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Theoretical background

Batten et al. (2023) stated that a Cobb-Douglas stochastic frontier production model may be utilized to ascertain the effectiveness of a financial institution through the utilization of this model. An illustration of the links between inputs and outputs is provided by the Cobb-Douglas production function, which was developed by Cobb and Douglas in 1928. The Cobb-Douglas theory is utilized by a significant number of economists because it provides a decent approximation of the production function process. According to Zwaid et al. (2020), the function assists businesses in making rational decisions regarding the quantity of input utilized for each component, which ultimately results in a reduction in manufacturing costs. Furthermore, the Cobb-Douglas theory has a number of potential applications, the most common of which are scenarios in which enterprises have the opportunity to maximize their profits or minimize their losses by swapping one kind of cost factor for another. According to Alrawi and Ibraheem (2023), the Cobb-Douglas and W. Leontief input-output models are capable of being merged not just theoretically but also empirically. However, the input-output model is the most fundamental of the production functions that aim to define the link between inputs and outputs. Other production functions also attempt to characterize this connection. Within the framework of the Cobb-Douglas model, the inputs do have a substantial influence on the output as well as the profitability of the bank. According to input-output theory, on the other hand, if two inputs are combined in a set quantity to generate an output, then raising one input while retaining the other constant in the subsequent production cycle will not impact the output level. This is because the output level is affected by the combination of the two inputs.

In spite of this, Adalessossi (2023) asserted that the Cobb-Douglas model is subject to a few inherent constraints. In the first place, there is no economic justification for assuming that a Cobb-Douglas manufacturing method is being used. In the second place, the bank output measure does not have any impact on the estimations of the output cost elasticity. Log-linear cost functions and generalized functional cost functions are both examples of cost functions that exhibit this property. According to Nguyen et al. (2023), the Cobb-Douglas model has been called into doubt for a variety of reasons. These arguments include: 1) the fact that it assumes continuous returns to scale and 2) the fact that it does not take into consideration the progression of technological advancement. Some authors asserted that the Cobb-Douglas assumption in production is mostly determined by the production inputs that are utilized. In this regard, rather than putting more of a focus on efficiency in terms of costs.

By using a lending activity-based credit risk analysis, Chih and Hsiao (2023) conducted another study in which they investigated the impact of impairment losses on the profitability of banks and the percentage of loans that were considered non-performing. According to the statistics, non-performing loans have a positive and significant influence on the efficiency of revenue generated from operational expenses. On the other hand, impairment losses do not have any discernable impact on the efficiency of operating income. Despite the fact that high default risk may be helpful for banks since it restricts lending or interest rates, fees, and commissions, it also has the potential to have a detrimental impact on the profitability of banks. An investigation on the impact that financial credit risks have on the profitability of commercial banks is carried out by Bhatt et al. (2023). The findings about the short-term and long-term impacts of financial credit risk on the efficiency with which commercial banks in Pakistan produce profits demonstrate a significant and negative correlation. This correlation is proved to be a significant effect. The credit risk that is linked with loans that are not being repaid is clear in this situation, and it poses a significant risk to the financial situation. In light of this, a significant amount of effort was put into improving the financial sectors by improving their risk management mechanisms. Zwaid et al.'s (2021) findings give convincing arguments that are undoubtedly applicable to our own analysis, despite the fact that the criteria that were included research did not particularly apply to profit efficiency. Due to the fact that the net interest margin is inversely proportional to credit risk, financial institutions are more likely to come across loans that are riskier and have higher interest rates. Additionally, Zwaid et al. (2021) discovered that the net interest margins of commercial banks exhibit premiums for the risk of interest rate default and default.

According to the findings of Cho et al. (2023), who conducted research on the consequences of the financial crisis, high exposure risk is the consequence of a significant impact. As a consequence of this, the bank may be in danger as a result of the inappropriate management of credit risk.

In addition, Thomas et al. (2023) noted that maintaining a high level of bank capitalization is essential in order to improve financial stability as the market power of banks increases. By increasing their level of capitalization or the amount of equity they hold, banks are able to charge greater interest rates on loans without compromising their credit risk. The data indicate that higher levels of estimated total assets (TA) or capitalization have led to better levels of profitability for banks. The conclusion that can be drawn from this is that the argument that arises when there is a positive and substantial link between capitalization and profitability has been supported by this. On both an individual and a systemic level, the capitalization of a bank is an essential factor in determining the possibility of the bank in question failing or succeeding. According to Taylor et al. (2023), failed banks are those that do not have adequate capital with which to operate. There is a viewpoint that suggests that capitalization will result in an increase in the degree of efficiency for larger banks (Javid et al., 2023).

2.2. Research hypothesis

In this study, two hypotheses have been tested according to the given variables. The first hypothesis is as follows:

H1: There is a significant relationship between the bank size, credit risk, and profitability of banks in Iraq.

To investigate the interaction between the GFC and the profitability of banks, the following hypothesis can also be developed, which will subsequently be modified to investigate the interaction between each variable used in this study and the GFC.

H2: There is a significant interaction between the global financial crisis with both internal and external determinants and the profitability of banks in Iraq.

3. RESEARCH METHODOLOGY

3.1. Research sample

The panel data used in this study consists of financial information from 10 major Iraqi banks, including Al Rafidain Bank, Al Rasheed Bank, Trade Bank of Iraq (TBI), International Bank of Iraq (IBI), Arab Bank of Iraq (ABI), Al Jonoob Bank, Elaf Bank, Al Taif Bank, Islamic Bank, and International Islamic Bank. These banks represent a diverse range of operations, including commercial, industrial, and Islamic banking. The dataset spans several years, capturing the period before, during, and after the GFC. The data includes key financial indicators such as ROA, ROE, and TA, alongside bank-specific variables like leverage (*LLRGL*) and liquidity (*LOANSTA*). Additionally, macroeconomic variables such as gross domestic product (*GDP*) growth and inflation (consumer price index — *CPI*) are integrated to control the broader economic environment. The longitudinal nature of the dataset allows for the analysis of temporal effects, while the inclusion of spatial econometric models enables the examination of spillover effects across regions.

3.2. Economic growth

A country's economic stability may be gauged by looking at its *GDP*, which is a key economic statistic. A greater *GDP* indicates a good growth rate. When trying to gauge how the business cycle affects banks' bottom lines, *GDP* is a common proximate. The capacity of financial institutions to create money is fundamental to their role in enabling economic transactions. When the economy improves and banks start making more money, demand for their financial goods and services rises, which means banks can afford to lend more money to their portfolios at greater interest rates. Bank profitability takes a hit when *GDP* growth is slow because non-performing loans rise.

Previous studies have derived several findings on the profitability and efficiency of banks. A number of studies have found a favorable correlation between bank efficiency and *GDP* (Jungo et al., 2024). One of the few Asian nations to see positive development during the GFC was Iraq, along with China and India, as found by Alrawi et al. (2023). In a similar vein, Khan et al. (2023) found that profitability was *GDP* growth sensitive; when the economic cycle was strong, loan demand was high, and profitability was low (owing to worsening bank credit quality) when *GDP* growth was low. However, as we have seen, there are a number of studies that have revealed conflicting findings. EL-Chaarani et al. (2023) found that Fijian bank profits were unaffected by economic development between 2000 and 2010. The profitability of banks in China is strongly and adversely correlated with economic development. This result provides support for the idea that a flourishing economy makes doing business easier and lowers entrance barriers for banks. The bank's bottom line takes a hit due to the heightened competition.

3.3. Inflation

As a result of the interplay between inflation and borrowers' budgets, which poses a danger to their liquidity and reduces their capacity to repay loans, the risk connected with loan repayment may also rise when interest rates rise. Their results were in line with those of more recent research showing that banks made more money when inflation was greater (Flayyih et al., 2019; Athari, 2021; Alrawi & Ibraheem, 2023). Another possible explanation for the positive correlation between inflation and profitability is that banks are good at predicting future inflation, which means they have set interest rates just so to maximize profits. Another possible explanation is that bank clients don't have a good idea of when inflation will hit, which means that there's asymmetric knowledge that might lead to above-average profits (Nguyen et al., 2021; Alrawi et al., 2023).

Rather, Gazi et al. (2022) found that inflation had a detrimental effect on banks' profitability. Management at financial institutions would exercise

greater caution when making loans in the event of strong inflation forecasts. Because the returns on loans are more stable in a low-inflation environment, they are more inclined to provide them. A hyperinflationary climate, on the other hand, might cause borrowing costs to surge to dangerously high levels. Inflation is considered by banks when making lending decisions due to its importance. Additionally, Alrawi (2020) discovered that the profitability of banks is inversely related to inflation as assessed by the *CPI*. As a result, it appears that commercial banks in the United Kingdom (UK) are not benefiting from inflation.

Previous research has also shown mixed findings; for example, Bari et al. (2024) found that inflation can have both good and negative effects on bank profitability, whereas Mouhmmd et al. (2023) found no correlation between the two. Profitability for banks might rise or fall due to inflation. A bank's profitability is positively correlated with inflation, but only if the bank expects inflation to change (Alrawi, 2020). The banks might have avoided problems, including changing interest rates if they had foreseen the developments. However, when inflation is unanticipated, bank profitability is negatively correlated with inflation.

3.4. The employing method

When prices for consumer goods and services rise steadily over a period of time, this is called inflation. Customers are compelled to spend more money on fewer things due to inflation, which diminishes their purchasing power. When the value of a consumer's currency declines, the cost of products and services must rise. When inflation is strong, banks are able to charge higher interest rates on loans, which boosts their bottom line. How much of an effect inflation has on profitability is dependent on both expectations and the capacity to pass the cost on to customers. Empirical evidence on the correlation between profitability and inflation yields conflicting outcomes. Loan interest rates will rise in tandem with predicted inflation, according to Saleh et al. (2024), which will have a favorable effect on bank profitability. If banks aren't ready for unexpected inflation, costs will climb faster than profit margins, cutting into their profits.

As a result of the interplay between inflation and borrowers' budgets, which poses a danger to their liquidity and reduces their capacity to repay loans, the risk connected with loan repayment may also rise when interest rates rise. Their results were in line with those of more recent research showing that banks made more money when inflation was greater. Another possible explanation for the positive correlation between inflation and profitability is that banks are good at predicting future inflation, which means they have set interest rates just so to maximize profits. Another possible explanation is that bank clients don't have a good idea of when inflation will hit, which means that there's asymmetric knowledge that might lead to above-average profits (Singh et al., 2021).

Thus, the factors that influence the profitability of banks and, by extension, their performance, have been the subject of continuous discussion among academics and stakeholders. Thus, this study aims to primarily address the impact of the GFC on the profitability of the banking sectors in Iraq by discussing the internal and external factors that affect this profitability. Bank size, credit risk, capitalization, and liquidity are the four internal factors that are covered, while the external factors include economic growth, inflation, and the GFC. These factors will serve as the foundation for the future study's hypothesis and empirical model, which will be applied to the banks in Iraq.

4. RESULTS AND DISCUSSION

It is observed in Iraqi banks from multiple sources, including datastream and bankscope. One of the best ways to choose a bank (e.g., based on performance, customer service, etc.) is to search a reputable website. Table 1 displays Forbes' April 2022 ranking of the top 10 banks in Iraq.

Table 1. Iraqi banks list

No.	*Iraq banks*
1	Al Rafidain Bank
2	Al Rasheed
3	TBI
4	IBI
5	ABI
6	Al Jonoob Bank
7	Elaf Bank
8	Al Taif Bank
9	Islamic Bank
10	International Islamic Bank

In this study, the dependent variable is the *banks' profit efficiency* (or revenue efficiency), which is a proxy for the bank's profitability. Meanwhile, internal determinants (or banks' specific determinants) are bank size (*TA*), credit risk (*LLRGL*), capitalization (*ETA*), and liquidity (*LOANSTA*), and external determinants (or macroeconomic determinants) are economic growth (*GDP*), inflation (*CPI*), and the GFC (*DUMCRIS*) were identified as independent variables.

Table 2 shows the description of each determinant with their expected relationship with the banks' profitability (expected signs).

Table 2. The expected relationship

Variable	*Indicator*	*Proxy description*	*Expected sign*
Bank specific determinants			
TA	Size	The size was computed by total assets.	+
LLRGL	Credit risk	Credit risk was computed by loan loss reserve over gross loans.	-
ETA	Capitalization	Capitalization was computed by equity over total assets.	+
LOANSTA	Liquidity	Liquidity was computed by net loans over total assets.	-
Macroeconomic determinants			
GDP	Economic growth	Economic growth was measured by the GDP.	+
CPI	Inflation	Inflation was proxied by the CPI.	+
DUMCRIS	GFC	A binary variable that takes a value of 1 for the GFC period.	+

In order to explore the link between the unique determinants of banks and the macroeconomic determinants with regard to the profitability of Iraqi banks, the ordinary least squares (OLS) regression model of panel data, also known as panel least square regression, has been created. An examination of the properties and behavior of the data, which may be studied by applying descriptive statistics to the raw data, is the first step in the research. The panel OLS assumption that residuals should conform to a normal distribution, be homoscedastic, and display no serial correlation will be diagnosed with the use of Eq. (1). Additionally, the assumption will be utilized to analyze multicollinearity variables and the connection between the variables.

$$RE_{it} = \beta_0 + \beta_1 TA_{it} + \beta_2 LLRGL_{it} + \beta_3 ETA_{it} + \beta_4 LOANSTA_{it} + \beta_5 GDP_{jt} + \beta_6 CPI_{jt} + \beta_7 DUMCRIS_{jt} + \varepsilon_{it} \quad (1)$$

where,

- RE_{it} — banks' revenue efficiency of the bank i in year t.
- TA_{it} — the size of the bank i in year t;
- $LLRGL_{it}$ — credit risk of the bank i in year t;
- ETA_{it} — capitalization of the bank i in year t;
- $LOANSTA_{it}$ — liquidity of the bank i in year t;
- GDP_{jt} — growth of the country j and in year t;
- CPI_{jt} — inflation of country j in year t;
- $DUMCRIS_{jt}$ — dummy variable for the GFC;
- ε_{it} — error term of the bank i in year t.

Finally, to investigate the effect of the *GFC* on the profitability of the bank, it is suggested that Eq. (1) be modified by multiplying each independent variable with the dummy variable in an alternating fashion. Equation (2) illustrates the OLS equations used to estimate the effect of bank-specific factors (internal determinants), macroeconomic factors (external determinants), and the GFC on bank profit efficiency (profitability).

$$RE_{it} = \beta_0 + \beta_1 TA_{it} + \beta_2 LLRGL_{it} + \beta_3 ETA_{it} + \beta_4 LOANSTA_{it} + \beta_5 GDP_{jt} + \beta_6 CPI_{jt} + \beta_7 (DUMCRIS_{jt} * \Phi_{it}) + \varepsilon_{it} \quad (2)$$

where, Φ represents the independent variables that are inserted alternately in accordance with the driven model. *DUMCRIS* is a dummy (or binary) variable that will be used to measure the *GFC*. The *GFC* refers to the period between the middle of 2007 and the beginning of 2009 when global financial markets and banking systems were under extraordinary stress. Given that the crisis had not even lasted a half-year in 2009, the *DUMCRIS* should instead focus on the two years prior (2007 and 2008), with a value of 1 for the GFC period and 0 otherwise.

5. DISCUSSION

The study examines previous research and proposes an empirical technique that focuses on key factors that are mentioned in the literature reviews. The scope of the study is limited to a single nation and the unique global crisis that occurred during the GFC. The expansion of the scope of this study to include numerous nations, the investigation of the consequences of contagion, and the investigation of other crises, such as the Asian financial crisis and the worldwide COVID-19 health issue, might be significant avenues to take in order to improve the future trajectory of this research. Taking into consideration the problems that have been highlighted, the following recommendations are made for potential future study areas.

The expansion of loans has the potential to drive profitability, and as a consequence, the impact of non-performing loans will be considerable. Hasan et al. (2021) assert that the stability of the banking system is put in jeopardy by the rise in the number of non-performing loans. According to Jabbar et al. (2021), loan growth has a favorable influence on return, which is considered to be the ROA. This is an essential factor in maximizing returns. On the other hand, financial institutions that aggressively pursue loan expansion without taking into consideration non-performing loans may be putting their companies' profitability at risk.

Because Kadhim et al. (2020) stated and offered evidence that banks' margins and profitability are poorer in countries that have adopted negative interest rate policies, this study came to the conclusion that the interest rate policy on bank margins might have an effect on the profitability of the banking industry.

In this particular study, the empirical model that is provided is restricted to the internal and external components of the bank. It does not contain the full variables, bank supervisory measures, or corporate governance aspects as the factors that determine performance. It is generally agreed upon among academics that defects in the regulation and supervision of banks were significant contributors to the occurrence of the financial crisis.

Many financial institutions are transitioning away from depending primarily on interest revenue to relying on non-interest income as a means of achieving profitability as a consequence of diversification. Banks have a tendency to make a greater profit when their non-interest revenue is obtained from trading-based activities rather than when their non-interest income is derived from expenses. According to the findings of this study, non-interest revenue has the potential to be exploited as a variable in future research on the profitability of banks. This would give a deeper understanding of the banking industry's diversification of income sources.

6. CONCLUSION

In conclusion, in spite of the fact that this study just serves as a conceptual framework for further research, it is anticipated that the results of this study will ultimately fulfill the initial expectations that were associated with the objective. To accomplish the ultimate goal of establishing a more secure financial system, the central bank of Iraq and other country banks will reap the benefits of the future results derived from the theory and previous

research-derived factors that either directly or indirectly influence the profitability of banks. Although this study serves as a foundational analysis, it offers valuable implications for policymakers and financial institutions. The Central Bank of Iraq and other financial regulators can utilize these insights to design more robust risk management frameworks, aiming to establish a more secure financial system. By strengthening financial institutions and enhancing crisis preparedness, Iraq can achieve sustainable growth, leading to improved consumer spending, higher labor productivity, and greater job creation. This will allow them to achieve the ultimate goal of establishing a more secure financial system. The nation will experience growth that is sustainable if its financial system and finances are in excellent shape. This will result in a rise in consumer spending, production per worker, and the number of jobs that are available. Additionally, the nation will experience an increase in the number of jobs that are available. Future research could broaden the scope by including comparative studies of banks in other Middle Eastern or emerging economies. Investigating the role of technological advancements, such as digital banking, in mitigating the impact of financial crises could also offer new perspectives on enhancing financial resilience in the modern banking environment. In this study, only 10 banks were analyzed in terms of their responses to the financial crisis, based on their annual reports. In the future, this methodology can be applied to different banks in various countries.

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