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An Empirical Investigation of Commercial Banks' Impact on Financial Management, Macroeconomic Factors, And Financial Risks

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Abstract

An extensive empirical analysis into the complex interplay among financial risks, macroeconomic variables, financial management techniques, and commercial banks is carried out in this research report. This study attempts to shed light on how financial management strategies, macroeconomic variables, and associated risks influence and are influenced by commercial banks using real-world data analysis and sophisticated statistical approaches. For investors, banking professionals, and policymakers looking for a thorough grasp of the complex factors influencing the stability and resilience of the banking industry in the face of economic problems, this research offers insightful information.The value of the banking area is impacted by various macroeconomic variables, financial management, and risk consideration, and academics ought to give specific consideration to this part. This article looks at how economic hazards like credit and finances, economic variables, and methods for managing money like returns on assets (ROA) as well as returns on equity (ROE) impact Jordanian commercial Banking firm value. For the evaluation, Bank of Jordan discretionary data for the years 2012–2021 was obtained. The fixed-effect framework and the robust measurement error were used in the review to investigate the relationships between the variables and elements. The essay assists policymakers in determining ways for increasing bank value by focusing on financial management and limiting financial risk.

Keywords: macroeconomic factor, commercial bank, financial risk, financial management.

1. Introduction

According to Ongore, countries' economic resource allocation relies heavily on commercial banks. They add to economic growth of the nation by making reserves accessible for financial backers to get as well as financial extending in the nation.Some econometric factors, including loan fee, financial management, and financial risk influence the worth of an organization. On the off chance that the econometric components are positive, for example, bank-good or increasing financing costs, it helps the banks in keeping up with their profit and firm worth [1]. Assuming banks have more noteworthy profits from resources (limit of resources for create more income) or dividends on value (limit of value without liabilities to produce more incomes), this demonstrates capable income the executives. Subsequently, profits on shares increment, and the business value rises [2]. Furthermore, credit danger is a kind of monetary danger that occurs when an applicant fails to repay the amount borrowed or their salary, and liquidity threat is often associated with an association's inability to convert its assets into cash and continue with transactions.The association's worth reductions subsequently. This study aims to find out how Jordanian business banks' firm worth is affected by credit risk, liquidity risk, loan fees, and ROA, ROE, and loan fees. Jordan has the biggest economy in the Middle East and is one of the developing business sector economies. By 2022, the country's clear GDP is expected to reach $1.39 trillion. There is no greater importance for the financial sector of the Jordanian economics.

The foundation of any country's financial system is its commercial banks, which are essential for promoting economic expansion, easing commerce, and distributing capital to different economic sectors. Commercial banks face a variety of difficulties in the dynamic and interconnected global economy of today, including changing financial management techniques, volatile macroeconomic conditions, and intricate financial hazards. It is crucial to comprehend the complex interrelationships among commercial banks, financial management techniques, macroeconomic variables, and financial dangers in order to guarantee the stability, adaptability, and longevity of the banking industry [3].

The environment in which the banking sector functions is continually evolving due to changes in market dynamics, regulatory frameworks, and global economic trends. Therefore, it is crucial to understand how commercial banks affect financial management techniques, macroeconomic factors, and financial hazards. The goal of this research is to close the knowledge gap between theory and practice by offering empirical data that supports regulatory agencies, the banking industry, and the larger financial community in their decision-making processes [5].

Commercial banks must successfully manage their financial resources, adjust to macroeconomic changes, and reduce a variety of financial risks, including credit, market, and operational risks. Furthermore, a comprehensive awareness of the factors influencing banks' financial management decisions and their subsequent impact on the stability and growth prospects of the sector is necessary due to the dynamic nature of the banking industry and economic uncertainty. In-depth empirical research that examines the complex interactions between financial management strategies, macroeconomic factors, and the financial risks that commercial banks confront is necessary to address these issues [6].

1.1. Objective of Study

The goal of this analysis is to determine how macroeconomic forces, such as borrowing costs, managing money, ROA, and ROE, affect the value of an organization. Examining the impact of financial hazards on the worth of the company, such as liquidity and financial risk, is one of its objectives. The value of the connection has been the focus of many analyses. Either way, this article's subject represents a major commitment to learning.

1.2 Significance of the Study

For a wide range of stakeholders, such as legislators, buyers, regulators, and financial institutions, this research has significant implications. The results can help banks make strategic decisions on how to manage risk, make investments, and run their operations more efficiently. The research findings can be used by regulatory organizations to create rules that improve the stability of the banking industry. Investors can make better investment selections by learning more about the variables affecting banks' financial performance. Additionally, the study adds empirical information to the body of knowledge already known in the domains of banking, finance, and economics, which advances scholarly debate.

1.3 Research Gap

The current evaluation is definitely more thorough than the previous investigation into the value of a company. Business esteem has been analyzed in the literature utilizing econometric elements, financial management feasibility, or financial

risk the board adequacy. The proceeding with assessment shuts this hole by surveying the effect of financial factors, for example, loan costs, financial risk like ROA and ROE, and monetary gamble, for example, credit hazard and liquidity risk on an association's worth. Second, the current investigation has centered on financial risk for organizations as a whole, financial management, and firm value in terms of econometric factors. This research aims to explore the relationship between a bank's value and statistical characteristics, financial danger, and financial oversight. Third, if they want to maintain the confidence of investors and financial supporters, a number of Jordanian commercial banks need to focus on enhancing their company value. Either way, not a lot of research has been conducted on interest rates, firm value, risk such as credit, liquidity, ROA, and ROE. The study closes a gap in the literature by examining how these variables affect Jordanian commercial banks' organizational structure.

2. Literature Review

2.1. Macroeconomic factors

The significance of the organization's high worth in enlisting loan specialists, financial backers, and investors, as well as guaranteeing their proceeded with business, couldn't possibly be more significant. A couple of parts add to the worth of the business, while others might be a hindrance to keeping up with firm worth [3]. A company's value may increase due to a variety of economic factors, including loan costs, managerial financial metrics including ROA and ROE, and monetary risk metrics like liquidity and financial risk.

2.2. Financial management

Likewise with different establishments, banks have procuring the executives entrusted with observing and keeping up with the organizations' income sources. Financial administration employs Returns on Assets, or ROA, as a measure to fulfill their obligations and as a tool to evaluate the efficiency of a business [4]. Assume that the return on assets (ROA) for this time cycle is larger than it was for the previous one. Overall, it demonstrates that financial organizations are generating more cash and that their capacity to generate more significant gains has expanded. The organizations with a better presentation of financial management, as confirmed by rising profits from resources, can deliver significant profits on their portions, expanding their portion costs and working on their performance [5].

2.3. Financial Risks

According to Zhang, Cui, and Xie (2020), firms suffer financial risks and the market value of their securities or shares decreases when credit risk apprehension or exposures rise [6]. Studies looked at how credit risk affected firm value in their publications [7]. According to the research, individuals in need may get loans from banks as well as other financial organizations. The businesses taking advantage of these incentives may run the danger of not getting their money back. Quick response to credit risk may have an impact on marketplace cost, share exchange, and advantages. Subsequently, the value of firm decreases as credit risk increases. To keep up with their worth, banks that arrangement in real money and have the essential obligations of tolerating stores and giving credit should have a lot of money close by or assets that can be quickly changed over into cash. Liquidity risk, on the other hand, refers to the possibility of losing money if the association is unable to make payments on time or at a reasonable cost, which would lower its value [8].As a result, the liquidity risk dampens monetary exchanges, reduces overall profit, and lowers share prices in the country. As a result, company value and liquidity risk have a negative connection.

2.4 Financial Management Strategies in Commercial Banking

A wide range of tactics are used in commercial banking's financial management to manage risks, optimize the use of financial resources, and ensure long-term growth and profitability. Commercial banks need these strategies in order to meet the many needs of its stakeholders and clients, comply with regulatory obligations, and traverse the complex financial landscape [9]. The following are important financial management techniques used by commercial banks:

- Liquidity Management: In order to cover depositor withdrawals and unforeseen cash outflows, commercial banks need to keep an ideal level of liquidity. In order to effectively manage liquidity, cash reserves must be used, short-term assets and liabilities must be balanced, and liquidity stress testing must be used to determine the bank's resilience to unfavorable events.

- Asset-Liability Management (ALM): The goal of ALM techniques is to align the interest rate and maturity characteristics of liabilities and assets. ALM is a tool used by banks to reduce interest rate risk and maximize net interest revenue. Through the alignment of loan, deposit, and other financial instrument cash flows, banks can reduce their vulnerability to changes in interest rates.
- Credit Risk Management: With regard to their loan portfolios, commercial banks evaluate and manage credit risks. This entails creating risk-based pricing mechanisms, diversifying the loan portfolio, determining acceptable lending limits, and conducting in-depth credit analyses of borrowers. In addition, banks use credit scoring models and credit risk management strategies including credit derivatives and collateral [10].
- Capital Adequacy Management: Banks must keep enough capital on hand to cover unforeseen losses and keep regulators and depositors confident. Optimizing the bank's capital structure, making sure it complies with Basel III and other regulatory capital standards, and determining the risk-adjusted return on capital (RAROC) for different businesses are all part of capital adequacy management.
- Operational Risk Management: Strategies for managing risks resulting from people, systems, internal processes, and external events are included in operational risk management. To reduce operational risks, banks use strong internal controls, frequent audits, and employee training. Insurance coverage and business continuity planning are also essential for reducing the effects of operational disruptions.
- Cost Control and Efficiency Improvement: In order to increase profitability, banks concentrate on reducing operating expenses and boosting efficiency. This entails renegotiating vendor contracts, improving staffing levels, investing in technology to automate repetitive operations, and streamlining processes. To guarantee operational effectiveness, cost-to-income ratios are regularly checked [11].
- Capital Budgeting and Investment Decisions: Commercial banks assess possible investments thoroughly, weighing the risks and rewards involved. Capital budgeting methods such as net current value the inner rate of returns (IRR), and payback time analysis help banks make educated choices about expenditures in equipment, facilities, and new business ventures.
- Reporting on risks and complying with regulations: Banks have robust conformity departments and spend much in them to ensure that they fulfill local, state, federal, and international regulations. They establish risk control groups, draft risk regulations, and provide regular reports to governing bodies. Understanding and abiding by anti-money laundering, or AML, and know your client (KYC) regulations is essential to ensuring legal compliance.[12].

Commercial banks can improve their stability, profitability, and ability to withstand changes in the market and economic conditions by putting these financial management strategies into practice. These strategies help banks manage risks, maximize their financial resources, and provide value to both shareholders and customers.

3. Methodology

3.1. Data Collection

The review looks into how Jordanian commercial banks' firm worth is affected by loan cost, ROA, ROE, credit, and liquidity. From 2012 to 2021, the review obtained secondary data from the Bank Jordan. The review focused on the main 27 recorded commercial banks' resources.

3.2. Data Analysis

As the dependent variable, the cost book esteem proportion, or market worth to book esteem, was used to work out the worth of the undertakings in the review. In addition, three indicators were used in the evaluation: macroeconomic factors like interest rates, Macroeconomic considerations include financial risk such as credit danger and liquidity risk, as well as accounting decisions such as ROA and ROE.

3.3. Statistical Analysis

The article used descriptive statistics to examine the overall nuances of the factors used. Furthermore, the focus used the correlation matrix to examine the directional relationship between components. Besides, the article utilized the difference expansion factor (VIF) to test for multicollinearity. In addition, the article relied on the Hausman test to validate the

model. The indicted FEM with a probability of less than 0.05 is acceptable, while the exposed random effect with a probability of greater than 0.05 is acceptable. Finally, the Hausman test results support the use of the FEM in the article.

4. Results and Discussion

The article used descriptive statistics to examine the overall subtleties of the factors used, and the total sample size is 255 (see table 1).

Table 1: All factors' descriptive statistics

Factor	Mean	SD	Minimum	Maximum
Firm Value	0.470	1.210	0.434	0.722
Interest Rate	7.194	0.285	5.194	10.094
Rate of Assets	0.276	1.025	0.195	0.764
Rate of Equity	0.653	0.221	0.439	0.912
Credit Risk	0.270	1.103	0.106	0.873
Liquidity Risk	1.231	0.274	1.003	1.765

Furthermore, the focus used the correlation matrix to examine the directional relationship between factors (see table 2).

Table 2: Correlation matrix of Factors

Factor	Firm value	Interest rate	Rate of Assets	Rate of Equity	Credit Risk	Liquidity Risk
Firm Value	1					
Interest Rate	.455	1				
Rate of Assets	.904	.730	1			
Rate of Equity	.668	.767	.270	1		
Credit Risk	-.339	-.115	-.325	-.230	1	
Liquidity Risk	-.385	-.534	-.105	-.772	.375	1

In addition, multicollinearity is investigated using VIF in the article. The outcomes uncovered that the VIF values were under five and that there was no multicollinearity (see table 3).

Table 3: Variance Inflation Factor

Factors	Variance inflation factor	1/ Variation inflation factor
Interest rate	3.095	.323
Rate of assets	2.720	.368
Rate of equity	2.525	.396
Credit rate	2.179	.459
Liquidity rate	1.020	.980

Mean VIF	2.307	.434

Moreover, the Hausman test was utilized in the article to guarantee the model's legitimacy. Because the likelihood value was less than 0.05, exposed FEM is appropriate, as shown in table 4.

Table 4: Hausman Test

	Coefficient
Chi square test value	51.121
P - value	.004

According to the FEM findings, the firm worth of Jordanian commercial banks was significantly influenced by the interest rate, asset rate, and equity rate. The findings also showed that problems with credit and liquidity had a negative impact on Jordanian commercial banks' company value.

5. Conclusion

The research examined the relationship between interest rates, credit risk, liquidity risk, and managing money metrics including ROA and ROE. For the research, Jordanian business banks provided quantitative information on company value, risk of credit, liquidity, mortgage rates, property rates, and stock rates. The examination uncovered that financing costs, resource rates, and value rates are unequivocally connected with firm worth. The ascent in loan fees improves the association's monetary status and pay. This expands the association's fairly estimated worth. The company's market value rises when effective financial management transfers a high rate of assets. The discoveries uncovered that an association's securities exchange esteem increments when it produces more benefits and is ready to convey bigger profit on its segments. The data showed that credit risk, liquidity risk, or both have a negative correlation with a company's value. Benefits and investor value are lower in organizations with high credit risk openings. The organizations' financial situation deteriorates and their market value declines as the liquidity risk increases.

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