

Evaluating the Operational Efficiency of Jordan Islamic Bank and Housing Bank

for Trade and Finance Using the ROE Model

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Abstract

This study critically assesses the operational efficiency of the Jordan Islamic Bank and the Housing Bank for Trade and Finance by applying the Return on Equity (ROE) framework over the period 2021–2023. A suite of financial performance indicators—including Return on Assets (ROA), Asset Utilization (AU), Equity Multiplier (EM), and Profit Margin (PM)—were employed to conduct a comparative analysis of both banks. The findings indicate that the Jordan Islamic Bank achieved notable growth in ROE during 2022, followed by a marginal decline in 2023, whereas the Housing Bank maintained consistent and stable ROE throughout the period. In terms of ROA, the Jordan Islamic Bank experienced a decline in 2023, signaling reduced efficiency in asset deployment, while the Housing Bank demonstrated continuous improvement. Asset Utilization for the Jordan Islamic Bank showed steady progress, contrasting with the fluctuating trend observed at the Housing Bank. The Equity Multiplier analysis revealed increasing financial leverage at the Jordan Islamic Bank, suggesting a heightened reliance on debt financing, while the Housing Bank displayed greater capital structure stability. Profit Margin trends further reinforced these dynamics, with the Jordan Islamic Bank showing consistent improvement, and the Housing Bank peaking in 2022 before a slight downturn in 2023. The integrated analysis offers valuable insights into each bank's strategic financial positioning and operational strengths. It is recommended that the Jordan Islamic Bank reevaluate its asset management practices, while the Housing Bank should focus on growth-oriented strategies to enhance long-term profitability.

Keywords: operational efficiency, Jordan Islamic bank, housing bank for trade and finance, return on equity (ROE), return on assets (ROA), asset utilization (AU), equity multiplier (EM), profit margin (PM), financial performance, bank analysis

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Introduction

Commercial banks in the financial system play a crucial role in all countries, serving as key pillars for growth and economic stability. Through their provision of financial and funding services, banks contribute to supporting businesses, small and medium-sized enterprises, and promoting both local and international investments. In this context, assessing the efficiency of banks in managing capital and generating returns becomes an essential area of focus, primarily through the analysis of their financial performance using specific financial indicators. This research focuses on evaluating the operational efficiency of Jordan Islamic Bank and Housing Bank for Trade and Finance using the Return on Equity (ROE) model. This key financial metric reflects a bank's ability to generate profit from shareholders' equity. By conducting this analysis, we aim to compare the performance of these two banks and gain insights into their effectiveness in managing capital and achieving sustainable profitability. This comparison will highlight each bank's strengths and weaknesses in its strategic approach. The importance of this study lies in its ability to provide a deeper understanding of how these banks operate and assess their ability to utilize available resources to generate returns for investors efficiently. Moreover, the study will help enhance investment and managerial decision-making for investors and policymakers in the financial sector. By doing so, this study will enable stakeholders in the banking sector to identify factors influencing financial performance and take necessary actions to improve operational efficiency and develop financial strategies that ensure sustainability and profitability.

The study poses the following central question: Does Jordan Islamic Bank have better control over costs and profit generation compared to Housing Bank for Trade and Finance?.

Study Hypothesis:

This study hypothesizes that Jordan Islamic Bank outperforms Housing Bank for Trade and Finance in terms of achieving profits and controlling costs.

Importance of the Study:

The analysis of operational efficiency using Return on Equity (ROE) of the Jordan Islamic Bank and Housing Bank for Trade and Finance is crucial, as it is one of the most important financial indicators for measuring the bank's ability to generate profits using shareholders' funds. Commercial banks are considered the backbone of the national economy, particularly in Jordan, where the Jordan Islamic Bank and the Housing Bank are among the leading financial Institutions providing various banking services. By evaluating the performance of these two banks from 2021 to 2023, this study aims to shed light on the effectiveness of each bank's strategies in capital utilization efficiency and profit achievement. Moreover, it will provide stakeholders, such as investors and decision-makers, with a deeper understanding of the

factors that affect the operational efficiency of both banks. This study adds value by answering the central question about the banks' ability to control costs and achieve profits, thus enhancing the ability to make sound investment and managerial decisions.

Objectives of the Study:

- **Evaluating Operational Efficiency:** The study aims to assess the operational efficiency of the Jordan Islamic Bank and the Housing Bank for Trade and Finance using the Return on Equity (ROE) indicator over the period from 2021 to 2023.
- **Comparing Financial Performance of the Two Banks:** The study aims to compare the financial performance of both banks to determine which one is more efficient in utilizing equity to generate returns for its shareholders.

DuPont Model

When relying on input efficiency, the traditional methods of analyzing financial conditions and bank performance are considered a matter of great importance. Among these methods, Return on Equity (ROE) stands out as a key tool for evaluating banking performance. ROE is a vital indicator that reflects the bank's ability to generate profits from the funds owned by shareholders.¹

The DuPont Model was developed in 1918 by American engineer F. Donaldson Brown from DuPont Company. Brown noticed a mathematical relationship between profit and return on capital, as well as how return on capital is closely related to return on assets. The model was later modified twice. The first modification introduced the concept of financial leverage (Leverage) into the model, allowing a distinction between return on assets and return on equity (ROE) by incorporating debt into the model. The second modification involved determining the return on assets based on the relationship between five key measures, adding an extra dimension to the bank's performance analysis and making it more comprehensive.²

According to the DuPont Model, Return on Equity (ROE) is linked to Return on Assets (ROA) through what is known as the **Equity Multiplier**. This relationship allows for a more detailed explanation of the return on investment.³

When a bank has either a high or low return on equity, the reason for this increase or decrease can be attributed to three main factors: return on assets, financial leverage, or both.⁴

This model provides a deeper understanding of how various factors impact the financial efficiency of a banking institution. It serves as a crucial tool for evaluating the economic performance of banks.⁵

Importance of the Return on Equity (ROE) Model for Banks:

- **Profitability Efficiency Analysis:** The Return on Equity (ROE) model is a vital tool for measuring banks' efficiency in generating profits from shareholder equity. Through this model, a bank can determine how

effectively it is utilizing its available financial resources to generate profits, which helps shareholders assess the expected returns on their investments.⁶

- **Comprehensive Financial Performance Evaluation:** The DuPont model provides a comprehensive method for analyzing a bank's financial performance. By breaking down the Return on Equity (ROE) into components such as Return on Assets (ROA), financial leverage, and profit margin, the bank can identify the key factors affecting its financial performance and make informed decisions to improve its financial position.⁷
- **Impact of Risks and Leverage Assessment:** The DuPont model enables banks to understand the relationship between risks and profitability, particularly regarding the use of financial leverage. By examining the impact of debt on returns, the bank can determine the level of risk associated with leveraging and make balanced investment decisions.⁸
- **Operational Efficiency Analysis:** A bank can utilize the DuPont model to assess its operational efficiency by examining its profit margins. This helps the bank understand its ability to control costs and generate profits from operational revenues. It also serves as a tool to identify potential areas for improvement in day-to-day operations.
- **Marketing Strategy Enhancement:** By improving operational efficiency using the DuPont model, a bank can refine its marketing strategies and increase revenues. The analysis helps identify factors that affect profit margins, thereby enhancing the ability to design more effective marketing campaigns and achieve higher returns on investment.⁹
- **Guiding Strategic Decisions:** The DuPont model provides a detailed analysis of the bank's performance, enabling management to make more accurate strategic decisions. By understanding the factors that affect ROE, the bank can develop strategies to improve its performance in the future, such as investing in high-return assets.¹⁰
- **Asset Allocation Analysis:** The model enables banks to make informed decisions on asset allocation across various investments. By understanding how ROA and leverage impact overall performance, the bank can optimize investment decisions and ensure the best use of available assets.¹¹
- **Increased Transparency for Investors:** By applying the DuPont model, the bank can provide a comprehensive and transparent analysis of its financial performance to investors and shareholders. This can boost confidence in the bank by offering clear insights into how profits are achieved and resources are effectively utilized.¹²
- **Improved Capital Management:** The model helps measure the return on equity (ROE) and assess how efficiently invested capital is utilized.

The bank can use these analyses to refine its capital management strategies and ensure that financial resources are allocated in a manner that maximizes returns while minimizing risks.¹³

- **Achieving Sustainable Growth:** By utilizing the DuPont model, a bank can enhance the sustainability of its long-term financial growth. The model helps identify the factors influencing long-term profits, enabling the bank to develop strategies that ensure continued high returns and maintain economic stability.¹⁴

Indicators of the DuPont Model:

The DuPont model is a financial analysis tool used to assess the performance of companies and the effectiveness of their management in generating returns on equity. The model aims to analyze the factors that contribute to profitability and identify the sources that affect return on equity. The DuPont model comprises a set of key indicators that provide comprehensive insights into the company's financial performance. These indicators can be summarized as follows:

- **Return on Equity (ROE):** Return on Equity (ROE) is an indicator that measures the ratio of net profit earned by shareholders to their equity. This indicator is a crucial tool for assessing the effectiveness of the company's management in generating returns on shareholders' investments. The ROE is a significant metric for evaluating management effectiveness and represents the return on capital invested by shareholders. Generally, the average return on equity (ROE) in the industry is around 15%, and a company's ROE should not fall below this percentage to ensure it is generating good returns on shareholders' investments.¹⁵
- **Return on Assets (ROA):** Return on Assets (ROA) measures the ratio of net income to the total assets used by the company. This indicator is used to determine the company's effectiveness in utilizing its assets to generate profits. The basic concept here is that the company should be able to develop the highest possible return using its assets. Typically, the average return on assets (ROA) in the industry ranges from 8% to 9%, and the company's ROA should be above this average to ensure effective asset management. This indicator comprises a set of sub-factors that demonstrate how assets are utilized to achieve profitability.¹⁶

Sub-Indicators within ROA:

- **Profit Margin (PM):** This indicator measures the company's operational efficiency by analyzing profit margin, i.e., the ratio of net income to total revenues. It demonstrates the company's ability to effectively control its costs and generate profits from sales, thereby contributing to an analysis of the company's operational efficiency.¹⁷
- **Total Assets Turnover:** This indicator measures a company's efficiency in utilizing its total assets to generate revenue. Whenever the

total assets turnover is high, the return on assets (ROA) will be high. It is a key indicator for measuring the company's efficiency in utilizing its assets to generate income.¹⁸

- **Financial Leverage (FL):** Also known as the equity multiplier, financial leverage measures a company's dependence on debt to finance its operations. This indicator helps evaluate the risks associated with the use of equity in the capital structure. Typically, the average financial leverage in the industry is around 4, and companies should not exceed this number to avoid increasing financial risks.¹⁹

Table 1: Indicators of Return on Equity (ROE) Model

| Indicators | Ratios | Efficiency |
|--------------------------|-----------------------------------|-------------------|
| Return on Equity (ROE) | Net Income / Shareholders' Equity | Profit Efficiency |
| Return on Assets (ROA) | Net Income / Total Assets | |
| Asset Utilization (AU) | Total Revenue / Total Assets | |
| Financial Leverage (FL) | Total Assets / Total Equity | |
| Profit Margin (PM) | Net Income / Total Revenue | Cost Efficiency |

Analysis and Discussion of Study Results

First: Profit Margin (PM)

Table 2: Profit Margin (PM)

| Profit Margin | 2021 | 2022 | 2023 |
|------------------------------------|--------|--------|--------|
| Jordan Islamic Bank | 33.2% | 35.1% | 36.2% |
| Housing Bank for Trade and Finance | 31.04% | 35.03% | 32.14% |

As shown in Table 2, **Jordan Islamic Bank** experienced continuous improvement in its Profit Margin (PM) from 2021 to 2023. In 2021, the margin was 33.2%, increasing to 35.1% in 2022 and further rising to 36.2% in 2023. This steady increase in the profit margin indicates an improvement in the bank's performance in several aspects, including operational efficiency and its ability to manage costs effectively. This improvement could also be attributed to the bank's success in increasing its revenue while controlling costs or enhancing its ability to generate profits from banking operations. The sustainability of the profit margin growth reflects the bank's strong strategy and its ability to adapt to economic and financial challenges, thus boosting investor confidence in its continued growth.

On the other hand, **Housing Bank for Trade and Finance** experienced notable fluctuations in its profit margin from 2021 to 2023. In 2021, the margin was 31.04%, which increased to 35.03% in 2022, before dropping to 32.14% in 2023. The noticeable increase in 2022 suggests that the bank benefited from favorable conditions, such as improvements in operational processes or increased revenues. However, the slight decline in 2023 could be attributed to external economic or business factors, such as market fluctuations, changes in the bank's strategy, or increased costs. Despite this decline in 2023, the profit

margin remains higher than in 2021, indicating an overall improvement in the bank's performance over the long term, despite the short-term challenges.

When comparing the two banks, it is evident that Jordan Islamic Bank has achieved continuous and stable improvement in its profit margin, reflecting effective management and a sustainable strategy. Meanwhile, **Housing Bank for Trade and Finance** experienced a significant improvement in 2022, but the slight decline in 2023 reflects performance volatility, possibly due to economic factors or the bank's strategic adjustments.

Overall, an increase in the profit margin indicates that both banks have the ability to generate good profits from their revenues, reflecting the level of efficiency in managing operations. However, developments in the next year should be monitored to determine whether the decline in 2023 for Housing Bank is a temporary phenomenon or requires a strategic review.

Second: Asset Utilization (AU)

Table 3: Asset Utilization (AU)

| Asset Utilization | 2021 | 2022 | 2023 |
|------------------------------------|-------------|-------------|-------------|
| Jordan Islamic Bank | 1.64% | 3.2% | 2.6% |
| Housing Bank for Trade and Finance | 1.6% | 1.67% | 1.52% |

As shown in **Table 3**, **Jordan Islamic Bank** experienced a slight improvement in its Asset Utilization (AU) over the three years. In 2021, the rate was 1.64%, then increased to 3.2% in 2022, and finally reached 2.6% in 2023. This gradual improvement suggests that the bank has become more efficient in utilizing its assets over time, reflecting a successful strategy to increase returns from assets or enhance their utilization. The generally stable rate indicates the bank's ability to manage its resources effectively and achieve sustainable growth in efficiency.

In contrast, **Housing Bank for Trade and Finance** showed slight fluctuations in its asset utilization rate. In 2021, the rate was 1.6%, which then improved slightly to 1.67% in 2022. However, in 2023, it saw a slight decline to 1.52%. The decline in 2023 could reflect challenges in increasing returns or may result from asset growth outpacing the returns generated. This suggests that the bank may need to reassess its strategies in order to make better use of its resources in the future.

Third: Return on Assets (ROA)

Table 4: Return on Assets (ROA)

| Return on Assets | 2021 | 2022 | 2023 |
|------------------------------------|-------------|-------------|-------------|
| Jordan Islamic Bank | 1.11% | 1.12% | 0.94% |
| Housing Bank for Trade and Finance | 1.33% | 1.59% | 1.64% |

As shown in **Table 4**, the **Return on Assets (ROA)** for **Jordan Islamic Bank** remained relatively stable between 2021 and 2022 (1.11% and 1.12%, respectively). However, there was a noticeable decline in 2023, with the rate dropping to 0.94%. This decline may reflect challenges in generating returns from assets in the final year, suggesting that the bank might be facing difficulties in effectively utilizing its resources to generate profits. This could

be due to various factors, such as a faster increase in assets compared to net income or a decline in returns from certain operational activities. The bank needs to analyze the reasons for this decline and take corrective actions to improve asset utilization efficiency.

In contrast to **Jordan Islamic Bank**, **Housing Bank for Trade and Finance** exhibited continuous improvement in its return on assets from 2021 to 2023. The return on assets increased from 1.33% in 2021 to 1.64% in 2023. This consistent increase indicates that the bank has successfully enhanced its efficiency in utilizing assets to generate profits. The bank may have adopted more effective strategies in asset management or expanded into higher-return activities. Furthermore, the bank's positive performance in 2023 reflects its ability to adapt to economic and operational conditions, thereby reinforcing its long-term financial stability.

When comparing the two banks, **Housing Bank for Trade and Finance** demonstrates a consistent improvement in its return on assets, indicating the bank's ability to increase profits from its assets effectively. On the other hand, **Jordan Islamic Bank** experienced a slight decline in its return on assets, indicating the need to review its strategies and improve the efficiency of asset utilization. Although both banks show the ability to generate profits, **Housing Bank** demonstrates more stability and better performance in recent years.

It can be concluded that **Housing Bank for Trade and Finance** is in a better position in terms of asset utilization efficiency, as it has shown continuous improvement in return on assets. On the other hand, **Jordan Islamic Bank** needs to reassess its asset management strategies and work on improving performance to achieve higher levels of efficiency in utilizing its resources.

Fourth: Return on Equity (ROE)

Table 5: Return on Equity (ROE)

| Return on Equity | 2021 | 2022 | 2023 |
|------------------------------------|-------------|-------------|-------------|
| Jordan Islamic Bank | 7.06% | 11.74% | 11.67% |
| Housing Bank for Trade and Finance | 9.26% | 10.69% | 10.88% |

The **Jordan Islamic Bank** showed a significant improvement in its **Return on Equity (ROE)**, rising from 7.06% in 2021 to 11.74% in 2022. This improvement reflects the bank's ability to increase its profits relative to shareholders' equity, suggesting effective strategies in capital management and generating returns. Although the **ROE** remained high in 2023 (11.67%), there was a slight decline compared to the previous year. This slight drop may reflect operational challenges, changes in capital structure, or a decrease in net income due to external factors. Nevertheless, the **ROE** remains at a strong level, indicating that the bank continues to generate value for its shareholders.

For **Housing Bank for Trade and Finance**, the **ROE** increased from 9.26% in 2021 to 10.69% in 2022, and then to 10.88% in 2023. This consistent rise indicates continuous improvement in the bank's efficiency in generating profits from shareholders' equity. This performance reflects the bank's ability

to enhance its equity management and create higher profits relative to the invested capital. It demonstrates that the bank is continually improving its financial and managerial strategies, enabling it to generate stable and increasing returns for its shareholders over time.

Notably, the **Jordan Islamic Bank** experienced a more significant improvement in **ROE** between 2021 and 2022, whereas **Housing Bank for Trade and Finance** demonstrated continuous improvement in **ROE** over the three years. Although **Jordan Islamic Bank** started at a lower level in 2021, it managed to significantly increase its **ROE** in 2022, albeit with a slight decline in 2023. On the other hand, **the Housing Bank for Trade and Finance has shown** consistent stability and gradual improvement over the years.

Regarding Return on Equity (ROE), it appears that Housing Bank for Trade and Finance has been steadily improving, suggesting that the bank consistently performs well. Meanwhile, Jordan Islamic Bank experienced an impressive improvement in 2022, only to see a slight decline in 2023. Both banks are performing well in terms of return on equity (ROE), but in this case, Housing Bank for Trade and Finance has the upper hand in terms of stability. The Bank's continuous improvement in this ratio indicates more profitability for the institution over the long term.

Fifth: Financial Leverage (FL)

Table 6: Financial Leverage (FL)

| Financial Leverage | 2021 | 2022 | 2023 |
|------------------------------------|-------------|-------------|-------------|
| Jordan Islamic Bank | 4.27 | 10.51 | 12.42 |
| Housing Bank for Trade and Finance | 6.77 | 6.71 | 6.53 |

The **Jordan Islamic Bank** showed a significant improvement in **financial leverage (Equity Multiplier)**, increasing from 4.27 in 2021 to 10.51 in 2022, and then reaching 12.42 in 2023. This sharp rise indicates a substantial increase in the bank's reliance on debt financing relative to shareholders' equity. This suggests that the bank is using more external funding (debt) to finance its assets. While this may reflect a strategy aimed at rapidly expanding assets, it also indicates a higher financial risk due to the increasing reliance on debt. Although this leverage may help boost profits if the debt is managed effectively, it also exposes the bank to higher risks in case of fluctuations in the financial markets or difficulties in servicing the debt.

In contrast, **the Housing Bank for Trade and Finance exhibited relatively stable financial leverage over the three years**. The ratio started at 6.77 in 2021, decreased slightly to 6.71 in 2022, and further declined to 6.53 in 2023. This gradual decrease suggests that the bank has become less reliant on debt financing compared to equity. This could reflect a more conservative approach to financial leverage, where the bank prefers to maintain a better balance between debt and equity, potentially reducing financial risks and enhancing long-term economic sustainability.

Comparing the two banks reveals different strategies in the use of financial leverage. **Jordan Islamic Bank** is more heavily reliant on debt

financing, which may accelerate asset growth in the short term but increases exposure to risks. On the other hand, **Housing Bank for Trade and Finance** appears more cautious in its use of debt, reflecting greater stability in its capital structure and a reduction in debt-related risks.

While **Jordan Islamic Bank** shows a significant increase in financial leverage, indicating potentially profitable expansion strategies if debt is well-managed, **Housing Bank for Trade and Finance** prefers to maintain a low and stable level of financial leverage, reflecting a more conservative financing policy. The strategy of **Jordan Islamic Bank** may be more vulnerable to risks in the event of economic fluctuations. In contrast, **Housing Bank for Trade and Finance** offers greater stability in its capital structure, enabling it to better cope with financial pressures.

Conclusion:

The analysis of operational efficiency of Jordan Islamic Bank in addition to Housing Bank for Trade and Finance was conducted using key financial ratios such as Return on Equity (ROE), Return on Assets (ROA), Asset Utilization (AU), Financial Leverage (EM), and Profit Margin (PM) for the years 2021 to 2023. A comparison of the different periods revealed that Jordan Islamic Bank showed improvement in Profit Margin among other indicators, but experienced a drop in Return on Assets during 2023. Conversely, Housing Bank for Trade and Finance remained steady in terms of improving Return on Assets and Return on Equity, but, when compared to 2022, experienced a reduction in Profit Margin in 2023.

Reviewing the Return on Equity (ROE) analysis, it became evident that Jordan Islamic Bank had a very good ROE improvement in 2022, but slightly worse in 2023. At the same time, Housing Bank for Trade and Finance was able to show consistent stabilization in ROE over the period of three years. Regarding financial leverage, while Jordan Islamic Bank increased its dependency on debt for asset financing, thereby increasing its debt risk, Housing Bank for Trade and Finance's less debt-reliant financing demonstrates a more prudent approach. With regards to Asset Utilization, Jordan Islamic Bank exhibited a progressive effective asset employment, whereas Housing Bank for Trade and Finance suffered a dip in 2023.

In light of these results, it is recommended that **Jordan Islamic Bank** should focus on improving its asset utilization efficiency and implement effective strategies to increase returns from its assets. The bank should also adopt a more balanced approach to financial leverage to reduce risks. As for **the Housing Bank for Trade and Finance, it should continue its financial stability strategy, focusing** on continuously improving operational efficiency. Overall, both banks need to review their cost management and profitability strategies to ensure sustainable growth in the future.



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