

ISSN: 2576-5973 Vol. 5, No. 12, 2022

The Modified Return on Equity Model and its Impact on Evaluating Financial Performance in banking Sector for Regular and Secondary Markets for the Period 2020-2021

Zahraa Ali Mahdi

Department of Business Administration, College of Administration Sciences and Financial, Imam Ja'afar Al-Sadiq University, Baghdad, Iraq

Abstract: study **Aims** application of modified Du Ponte model, which analyzes and measures indicators that help the bank's management in evaluating financial performance of Iraqi banks listed in Iraqi Securities Commission for regular and secondary markets by analyzing efficiency, effectiveness and productivity as one of the tools that help in decision-making process in the future as well as exploitation best available economic resources.

Importance of this study highlights the importance of applying the modified Du Ponte model, which analyzes and measures indicators such as (return on equity, return on assets, multiples of equity and other indicators that help the management of banks to avoid obstacles that prevent access to success as well as efficiency analysis Effectiveness and productivity as one of the tools that help in decision-making process in the future.

Problem modified return on equity model allows giving indications about measuring operational efficiency of banks. Through the above, questions can be asked, which are as follows:

- To what extent are commercial banks able to achieve levels of operational efficiency?
- ➤ Is return on equity model alone a measure of optimum utilization of available economic resources and achievement of returns?

Hypothesis Using modified Du Ponte model, to assess financial performance of Iraqi banks listed in Iraqi Securities Commission for regular and secondary markets.

Results By applying modified Du Ponte model, we will be able to analyse and measure indicators such as (return on equity, return on assets, multiples of equity ... etc., which works to optimize use of available economic resources

Keywords: Modified Du Ponte Model, Financial Performance, Iraqi Securities Commission, Banking Sector, Financial Markets.

Introduction

The traditional financial theories are based on a basic premise, which is that rational investors make investment decisions in a rational manner that increases their financial wealth. What's going on (Heshmat & Abdullah, 2019)

7.0	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 5 Issue: 12 in Dec-2022 https://www.grnjournals.us/index.php/AJEBM
76	Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of
	Creative Commons Attribution License (CC BY).To view a copy of this license,
	visit https://creativecommons.org/licenses/by/4.0/

Today, the world is witnessing major economic developments and transformations that cast a shadow on performance evaluation, in light of the many and continuous competition between companies in the business world to obtain the largest market share, which leads to achieving great returns and savings that will certainly increase the wealth of the owners. (Al-Khuzaie, 2019).

On other hand, issue of evaluating performance of Iraq banks is of great importance in light of economic transformations that have occurred in Iraq during last decade, and economic openness that country has witnessed, which allowed these banks new opportunities not available in past, which will certainly be reflected in financial results of owners' rights, which added after Another to evaluate Iraqi banks (Saleh & Fadel, 2021).

where is considered the banking system is one of the main tools for the process of economic growth; Due to its main role in financing productive projects, where the banking market plays an important role in the national economy and because of the important role it plays as a link between investors and savers, (kerroumi, 2022). as the banking system contributes to transferring money from people who own it and do not have investment opportunities to people who need it and have opportunities their investment, thus raising the level of economic activity, achieving economic growth, and mitigating and addressing economic problems And that many studies have dealt with the position of the banking system and stressed that banks play an important role in influencing the rate of economic growth through the process of creating deposits, which depends on bank balances, which are divided into legal balances imposed by the central bank and surplus balances that have two goals. The first is used by the bank in confronting Withdrawing or securing its financial position, and the second by employing balances the rest is in various loans and investments. (Abdel Qader et al., 2020). And that the owners of these banks always strive to preserve their investments and their rights, as the return on the owners' rights is known as a model for measuring the dual effect of efficiency and productivity on the profitability of assets or the financial leverage indicator And that the owners of these banks always strive to preserve their investments and their rights, as the return on the owners' rights is known as a model for measuring the dual effect of efficiency and productivity on the profitability of assets or the financial leverage indicator. (al hajaj, 2020).

What is learned from this model is that it explains performance better. If an institution achieves a high or low return on equity, the reason for this increase or decrease in return on assets, or the leverage, or both, can be traced or traced back to the cause. (albayati & Jasim, 2020).

The high return on equity is due to the financial leverage, so analysts and shareholders recognize the level of risk that this level requires. Of return and performance; In return, if a high return on equity is achieved through excellent asset management, it will result in efficiency and productivity in this case, it will be another message to the locals and shareholders about the management of the organization. (Ramli & arous, 2018).

Literature Review

The First Axis: Concepts about the Financial Performance:

The concept of performance differs from one organization to another, as the word "performance" comes from the Latin word "performance" which means to give shape to something. (Bentabet & hamza, 2018). Performance is defined as a center with responsibility, which means the effectiveness and productivity with which this center reaches the goals it accepted, as effectiveness is determined at any level at which the goals are achieved. As for productivity, it compares the results obtained with the means used. According to this definition, it turns out that performance consists of two components: Effectiveness and Productivity. What is meant by the value is the degree of achieving the goals, that is,

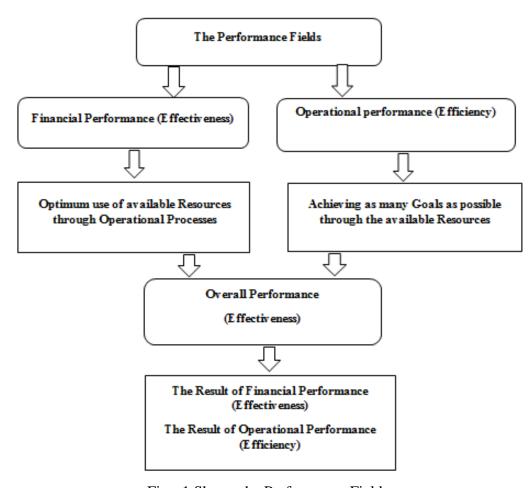
	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 5 Issue: 12 in Dec-2022 https://www.grnjournals.us/index.php/AJEBM
77	Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

there are two elements of comparison and productivity represented by the relationship between the actually achieved results and the means used to achieve them. Performance is also defined as the organization's ability to achieve its long-term goals. (Najib, 2022). Financial performance in its "precise framework is defined as a description of the organization's current situation and an accurate identification of the areas that it used to reach the goals by studying sales, revenues, assets, liabilities and net wealth". (Daden & Kamassi, 2005). In addition to the fact that financial performance is the efficiency and effectiveness together of the financial activity related to the group, that is, the ability to achieve results that match the plans and objectives set by optimizing the use of the resources at the disposal of the institution. Or that it is the extent to which the institution succeeds in exploiting all the resources available to it from material and moral resources to the best use and achieving the goals listed by the management from all the previous definitions, we conclude that financial performance focuses on the following:

- > Efficacy and Efficiency
- > Optimum utilization of the Economic Resources available to the institution
- ➤ The extent to which the objectives previously set by the organizations can be achieved. (Issa, Massia, & Abdel Raouf, 2021).

Financial performance reflects the mechanism of using financial indicators to measure the extent of achievement of goals previously. It expresses the performance of companies as the main support for the various businesses practiced by those companies. Financial performance reflects measuring the continuity of the economic unit according to measures such as (sales growth, operating profits, return on capital, cash outflows, etc.). (Jassim & Mohamed, 2020). To measure financial performance, there are two measures: (Al Sharif & faith, 2014).

- ➤ The first scale: measures organizational performance based on several indicators, including quality, the ability to develop new products or services, customer satisfaction, as well as the ability to maintain positive relationships between employees.
- ➤ The second scale: focuses on market performance and includes indicators that express marketing activities, including (profitability, sales growth, and market share).



Figur1.Shows the Performance Fields

Source: (Al-Osta, 2016).

Factors Affecting Performance Appraisal: The factors affecting performance evaluation are divided into internal factors and external factors, as follows:

- ➤ Internal Factors: They are represented in various variables resulting from interaction of the internal organization elements that affect its performance, as follows: (Mohamed, 2015).
- ✓ Human Element: is one of most important factors affecting performance of institutions, as it is dynamic factor influencing all stages of the production process.
- ✓ Administration: bears the largest share in the increase in performance rates, as it is responsible for the effective use of the resources under its control, in addition to the other functions it exercises such as organizational planning, coordination of leadership, carrying out control operations and others. (Etab & El-Moslemany, 2020).
- ✓ Organization: which is one of the main factors affecting performance the institution is in dire need of an organization that ensures it distributes tasks and defines powers and responsibilities according to specializations in order to ensure control and coordination. (hammad & hamdi, 2008)
- ✓ Technical factors: which are different forces and variables that are related to technical aspect of the organization, including (type of technology, Reliance on devices, design of institution, product quality, materials used quality... and others)

70	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 5 Issue: 12 in Dec-2022 https://www.grnjournals.us/index.php/AJEBM
79	Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of
	Creative Commons Attribution License (CC BY).To view a copy of this license,
	visit https://creativecommons.org/licenses/by/4.0/

- **External Factors:** It means set of changes, restrictions and situations that affect the control of the institution, as follows: (Sobhi & Al-Ghalbi, 2009).
- ✓ Political factors: Relationship of institution with political variables includes aspect of political decisions, including (wars, bans on the activity of some institutions, coups) all factors that affect performance of institution
- ✓ Economic factors: include all (rates of interest, inflation rates, unemployment rates, labour trends, energy savings and its cost...etc.)
- ✓ Social factors: (demographics, distribution of geographic, consumption patterns, education level and others).
- ✓ Technological Factors: including (expenditure rates on research & development, development of means of communication and information, new inventions)
- ✓ Environmental and legislative Factors: including laws regulating the organization's relationship with workers, laws related to the environment that works to protect and preserve it from pollution.

Concept of Evaluating Performance of Banks: Banks are intermediary financial institutions that facilitate process of supply and demand for money, so whoever has surplus wealth that exceeds his need keeps it in bank, then bank lends person who needs liquidity or a certain amount of money what he needs in return for a guarantee or a fixed asset that is sufficient or more than value of borrowed amount, and banks invest this money and give its owner interest either annual, semi-annual, quarterly or monthly according to agreement that took place between bank and customer, but it is required that this money be deposited in form of long-term deposits or savings accounts and not current accounts until bank shall have freedom to dispose of it during deposit period. (Issa, Massia, & Abdel Raouf, 2021). banks also perform several other functions such as drawing and endorsement of bills of exchange and commercial papers...etc., There are several concepts for evaluating banking performance it is a set of procedures by which achieved results of activity are compared with its established objectives in order to indicate extent to which those results are consistent with the specific objectives to assess level of effectiveness of performance. (Ibrahim & Rabie, 2021).

Types of Banks: banking system has developed greatly, & several types of banks have emerged, each with a special function as follows: (asia, 2021).

- ✓ Central Banks: It is the basis of the banking system of any country, as it is authorized to issue money and maintain value of country's official currency from depreciating against foreign currencies. In addition, it controls the liquidity in market to deal with cases of inflation and deflation by raising interest rates or increasing tax rate and others.
- ✓ Commercial Banks: It is based on receiving money from depositors and investing it or giving it to borrowers in return for interest rates set by central bank according to market conditions. These other types are divided into several types, such as chain banks, subsidiary banks and collective banks. Main difference between types of commercial banks is due to administrative system they follow. (Jassim A., 2007).
- ✓ Investment Banks: It finances major investment projects to revitalize economy, as well as the process of issuing securities such as shares and bonds for joint stock companies.
- ✓ Industrial Banks: These banks undertake to revive the industrial aspect, and to give industrial companies loans they need whether they are medium or long-term. Also conduct feasibility studies

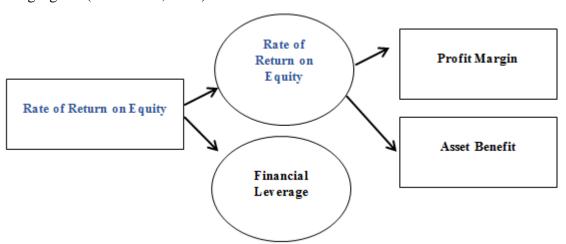
ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 5 Issue: 12 in Dec-2022 https://www.grnjournals.us/index.php/AJEBM
Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of
Creative Commons Attribution License (CC BY).To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

needed by any new industrial organization that helps in developing industrial activity. (Klandar, 2021).

- ✓ Real Estate Banks: specialize in real estate aspect, providing necessary loans for real estate development and establishment of major real estate projects.
- ✓ Agricultural Banks: are interested in providing all agricultural requirements that farmers need, including loans needed to buy seeds, crops, pesticides, etc., and also provide all technology needed for agriculture. (Fawzy, 2009).
- ✓ Savings Banks: This type of bank takes care of the lower income category, accepts small deposits and gives them advantages to encourage this category to save. Examples of such banks are "Post Banks". (mursa & Mohammed, 2022).
- ✓ Islamic Banks: These banks work on the principle of not adopting fixed interest, as they finance the operations needed by borrower in accordance with provisions of Islamic Sharia, and this system has proven its effectiveness and stability in the face of global crises.

The Second Axis: Concepts about Rate of Return on Equity

The performance of banks and financial institutions is evaluated using the return on equity model, or what is known as the (Du Ponte Model), assuming a measure of their efficiency in using resources and achieving the best possible outputs with the least possible input, as well as the extent of their success in achieving their listed goals. This model was developed by an engineer from the American company DuPont in 1918 called (F. Donaldson Brown) to be the modified return on equity, one who realized existence of a mathematical relationship between profitability and rate of return on equity, and latter represented return on assets, and this model was modified twice. As for second amendment to model, it states that rate of return on equity is determined based on relationship between five ratios, as shown in the following figure. (Mustafa E., 2019).



Figur2. Shows Five Specific Ratios of Rate of Return on Equity

Source: (asia, 2021).

The Third Axis: Concepts about Financial Markets

The concept of the market is associated with the public as a place to satisfy a certain need in exchange for giving up a certain amount of money. And financial markets work, like other markets, to meet the needs of investors in them by working on the transfer of funds from surplus units (those who have

81	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 5 Issue: 12 in Dec-2022 https://www.grnjournals.us/index.php/AJEBM
01	Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of
	Creative Commons Attribution License (CC BY). To view a copy of this license,
	visit https://creativecommons.org/licenses/by/4.0/

AJEBM, Vol. 5, No. 12, Dec 2022

money) to deficit units (those who want financing for funds) against certain securities. In this market there is a list of individuals and organizations within special procedures that regulate their work. In addition, there are different types of financial markets that can be classified according to a number of criteria or main characteristics, whether in terms of the place of trading, how to issue or maturity dates. (Al Fawaz, 2010).

- **By version:** (Saleh & Fadel, 2021)
- ✓ Primary Market: It is the market in which securities are issued for the first time by institutions in order to finance their projects and to advance the process of economic development.
- ✓ Secondary Market: It is the market in which securities issued in the primary market that meet certain conditions are traded, and are traded through approved brokers and according to the general regulations and instructions.
- **By Environment and Location:** (El-Hamalawy, 2016).
- ✓ Hall Markets: (exchange within the trading halls) where there is a place A specific market place in which investors must meet directly to exchange securities.
- ✓ Electronic Exchange Markets: transactions are carried out through an electronic system through which investors can enter purchase and sale orders through their approved brokers.
- > By Due Date: (Mustafa & Al-Najjar, 2018)
- ✓ Money Market: It is market, in which short-term financial instruments are traded, and their maturity dates are usually less than a year and objective is to provide liquidity.
- ✓ Capital Market: market in which long-term financial instruments are traded, and whose maturity date exceeds the year.

Research Methodology

Research instrument:

- Theoretical Side: The authors relied on the descriptive and inferential approach through a group of (articles, reports, studies published on the Internet).
- > **Practical Side:** The authors relied on the descriptive and analytical approach in the study from the reality of the annual reports of banks

Research Model:

This study uses linear Models

➤ Dependent variable: Modified Return on Equity Model

➤ Independent variables: Financial Performance

Method of Data analysis: Bank data is measured and analyzed by Excel.

Descriptive Analysis: The Securities Commission in Iraq is a regulatory organization working to regulate the capital market. It was established under Law No. (74) For the year 2004. It has financial and administrative independence. The goal of its establishment is to protect investors in securities in the stock market, and to organize and develop the capital market to ensure justice, efficiency and transparency. And protect the market from the risks that it may be exposed to. And The Iraqi Stock Exchange is divided into: (Commission, 2022).

82	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 5 Issue: 12 in Dec-2022 https://www.grnjournals.us/index.php/AJEBM
02	Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of
	Creative Commons Attribution License (CC BY). To view a copy of this license,
	visit https://creativecommons.org/licenses/by/4.0/

- > Regular Market: shares of joint stock companies that are governed by special listing conditions are traded
- > Secondary Market: It is through which shares of joint stock companies are traded that are governed by conditions in line with the nature of the work of this market.

Tabl 1. Shows the Name of Bank, Coding and Market Type

No	Name of bank	Coding	Regular Market	Secondary market
1	National Bank of Iraq	BNOI		
2	Commercial Bank of Iraq	BCOI		
3	International Islamic Bank	BINT		
4	Islamic National Bank	BNAI		
5	Union bank of Iraq	BUOI		
6	Investment bank of Iraq	BIBI		
7	Credit bank of Iraq	BROI		
8	Economy bank Investment & Finance	BEFI		
9	International Development bank	BIDB		
10	Trust International Islamic bank	BTRU		

Source: Prepared by the authors based on Lists of the Iraqi Securities Commission for the years 2020-2021

From previous table we have chosen a random group of Iraqi commercial banks listed in the Iraqi Securities Commission distributed in the form of regular markets and secondary markets.

The Fourth Axis: the Modified Du Pont Model

In this axis, we will calculate the indicators for this model through the following table:

Tabl 2. Shows Du Pont Ratios Used in the Analysis

Item	Equation	Equation Analysis			
Return on Equity	Net Income / Equity	Return on equity = Return on Assets x			
		Leverage			
Return on Assets Net Income / Total Assets		Return on Assets = Profit Margin x Utility			
		of Assets			
Multiplier on equity	Total Assets / Equity	Return on Equity = Profit Margin x Utility			
		of Assets x Financial Leverage			
Profit Margin	Net Income / Revenue	-			
Asset Benefit	Total Revenue / Total Assets	-			

Source: Prepared by the authors

In the previous table, we showed some specific equations and ratios on the basis of which we will calculate the modified Du Ponte model

Results

Tabl 3. Shows Modified Du Pont Model for the years 2020-2021

Name of bank	Return on Equity		Return on Assets		Multiplier on Equity		Profit Margin		Asset Benefit	
years	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
National	0.065	0.083	0.022	0.014	2.907	5.766	3.800	5.680	0.061	0.046

	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 5 Issue: 12 in Dec-2022 https://www.grnjournals.us/index.php/AJEBM
83	Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/

	1	ı	1	1	1	1			1	
Bank of Iraq										
Commercial	0.083	0.041	0.041	0.025	2.005	1.629	10.717	5.374	0.093	0.057
Bank of Iraq										
International	0.014	0.008	0.006	0.004	2.181	2.048	158.441	7.735	0.059	0.003
Islamic Bank										
Islamic	0.006	0.002	0.008	0.003	0.786	0.772	34.627	37.438	0.034	0.037
National										
Bank										
Union bank	0.003	0.004	0.002	0.002	1.860	1.995	23.837	32.501	0.017	0.021
of Iraq										
Investment	0.002	0.003	0.002	0.002	1.155	1.474	18.912	16.115	0.054	0.036
bank of Iraq										
Credit bank	-	-	-	-	1.795	1.616	0.016	61.640	0.009	38.755
of Iraq	0.012	0.017	0.007	0.011						
Economy	0.001	0.000	0.001	0.000	1.777	1.803	53190.693	171.376	0.003	0.000
bank										
Investment										
& Finance										
International	0.018	0.046	0.006	0.012	2.854	3.787	6.876	10.350	0.034	0.038
Development										
bank										
Trust	0.020	-	0.016	-	1.238	1.738	20.898	15.123	0.053	0.028
International		0.002		0.001						
Islamic bank										

Source: Prepared by the authors based on Lists of the Iraqi Securities Commission for the years 2020-2021.

From Table 3, we note that highest rate of Return on Equity was achieved by Commercial Bank of Iraq for 2020, at a rate of **0.083**.

As for the year 2021, it was the highest percentage of the National Bank of Iraq, and the reason for this is that financial performance of two banks was the best among the banks. And the weakest Financial Performance among banks was Credit Bank of Iraq, which achieved the ratio (**0.012-0.017**) 2020-2021, respectively.

As for the Return on Assets, the highest ratio for an Iraqi commercial bank was **0.041 - 0.0254** for the years 2020-2021, respectively. The reason for this is that the financial performance was the best among the banks. And the weakest financial performance among banks (Credit Bank of Iraq), where it achieved the ratio (**0.007-0.0106**)

As for the Multiplier Equity, the National Bank of Iraq achieved the highest rate for the year 2020-2021 with a rate of **2.907-5.766**, respectively.

As for the Profit Margin, it was the highest rate achieved by the Economy bank Investment & Finance for the year 2020-2021, at a rate of **53190.693 - 171.376**, respectively.

As for Asset Benefit it was highest rate achieved by the Commercial Bank of Iraq for year 2020-2021, at a rate of, **0.093-0.057** respectively.

84	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 5 Issue: 12 in Dec-2022 https://www.grnjournals.us/index.php/AJEBM
04	Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of
	Creative Commons Attribution License (CC BY).To view a copy of this license,
	visit https://creativecommons.org/licenses/by/4.0/

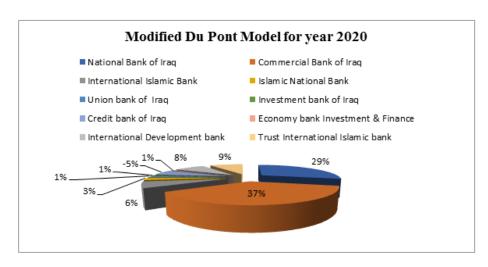


Figure 3. Shows Modified Du Pont Model for year 2020

Source: Prepared by the authors based on table 3 for the year 2020.

Through previous figure, we note that Commercial Bank of Iraq has achieved the highest average rate of return on equity among banks, at 37%, followed by National Bank of Iraq, at 29%. As for Credit Bank of Iraq, return on equity was not the acceptable ratio, as it amounted to -5% which is the worst among the banks, due to the failure to achieve the appropriate efficiency, effectiveness and productivity through the optimal use of the assets and resources available to bank and the extent of achieving the goals previously set by the bank's management That for a year 2020.

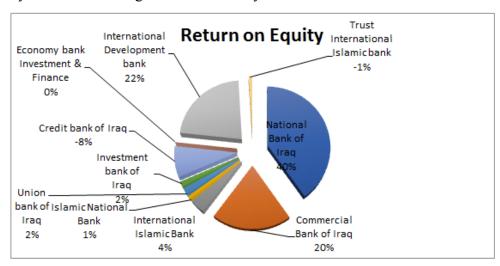


Figure 4. Shows Modified Du Pont Model for year 2021

Source: Prepared by the authors based on table 3 for the year 2021.

Through the above-mentioned figure, we note that National Bank of Iraq has achieved highest rate of return on equity, reaching 40%, Compared to the rest of the banks, the International Development Bank reaching 22%, and Commercial Bank of Iraq, at a rate of 20% for the year 2021, and worst percentage was by the Credit Bank of Iraq, reaching - 8%.

And we note that the year 2020 is the best for Commercial Bank of Iraq and the reason is because it achieved the best performance through the five measures that are as follows: (Return on Equity, Return on Assets, Multiplier on equity, Profit Margin, Asset Benefit).

0.5	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 5 Issue: 12 in Dec-2022 https://www.grnjournals.us/index.php/AJEBM
85	Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of Creative Commons Attribution License (CC BY). To view a copy of this license,
	visit https://creativecommons.org/licenses/by/4.0/

Discussion and Conclusion

From Figures 3-4, we notice that most banks had better financial performance in 2021, while some banks to retreat their financial performance from the previous year and on this basis. Now we will calculate the efficiency, effectiveness and productivity, as shown as follows:

- ➤ Efficiency = Output / Total Input *100%
- Effectiveness = Achieved goals / Pre-set goals.
- ➤ Productivity = Efficiency + Effectiveness.

Tabl 4. Shows Efficiency, Effectiveness, Productivity for years 2020-2021

Name of bank	Efficiency		Effectiveness		Productivity	
years	2020	2021	2020	2021	2020	2021
National Bank of Iraq	4.286	5.296	6.096	7.086	10.382	12.382
Commercial Bank of Iraq	0.520	1.500	1.500	3.400	2.020	4.900
International Islamic Bank	0.750	1.850	2.850	2.350	3.600	4.200
Islamic National Bank	0.526	0.826	0.826	1.826	1.352	2.652
Union bank of Iraq	0.667	0.661	1.221	1.461	1.888	2.122
Investment bank of Iraq	0.650	0.850	2.850	1.050	3.500	1.900
Credit bank of Iraq	0.727	1.827	2.827	1.527	3.554	3.354
Economy bank Investment & Finance	1.000	1.209	1.209	1.209	2.209	2.418
International Development bank	0.500	1.300	1.704	2.800	2.204	4.100
Trust International Islamic bank	0.380	1.000	2.580	0.220	2.960	1.220

Source: Prepared by the authors based on Lists of the Iraqi Securities Commission for the years 2020-2021.

From the table 4 we note that National Bank of Iraq, it is the highest in terms of Efficiency, Effectiveness and Productivity for the years 2020-2021 Respectively.

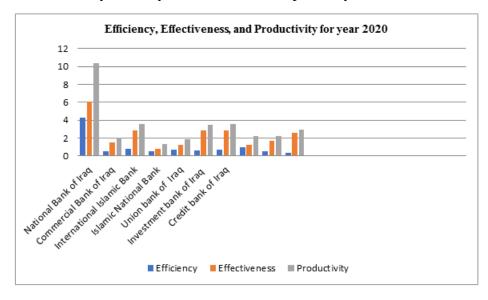


Figure 5. Shows Efficiency, Effectiveness, and Productivity for year 2020

Source: Prepared by the authors based on Lists of the Iraqi Securities Commission for the year 2020

86	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 5 Issue: 12 in Dec-2022 https://www.grnjournals.us/index.php/AJEBM
00	Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of
	Creative Commons Attribution License (CC BY).To view a copy of this license,
	visit https://creativecommons.org/licenses/by/4.0/

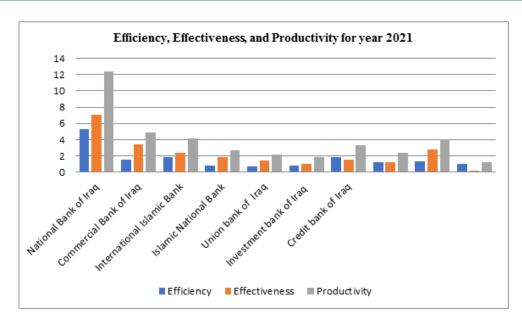


Figure 6. Shows Efficiency, Effectiveness, and Productivity for year 2021

Source: Prepared by the authors based on Lists of the Iraqi Securities Commission for the year 2021

For all of the above, we can conclude as follows:

- ➤ By applying the modified Du Ponte model, we will be able to analyse and measure indicators such as (return on equity, return on assets, multiples of equity ... etc., which works to optimize the use of available economic resources.
- > The financial performance was the best among the banks National Bank of Iraq and the weakest financial performance among the banks was Credit bank of Iraq
- ➤ By measuring the efficiency, effectiveness and productivity as a measure of performance evaluation, including raising the performance of banking organizations, which is positively reflected on economic development.
- National Bank of Iraq, It is highest in terms of Efficiency, Effectiveness and Productivity for the years 2020: 2021 Respectively.
- ➤ Commercial Bank of Iraq has achieved highest average rate of return on equity among banks, at 37%, and National Bank of Iraq, at 29%.
- ➤ Credit Bank of Iraq, return on equity was not the acceptable ratio, as it amounted to -5% which is the worst among the banks.

Acknowledgment

We extend our thanks and gratitude to the management, employees and workers of the Iraqi Securities Commission for providing us with all the financial statements, financial accounts, data and information through field and personal interviews and at all levels. Complete this study as required

References

1. Abdel Qader, Y., Mohammed, D., & mohammed, v. (2020). Evaluation of Islamic banking work in Algeria in terms of the efficiency of the performance of Islamic banks using the return on equity

07	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 5 Issue: 12 in Dec-2022 https://www.grnjournals.us/index.php/AJEBM		
87	Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of		
	Creative Commons Attribution License (CC BY). To view a copy of this license,		
	visit https://creativecommons.org/licenses/by/4.0/		

- model applied to Al Baraka Bank of Algeria during the period 2009-2019. Journal of Economic Studies, 16(2). Retrieved from https://www.asjp.cerist.dz/en/PresentationRevue/417
- 2. Al Fawaz, M. b. (2010). financial markets. In M. b. Al Fawaz, financial markets (pp. 1-126). Saudi Arabia: Islamic economics research center.
- 3. al hajaj, s. (2020). The impact of energy subsidies on the Egyptian economic performance, with reference to the experiences of some countries. Journal of the Faculty of Economics and Political Science, 21(4). Retrieved from https://journals.ekb.eg/article_131191.html
- 4. Al Sharif, R., & faith, B. (2014). Emerging Stock Markets and Their Relationship to the Financing of Economic Development: A case study of the Casablanca Stock Exchange in Morocco. Al-Quds Open University Journal for Research and Studies, 34(20), 369-402.
- 5. albayati, S. J., & Jasim, D. H. (2020). The Iraqi banking sector: its economic importance and its relationship to financing the budget deficit. Enterprenuership Journal For Finance and Bussiness, 3(2), 203-211. doi:https://doi.org/10.56967/ejfb202278
- 6. Al-Khuzaie, S. M. (2019). The Central Bank and its role in developing the banking sector in Iraq for the period (2009-2017). Collage of Administration and Economics, 1-106. Retrieved from.
- 7. Al-Osta, A. M. (2016). The basics of modern strategic management. In A. Q. Al-Osta, The basics of modern strategic management (Vol. 1, p. 246). Jordan: Alakaymon publishing house.
- 8. asia, c. (2021). Evaluating the performance of commercial banks using the modified Dupont model for a sample of private Algerian banks. Innovation and Marketing Journal, 9(2), 51-31.
- 9. Bentabet, A., & hamza, t. (2018). Emerging financial markets and the evolution of Islamic finance. The Sixth International Conference on Entrepreneurial Finance: Islamic Finance and Current Directions: Financial Technology, Financial Inclusion and Emerging Markets At: National School of Commerce and Management, University of Ibn Zohr Agadir, Kingdom of (pp. 1-14). Morocco: research gat. Retrieved from https://www.researchgate.net/publication/340925266
- 10. Commission, I. S. (2022, 11 17). Iraqi Securities Commission. Retrieved from Iraqi Securities Commission: https://www.isc.gov.iq
- 12. El-Hamalawy , F. K. (2016). Foreign Direct Investment in The Financial Sector in Emerging Markets. Egyptian Journal of Development and Planning, 42(1), 40-70. doi:10.21608/INP.2016.165233
- 13. Etab, M., & El-Moslemany, R. (2020). Financial Performance Comparison of Islamic and Traditional Banks in Emerging Markets. Alexandria Journal of Accounting Research, 4(2), 2-43.
- 14. Fawzy, S. (2009). Capital flows and exchange rate arrangements in emerging markets and Transitional economies possible alternatives for the emergence of the Algerian economy. Journal of economic and administrative research, 51-78. Retrieved from https://www.asjp.cerist.dz/en/article/38652

88	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 5 Issue: 12 in Dec-2022 https://www.grnjournals.us/index.php/AJEBM
00	Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of
	Creative Commons Attribution License (CC BY).To view a copy of this license,
	visit https://creativecommons.org/licenses/by/4.0/

- 15. hammad, a., & hamdi, a. (2008). The role of Iraq market of the financial documents for decreasing the average of unemployment. Anbar University Journal of Economic and Administrative Sciences, 1(2), 1-11. Retrieved from https://www.iasj.net/iasj/download/f0e72d8b20b91dd6
- 16. Heshmat, N. A., & Abdullah , H. A. (2019, december). The role of investor morale in pricing capital assets in emerging markets in periods of financial crises: An applied study on Egyptian market using fuzzy regression. Arab Journal of Management, Vol. 39, v. 4 December 2, 39(4), 189-207. Retrieved from https://aja.journals.ekb.eg/article_66924_190dff4306353c5262a2a1e4238ffd4a.pdf
- 17. Ibrahim, T., & Rabie, M. (2021, 6). Evaluation of the financial performance of Islamic banks using the indicators of return on assets and return on equity, applied to Qatar Islamic Bank and Jordan Islamic Bank during the period 2008-2018. Journal of Financial, Accounting and Administrative Studies, 8(2), 596-617.
- 18. Issa, Q., Massia, F., & Abdel Raouf, E. (2021). Evaluating the financial performance of commercial banks using financial ratios A study of a group of Algerian commercial banks during the period2010-2019. Journal of Economics, Management and Commercial Sciences, 14(1), 31-46. Retrieved from https://www.asjp.cerist.dz/en/article/154219
- 19. Jassim, A. (2007). Banking developments in Iraq. Iraqi Journal for Economic Sciences, 5(23). Retrieved from https://www.iasj.net/iasj/download/a6763d1a9fc936f0
- 20. Jassim, O. S., & Mohamed, M. I. (2020). The Impact of Electronic Payment systems on the Profitability of Banks An applied research on a sample of Iraqi commercial banks. Journal of Accounting and Financial Studies (JAFS), 113-130. doi: https://doi.org/10.34093/jafs.v15i51.912
- 21. kerroumi, a. (2022). Evaluation of the performance of commercial banks using the Dupont model for a sample of Algerian banks. Innovation and Marketing journal, 9(2), 31-51.
- 22. Klandar, M. A. (2021). Islamic banks, a legal study in the most important recent developments. Al-Rafidain Journal of Rights, 75(23), 396-401. doi:10.33899/alaw.2021.168458
- 23. Mohamed, A. H. (2015). Management, organization and business development: measuring the balanced scorecard. In A. H. Mohamed, Management, organization and business development: measuring the balanced scorecard (pp. 1-70). Jordan: Dar Al Moataz for Distribution and Publishing.
- 24. mursa, m. e., & Mohammed, H. O. (2022). The Effect of Banking Services In achieving Copetetive Advantage. Journal of Economic Administrative and Legal Sciences, 6(14), 22-44.
- 25. Mustafa, E. (2019). Evaluation of operational efficiency of Islamic bank and conventional bank A comparative study between Al Baraka Bank of Algeria and Societe Generale Algeria using return on equity model. Al Ijtihad Journal for Legal and Economic Studies, 8(1), 554-564.
- 26. Mustafa, S. M., & Al-Najjar, S. M. (2018). The impact of reconciling local accounting standards with financial reporting standards. Journal of Accounting Thought, 22(8), 1-36. Retrieved from https://atasu.journals.ekb.eg/article_36864.html
- 27. Najib, D. (2022). The impact of risk management measures on strengthening the financial performance of Algerian commercial banks. Journal of Research in Financial and Accounting Sciences, 6(1), 302-320. Retrieved from https://www.asjp.cerist.dz/en/article/159355
- 28. Ramli, H., & arous, N. (2018). Evaluating the financial performance of pharmaceutical industry enterprises based on the rates of return on equity (ROE) and return on assets (ROA a comparative

89	ISSN 2576-5973 (online), Published by "Global Research Network LLC" under Volume: 5 Issue: 12 in Dec-2022 https://www.grnjournals.us/index.php/AJEBM
09	Copyright (c) 2022 Author (s). This is an open-access article distributed under the terms of
	Creative Commons Attribution License (CC BY).To view a copy of this license,
	visit https://creativecommons.org/licenses/by/4.0/

AJEBM, Vol. 5, No. 12, Dec 2022

- study between Saidal Corporation and Biopharm Corporation). Journal of Administrative and Economic Research, 2(1), 87-100. Retrieved from https://www.asjp.cerist.dz/en/article/123805
- 29. Isma'eel, Mustafa Muneer and Rhima, Mustafa Hatwan, (2019) Production Capacity Utilization Variance and Its Role in the Operating Profitability of a Sample of Iraqi Industrial Corporations, Journal of Administration and Economics, No 119, pp. 17-41.
- 30. Rhima, M. H., Muhsen, N. A., Faris, H. M., and Mohammed, R. F., (2022) "Study of Pillars and Variables of Business Administration for Successful Organizational Effects" Webology, Vol. 19, No 1, pp. 6550 6567.
- 31. Saleh, A. A., & Fadel, U. S.-D. (2021). Evaluating the performance of Iraqi companies using the return on equity model An applied study on companies listed in the Iraqi Stock Exchange for the period 2008-2010. University of Kufa faculty of Administration and Economics, 25(8), 143-164.
- 32. Sobhi, W. M., & Al-Ghalbi, I. W. (2009). The basics of performance and the balanced scorecard. In W. M. Sobhi, & I. W. Al-Ghalbi, The basics of performance and the balanced scorecard (Vol. 1, pp. 1-80). Jordan: Wael Publishing House.