

## **EVALUATING THE FINANCIAL PERFORMANCE OF BANKS USING FINANCIAL RATIOS- A CASE STUDY OF ERBIL BANK FOR INVESTMENT AND FINANCE**

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**ABSTRACT:** *This study investigates the financial performance of Erbil Bank for Investment and Finance, Kurdistan Region of Iraq during the period of 2009-2013. Several financial performance parameters are used such as financial ratios analysis which is used to measure the financial position for the bank and on broader range statistical tools also have been used for analysis purpose of several variables which would affect the banking system in general in order to know whether these variables are significantly correlated with the financial performance for the bank. The findings of the study show the positive behaviour of the financial position for Erbil Bank and some of their financial factors variables influence the financial performance for the bank. Then, it is found that the overall financial performance of Erbil Bank is improving in terms of liquidity ratios, assets quality ratios or credit performance, profitability ratios (NPM, ROA, ROE). This study suggests a set of recommendations regarding the development and enhancing of some banking operations which will boost the bank's profitability and improve the financial performance for the bank.*

**KEYWORDS:** Erbil Bank, Evaluating, Financial Performance, Financial ratios, Case Study.

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### **INTRODUCTION**

Assessing the health of an economy can be accomplished by studying the financial performance of its banks, (Haque and Sharma, 2011). Then banking and financial industry has become a reality in today's economy, as it is witnessing a growing both in terms of the number of such institutions, or in terms of the amount of money managed by or diversity activities. In spite of this progress and successes achieved by the banking and financial institutions, it still have challenges which will require further intensive efforts on the part of these institutions. Such to enhance the quality of its products and services and diversity, and to keep pace with the rapid developments taking place in the world in this field. Commercial banks have been attacked by the globalization, competition (from nonbanking financial institutions) and volatile market dynamic pressures, (Casu et al, 2006). So banks attempt to find new method to improve their services. To understand the superior performance and struggle for it, managers and policy makers stated the major question is "What drives performance?" To address this question, researchers have focused their efforts on the operational details (Soteriou and Zenios, 1999). An important requirement, to answer this question, is the profitability measurement. The widely used measures to assess commercial banks' performance are return on total assets (ROA) and return on total equity (ROE). These measures have been used by analysts and bank regulators in (a) assessing industry performance (b) forecasting market structure trends (used to predict bank failures and mergers) and (c) other purposes where a profitability measure is wanted (Gilbert and Wheelock, 2007). Over the past several years, an increased attention has been received by financial institutions (particularly commercial banks) on performance

analysis. As a result, the research focus has been shifted from characterizing performance in simple ratios as ROA or ROE to a multidimensional systems perspective. Although an important and relevant information about bank's financial performance can be provided by accounting and financial ratios, assessing the relationship among many factors that are related to bank performance such as assets, revenue, profit, market value, number of employees, investments, and customer satisfaction can assist in improving bank productivity (Seiford and Zhu, 1999).

### **Statement of the Problem**

Financial measures have long been the foundation for business performance measurement. These measures expressed the performance and achievement in monetary terms, included in the chart of accounts, and provided a high level of aggregation of information. More importantly, financial measures are well recognized and followed the rules of General Accepted Accounting Principles (GAAP). The financial measures is still popular among most of the companies because non financial measures such as customer satisfactions, quality, market share and human resources, tend to be subordinated to financial figures. In addition, the fundamental reliance by managers on financial performance measures dominates organization strategy particularly in short run. In addition, the financial measures have been used for decades and managers are frequently comfortable with them. Whilst it is acknowledged that the immediate outlook for the global financial markets and ensuing world economic growth prospects appear challenging, the commercial banks operating in healthy situation will remain resilient. Financial performance could be defined as a measurement of the results of a firm's policies and operations in monetary terms. In assessing the overall financial condition of a company, the income statement and the balance sheet are important reports, as the income statement captures the company's operating performance and the balance sheet shows its net worth. Financial performance could be assessed using the following key measures which are important to assess the current financial position and performance. These are descriptive and analytical measures of financial position and performance. Descriptive measures include total assets, total liabilities, stockholders equity, total revenues, total expenses and net income. And analytical measures of financial position and performance could include profit-ability, efficiency, liquidity and solvency measures. This study will measure the performance of a commercial bank in Kurdistan Region of Iraq by using NPM, ROA, ROD, and ROE as profitability indicators affected by a group of financial factors (capital ratio, bank size and loans) as liquidity indicators. Also assets quality or credit performance (total revenues/total assets, provisions/financing, and provisions/total assets).

### **Objectives of the Study**

The primary objective of this study is to measure the performance of Erbil Bank for Investment and Finance in Kurdistan Region of Iraq. The specific objectives are:

- (i) to analyse the financial performance of the banks under study;
- (ii) to examine the financial factors that could be the determinant of the current financial performance of the bank.
- (iii) to investigate whether bank capital ratio, size and loans of the bank are related to its profitability in Kurdistan Region of Iraq;
- (iv) to evaluate which performance measure (ROA or ROE) is better to be used in measuring the profitability of the bank;
- (v) Reflecting the role of financial analysis benefiting from data of financial statements especially income statement through reflecting of points of weakness and strength for evaluating the banking performance, and,

(vi) to suggest measures, on the basis of the study results, to improve further the financial performance of the banks under study.

### **Importance and Significance of the Study**

The importance of the study is to improve the financial performance of Erbil Bank for Investment and Finance; improve the Kurdish banks' operations and technology, therefore, this will lead to improve the Kurdish economic society and be more developed:

(i) Recognize the importance of financial performance in general and the banking sector in Kurdistan region of Iraq in particular, and, (ii) Emphasis on attention to the financial performance and financial ratios, including analysis contribute to decision-makers to take correct decisions.

### **Hypothesis of the Study**

The current study addresses the following hypotheses:

**H1:** Bank profitability measured by ROA is greater than that measured by ROE in case of Erbil Bank.

**H2:** Financial analysis helps make financial performance evaluation of Erbil Bank.

**H3:** There is a significant statistical relationship between financial ratios analysis and specification of points of power and weakness in the performance of Erbil Bank.

### **SURVEY OF RELATED LITERATURE**

A literature review is generally conducted to review the present status of a particular research topic. From the survey of literature, a researcher is able to know the quantum of work already done on his/her new research topic so far not touched, or yet to be undertaken. The overview of literature at the national or an international level is researched with the help of research reports, articles, books and other materials. The major benefits of literature reviews are: (i) it helps the researcher in avoiding duplication of efforts on the same research topic, (ii) helps the researcher in adopting methodologies used successfully by other researchers; (iii) suggests new approaches in planning/the organization investigating research; (iv) helps to narrow down the research problem more clearly; (v) assists investigators to develop firmer understandings of theoretical implications of proposed inquiries. Many studies that related to measurement of financial performance are discussed below:

Bashir (1999, 2000, & 2001) examined the balance sheets and the income statements of a sample determinants of Islamic Banks' performance, specifically the relationship between the profitability and the banks' characteristics. He found that the measure of profitability is an increasing function of the capital and loan ratios. Besides, the study highlights the empirical role that adequate capital ratios and loan portfolios play in explaining the performance of Islamic banks. Factors such as non-interest earning assets and customer and short-term financing, etc contribute to the increase of the Islamic banks' profit. In the year (2000), he examines the determinants of Islamic bank's performance across eight Middle Eastern countries for 1993-1998 period. A number of internal and external factor were used to predict profitability and efficiencies. Controlling for macroeconomic environment, financial market situation and taxation, the results show that higher leverage and large loans to asset ratios, lead to higher profitability. The paper also reports that foreign-owned banks are more profitable than the domestic one. There is also evidence that taxation impacts negatively bank profitability. Finally, macroeconomic setting and stock market development have a positive impact on profitability.

Hassan and Bashir (2003) who look at the determinants of Islamic bank performance and show Islamic banks to be just as efficient as conventional banks if one uses standard accounting measure such as cost to income ratio. Moreover, banks should have solid knowledge of how to manage their data and how to create and emend the database periodically. Samad and Hasan (1999) apply financial ratio analysis to see the performance of Malaysian Islamic bank over the period 1984-1997 and generally find that banker's lack of knowledge was the main reason for slow growth of loans under profit sharing.

Samad (2004) examines empirically the performance of Bahrain's commercial banks with respect to credit (loan), liquidity and profitability during the period 1994-2001. Ten financial ratios are selected for measuring credit, liquidity and profitability performances. By applying t-test to these financial measures, his paper finds that commercial banks' liquidity performance is not at par with the banking industry. Commercial banks are relatively less profitable and less liquid and, are exposed to risk as compared to banking industry. With regard to credit performance this study finds no unambiguous conclusion

Tarawneh (2006) found that the banks having high total capital, deposits, credits, or total assets does not always means that has healthier profitability performance. The operational efficiency and asset management, in adding to the bank size, positively influenced the financial performance of these banks. In the light of his empirical study he concluded that the operational efficiency and asset management, in addition to the bank size, strongly and positively influenced financial performance of the banks.

Jahangir, Shill and Haque (2007) stated that the traditional measure of profitability through stockholder's equity is quite different in banking industry from any other sector of business, where loan-to-deposit ratio works as a very good indicator of banks' profitability as it depicts the status of asset-liability management of banks. But banks' risk is not only associated with this asset liability management but also related to growth opportunity. Smooth growth ensures higher future returns to holders and there lies the profitability which means not only current profits but future returns as well. So, market size and market concentration index along with return to equity and loan-to-deposit ratio grab the attention of analyzing the banks' profitability.

Kumbirai, and Webb (2010) investigated the performance of South Africa's commercial banking sector for the period 2005- 2009. Financial ratios are employed to measure the profitability, liquidity and credit quality performance of five large South African based commercial banks. The study found that overall bank performance increased considerably in the first two years of the analysis. A significant change in trend is noticed at the onset of the global financial crisis in 2007, reaching its peak during 2008-2009. This resulted in falling profitability, low liquidity and deteriorating credit quality in the South African Banking sector.

Abdulrahman, and Al-Sabaawee (2011) their study tried to assess the performance of Islamic banks through the use of complex financial analysis based on the use of two tools: (financial analysis using financial ratios) and (analysis of change and the general trend on the basis of the base year). For judging the performance of these banks and the efficiency of management in the management of financial resources optimally, and to achieve economic and social objectives in light of various developments taking place in these banks. The study sample consisted by (the Iraqi Islamic Bank) and (Jordan Islamic Bank), in an attempt to analyze the financial statements of these banks for the period (2000-2008). The study found that Islamic

banks if they want to achieve the economic and social objectives and in line with their fundamentals base, it is necessary to have a role of great decision making and financial policies and future plans, and strengthening the position of these banks in the societies working in it, as well as the use of financial instruments provided by the financial analysis in order to reach the goals that are supposed to be achieved.

Almazari (2011) in his study attempted basically to measure the financial performance of seven Jordanian commercial banks for the period 2005-2009, by using simple regression in order to estimate the impact of independent variable represented by; the bank size, asset management, and operational efficiency on dependent variable financial performance represented by; return on assets and interest income size. It was found that banks with higher total deposits, credits, assets, and shareholders' equity does not always mean that has better profitability performance. Also found that there exists a positive correlation between financial performance and asset size, asset utilization and operational efficiency, which was also confirmed with regression analysis that financial performance is greatly influenced by these independent factors.

Haque and Sharma (2011), their research studied the hypotheses tested imply that there are significant differences amongst Saudi banks. The financial performance of banks in Saudi Arabia is studied on the basis of financial variables and ratios through the help of Spearman's rank correlation method. Although, benchmarking performance of banks is done using advanced linear programming models, this study attempts to develop an efficiency frontier on the basis of simple linear regression. Albeit certain restrictive assumptions, this study identifies Al Rajhi bank to be the best bank to which other banks could look up to and justifies this model on the basis of parsimony

While Sidqqi and Shoaib, (2011) concluded in their study "Measuring performance through capital structure in Pakistan" that size of the bank plays an important role in determining the profitability of the bank using ROE as profitability measure. In addition, Tobin's Q model was also used in the study to measure banks profitability and performance and found direct and positive relation with the size of the banks, the leverage ratio and Investments by banks in assets.

Alsamaree (2013) studies and puts sheds light on the performance of commercial banks in particular during the critical period from 2007 to 2010, and the reason that the banks in Kuwait has been able to largely overcome the crisis and draws attention to the National Bank of Kuwait was able to distribute profits at that stage.

Almumani (2014) the purpose of his study is to analyze and compare the performance of Saudi banks that listed in stocks market for the period 2007-2011. The study is an evaluator in nature, drawing sources of information from secondary data. The financial performance of banks is studied on the basis of financial ratios and variables. Financial performance was measured by two approaches; trend analysis and inter-firm analysis. It was found that increasing of assets, operating expenses, and cost to income cause a decrease in Saudi bank's profitability, while increasing of operating income causes an increase in the profitability of Saudi Banks. Analysis show that all the variables of study have a positive mean value and all banks are generating income. Saudi joint venture banks proved to be more proficient in generating profits, absorbing loan losses and dominating in ROE, while, Saudi established banks have more capacity of absorbing asset losses and dominating in ROA.



The foresaid studies cover different cases only one is from Iraq, here, the study covers those studies related to performance while applying the financial ratios only. So many other studies were there but with another modes that may related or using other approaches of analysis.

## **PROFILE OF ERBIL BANK FOR INVESTMENT AND FINANCE**

Erbil Bank for Investment and Finance has incorporated under a special decree act (Law No. 0056) dated 20<sup>th</sup> of April 2009 and commenced its operations on the 24<sup>th</sup> of June 2009 with a capital of Iraqi Dinar fifty billion. At its inception, the Bank's mission was to set as managing and utilizing the assets of foundations in the most efficient manner in line with the needs of the economic development, contributing to Iraqi economy in general and Kurdistan Region in specific by increasing savings rate based on a management and working understanding aligned with the requirements of modern banking. Whether you are a trader, manufacturer, importer, exporter, or supplier, the bank can provide you with a tailor made products to satisfy your financing need within an ever-changing trade conditions. Debt is essential for businesses funding current operations or future investment. Erbil Bank offers a comprehensive line of products servicing all businesses needs with perfect integrity from start to finish. The bank put forth all the resources and technology needed to deliver an outstanding service. It is all about understanding client's needs. Similar to consumer credit, businesses have a variety of lending products to choose from. A line of credit, term loans, and special products, such as: (i) overdraft (ii) term loan (incentive loan) (iii) letter of credit/ letter of guarantee (iv), Current Account: This is the most convenient basic account to get you started. It is available in all major currencies (Iraqi Dinar, USD and Euro).

### **Accounts with Erbil Bank:**

Opening a Current Account that allow the customer to build a credit record at Erbil Bank, which can support you later on when applying for loans. By opening a current account the customer can ask to get check book.

Saving Account: The Saving Account from Erbil Bank is available in any major currency for you to deposit funds blocked over the period of your choice (one, three, six, nine or twelve months) and earn interest from these deposits. Along with your Saving Account, the customer can get a passbook so as to keep track of his balance and interests. The customer can transfer money in (Iraqi Dinar, EUR OR USD) currency to any other branch without any value date which directly will be showed in his balance sheet account. The customer needs to provide the following information so you could transfer money through your account:

1. Beneficiary's full name and address.
2. Beneficiary's bank account or IBAN.
3. Beneficiary's bank name or BIC.
4. Reason of the payment (Providing the Invoice for payments more than USD.7,000.- or its equivalent).

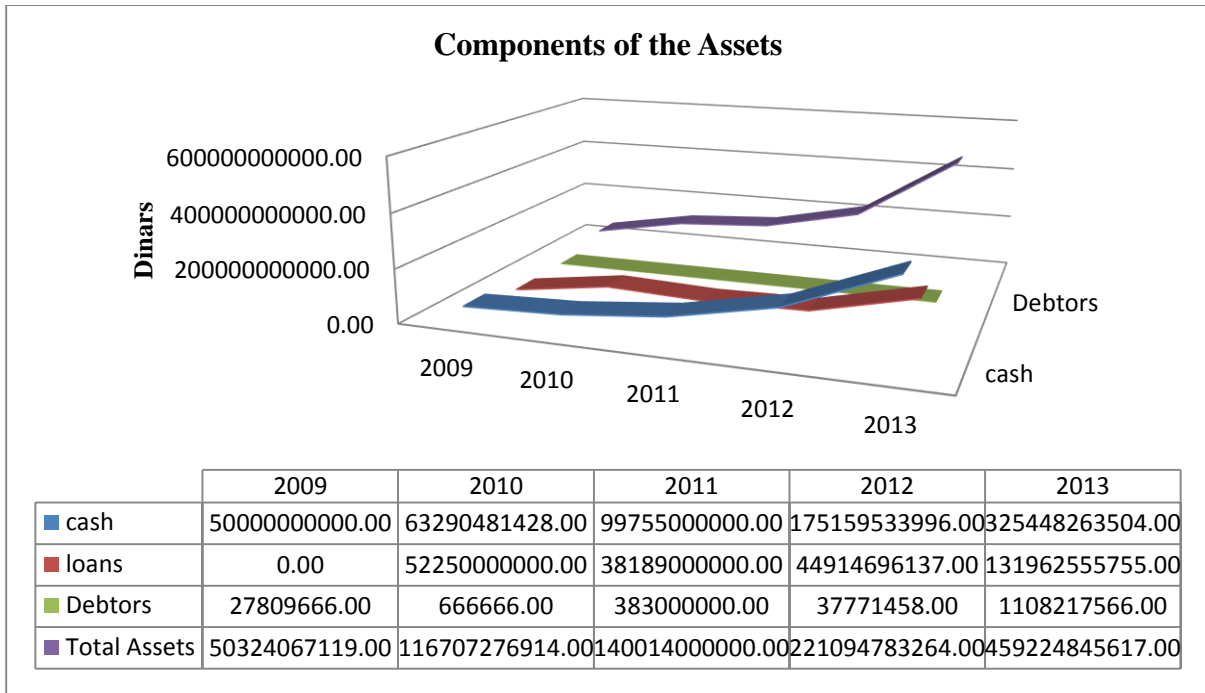
The customer can receive any payment in any currency through our bank by using one of our correspondents bank's details. Effective Time for Transfer is 24 to 48-hours to transfer funds from Erbil Bank Branch to any Bank

### **The Bank's Future Targets:**

- ✓ To increase the market share through creating difference with our Restructuring Program;
- ✓ To ensure healthy growth and progress;
- ✓ To ensure unconditional customer satisfaction,
- ✓ To follow a widespread and diversified deposit policy;

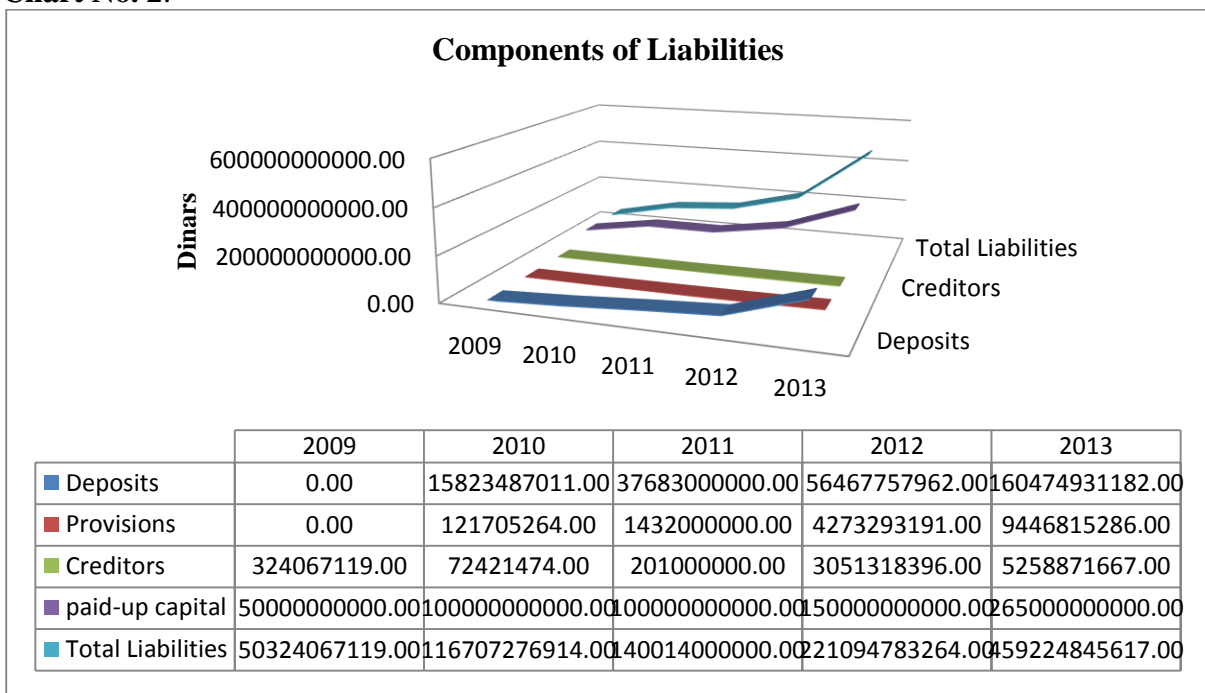
- ✓ To develop and implement new products and services,
- ✓ To increase non-interest income,
- ✓ To decrease operating costs;
- ✓ To ensure the continual improvement and motivation of our personnel constituting our most powerful capital in achieving all of these targets.

**Chart No. 1:**



Sources: Prepared by the author

**Chart No. 2:**



Sources: Prepared by the author

The abovementioned chart 1 and 2 explain the components of the financial statements that presented by Erbil banks during the period 2009 to 2013. As a matter of fact the bank started dealing with public only in the year 2010, therefore, the year 2009 was a foundation business year for Erbil Bank, only expenses were occurred.

## RESEARCH METHODOLOGY AND DATA COLLECTION

This research study adopts two methods in order to describe the entire financial performance of Erbil Bank such as analytical as well as descriptive study. In order to reach a complete analysis, the financial statements of the bank such as income statement and balance sheet would be analyzed. The financial ratios would computed as an indicator to evaluate the financial position of the bank. For this reason, essential variables which are highly correlated with the financial performance for the studied bank, these variables will give a complete picture of how the bank carries on its operations which influence the financial position and contribute enhancing the overall performance. Data of the study has been collected from the concerned Bank, applied to the study on the financial statements during the period (2009-2013) of the Erbil Bank for Investment and Finance in Kurdistan region of Iraq.

## ANALYSIS OF THE RESULTS

### Descriptive statistics:

Descriptive statistics are conducted to state the mean differences among the variables within the observed period; and the descriptive results of these measures are reported in table1. The mean value of ROA is 0.011768; this shows that percentage of ROA is 1 % which is very low while the standard deviation is 0.016082. The mean value of net profit margin (NPM) is 0.30142, this shows that percentage is 30% which indicate low value of profit margin while the standard deviation is 0.203629. The mean of loans/deposits ratio reads 1.18664 and its standard deviation is 1.2449, meanwhile, the mean of deposits/total assets is 0.20194 and its standard deviation is 0.136324. The mean of total revenues/total assets (TAT) is 0.04652 and its standard deviation is 0.036531. The mean of provision/loans ratio reads 0.04132 and its standard deviation is 0.042025; and the mean of provision/total assets ratio reads 0.01034 and its standard deviation is 0.009626.

**Table No. 1: Descriptive Statistics:**

	Loans/ Deposits	Deposits/ Assets	NPM	ROD	ROA	ROE	TAT	Provision/ Loans	Provision/ Assets
Mean	1.186640	0.201940	0.301420	0.067800	0.017680	0.027200	0.046520	0.041320	0.010340
Median	0.822300	0.255400	0.331500	0.053900	0.014500	0.020400	0.054600	0.037500	0.010300
Maximum	3.302100	0.349500	0.568500	0.143400	0.036600	0.054700	0.092700	0.095200	0.020600
Minimum	0.000000	0.000000	0.000000	0.000000	-0.001200	-0.001100	0.000000	0.000000	0.000000
Std. Dev.	1.244901	0.136324	0.203629	0.053123	0.016082	0.025890	0.036531	0.042025	0.009626
Skewness	1.113021	-0.535857	-0.274397	0.232639	0.097793	0.159196	-0.073182	0.203985	0.000957
Kurtosis	2.869176	1.977131	2.425957	2.125452	1.431274	1.291546	1.714098	1.452909	1.276420
Jarque-Bera Probability	1.035911 0.595737	0.457257 0.795624	0.131396 0.936414	0.204441 0.902830	0.520658 0.770798	0.629206 0.730079	0.348952 0.839897	0.533319 0.765934	0.618903 0.733850
Observations	5	5	5	5	5	5	5	5	5

Sources: The estimates are computed by the author



**Table No. 2: Correlation Matrix:**

	Loans/ Deposits	Deposits/ Assets	NPM	ROA	ROE	ROD	TAT	Provision/ Loans	Provision/ Assets
Loans/ Deposits	1.000000	0.019092	0.304315	-0.153892	-0.202535	0.038352	-0.133121	-0.310433	-0.285145
Deposits/ Assets	0.019092	1.000000	0.689782	0.841496	0.850714	0.732798	0.974264	0.786538	0.888731
NPM	0.304315	0.689782	1.000000	0.845702	0.777950	0.959225	0.657290	0.788614	0.720413
ROA	-0.153892	0.841496	0.845702	1.000000	0.990619	0.950188	0.897849	0.981668	0.973821
ROE	-0.202535	0.850714	0.777950	0.990619	1.000000	0.903125	0.924709	0.967800	0.986261
ROD	0.038352	0.732798	0.959225	0.950188	0.903125	1.000000	0.754882	0.924525	0.858868
TAT	-0.133121	0.974264	0.657290	0.897849	0.924709	0.754882	1.000000	0.855372	0.953536
Provision/ Loans	-0.310433	0.786538	0.788614	0.981668	0.967800	0.924525	0.855372	1.000000	0.967679
Provision/ Assets	-0.285145	0.888731	0.720413	0.973821	0.986261	0.858868	0.953536	0.967679	1.000000

Sources: The estimates are computed by the author

The correlation analysis shows that there is a significant and positive relationship between ROA and deposits/total assets ratio, and with provision to total assets ratio, and ROE has the same relations with those variables. While the relationship between ROA and ROD is negative. Also, provision/loan ratio and ROE are positively and significantly correlated. Again, there is a positive and significant relationship of deposits/total assets ratio with TAT and ROD. Similarly net profit margin also has a positive and significant relationship of deposits with ROA, ROE, TAT and other variables. Moreover, ROA and ROE are positively and significantly correlated.

## BANK FINANCIAL PERFORMANCE AND FINANCIAL RATIOS

The significant that have occurred in the financial sector industry in all advanced economies has increased the importance of performance analysis for modern banks. Performance analysis is an important tool used by various agents operating either internally to the bank (e.g. managers) or who form part of the bank's external operating environment (e.g. regulators). Who is interested in bank's performance? the answer is that depositors, shareholders, regulators, managers, direct competitors, credit-rating companies, financial markets, and other market participants (Casu et al 2006). Performance measurements play an important role in understanding the determinants of successful performance of firms, such as banks. Managerial performance measures based on achieving these strategic goals should be developed to replace the current emphasis on short-term financial performance measures. Performance measures can play the key role in initiating or implementing technological innovations and organizational change through incentives for improving performance and measurements to evaluate progress toward this goal. This research depends on the internal way to study the financial performance of banks using a group of the financial ratios, which related to items of the financial statements of banks. However, the following categorized ratios are employed for evaluating purposes of the financial performance for banks with respect to profitability, liquidity and assets quality or credit performance.

There are two broad approaches used to measure bank performance, the accounting approach, which makes use of financial ratios and econometric techniques. Traditionally accounting methods primarily based on the use of financial ratios have been employed for assessing bank performance. However, the limitations of this method coupled with advances in management sciences have led to the development of alternate methods such as non-parametric (DEA) and parametric Stochastic Frontier Approach (SFA) (Berger and Humphrey, 1997). It has asserted that the whole idea of measuring bank performance is to separate banks that are performing well from those which are doing poorly. Further indicated that, "evaluating the performance of financial institution can inform government policy by assessing the effects of deregulation, mergers and market structure on efficiency" (Berger & Humphrey, 1997).

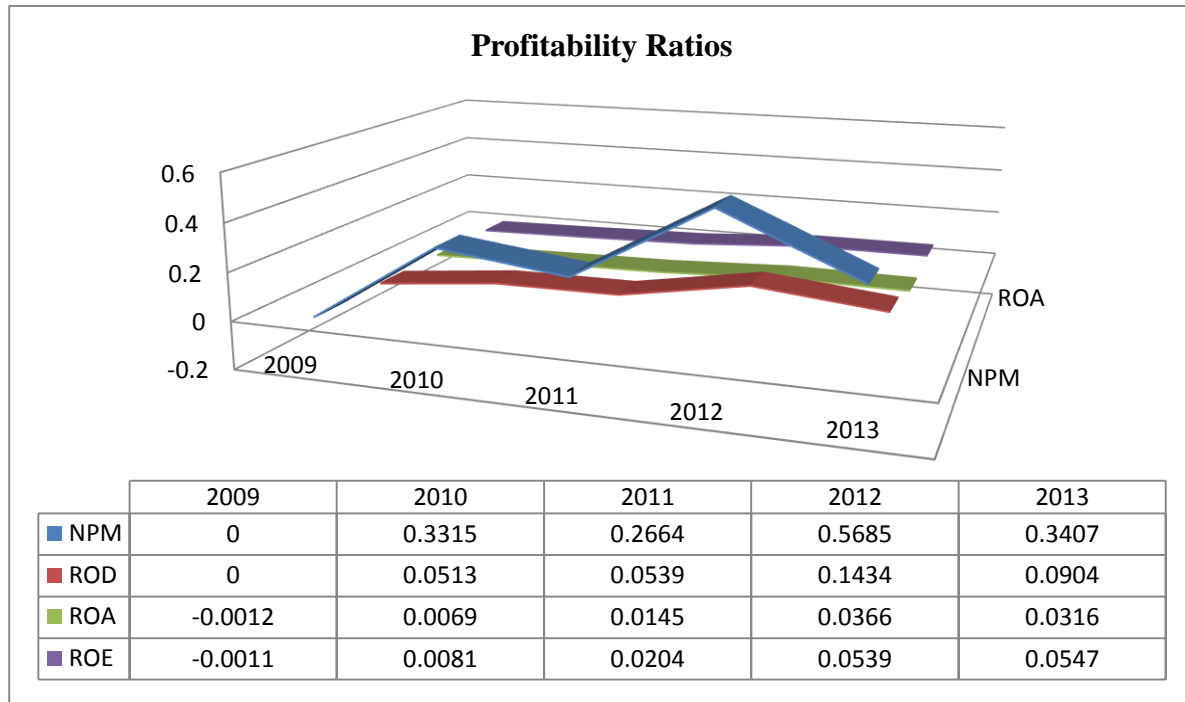
Bank regulators screen banks by evaluating banks' liquidity, solvency and overall performance to enable them to intervene when there is need and to gauge the potential for problems (Casu *et al*, 2006). On a micro-level, bank performance measurement can also help improve managerial performance by identifying best and worst practices associated with high and low measured efficiency. Bank performance is calculated using ratios analysis and assessed with the aim of: (i) looking at the past and current trends; and (ii) determining future estimates of bank performance. Financial ratio analysis investigates different area of bank performance, such as profitability, assets quality and solvency. The key ratios for measuring the performance of the banks are discussed below. The tools that can be used to calculate performance are derived from the information revealed by periodic financial reports produced by accounting system, the balance sheet and the income statement, (Casu *et al*, 2006).

### **Profitability Performance**

Profitability ratios typically used in banking are ROA, ROE, NPM, and ROD, all are studied below:

**Return on assets (ROA):** often described as the primary ratio, relates the income earned by the bank to the assets it used in the business operation. It is commonly defined as net income (or pre-tax profit)/total assets. It provides information about management's performance in using the assets of the business to generate income. Profit before tax is generally ideal because calculations using net income after tax figures may show trends due simply to changes in the rates of taxation, (Bodie et al 2009). For Erbil Bank, the return on assets has fluctuated during the five years of the bank's operation from 2009-2013. The lowest return on assets was recorded in 2009 (-0.12%) while the highest was recorded in 2012 (3.66%). The significant increase in the ratio in 2012 is due to considerable increase in total revenues by two folds.

**Return on Deposits (ROD):** Chart (3) shows that the majority of return on deposits (ROD) ratios of the Erbil Bank are positive. It is clearly shown that overall (ROD) ratios were fluctuated through the period for the bank. To most financial analysts, (ROD) is one of the best measures of bank profitability performance. It is calculated through dividing net profits by total deposits. This ratio reflects the bank management ability to utilize the customers' deposits in order to generate profits. The highest (ROD) for EBIF is 14.34% during the year 2012 and the lowest 5.13% in the year 2010, as shown in chart (3).

**Chart No. 3**

Sources: Prepared by the author

**Return of equity (ROE):** This ratio measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. The higher such ratio, the more efficient is the financial performance of profitability of a bank. Such profitability ratios measure the financial performance and the managerial efficiency of bank. However, profitability ratios are only part of bank performance story. The bank recorded a return on equity of 5.39% in 2012 and 5.47% in 2013. This means EBIF equity holders earned more during these periods.

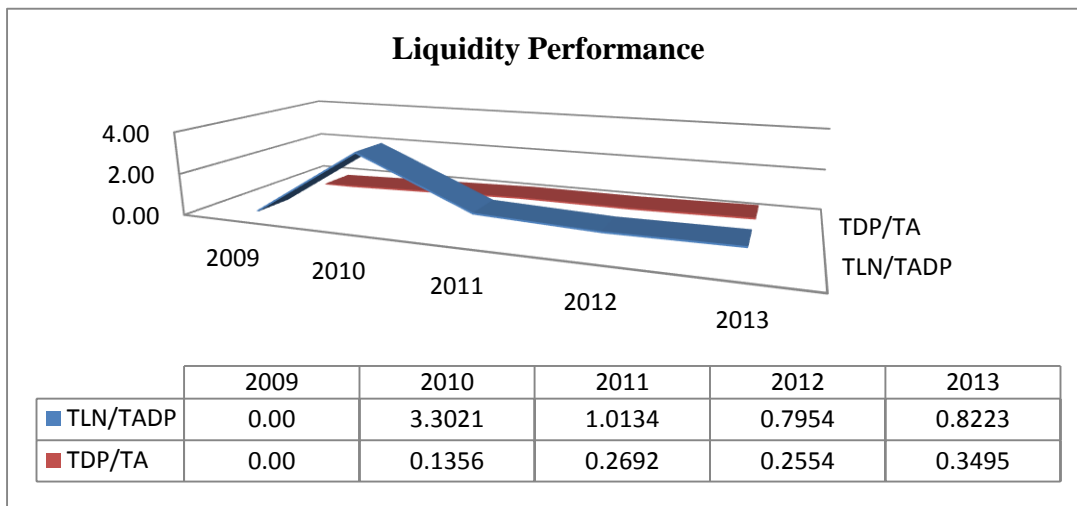
### Liquidity Performance

Liquidity ratios in a bank demonstrate the ability to pay its current obligations. Generally, but not always, the higher the value of the ratio, the larger the margin of safety that a bank possesses to cover short-term obligations. Liquidity ratios are, however, listed below as following:

**Total Loans to Total Deposits Ratio (TLN/TADP):** This ratio is a commonly used measure for assessing liquidity and credit risk, which measured by dividing the banks total loans or total financing by its total deposits. This ratio indicates, however, the percentage of a bank's loans funded through deposits. On the other hand, a high loan to deposit ratio may indicate several things, but from liquidity's viewpoint, a high value of such ratio indicates a potential source of illiquidity and insolvency due to deposits are quite stable source of funding for a bank and loans are riskier asset than other financial assets because of lower market liquidity. Therefore, a higher loan deposit ratio means more financial stress by making excessive loans. So, the lower loan deposit ratio is always favourable to the higher one. This ratio was too high in the year 2010 (330.21%) and subsequently declined to reach 82.23% in the year 2013, as it has shown in chart 4.

**Total Deposits to Total Assets Ratio (TDP/TA):** The ratio of total deposits to total assets is another liquidity measure, which considered a traditional liquidity. This ratio is measured by dividing the banks total loans or total financing by its total assets. However, such ratio indicates the broad "reliable" base of funding for the bank, which establishes how much of the bank's assets are funded by deposits, rather than borrowed funds or equity. Chart 4 shows the needful results, where the ratio reached 34.95% in the year 2013.

**Chart No. 4:**

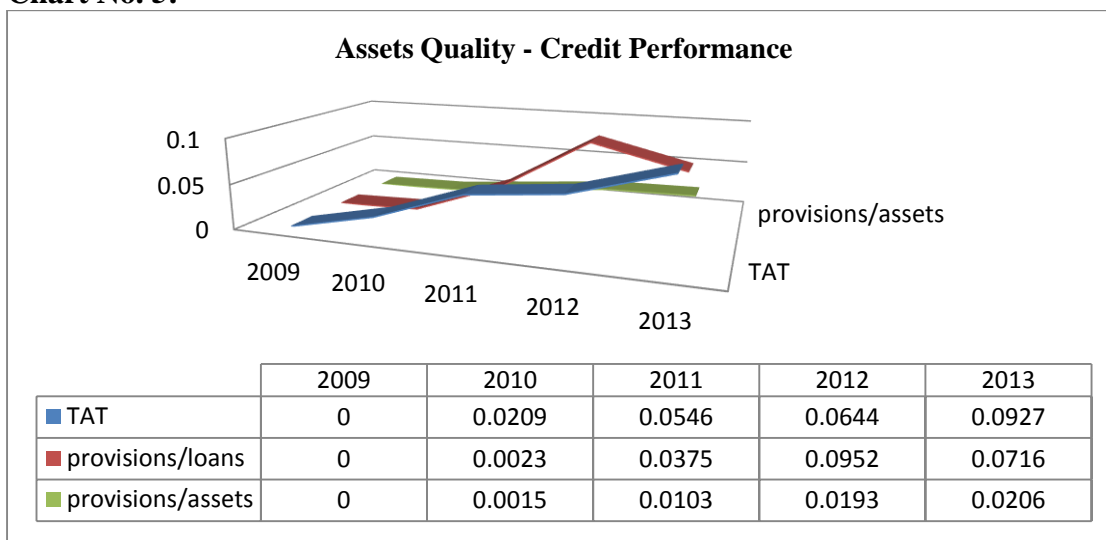


Sources: prepared by the author.

**Assets Quality (Credit Performance)**

Lending is still one of the most important activities of banks. While it is expected that all banks will have to bear some positive level of bad loans and loan losses; one of the key objective of bank management is to minimise such losses,( Casu *et al*, 2006). For Erbil Bank, the total revenues/total assets ratio reached the peak in the year 2013 (9.27%). Meanwhile, provision to total loans ratio reads 0.23% in 2010 and jumped to 9.52% in 2012. The ratio of provision to total assets is 0.15 % to reach 1.93% in 2012, as shown in chart 5 below.

**Chart No. 5:**



Sources: prepared by the author

## REGRESSION RESULTS

Regression analysis was used in testing the relationship between the profitability variables as dependent and total revenues/total assets ratio from one side and bank size from another point. Regression is one of the most widely used statistical method in measuring banks' profitability. Data analysts widely used regression models in science and technology fields in addition to social sciences, economics, and finance. For this study, the results of the regression analysis are reported based on bank profitability measures as dependent variables according to the research's hypotheses. Also, the results of the pooled sample have been included. This study will use three models to measure the hypotheses to indicate the Erbil Bank's ability to produce profits within the recent circumstances. To test the hypotheses, the profitability measures (ROA, ROD and ROE) will be used as shown below:

(i) The general expression of Return on Assets (ROA) in the form of regression equation is written as follow:

$$ROA = \alpha_0 + \beta_1 E/TA + \beta_2 SIZE + \beta_3 LT + e \quad (1)$$

where:

E/TA = capital ratio

SIZE = Bank size

L/TA = total loans on total assets

(ii) The general expression of Return on Equity (ROE) in the form of regression equation, as:

$$ROE = \alpha_1 + \beta_4 E/TA + \beta_5 SIZE + \beta_6 L/TA + e \quad (2)$$

(iii) The general expression of Return on Deposits (ROD) in the form of equation will be as:

$$ROD = \alpha_2 + \beta_7 E/TA + \beta_8 SIZE + \beta_9 L/TA + e \quad (3)$$

Tables 3,4, and 5 below present the results of the foresaid equation:

**Table No. 3:** Results of Regression Analysis (Dependant Variable ROA)

Variable	Coefficient	Std. Error	t-Statistic	Probability
C	-0.210833	0.888756	-0.237222	0.8517
Log(Bank Size)	0.010501	0.030398	0.345435	0.7883
Capital	-0.047392	0.147661	-0.320951	0.8023
Loans/total assets	-0.023532	0.043567	-0.540125	0.6847
R-squared	0.853187	F-statistic	1.937134	-
Adjusted R-squared	0.412749	Prob(F-statistic)	0.475641	-

Sources: estimates are computed by author

Bank size shows positive relationship with ROA with a coefficient of 0.010501. This result indicates that with a one percent increase in the firm's bank size, there is 1.0501 percent increase in ROA of a firm. There is an insignificant relationship between ROA and bank size. According to the results, capital and loans/total assets are negatively related with ROA with a coefficient -0.047392, and -0.023532 respectively.



**Table No. 4:** Results of Regression Analysis (Dependant Variable ROE)

Variable	Coefficient	Std. Error	t-Statistic	Probability
C	-0.632563	1.047838	-0.603684	0.6542
Log(Bank Size)	0.027089	0.035839	0.755860	0.5880
Capital	-0.033889	0.174091	-0.194662	0.8776
Loans/total assets	-0.049449	0.051365	-0.962685	0.5121
R-squared	0.921257	F-statistic	3.899859	-
Adjusted R-squared	0.685029	Prob(F-statistic)	0.352540	-

Sources: estimates are computed by author

Bank size shows positive relationship with ROE with a coefficient of 0.027089. This result indicates that with a one percent increase in the firm's bank size, there is 2.7089 percent increase in ROE of a firm. There is an insignificant relationship between ROE and bank size. According to the results, capital and loans/total assets are negatively related with ROE with a coefficient -0.033889, and -0.049449 respectively. The regression co-efficient is also found to be statistically insignificant.

**Table No. 5:** Results of Regression Analysis (Dependant Variable ROD)

Variable	Coefficient	Std. Error	t-Statistic	Probability
C	-0.243760	4.736884	-0.051460	0.9673
Log(Bank Size)	0.017423	0.162016	0.107538	0.9318
Capital	-0.175862	0.787000	-0.223458	0.8600
Loans/total assets	-0.011414	0.232204	-0.049154	0.9687
R-squared	0.617806	F-statistic	0.538824	-
Adjusted R-squared	-0.528777	Prob(F-statistic)	0.733639	-

Sources: estimates are computed by author

It has been observed that Bank size is positively related with return on deposits with a coefficient of 0.017423. There is insignificant relationship between return on deposits and bank size. According to the results, Capital and loans/total assets are negatively and insignificant related with ROD with a coefficient -0.175862, and -0.011414 respectively.

## CONCLUSIONS AND POLICY RECOMMENDATION

This study examines the impact on the financial performance of Erbil Bank, which was taken as a sample for the purpose of analysis of financial performance. Returns on asset, return on equity and return on deposit were taken as dependent variables while bank size, asset management and operational efficiency were taken as independent variables. Results showed that the ROA of the banks were strongly and negatively influenced by the bank size. Operational efficiency is negatively related with the ROA and results also showed that it was statistically significant so third hypothesis is also accepted. Other dependent variable interest income of the banks was strongly positive influence by the bank size and is statistically significant. Interest income showed negative relation with the operational efficiency and results were also statistically significant. On the practical dimension, this study is helpful for bankers and managers in their decision making to improve the financial performance and formulate policies that will promote effective financial system. The study also recommend measures that could be adopted by banks to ensure soundness in their operations. The impact of three financial factors on the profitability measures (ROA and ROE):

- (i) bank size (natural logarithm of total assets) has no significant impact on both banks profitability measures (ROA and ROE).
- (ii) loans variable (total loans on total assets) has a significant positive impact on ROE but not on ROA.

The Bank Size measured by the total assets of the bank: The expected contributions of this study to the management in the field of banking can be said to be that: this study may help decision makers to pay more attention on the major banking activities that may help in increasing the financial performance positions and ranking of the bank as compared to other banks. In addition, the financial information of this study will help the management of the commercial banks of Kurdistan Region of Iraq in setting up plans and financial strategies. The expected contributions of this study to the academic fields can be said to be that: from an academic point of view, this research provides a new perspective in evaluating the financial performance of leading commercial banks as well as the finding of this study can be added to the present literature and it can help researchers in their future studies.

### **Policy Recommendations**

The following points may help Erbil Bank for Investment and Finance to perform well in the future considering that the bank right now in beginning state of its age. Below are the recommendation:

- (i) Increasing the Bank's branches: a bank branch must serve a 25,000 of inhabitants which ideal to the developing nations, here, a bank may open branches in Kurdistan Region so as to absorb the cash from the hands of public, and subsequently enhance the bank business.
- (ii) Financing agricultural, manufacturing and small scale industries sectors.
- (iii) maximum utilization of information technology such as electronic banking services.
- (iv) Participation in the capital market (Iraqi stock exchange or the up-coming Erbil Stock.
- (v) Students account and financing education: students account with zero balance was a successful story that had been applied by Bank of Baroda in India in the 1990s, considering them as the future customers of the bank.

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