“The relationship between debt securities issuance, profit efficiency, and Jordanian commercial banks’ operational performance”

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THE RELATIONSHIP BETWEEN DEBT SECURITIES ISSUANCE, PROFIT EFFICIENCY, AND JORDANIAN COMMERCIAL BANKS' OPERATIONAL PERFORMANCE

Abstract

The purpose of this study is to investigate whether or not the issuing of debt securities and the effectiveness of profit management affect Jordanian banks' operational performance. The assessments are carried out with the help of data obtained from the financial statements of commercial banks that are listed on the Amman Stock Exchange (ASE) from 2016 to 2020. Estimation of the regression equation is performed with the help of the non-linear analysis. The study's findings showed that the issuance of debt securities has a significant (0.02) influence on banks' operational performance. Furthermore, profit efficiency has an insignificant (0.363) influence on banks' operational performance. Overall, the findings of the study are consistent with those of earlier empirical research. The most important contribution of this paper is that the determination of debt security issuers' prospects associated with the Jordanian economy can be improved, and financial institutions and commercial banks can take corrective measures to reduce variation and increase development.

Keywords debts, net interest margin, operational performance, profits, efficiency, commercial banks, ASE, SPSS, Jordan

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INTRODUCTION

The capital of a bank has a direct impact on its operational expenses. Banks should supply new funding sources to route credits (Tran & Nguyen, 2020). The capital ratio indicates an institution's financial soundness. Profit efficiency is affected by this ratio (Antoun et al., 2018). Debt gives the market a favorable signal.

Furthermore, information asymmetries between enterprises and investment firms mean funding expenses are decreased (Kedzior et al., 2020). According to Mittal and Raman (2021), a firm's finances follow a hierarchical structure. Initially, it arises from their funds, but loan financing should be considered if there are still gaps. Bankers who create bonds result from debt maturities being restructured, which refinance affects bank performance (Xu et al., 2018). Furthermore, the banking and financial services businesses are the ones that contribute the most to the issuance of corporate debt in Jordan. To preserve bank safety and health, banks must weigh the advantages and disadvantages of adopting large capital percentages (Kammer et al., 2015). The issuing of debt instruments (bonds) is favored since it is a less expensive type of funding than equity (Khan et al., 2016).

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The problem with this study lies in how bond issuance in the financial sector may be controlled by the banking industry. It explains how the financial markets may be leveraged to locate alternative financing sources. Furthermore, banks require alternative capital sources to deal with various potential internal liquidity shortages. Third-party funds are regularly used to supply internal liquidity, and their expansion tends to slow amid imminent inflationary pressures and reduced deposit rates (Casey & O'Toole, 2014). Commercial banks, as intermediate institutions, require adequate capital to expand credit and meet commercial banks' regulatory norms. This approach is more efficient since it is a direct action that promotes long-term economic growth without the need for any financial intermediaries (Warner & Sullivan, 2017). It is important to highlight that the reasons affecting bank bond issuance are currently being disputed (Astrauskaite & Paškevicius, 2014; Ben-Zion et al., 2018; González-Galarza, 2020; Kaya & Wang, 2016; Martellini et al., 2018). This study is different from others that have employed panel data analysis in terms of efficiency (Dimitras et al., 2018; Othman et al., 2017; Thilakaweera et al., 2016; Zameer et al., 2020).

This paper needed to look into what drives improvements in banks' efficiency. The development of a perceptual analysis to show the effects of debt issuance rules and profitability on the bank sample is novel in this study. This study differs from others in that it adopts a never-apply approach in Jordan. The goal was to compare and evaluate two essential policy metrics. First, the study asserted that "greater debt issues will inhibit corporate success" to the test (Heffernan & Fu, 2010). The non-linear test was carried out to determine the ideal bond issue size and whether it may reduce the functional efficiency of the financial system. Finally, the study focused on policies that had the most significant impact on bank operational performance. The data were categorized or separated to see whether there were any changes in the impact of enacting a bond issuing policy (Matuszak & Różańska, 2019).

1. LITERATURE REVIEW

The theoretical concepts behind the debt securities issuance strategy and its influence on the operational performance of Jordanian commercial banks may be defined using either debt securities issuance irrelevance or debt securities issuance relevance theory. Debt has various benefits over equity since it is not transaction sensitive: inside knowledge will not affect debt. Therefore, a bank's investment is an asset that supports an institution's operations effectively in credit distribution. Furthermore, an asset is a wealth description that includes an economic worth, a selling value, and an exchange value. The act of applying all corporate policies within a specific timeframe is referred to as operational performance (Djalilov & Piesse, 2016). In addition, the market price and the value in terms of a currency's trading pair make up the economic valuation of an asset. As a term, "operational performance" refers to how well a company can put its policies into action within a given timeframe (Djalilov & Piesse, 2016). One of the metrics used to evaluate the success of a bank's business as an intermediary is the institution's capacity to turn a profit. One way that businesses boost profits is by optimizing their return on assets (ROA). Return on assets is a typical metric utilized in analyzing financial institution efficiency. Return on investment (ROI) is an economic metric (Lo Duca et al., 2017; Saghi-Zedek, 2016). Meanwhile, return on assets (ROA) exemplifies how banks and other financial institutions generate revenue from their assets (Adam, 2014; Terraza, 2015; Yasser et al., 2017). ROA can also be used to measure a bank's operational efficiency (Buallay, 2019; Havidz & Setiawan, 2015; Abdeldayem & El-Sherbiney, 2018). This is because it shows how assets change during the fiscal year.

In contrast to bank loans, the advantage of issuing debt securities is that firms may reduce interest expenditures because interest margins do not fluctuate due to bank intermediary fees (Barrdear & Kumhof, 2022). Second, a bond loan has a more extended repayment period than a bank loan (Cumming et al., 2019). As a result, it is easier to construct the necessary capital structure (Ryu et al., 2018). Finally, there is no property depreciation, resulting in a lighter cash flow burden for the firm. Bonds are issued for a set period, whereas equity is issued indefinitely (Bagaria, 2016). The growth in bond financing in

emerging countries influences the reliance of businesses on bank borrowing. The fact demonstrates that firms consider issuing bonds when global interest rates fall. As a result of this situation, the bank loan is significantly more expensive, resulting in a decrease in bank capital (Eggertsson et al., 2019).

Additionally, the bonds-to-long-term-debt (BLTD) ratio was applied throughout this study (Ben-Zion et al., 2018). The BLTD ratio denotes the extent to which a company's bond valuation exceeds its book value. The sum of all future payments is due on all its long-term obligations. The study concluded that companies that increase their long-term debt also increase their safety measures. This study supports the theory that the overall amount of long-term debt is directly proportionate to the bond issuance volume and that the same holds true inversely. Therefore, bonds can boost bank performance as a source of capital.

Furthermore, alternative bank funding sources, such as bonds, can boost bank performance (Astrauskaite & Paškevicius, 2014). Concerns must carry out corporate operations and resolutions to pursue an expansion plan. Therefore, banks need to work together to move quickly and efficiently, maximizing the opportunities for the company's growth and expansion of its business reach. This bond financing aims to maintain a stable capital adequacy ratio (CAR). Furthermore, as bond interest rates have fallen, bank operating funding has grown through bond issuance, resulting in more significant bank interest margins. This impacts the improvement of bank performance (Erünsal et al., 2017). Following all of this empirical research, it is clear that no agreement has been achieved on the subject. Thus, this study explains the kinds of correlations and directions of causality between the variables.

The theoretical concepts behind the profit efficiency strategy and its influence on the operational performance of Jordanian commercial banks may be defined using either profit efficiency irrelevance or profit efficiency relevance theory. Efficiency measures a bank's ability to manage interest income so that it exceeds interest costs. Nevertheless, bank liabilities are viewed as a source of currency; they may be stated as an input character in the production theory. Assets show output characteristics since they utilize the money to generate most of the bank's cash revenue. Output measurements include financial assets, productive resources, total investment, bank deposits, the number of savings and credit accounts, and gross operating profit (Hughes & Mester, 2013). Developing content as a source of bank profit is analogous to inventory in industrial enterprises (Jing & Seidmann, 2014; Upadhye et al., 2010). Upadhye et al. (2010) say that productive assets like loans, securities, investments, and other investments that bring in money can be used as a measure of productivity.

Banking responsibilities have input qualities because they serve as the basis for capital investment. However, bank assets have output features since they allow banks to earn a portion of their direct revenue (Ahn & Le, 2014). Profit efficiency is one example of a profit-maximizing strategy (Pilar et al., 2018). Net interest margin (NIM) is a measure of profit efficiency (Marinkovi & Radovi, 2014). This study uses the input, output, and advantages of NIM banks (Lestar & Indarto, 2021). A financial institution's net interest margin (NIM) is the difference between the interest it earns and pays on all its interest-earning assets (including cash). Increases in the NIM allow for the more efficient administration of a bank's productive activities when measured against total earning assets (Galletta et al., 2021). The acronym NIM describes the interest earned on loan. The Net Interest Margin includes interest income from both credit and other fund placements (Angori et al., 2014). Therefore, NIM has a considerable and beneficial influence on total bank profitability. Following all of this empirical research, it is clear that no agreement has been achieved on the subject. Thus, this study explains the kinds of correlations and directions of causality between the variables.

The theoretical concepts behind the control variables strategy and its influence on the operational performance of Jordanian commercial banks may be defined using either control variables irrelevance or control variables relevance theory. The size of the banks is one of the statistically essential variables impacting the quantity of operational performance in the debt securities issuance literature. Larger banks are more likely to be politicized (debt securities issuance, stock price, and environmental operational responsibility). On the other hand, Nagano

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(2018) discovered that the size of a company had no moral effect on the amount of debt securities issuance and operational performance in Italian banks. Pigrum et al. (2016) confirmed an inverse relationship between bank size and debt securities issuance size in the same area.

Debt strains banks, increasing the probability of operational failure, which may require them to maintain a particular level of profit, as evidenced by insufficient debt securities issuance and operational performance. Delfino (2016) found that firms with a greater reliance on debt to fund their assets had lower financial reporting quality due to poor adherence to debt securities issuance and operational performance. Finishtya (2019) established a negative relationship between debt ratios and operational success. On the other hand, Mehari and Aemiro (2013) found a good link between debt ratio and operational success.

The investigation carried out for this study aimed to investigate the factors that influence the enhancement of the operational performance of banks. This is a groundbreaking study since it uses visualization to investigate how profit efficiency and debt issuance strategy affect bank samples. Furthermore, this study is distinguished from other investigations using the diagrammatic approach. As a direct result of this, the paper has the potential to generate the following hypothesis:

H1: Debt securities issuance strategy has a substantial impact on Jordanian commercial banks' operational performance.

H2: Profit efficiency strategies have a substantial impact on bank operational performance in Jordanian commercial banks.

2. DATA AND METHODOLOGY

In this study, the sample data criteria used were banks with unsettled bond values. The percentage of dominant ownership in a bank was more than 5%. In addition, from 2016 to 2020, they must publish their financial reports regularly. Furthermore, according to the Jordan Securities Commission, 13 commercial banks have outstanding bond values between 2016 and 2020. Put all of the examples in a table. ROA is used as a measurement of the operational success of a bank since it may identify changes in the bank's assets over a fiscal year. ROA measures how well a firm functions by comparing its profit to the capital invested in its assets. Because there is no measurement link with debt securities or knowledge of operating performance, the other parts of calculating profitability were not applied (Ozili & Uadiale, 2017). On the other hand, the banks' operational performance is characterized by its bond-issuing program and its plan for optimizing profits. The initial step involved running the whole bank sample set through the following model:

$$ROA_{All} = \beta_0 + \beta Y_1 X_1 BLTD_{All} + \\ + \beta Y_1 X_2 NIM_{All} + \beta Y_1 X_2 SIZE_{All} + \\ + \beta Y_1 X_2 LEV_{All} + \varepsilon_2. \quad (1)$$

The paper estimates the Return on Assets of the bank by:

$$ROA_{All} = \frac{NA_{All}}{TA_{All}}, \quad (2)$$

where ROA_{All} is the return on assets of all banks, NA_{All} is the net income of all banks, and TA_{All} is the total asset of all banks.

The constant value: β_0 is estimated where β_0 is the constant value that represents the operational performance and debt securities issuance that are unaffected by independent variables and control variables.

The regression coefficient of the debt securities issuance is estimated: $\beta Y_1 X_1 BLTD_{All}$, where $\beta Y_1 X_1$ is the regression coefficient of the debt securities issuance, and $BLTD_{All}$ is the debt securities issuance of all banks.

The regression coefficient of the profit efficiency is calculated: $\beta Y_1 X_2 NIM_{All}$, where $\beta Y_1 X_2$ is the regression coefficient of the profit efficiency, and, NIM_{All} is the profit efficiency of all banks.

The study estimates the regression coefficient of the bank size: $\beta Y_1 X_2\ SIZE_{All}$, where $\beta Y_1 X_2$ is the regression coefficient of the bank size, and $SIZE_{All}$ is the bank size of all banks.

The leverage ratio's regression coefficient is found using the following formula: $\beta Y_1 X_2\ LEV_{All}$, where

$\beta Y_1 X_2$ is the leverage ratio's regression coefficient using the following formula, and, $SIZE_{All}$ is the leverage ratio of all banks. Finally, the paper also estimates the random error item: ε_2

In addition, this paper aimed to determine the extent to which the two policies were carried out in different ways. Which particular limitations, levels of profit efficiency, or bond issuances have the most significant influence on the operational performance of Jordanian commercial banks? This study uses descriptive statistics such as mean, median, standard deviation, minimum, and maximum values to evaluate the relationship between the dependent variable, the independent factors, and the control variables. Finally, a regression analysis is carried out to determine the relationship between each predictor (also known as an independent variable) and the variable (the dependent variable) (Sarka, 2021).

3. EMPIRICAL RESULTS AND DISCUSSION

The arithmetic mean and standard deviation of the study were derived by the application of descriptive statistics to test hypotheses (Table 1).

Table 1. Descriptive statistics of ROA data

ROA_y	N	Min	Max	Mean	Std. Deviation
ROA2016	13	1	7	2.02	1.497
ROA2017	13	0	6	1.85	1.514
ROA2018	13	0	6	1.79	1.469
ROA2019	13	0	2	1.22	.523
ROA2020	13	0	2	.80	.429
Valid N (listwise)	13				

Table 1 presents a description of return on assets (ROA) during the study period (2016–2020), where the mean of the study sample (commercial banks) is organized from the highest mean to the lowest one. In 2016, the mean value was 2.02 dinars, with a standard deviation of 1.14, making it the year with the highest mean value. In 2017, the mean was 1.85 and the standard deviation was .85. 1.514. The following year, 2018, the mean was 1.79, while the standard deviation was 1.469. The highest mean is for 2019 with a mean of 1.22 and a standard deviation of 0.523, while the lowest mean is for 2020 with a mean of 0.80 and a standard deviation of 0.523 (0.429).

Table 2. Descriptive statistics of BLTD data

$BLTD_y$	N	Min	Max	Mean	Std. Deviation
BLTD2020	13	0	9	.92	2.465
BLTD2019	13	0	9	.92	2.465
BLTD2018	13	0	9	.92	2.465
BLTD2017	13	0	9	.92	2.465
BLTD2016	13	0	8	.77	2.204
Valid N (listwise)	13				

Table 2 illustrates BLTD during the study period (2016–2020). It is shown that the highest mean is equal to the lowest one. For 2020, 2019, 2018, and 2017, the means are 0.92, with a standard deviation of 2.465 for all as being the highest mean compared to 2016. In 2016, the mean was 0.77 with a standard deviation of 2.204.

Table 3. Descriptive statistics of NIM data

NIM_y	N	Min	Max	Mean	Std. Deviation
NIM2016	13	2	7	5.13	1.628
NIM2017	13	2	7	4.82	1.497
NIM2018	13	2	7	4.60	1.567
NIM2019	13	2	6	3.97	1.272
NIM2020	13	2	6	3.32	1.436
Valid N (listwise)	13				

Table 3 displays the expected values of NIM for the five years (2016–2020). With a mean of 5.13 and a standard deviation of 1.628, 2016 stands out as the most extreme year. In terms of the mean, it has never been higher. In 2017, a mean of 4.82 and a standard deviation of 1.514 were recorded. The mean and standard deviation for 2018 were 4.60 and 1.500, respectively (1.567). The average for 2019 is 3.97, while the std dev is 1.98. (1.272). For 2020, a mean is 3.32 and a standard deviation is 0. The mean is the highest for 2019 and the lowest for 2020 (1.436).

Table 4. Descriptive statistics of leverage data

$Leverage_y$	N	Min	Max	Mean	Std. Deviation
Leverage20	13	0	1	.54	.310
Leverage19	13	0	1	.38	.252
Leverage18	13	0	1	.36	.243
Leverage17	13	0	1	.23	.222
Leverage16	13	0	1	.18	.174
Valid N (listwise)	13				

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Many different kinds of leverage are broken out and illustrated in Table 4 (2016–2020). The mean value for 2020, which is 0.54, is the highest one that has ever been recorded. The standard deviation for 2020 is 0.310. Following that is the year 2019, which has a mean value of 0.38 and a standard deviation value of 0.525. In 2018, the average value was 0.36, while the standard deviation was 1 (0.243). With a mean of 0.18 and a standard deviation of 0.174, 2016 had the lowest mean of any year in the sample. The mean for 2017 is 0.23, and the standard deviation is 0.222. The mean for 2017 was the highest of any year, with a mean of 0.23 and a standard deviation of 0.222 (or 0.174).

Table 5. Descriptive statistics of bank size

$Size_y$	N	Min	Max	Mean	Std. Deviation
Size2016	13	1	27	4.77	6.942
Size2017	13	1	26	4.62	6.702
Size2018	13	1	26	4.54	6.703
Size2019	13	1	24	4.31	6.210
Size2020	13	1	24	4.08	6.264
Valid N (listwise)	13				

Table 5 demonstrates the medians for bank size. The highest mean was recorded for 2016, with a value of 4.77 and a standard deviation of 6.942. This was followed by 2017 with a mean of 4.62 and a standard deviation of 6.702, and then 2018 with a mean of 4.54 and a standard deviation of 6.703. In 2018, the mean was 4.54, and the standard deviation was 6.703. The mean for 2019 is 4.31, and the standard deviation for that year is 6.210. The mean for 2020 is 4.08, and the standard deviation for 2019 has the highest mean, and 2020 has the lowest mean (6.264).

Table 6 indicates the Pearson correlation. The direction of the correlation between independent and dependent variables can be determined by looking at the relationship between independent and dependent variables. It has been demonstrated that a positive correlation exists between ROA and NIM, BLTD, and Size; nevertheless, a negative correlation exists between leverage and ROA.

Table 7. Multicollinearity assessments using tolerance and VIF

Coefficients	
Collinearity Statistics	
Tolerance	VIF
.084	11.846
.902	1.109
.073	13.685
.596	1.679

The purpose of Table 7 is to introduce VIF, which is an attempt to quantify the degree of multicollinearity existing in a group of multiple regression variables. Due to their prevalence in multicollinearity detection (O'brien, 2007; Petter et al., 2007), the tolerance value and Variance Inflation Factor (VIF) were employed in this study to illustrate the issue. According to Hair et al. (2014), multicollinearity is not a problem unless the VIF is larger than

Table 6. Pearson correlation

Variables		ROA	NIM	Size	Size	Leverage
ROA	Pearson Correlation	1				
	Sig. (2–tailed)					
	N	13				
NIM	Pearson Correlation	.376	1			
	Sig. (2–tailed)	.206				
	N	13	13			
BLTD	Pearson Correlation	.142	.101	1		
	Sig. (2–tailed)	.644	.742			
	N	13	13	13		
Size	Pearson Correlation	.114	.158	.951**	1	
	Sig. (2–tailed)	.711	.606	.000		
	N	13	13	13	13	
Leverage	Pearson Correlation	−.242	−.305	−.424	−.539	1
	Sig. (2–tailed)	.425	.311	.149	.057	
	N	13	13	13	13	13

Note: ** Correlation is significant at the 0.01 level (2-tailed).

10. However, if the VIF is greater than 10, the predictor variables are highly correlated, indicating significant levels of multicollinearity (Bowerman & O'Connell, 1990). Tolerance values ranged from 0.073 to 0.902 in Table 7, whereas VIF numbers ranged from 1.109 to 13.685. Therefore, it may be concluded that multicollinearity did not exist between the independent variables.

Table 8. Regression analysis testing the relationship between BLTD and ROA

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.263	.193		6.537	.000
	BLTD	.305	.078	.763	3.917	.002
	F	15.343				
	R Square	.582				
	Adjusted R Square	.544				

Note: a. Dependent Variable: ROA.

Table 8 indicates that the value of the coefficient of determination is R2 = 0.582, which means that the independent variables have explained an amount of 58.2% of the variance in the ROA while keeping the other factors constant. It was also shown that the value of F reached 15.343. Table 8 also shows that there is a significant relationship at the p-value 0.02, which is below $\alpha \leq 0.05$.

Table 9. Regression analysis testing the relationship between NIM and ROA

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.645	.977		.660	.523
	NIM	.204	.215	.275	.948	.363
	F	.899				
	R Square	.076				
	Adjusted R Square	–.009				

Note: a. Dependent Variable: ROA.

It is demonstrated that there is an insignificant relationship between NIM and ROA at p-values greater than 0.05 (Table 9). It also indicates that the value of R2 is 0.076, which means that the independent variables have explained an amount of 7 % of the variance in the ROA while keeping the other factors constant. It was also shown that the value of F reached .899.

Table 10. Regression analysis testing the relationship between leverage and ROA

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.052	.513		4.002	.002
	Leverage	–1.523	1.298	.333	–1.173	.265
	F	1.376				
	R Square	.111				
	Adjusted R Square	.030				

Note: a. Dependent Variable: ROA.

Table 10 shows that there is an insignificant relationship between Leverage and ROA at the p-value of 0.265, which is higher than $\alpha \leq 0.05$. It also indicates that the value of R2 is 0.111, which means that the independent variables have explained an amount of 11% of the variance in the ROA while keeping the other factors constant. It was also shown that the value of F reached 1.376.

Table 11. Regression analysis testing the relationship between BLTD, NIM, and leverage toward ROA affected by bank size

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.241	1.034		.234	.821
	BLTD	.144	.292	.360	.493	.635
	NIM	.152	.166	.205	.917	.386
	Leverage	.590	1.256	.129	.470	.651
	Size	.068	.115	.460	.585	.574
	F	3.550				
	R Square	.640				
	Adjusted R Square	.459				

Note: a. Dependent Variable: ROA.

It is illustrated in Table 11 that there is an insignificant relationship between BLTD, NIM, and leverage toward ROA. It is also observed that BLTD significantly affected ROA, but the bank size has affected the relationship to an insignificant level. To conclude, it can be said that size as a control variable has insignificantly affected the relationship between BLTD, NIM, and leverage toward ROA as

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the p-values were higher than $\alpha \leq 0.05$. It also indicates that the value of R2 is 0.640, which means that the independent variables have explained an amount of 64% of the variance in the ROA. It was also shown that the value of F reached 3.550.

According to the findings, debt securities issuance (BLTD) significantly affects the operational performance of Jordanian commercial banks. The results suggested that the issuance of debt securities (BLTD) substantially influenced Jordanian commercial banks' operational performance; = 0.305; P 0.02. As a result, H1 was supported, so raising the standard deviation in Jordanian commercial bank operational performance generated a 0.078 rise.

On the other hand, profit efficiency (NIM) has an insignificant impact on the operational performance of Jordanian commercial banks. The findings suggested that profit efficiency (NIM) has a substantial unfavorable influence on Jordanian commercial banks' operational performance; = 0.204; P 0.363. As a result, H2 was supported, so raising the standard deviation in Jordanian commercial bank operational performance generated a 0.215 rise.

The analysis found that a policy focused on increasing profit efficiency was the most critical factor in improving banks' bottom lines. Examples of test results are shown in the preceding tables. Just like the BLTD coefficient, the NIM coefficient is meaningless. The takeaway for managers is that they need to formulate a profit-efficiency policy for their banks. The next stage was drafting a bond-issuing policy to improve operational efficiency. As part of any plan to increase profits, a bank's leadership must take steps to increase interest income. The increase in interest income is used as a benchmark for profit efficiency. However, it is viewed as minor when compared to cost effectiveness (Dong et al., 2016). Banks lose competitiveness if they charge excessively high lending interest rates.

Furthermore, the interest rate on bank loans in Jordan is also low. Commercial banks in Jordan have substantial operational costs since they must build branches in all parts of the country. Moreover, Jordan's debtors are dominated by micro and small company operators, operating expenses skyrocket, and increasing investment risk.

This study looked into whether or not the maximum allowable debt value was the correct value for debt instruments issued to improve banks' operational performance. Among commercial banks, BLTD has varying effects on return on equity. According to the findings of this study, all commercial bank samples issued bonds (debt securities). Consistent with past findings, it is reasonable to infer that banks have a substantial negative effect on enhancing banks' operating performance (Lestari & Indarto, 2021).

CONCLUSION

Measuring the economic impact of Jordan's commercial banks requires looking into how debt securities issuance, profit efficiency, and operational performance. Because of this, the study accomplished its primary aim: to determine the pace of economic growth. Primary data questions have been helpful in investigating the dynamics at play between the issuance of debt instruments and the financial health of commercial banks in the Jordanian economy. Furthermore, the determination of enhancement techniques for debt security issuance ratings has been achieved, which aids in formulating mitigation plans for the issues. Similarly, the study connects the future potential for improving economic growth through the relationship between debt security issues and operational success.

The study's findings indicated that higher debt issuance directly impacted bank performance. Using the non-linear test, which determines the best value of bond issuance that generates a drop in bank operational performance, the second assumption was that the more significant it was, the more probable it was that the bank would adopt profit-efficiency. The average values of NIM and BLTD during the 2016–2020 period of observation were used to display the samples into industries in regression analysis of bank data. The more likely it is that banks seek financing through bond issuance, the more likely it is that banks seek financing through a bond issue.

The data used in this study came from commercial banks' consolidated yearly financial statements, which posed a restriction. Consequently, a division based on business groupings or categories was not considered, with the bank functioning as the operating corporation. In addition, this study employed only bond issuance as a measure of debt security financing. The study did not use other loan instruments such as Sukuk (sharia-based bonds). Future research should use the generalized method of moments, known as an adjustment dynamic, to come up with a more consistent estimate.

The study of Jordan's rising economy requires more investigation into the connection between the issuance of debt securities and operational success. Furthermore, debt security issuers' prospects associated with the Jordanian economy can be improved by undertaking similar research in the future. It is critical to do the same analysis to determine the contributions of other financial institutions to economic development. The utilization of this study to overcome challenges linked to issuing debt securities can be utilized as a technique to assess variance in operational performance. As a result, financial institutions and commercial banks can take corrective measures to reduce variation and increase development.

AUTHOR CONTRIBUTIONS

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