



Research Article

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Received: 22 February 2022 / Accepted: 7 June 2022 / Published: 5 July 2022

Evaluating Financial Performance of Jordanian Bank Listed on Amman Stock Exchange for the Period (2016-2020)

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DOI: <https://doi.org/10.36941/ajis-2022-0111>

Abstract

This study aims to identify the level of financial performance of Jordanian banks listed on Amman stock exchange during the period (2016-2020), using the financial ratios approved in assessing the financial performance of banks, to determine their performance during the study phase. Concerning the purposes of achieving the objective of the study, five financial ratios are extracted from the financial reports of the banks of the research sample for each year of the study: return on assets, return on equity, total assets to equity right ratio (equity multiplier), net profit margin and utility assets. The study noted that the financial performance of the Jordanian bank group during the period of the study was fragile, due to the high debt ratio and the low rates of return for these banks, this reflects the negative impact of the Corona crisis on the Jordanian economy represented by the increase of the volume of either internal or external debt, and the decrease in the proportion of foreign investment flows.

Key words: financial performance, Jordanian bank, financial ratios, Amman stock exchange, corona crisis

1. Introduction

Evaluating the financial performance of any institution operating in the banking sector is very crucial because it assists the administration in rationalizing its plans, policies and decisions, as well as knowing their sites of strength and emphasizing them in order to nourish and develop every single aspect, and knowing their sites of weakness and deviation intending to avoid and discard them or work on reducing their sources. As the financial performance of banks contributes positively to providing useful information in the field of planning, control and decision-making, all of this will lead to the improvement of the bank's performance level and the enhancement of its competitiveness.

Financial analysis of financial statements is one of the most important methods used in analysing the financial position of any institution, especially financial analysis with financial ratios that deals with assessing the financial performance of banks, in addition to offering important financial information that contribute to the estimation and the diagnosis of the current financial

position and forecasting the forthcoming situation based on indicators and models that are more useful for the decision-making process, which helps with evaluating the financial performance of banks.

1.1 *The Problem of the Study*

Through the above, we can pose the following problem: *To what extent do financial indicators extracted from the financial statements contribute to measuring and evaluating financial performance of Jordanian banks?*

1.2 *Objective of the study*

- The main objective of this study is to measure the performance of Jordanian Banks listed in Amman stock exchange for the period (2016-2020).
- To analyse the financial performance of the banks under study.
- To examine the financial factors that could be the determinant of the current financial performance of these banks.
- to evaluate which performance measure (ROA or ROE) is better to be used in measuring the profitability of the bank

1.3 *The Study Hypothesis*

To respond the research problem, we developed a set of hypotheses so that we can determine the level of financial performance of Jordanian banks.

First Hypothesis: The level of financial performance is poor in terms of returns.

Second Hypothesis: The level of financial performance is poor in terms of debt.

Third Hypothesis: The level of financial performance is poor in terms of profitability.

1.4 *Importance of the study*

- Recognize the importance of financial performance in general and the banking sector in Jordan region in particular.
- The significance of the financial performance and financial ratios, including analysis towards decision-makers to select fateful and accurate decisions.

2. **Theoretical Framework**

2.1 *Definition of financial performance*

Financial performance is defined as: "The extent to which activities contribute to creating value or are effective in using financial resources available, by achieving financial goals at the lowest financial costs"(Daden, 2006).

Evaluation of financial performance is also defined as "measuring the achieved or expected results in light of predetermined criteria, to determine what can be measured, and then the extent to which the objectives are achieved to determine the level of effectiveness" (Hafssi, 2014).

2.2 Indicators for Assessing Financial Performance

2.2.1 Return on Equity Model

For a long time the return on equity model has been considered as an integrated indicator to describe and measure the interrelationship between return and risk. This model has been used since the beginning of the seventies in the United States of America by David Cole, as a procedure for evaluating the performance of banks, by analyzing a set of ratios that are summarized in several forms enable the analyst to assess the source and size of the bank's profits for a selected risk, mainly credit risk, liquidity risk, interest rate risk, capital risk and operational risk (Hamad, 1999).

The indicators of this model can be summarized in two sets of ratios, a group that measures return and profitability, and a group that measures the selected risks. With regard to the first group, the relationship between these indicators can be clarified through an integrated system known as the Dupont system, where this model shows the dual effect of efficiency and productivity on the profitability of assets or the return on assets (ROA) indicator, as well as the ability of financial leverage (EM) to raise the return on equity (ROE) to a higher level of return on assets.

The Return on Assets (ROA) indicator is determined by two indicators:

The profit margin that reflects the efficiency in managing and controlling costs.

Asset Utility (AU) it is called asset utilization, where this indicator indicates the best utilization or use of the assets, i.e. the productivity of the assets.

Profit Margin = Net Income / Total Revenue.

Utility of Assets = Total Revenue / Total Assets.

Therefore:

Return on Assets = Profit Margin * Utility of Assets

The second contribution of the Dupont model is to explain and illustrate the relationship between ROE and ROA (between return on assets and return on equity) from the use of leverage; By multiplying the return on assets by the equity multiplier, or what is known as financial leverage, the equity multiplier = (total assets / equity), the return on equity can be calculated as follows:

Return on Equity = (Total Revenues / Total Assets) x (Net Income / Total Revenues) x (Total Assets / Equity):

$ROE = UA * PM * EM$

This model is characterized by greater flexibility, as each indicator can be analyzed into partial indicators that reflect the decision areas in detail. There is also a kind of dealing with indicators in linking the relationship between return and risk, as is the case with the financial leverage indicator, which leads to raising the level of profitability and reflects the level of capital risks.

As for the second group, they are indicators to measure the main risks facing any bank. These indicators can be expressed in one or several ratios, depending on the components associated with certain risks.

2.2.2 Economic Value Added Model

With the development witnessed by banking activity during the last two decades, the return on equity model has become inadequate for the purpose of evaluating the performance of many banks, especially American banks, where new concepts related to risk management and profitability have emerged, for example: duration analysis, activity-based cost accounting, and capital allocation. Based on the Value Risk approach, the risk-adjusted return on capital and other financial and accounting concepts. Thus, a new model known (EVA) as the economic value-added model was adopted, which is known as the top-down approach to risk management. The economic value added is measured by the following equation:

Economic value added = net working profit after tax - (capital * cost of capital).

2.2.3 Financial ratio

Financial ratios are one of the most common and easy methods of financial analysis. Financial ratios give a positive or negative impression about the progress of the company's financial position. It is a relationship between budget items to each other or between some items in the list of profits and losses with the intention of revealing strengths and weaknesses in financial aspects (Bernstein, 1993). Therefore, the lender is interested in the institution's liquidity if the loan is short-term, but if the loan is long-term, the lender is interested in the institution's ability to pay debt service, that is, the institution's ability to generate cash flows to pay interest and installments (Al-Zubaidi, 2000).

1. Ratios that are related to revenues and profitability, such as the ratio of revenues to equity, the ratio of operating profit to revenues, and the ratio of net profit to total revenues.
2. Liquidity ratios such as the trading ratio and the cash ratio.
- a. Other financial ratios that also contributed to the formation of the models are the ratios of the market values of shares, the ratio of loans to assets, and the ratio of total liabilities to shareholders' equity.

3. Literature Review

Evaluating the financial performance of banks captures a unique position in banking as well as the nation's economy as a whole. It is a very important feature due to its accurate results and the fact that many parties are interested in the performance of banks paved the way to many researchers and scholars who have made several studies in the financial field concerning the point of financial performance, however in different perspectives and different periods. And they are as follows:

(soumia, 2021) which aimed to evaluate the financial performance of the Algerian commercial banks, the National Bank of Algeria, the Algerian Foreign Bank, (BNP Paribas) bank, Gulf Bank of Algeria, and Bank EL-Djazair through analyzing the financial statements of these Banks during the period (2015-2019) using ten financial ratios that express the financial aspects of the bank, as follows: return on assets, return on equity, ratio of loans to deposits, ratio of cash to total deposits, ratio of deposits to total assets, credit risk, operating expenses to Assets, operating income of assets, capital adequacy, adequacy of equity right to deposits. The study deduced that the use of financial ratios identified the strengths and weaknesses of the banks under study, and also contributed to evaluating their financial performance. These ratios showed varying levels of financial performance from one bank to another. While (Diah Rani Nartasari, 2021) study the financial performance for stock prices of the Indonesian stock exchange in manufacturing companies by using the financial reports of Indonesian stock exchange manufacturing companies for the period (2016-2018). The authors measure the financial performance of these companies by two independent variables (net profit margin (earnings after tax to net sales) and price to book value (market price to book value)) to determine the effects of these two variables on the stock prices of Indonesian manufacturing companies as dependant variable. The results show that the price book value has an impact on stock prices at a probability value of 0.001 less than $\alpha = 0.05$, the effect of net profit margin has an influence on share prices with a probability value of 0.000 less than $\alpha = 0.05$. The results of the F test analysis showed that the value of $F = 21.567$ with a significance value = 0.00 with a value of $p < 0.05$, this means that the independent price book value and net profit margin have an impact on stock prices. The influence of independent price book value and net profit margin can explain 64.6% of the share price. While the remaining 35.4% is influenced other variables that have not been included in this study. (Alrayan, 2020) aimed to test the impact of the characteristics of the audit committees on the financial performance of Jordanian commercial banks during the period (2010-2017). The characteristics of the audit committees were measured through a set of indicators, which are the size of the audit committees, the independence of the members of the audit committees, the number of audit committees meeting, and the experience of the members of the audit committees. As for the financial performance, it was measured using both the return on equity and earnings per share

indicator. The study concluded that there is a statistically significant effect of the characteristics of the audit committees on the financial performance of Jordanian commercial banks. The study also showed that there is a statistically significant effect of the characteristics of the audit committees on the return on equity, while there is no statistically significant effect of the characteristics of the audit committees on the earnings per share of Jordanian commercial banks.

(Sarah, 2019) aimed to assess the financial performance of the Arab Banking Corporation in Jordan during the period (2013-2018), using a set of indicators that measure the performance of the bank under study, which are: rate of return on equity, rate of return on assets, earnings per share, debt to total Assets ratio, short-term debt to total assets ratio, debt to own money ratio, cash to total assets ratio, cash to total deposits ratio, current assets to total deposits ratio, adequacy of equity in relation to deposits, adequacy of equity in relation to total assets extracted from Financial Statements. The study concluded that the bank was able to achieve good profitability rates that indicate its efficiency in exploiting the resources available to it, in addition to its enjoyment of sufficient liquidity that makes it far from risks despite its reliance on high debt ratios, and this is due to the achievement of large net profits, and the results of the study also indicate that the bank has sufficient ability to return deposits to their owners at any time, which makes it safe from facing various risks, which reflects its good performance. (Santhiyavalli, 2018) evaluated the performance of 40 commercial banks in India were selected on the basis of the advances provided by the bank, amounting to a minimum of Rs. 1,500 billions as on 31-03-2014 (4 foreign banks, 12 private banks, 18 nationalized banks, 6 state bank of India and its associates) using the multiple criteria decision making approach (TOPSIS) for the period 1999 to 2014. The data was collected from Reserve Bank of India publications like Reserve Bank of India Bulletins, Reports on Trend and Progress of Banking in India and Statistical Tables Relating to Banks in India from the official website of Reserve Bank of India. The major financial components of the banks like capital adequacy (debts to equity ratio, investments in government securities to total assets, investments in government securities to total investments), asset quality (return on investments, return on advances, interest income to total assets), management ability (business per employee, profit per employee), earning efficiency (return on assets, return on equity, operating profits to total assets, Non-interest income to total assets, net interest margin) and liquidity management (cash to deposit ratio, liquid assets to total assets, liquid assets to demands deposits, liquid assets to total deposits, Terms deposits to total deposits) were assessed to understand the financial performance of the Scheduled Commercial Banks by applying ratio analysis, cluster analysis, rank-sum test TOPSIS and discriminant function analysis. The results convey that the performance of banks is measured through their sustainability, efficiency in managing the funds and earning returns by proper application of the available resources. At the same time, the banks must have adequate liquid assets to meet the requirements of their customers and economy. Further, the disbursements made by the banks must be secured in order to avoid adverse loan impairment. Thus, the strategies worked out by the banks must be able to balance the risks in the business operations. The findings of the present study, using the multiple criteria decision making approach, has considered the major components of financial performance to comprehend the managerial ability of the banks and is identified that the banks that effectively reduces their risks garners more profit and upholds consistency in their business. While (Jabri, 2015) pointed to evaluate the financial performance of Yemeni banks and compare the performance of Islamic banks with commercial banks, and used a range of financial ratios include performances by the study examined four groups are employing the available resources, profitability, liquidity and solvency .This research uses secondary data from 2004-2011, the financial reports of eight Yemeni banks. Four Islamic banks (Islamic Finance Bank, Tadhamon Islamic Bank, Sabaa Islamic Bank, Yemen and Bahrain Shammil Bank) and four commercial banks (The Yemen Bank for Reconstruction and Development, the Yemeni Ahli bank, the International Bank of Yemen, and the Commercial Bank of Yemen). To achieve this purpose six financial ratios are calculated which reflects the aspects of financial performance (return on assets, return on equity, cash to total assets, cash to total deposits, equity right to total assets, equity right to total deposit).The results of evaluating the financial performance

of all criteria indicate that the performance of Islamic banks is better than the performance of commercial banks according to the criterion of liquidity and the criterion of solvency. However, the performance of commercial banks is better than that of Islamic banks according to the criterion of investment of funds, and the criterion of profitability. It can be said that Islamic banks have a higher liquidity ratio than commercial banks, and this means that there are unused financial surpluses, and their solvency level is better than commercial banks. However, commercial banks enjoy high profit rates compared to Islamic banks, and the indicators of money investment in Commercial banks are better than Islamic banks, and this indicates that commercial banks in general and in terms of economic benefit to the country and the extent of their contribution to improving economic growth and development in general are better than Islamic banks.

4. Methodology

This study is based on a descriptive method in presenting the theoretical side of the research phenomenon, while the analytical method was applied in the practical side of this study by analyzing the financial data extracted from the financial statements of the study sample banks (Financial reports of Jordanian banks listed on Amman stock exchange for the period (2016-2020)), then finding the implications and relationships between the items of the financial statements through quantitative analysis for financial ratios. In order to achieve the goal of the study and answer its questions, we calculated a set of financial ratios extracted from the financial statements of the mentioned banks during the period (2016-2020), which reflect the aspects of the banks' financial performance: Return on assets, Return on equity, Equity multiplier, Utility assets, profit margin. In order to analyse the collected data, the IBM SPSS statistics 20 and EXCEL package were used.

The study was conducted on all 15 Jordanian banks listed on the Amman Stock Exchange for the period (2016-2020). The applied study was divided into two parts: The first part is descriptive statistics by calculating the arithmetic mean and standard deviations. As for the second part, the indicators of return or profitability are calculated and a general description of the results is provided, then compared and analyzed.

5. Result

5.1 Financial ratios of sample banks

Table 1: Return on Equity (ROE)

Banks	2016	2017	2018	2019	2020	Means	Standard deviation
Jordan islamic bank	15.760	14.440	12.660	12.890	10.990	13.348	1,820266464
Jordan Kuwait bank	6.470	5.750	9.460	6.510	-0.990	5.44	3,866755746
Jordan commercial bank	6.400	2.530	3.750	3.820	0.370	3.374	2,19279046
The housing bank for trade and finance	12.220	11.460	8.800	7.570	3.330	8.676	3,540088982
Arab Jordan investment bank	10.550	8.040	7.960	7.560	5.250	7.782	1,882809072
Safwa islamic bank	4.300	4.130	5.910	6.930	6.580	5.57	1,291491386
Bank Al Etihad	9.430	8.460	9.490	8.160	5.780	8.264	1,506827794
Arab banking corporation /(Jordan)	8.950	8.090	6.070	1.230	0.760	5.02	3,823741623
Invest bank	9.440	8.670	8.880	8.840	3.230	7.83	2,901591517
Capital bank of Jordan	4.480	8.350	10.740	8.550	8.440	8.112	2,2612983
Societe generale de banque - Jordanie	8.170	5.820	6.480	7.510	3.750	6.346	1,711411698
Cairo Amman bank	10.740	9.010	8.960	8.030	4.950	8.338	2,131987336
Bank of Jordan	10.210	10.790	10.080	9.690	7.870	9.728	1,111044454
Jordan Ahli bank	2.070	4.350	7.060	7.220	3.010	4.742	2,385798259
Arab bank	6.07	5.49	11.81	11.16	0.57	7.02	4,607862845

From the table above we note that the arithmetic mean value of the return on equity ratio was almost similar among all banks, The Jordan Islamic Bank achieved a very high rate of return compared to other banks during the years of study, achieving the highest return of 15.76 % for the year 2016 and less return in 2020 with 10.99 %, followed by The Housing Bank for Trade and Finance which achieved the largest return in 2016 with 12.22%, and less return in 2020 was 3.33%. Then Arab Bank with 11.81 % as high return in 2018 and less return in 2020 was 0.57 %. Then bank of Jordan with 10.790 % in 2017 as the highest return and 7.870 % in 2020 as the lowest return, Then Cairo Amman bank with 10.740 % in 2016 as the highest return and 4.950 % in 2020 as the lowest return, then Capital Bank of Jordan with high return 10.740% in 2018 and less return in 2016 was 4.480 %. Then Arab Jordan Investment Bank with high return 10.55 % in 2016 and less return in 2020 was 5.250 %. Then Bank Al Etihad with 9.490 % in 2018 as the highest return and 5.780 % in 2020 as the lowest return, then Jordan Kuwait Bank with 9.46 % as high return in 2018 and less return in 2020 was -0.99 %. Then Invest Bank with 9.44 % as high return in 2016 and less return in 2020 was 3.230 %, followed by the Arab Banking Corporation /(JORDAN) with 8.950 % in 2016 and less return 0.76 % in 2020. Then Societe Generale DE Banque – Jordanie with 8.170 % as high return in 2016 and less return in 2020 was 3.75 %. Then Jordan Ahli bank with high return 7.220 % in 2019 and less return in 2016 was 2.070 %, followed by Safwa Islamic Bank with high return 6.930 % in 2019 and less return 4.13 % in 2017. Finally, the Jordan Commercial Bank which achieved the best return for the year 2016 rate of 6.4 % and the lowest return in 2020 was 0.37.

If we analyze these results to their sources, that is to the two indicators contribute to achieving it are the return on assets (ROA) and the equity multiplier (EM), we find that the rate of return on equity (ROE) of the Jordan Islamic bank is due to the both equity multiplier and return on assets unlike the other thirteen banks that can say that it relied on the return on assets index to a greater degree than the equity multiplier while the Safwa Islamic bank is largely due to the equity multiplier and to a lesser extent to the return on assets. This is what explains the content of table number 2 and table number 3.

The Jordan Islamic bank has achieved a return on assets of more than 1 % in all years of study the maximum return was 1.32 % in 2016. The others bank had achieved varying rates, the highest rate achieved by the bank of Jordan in 2016 which amounted to 1.800 % followed by the Arab bank with rate on assets was 1.7 % in 2018, then The Housing Bank for Trade and Finance with rate on assets estimated to 1.680% in 2016, then the Invest bank with rate on assets amounted to 1.640 % in 2016, then Jordan Kuwait bank with rate on assets amounted to 1.550 % in 2018, then capital bank of Jordan with rate on assets amounted to 1.540 % in 2018, then Cairo Amman Bank with rate on assets of 1.390 % in 2016, followed by Arab Banking Corporation /(Jordan) with rate of 1.260 % in 2016, then Arab Jordan Investment Bank with rate on assets of 1.250 % in 2016, then Bank Al Etihad with rate on assets amounted to 1.140 % in 2016, While the remaining four banks (**Jordan Commercial Bank, Safwa Islamic Bank, Societe Generale De Banque – Jordanie, Jordan Ahli Bank**) achieved low rates compared to the rates of the previous banks which did not exceed 1% and this is what table 2 shows.

Table 2: Return on assets (ROA)

Banks	2016	2017	2018	2019	2020	Means	Standard deviation
Jordan islamic bank	1.32	1.29	1.200	1.220	1.080	1.222	0,09338094
Jordan Kuwait bank	1.100	0.950	1.550	1.090	-0.160	0.906	0,637283297
Jordan commercial bank	0.74	0.27	0.37	0.38	0.04	0.36	0,252685575
The housing bank for trade and finance	1.680	1.540	1.140	0.990	0.510	1.172	0,465263366
Arab Jordan investment bank	1.250	0.930	0.830	0.760	0.520	0.858	0,306865877
Safwa islamic bank	0.620	0.600	0.740	0.640	0.560	0.632	0,04163332
Bank Al Etihad	1.140	0.970	1.060	0.830	0.570	0.914	0,224120503
Arab banking corporation /(Jordan)	1.260	1.150	0.850	0.170	0.100	0.706	0,557643853
Invest bank	1.640	1.470	1.390	1.370	0.490	1.272	0,449911102
Capital bank of Jordan	0.800	1.370	1.540	1.320	1.100	1.226	0,2852718

Banks	2016	2017	2018	2019	2020	Means	Standard deviation
Societe generale de banque - Jordanie	0.840	0.580	0.490	0.590	0.400	0.58	0,164468842
Cairo Amman bank	1.390	1.070	1.010	0.880	0.520	0.974	0,315642203
Bank of Jordan	1.800	1.780	1.570	1.490	1.310	1.59	0,205548048
Jordan Ahli Bank	0.220	0.490	0.760	0.800	0.340	0.522	0,254597722
Arab bank	0.88	0.8	1.7	1.61	0.08	1.014	0,663686673

On the other hand, table 3 shows that the Jordan Islamic bank relied on the equity multiplier to achieve the return on equity, however with an insignificant value, as its highest value did not exceed 12 % during the study period, in 2016. While the equity multiplier in the Jordan Kuwait Bank reached 6.15 % in 2020. Jordan Commercial Bank 10 % in 2018, 8 % the Housing Bank for Trade and Finance in 2018, 10.83 % Arab Jordan Investment Bank in 2019, 11.77 % Safwa Islamic Bank in 2020, 12.92 % Bank Al Etihad in 2020, 7.40 % Arab Banking Corporation /(Jordan) in 2020, 6.85 % Invest Bank in 2020, 9 % Capital Bank of Jordan in 2020, and 13.32 % Societe Generale de Banque - Jordanie in 2018, 9.14 % Cairo Amman Bank in 2020, 6.53 % Bank of Jordan in 2019, 9.23 % Jordan Ahli Bank in 2018, 7 % Arab Bank in 2020.

Table 3: Equity Multiplier (EM) (total assets to equity right)

Banks	2016	2017	2018	2019	2020	Means	Standard deviation
Jordan islamic bank	11.9617	11.2322	10.5762	10.5529	10.2128	10.9071	0,695486429
Jordan Kuwait bank	5.9604	6.0464	6.1078	5.9974	6.1562	6.0536	0,079626604
Jordan commercial bank	8.6774	9.2433	10.0979	9.9612	9.6942	9.533	0,579738525
The housing bank for trade and finance	7.7202	7.6613	8.08817	7.8996	7.5454	7.7829	0,213253641
Arab Jordan investment bank	9.0860	9.2502	10.4337	10.8396	10.6747	10.056	0,82608597
Safwa islamic bank	6.9439	6.9332	7.9371	10.7782	11.7725	8.8729	2,258143944
Bank Al Etihad	8.2551	9.6385	10.2671	11.8254	12.9271	10.5826	1,833661295
Arab banking corporation /(Jordan)	7.0876	7.0397	7.1539	7.2601	7.4032	7.1889	0,145544879
Invest bank	5.8602	6.1723	6.6127	6.6458	6.8571	6.4296	0,404179558
Capital bank of Jordan	7.2230	6.8607	6.8508	7.4434	8.9431	7.4642	0,864050027
Societe generale de banque - Jordanie	9.7659	10.0830	13.3248	12.7826	9.3767	10.0666	1,841122657
Cairo Amman bank	7.63061	8.3020	8.7260	8.9450	9.1462	8.5499	0,601938356
Bank of Jordan	5.7685	5.9150	6.3586	6.5360	5.9645	6.1085	0,323704287
Jordan Ahli Bank	9.3024	8.9127	9.2378	8.9757	8.9442	9.0745	0,181343351
Arab bank	6.9282	6.8625	6.9594	6.9372	7.0573	6.9489	0,070517991

As a complement to the analysis of the Dupont model, the return on assets index (ROA) can be analyzed into its two components, the profit margin index (PM), which reflects the bank's efficiency in managing and controlling its costs, and the asset benefit (UA), that refers to the best use of assets or what is known as the quality of assets in the bank which it explains table 4 and table 5.

Table 4 shows that the Jordan Islamic Bank achieved very high profit margin rates compared to other banks, where the profit margin ratio exceeded 30 % in all years of study, as it achieved a maximum value of 36,83 % in 2017. While Jordan Kuwait bank didn't achieve the highest ratio only 33,72 % in 2018 and 18,78 % for the Jordan Commercial bank in 2016 and 38,40 % for the Housing bank for Trade and Finance in 2017 and 33,19 % for Arab Jordan Investment Bank in 2016 and 23,98 % for Safwa Islamic bank in 2020 and 29,01 % for Bank Al Etihad in 2016, and 30,13 % for Arab Banking Corporation/ Jordan in the same year and 33,13 % for the Invest Bank in 2016 while Capital Bank of Jordan had achieved a maximum rate of 37,77 % in 2018 and 37,24 % for Societe Generale de Banque in 2016 and 27,10 % for Cairo Amman Bank in the same year and 33,11 % for Bank of Jordan also in the same year and 19,38 % for Jordan Ahli Bank in 2018 and 33,01 % for Arab Bank in the same year.

Table 4: Profit margin (PM)

Banks	2016	2017	2018	2019	2020	Means	Standard deviation
Jordan islamic bank	36,111	36,8367	33,8712	32,8393	30,5007	34,0318	0,025548
Jordan Kuwait bank	25,138	21,8423	33,7282	24,5174	-4,169	20,2114	0,128263
Jordan commercial bank	18,7858	7,8681	12,3133	12,5135	1,2017	10,5365	0,065072
The housing bank for trade and finance	35,9297	38,4011	27,0986	23,1889	11,6681	27,2573	0,095812
Arab Jordan investment bank	33,194	28,666	28,9623	27,8408	18,1902	27,3707	0,055368
Safwa islamic bank	20,6321	18,2588	22,736	23,3596	23,9801	21,7933	0,023434
Bank Al Etihad	29,0135	23,6519	26,075	22,0752	16,2821	23,4195	0,047736
Arab banking corporation /(Jordan)	30,1375	29,8179	23,0802	4,6654	2,9496	18,1301	0,133887
Invest bank	33,1368	30,0881	31,9656	30,1166	11,622	27,3858	0,089065
Capital bank of Jordan	17,1326	29,4801	37,7766	30,7671	27,3828	28,5078	0,074602
Societe generale de banque - Jordanie	37,2454	30,6336	34,0848	29,5342	18,82	30,0636	0,069781
Cairo Amman bank	27,1084	23,7893	22,6009	20,2045	12,751	21,2908	0,053831
Bank of Jordan	33,1129	29,422	29,0981	27,026	23,1082	28,2	0,036614
Jordan Ahli Bank	5,4123	11,2496	19,38	18,8297	8,5521	12,6847	0,062172
Arab bank	22,6868	19,9773	33,0113	37,9288	2,3471	23,1903	0,137722

Table 5: Utility assets (UA)

Banks	2016	2017	2018	2019	2020	Means	Standard deviation
Jordan islamic bank	3,649	3,4896	3,5343	3,7198	3,5274	3,584	0,000965
Jordan Kuwait bank	4,3564	4,3574	4,5913	4,4306	3,8513	4,3174	0,002776
Jordan commercial bank	3,9232	3,4837	3,0176	3,0621	3,1605	3,3294	0,003787
The housing bank for trade and finance	4,6627	4,0029	4,2027	4,2774	4,3859	4,3063	0,002434
Arab Jordan investment bank	3,7688	3,2597	2,8559	2,7297	2,8826	3,0993	0,004233
Safwa islamic bank	3,0028	3,2635	3,275	2,754	2,3293	2,9249	0,00396
Bank al etihad	3,9366	4,1187	4,0736	3,7604	3,4989	3,8776	0,002535
Arab banking corporation /(Jordan)	4,1914	3,8544	3,6738	3,6418	3,5009	3,7724	0,002659
Invest bank	4,9601	4,8851	4,3469	4,5351	4,2185	4,5892	0,003256
Capital bank of Jordan	4,692	4,6313	4,0889	4,2839	4,0258	4,3444	0,003056
Societe generale de banque - Jordanie	2,2474	1,8857	1,427	1,9882	2,1273	1,9351	0,003154
Cairo Amman bank	5,1433	4,5081	4,4778	4,3501	4,0866	4,5132	0,003895
Bank of Jordan	5,4492	6,0433	5,4119	5,5169	5,6585	5,616	0,002567
Jordan Ahli bank	4,1179	4,3385	3,9443	4,2743	3,9293	4,1209	0,001863
Arab bank	3,8603	4,0073	5,1408	4,2415	3,4161	4,1332	0,006387

As for the asset utility index, its data were similar among all banks during the study period, the Bank of Jordan has achieved its highest rates during the years 2017 and 2020 by 6,04 % and 5,65 % respectively, the Cairo Amman Bank achieved its high rates during 2016, 2017 and 2018, the Arab Bank achieved its high rates during 2019 and 2020, Invest Bank achieved its high rates in two years 2016 and 2017 like the Capital Bank of Jordan which achieved its high rates in the same years. While the housing Bank for Trade and Finance achieved its high rates during 2016 and 2020, the Jordan Kuwait Bank achieved its high rates in 2018, 2019, but the Jordan Ahli Bank achieved its high rates in 2017 and 2019. While Arab Banking Corporation/ Jordan achieved the high scores in 2016 and 2017 successively, the Bank Al Etihad achieved its high rates in 2017 and 2018, the Jordan Commercial Bank achieved its high right in 2016 and 2017 respectively, the Arab Jordan Investment Bank reached its high value in 2016 and 2017, but Jordan Islamic Bank achieved its high levels in both 2016 and 2019, Safwa Islamic Bank reached its better rates in 2017 and 2018. While Societe Generale de Banque-Jordanie achieved lower rates than the rest of the banks during the study period, and achieved the best rates for two years 2016 and 2020, it achieved 2,24 % and 2,12 % respectively.

6. Discussion

6.1 Summarising returns rates:

Through the previous analysis of the results, we can summarize the following clarifications:

- **In term of profitability:** Jordan Islamic Bank is more profitable than other banks, and this is what was shown by the three profitability indicators (ROE, ROA, PM) in all the years (2016-2020), this result is approved by (Jabri, 2015) study and this may be due to the different nature of the basic activity of the bank from other banks and its adoption of financing formulas that are guaranteed profitability, such as Murabaha sale and financial leasing. Profitability indicators also showed that Small banks (in terms of the size of assets), in this case Jordan Kuwait bank and Arab Jordan Investment bank, Arab banking Corporation/ Jordan, Invest Bank, Capital Bank of Jordan, Societe Generale de banque-jordanie, Arab Banking Corporation/Jordan are more profitable than large banks (in terms of the size of assets) such as Arab Bank, Jordan Ahli Bank. This is the same result obtained by (Sarah, 2019) which concluded that Arab Banking Corporation is more profitable and has sufficient ability to return deposits to their owners at any time, which makes it secure from facing various risks what reflects its good performance.
- **In term of efficiency:** The indicator of efficiency in managing and controlling costs showed that Jordan Islamic Bank is more controllable, controlling and lowering the costs of its activities compared to other banks, and this may be due to a lack of branches and agencies, any shortage and lack of activity, and therefore Reduction in the level of fixed costs. This calculation supports the same results acquired by (Jabri, 2015).
- **In term of productivity:** The data on the asset productivity index (UA) were similar among the banks throughout the study period, which is reflected in the convergence of the rates of return and interest rates applied in these banks, as well as the lack of diversification of the banking portfolio.
- **In term of leverage:** The leverage indicator (EM) shows the extent to which the bank relies on its own funds to finance its assets, thus, the extent to which the money of others is risked in his investments, and the study shows that Arab Bank is less risk than other banks, which is reflected and supported by assets productivity index, as the relationship in banking activity between risks and asset yield is a direct relationship) where Arab Bank achieved relatively weak productivity compared to other banks. The leverage ratio has a necessary role in evaluating the financial performance of banks, and this was exhibited by the arithmetic mean values of the latter represented in table 3 and this is consistent with the results of both (soumia, 2021) (soumia, 2021) and (Santhiyavalli, 2018).

6.2 Testing the hypothesis

In the context of testing the validity of the hypotheses, it is obvious to us through the previous analysis that the financial performance of the Jordanian bank group during the period (2016-2020) was frail, due to the high debt ratio and the high risk of investing the money of others', and that the return of these banks was not stable and decreased through the last period, all banks achieved low rates of return, except the Jordan Islamic Bank which is most likely due to the distinct nature of the bank's basic activity .The low rates of return and high indebtedness rates for these banks are reflected by the impact of the Corona crisis on the Jordanian economy, by the increase in the volume of debt, whether internal or external, and the decrease in the percentage of foreign investment flows.

7. Conclusion

Based on the results of the research the Jordan Islamic Bank reached a very high rate of return on equity compared to other banks during the years of study, achieving the highest return of 15.76 % for the year 2016 and less return in 2020 with 10.99 %, also the Jordan Islamic Bank achieved a very high rate of return on assets of more than 1 % in all years of study the maximum return was 1.32 % in 2016. It has the higher value on the equity multiplier to achieve the return on equity compared to other banks, but with a small value, as its highest value did not exceed 12 % during the study period, in 2016. The Jordan Islamic Bank achieved very high profit margin rates compared to other banks, where the profit margin ratio exceeded 30 % in all years of study, as it achieved a maximum value of 36.83 % in 2017. In term of asset utility index, its data was similar amongst all banks during the study years, the higher value is achieved by Bank of Jordan during the years 2017 and 2020 by 6.04 % and 5.65 % respectively.

The Jordan Islamic Bank is the most profitable compared to other banks because its nature of activity that depends on Murabaha sale and financial leasing which does not exist in other commercial banks.

From the above results we derived that Profitability indicators also showed that Small banks (in terms of the size of assets), in this case Jordan Kuwait bank and Arab Jordan Investment bank, Arab banking Corporation/ Jordan, Invest Bank, Capital Bank of Jordan, Societe Generale de banque-jordanie, Arab Banking Corporation/Jordan are more profitable than large banks (in terms of the size of assets) such as Arab Bank, Jordan Ahli Bank.

The Jordan Islamic Bank is more controllable, controlling and lowering the costs of its activities compared to other banks during the period of the study.

In term of leverage indicator the results show that Arab Bank is less risk than other banks, which is reflected and supported by assets productivity index, as the relationship in banking activity between risks and asset yield is a direct relationship) where Arab Bank achieved relatively weak productivity compared to other banks.

The financial performance of the Jordanian bank group during the period (2016-2020) was weak in general, due to the high debt ratio and the high risk of investing in the money of others', and that the return of these banks was not stable and decreased in the last period, all banks achieved low rates of return, except for the Jordan Islamic Bank which is most likely due to the different nature of the basic activity of the bank.

8. Recommendation

In light of the results obtained through this study, we are able to provide the following recommendations:

- * The research sample banks should focus on activities that generate higher banking returns than other activities and provide the best banking facilities to encourage customers to deposit in the bank.
- * The Jordan Commercial Bank should work to achieve profit levels that are commensurate with the capabilities of the bank, with attention to the bank's liquidity in the short term.
- * Jordan Commercial Bank should focus on liquidity in the short term, as well as the levels of risks it faces.
- * Both Jordan Islamic Bank and Societe Generale Bank should be aware of and control the various risks they face, and focus on appropriate levels of self-financing rather than borrowing.
- * The management of the bank should focus on balancing liquidity and profitability and not leave idle cash in the fund, which affects the decline in the profitability index.
- * The study sample banks should pay more attention to evaluating their financial performance to identify and amend weaknesses and shortcomings, as well as to know and increase strengths to develop the financial performance of banks in line with the current conditions and so that they can keep pace with the development of economic activities and the global environment.

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