Blueprint Academic Publishers

Journal of Business, Economics and Management Research Studies
1(2)
Received: July 22, 2023
Revised: August 29, 2023
Published: September 8, 2023

Effect of Bank Efficiency Strategies on Firm Financial Performance among Banks in Kenya

Sitienei Hillary [1], Korir Michael [1] and Koske Naomi [2]

[1]Department of Management Science and Entrepreneurship, School of Business and Economics, Moi University, P. O. Box 3900 30100, Eldoret - Kenya

[2]Department of Accounting and Finance, School of Business and Economics, Moi University, P. O. Box 3900 30100, Eldoret - Kenya

Abstract

It is generally acknowledged that changes in interest rates have a significant impact on bank performance. The implementation of interest capping in Kenya not only affected bank performance but also altered bank strategies, including bank efficiency strategies. The objective of the study was to determine the effect of bank efficiency on bank financial performance among banks in Kenya. The study underpinning theory was the balanced scorecard model. The study used explanatory research design. Through this approach, the study sought to explain the relationship between variables and to identify the cause-and-effect relationship between bank efficiency strategies and firm financial performance. The target population for this study was 42 banks in Kenya and 35 banks were surveyed after the inclusion exclusion criteria. The fixed regression results for Bank Efficiency Strategies showed a positive and significant effect on firm financial performance (β= 0.4331749, p= 0.000). This means that a unit increase in bank efficiency strategies increased bank financial performance by 0.4331749 units. The findings imply that banks efficiency strategies such as restructuring, consolidation and digitization during interest capping period paid-off and that cost management at the various phases of a firm is a sustainable survival strategy in the wake of volatile business environment.

Keywords: Bank efficiency strategies, firm financial performance, bank size, and bank liquidity

Correspondence: hkhillary@yahoo.com

Competing interests: The authors have declared that no competing interests exist

Introduction

The success of a firm is a reflection of its capacity to use both material and human resources to meet its goals. It shows the relationship between the output outcomes and the input resources used in the process of business operations of enterprises and is regarded as the effectiveness of using business means during the production and consumption process (Savitz, 2013). Accordingly, bank performance is the accomplishment of the goals set forth by the bank within the agreed time frame and with the least amount of expenses while utilizing the resources at hand (Jansen, Simsek, & Cao, 2012). This is crucial for maintaining ongoing activity and ensuring that its investors receive a just return. Therefore, a bank's ability to sustainably generate a profit serves as its first line of defense against unforeseen losses. In order to guarantee more resilient banks capable of withstanding dynamic changes in the

business environment, regulators like CBK are also concerned about this (Mugo, 2018).

Both internal and external factors can be categorized as firm performance determinants. The management choices and strategic goals of the bank can be referred to as internal determinants of firm performance (Selvam, Gayathri, Vasanth, Lingaraja, & Marxiaoli, 2016) and (Elbanna, 2012). Differences in bank management objectives, policies, decisions, and actions have an impact on management effects, which are reflected in variations in bank operating results, including profitability. The profitability of the bank is directly impacted by internal factors, such as management decisions regarding risk and cost management, because the majority of these factors are kept private. Other internal variables like asset quality and liquidity are regarded as factors unique to banks. Low asset quality and insufficient liquidity are the two main reasons for bank failures and the major sources of credit and liquidity risk, respectively, that researchers pay close attention to when analyzing their effects on bank profitability (Deephouse & Jaskiewicz, 2013)

The factors that are not influenced by a specific bank's decisions and policies, but rather by external events, are referred to as external determinants of bank performance. PESTEL factors, which are a collection of political, economic, social, technological, ecological, and legal factors, are included separately in the performance analysis in order to distinguish their influence from that of bank structure and better understand how the latter affects profitability (Tan, Chew, & Hamid, 2017). In particular, the interest rate is a significant economic factor in this research project's analysis of bank performance. It has a significant impact on a bank's performance and can be divided into two main parts: the interest rate charged to depositors and the interest rate charged on loans. The term "spread" generally refers to the distinction between the deposit rate and the loan rate. Because it reflects the cost of intermediation that banks incur, the size of banking spreads can be used to measure the efficiency of the financial sector. The macroeconomic, regulatory, and institutional context in which banks operate is responsible for some of these costs, while the internal characteristics of the banks themselves are responsible for others. As a result, according to (Borio & Gambacorta, 2017), the most crucial indicator of bank profitability is the effectiveness of cost management.

Thus, both a financial and non-financial perspective are used to evaluate banking performance. Therefore, banks should place more emphasis on addressing both the non-financial and financial aspects of performance. This is due to the fact that bank performance is now a crucial component of contemporary bank strategic management. Banks rely on stable and enduring client relationships, which are largely dependent on employee performance, quality, and ability to meet client needs. By increasing the loyalty of current customers, lowering price elasticity, lowering marketing costs through effective word-of-mouth advertising, lowering transaction costs, and enhancing company reputation, for instance, superior customer satisfaction improves financial performance (Khan, Ali, Puah, Amin, & Mubarak, 2023). Therefore, the objective of this study was to determine the effect of bank efficiency strategies on firm financial performance of banks in Kenya.

Literature review

The study reviewed literature in relation to the concept of Firm financial performance, Bank efficiency strategies, theoretical framework and the empirical literature between Bank efficiency strategies and firm financial performance.

Firm financial performance

In almost all areas of strategic management, the idea of performance has received more attention in recent decades. Performance is a subjective perception of reality, which accounts for the numerous critiques of the idea and its metrics (Elena-Iuliana & Maria, 2016), (Mkandawire, 2015), and (Van Dooren, Bouckaert, & Halligan, 2015). The financial crisis that engulfed the world economy and caused a constant need for improvement in the area of entity performance is also to blame for the abundance of studies being conducted at the international level in the field of performance. The term "firm performance" is frequently used in academic writing, but it is only rarely defined. The existence of a confusion with this concept is being discussed more and more due to the numerous concepts used in defining performance. As a result, concepts like productivity, efficiency, effectiveness, economy, earning potential, profitability, competitiveness, etc. can be confused with firm performance. This is why a precise and unambiguous definition of the term "performance" is becoming more and more important. When compared to

intended outputs, an organization's actual results or output are called "firm performance." It refers to putting into action, achieving, finishing a task, carrying out a duty, or performing a specific activity. It is predicated on the notion that an organization is the voluntarily comingled of productive resources, such as people, property, and capital, with the aim of achieving a common goal (Tomal and Jones, 2015).

Profitability performance, growth performance, market value performance, customer and employee satisfaction, environmental performance, environmental audit performance, corporate governance performance, and social performance are some of the potential aspects of firm performance (Bătae, Dragomir, & Feleagă, 2021). Profitability Performance is a company's capacity to turn a profit. A profit is what remains after a business pays all expenses directly related to generating the revenue, such as those associated with producing a product, as well as other costs associated with carrying out its daily operations. The company's goal is to increase the wealth of its current shareholders (Anderson, Chandy, & Zia, 2018). Investor satisfaction can be attained through superior financial performance, which can be exemplified by profitability, growth, and market value. Profitability, growth, and market value are three factors that work best together. The profitability gauges a company's historical capacity for yielding profits. The price in the market is referred to as "market value performance." Like stock in a company, the financial asset should be valued in the market. The term "market value" is also frequently used to describe a publicly traded company's market capitalization, which is calculated by dividing the number of outstanding shares by the stock price at the time (Glick & Hutchison, 2005).

Market Value, which represents the external evaluation and expectation of future performance of firms, is thought of as a potential variable. It should be related to past firm profitability and growth rates while also taking into account anticipated future market shifts and competitor activity. Effective risk mitigation and return maximization are provided by the diversification strategy. Thus, an important consideration is a company's market value as well as the capability of forecasting stock trends using data that has been made publicly available. Investors in general and those who are involved with publicly traded companies should both be aware of information related to stock returns. Anomalies in the market enable investors to profit from changes in the market. The stock market's indicators of financial report and other necessary information reveal how to maximize stakeholder and investor value through better business operation performance. The share price performance is revealed by studies on weak form efficiency and semi-strong form efficiency. The firm's growth performance is defined as an increase in size and/or maturity, frequently over time. Typically, growth happens as a phase of maturation or as a path toward completion or fulfillment (Lingaraja, Selvam, & Venkateswar, 2015).

The expansion shows a company's historical capacity to grow. Even at the same level of profitability, the size expansion will result in a greater overall profit and cash flow generation. Larger companies may benefit from economies of scale and market power, which will increase their long-term profitability. Stock indices serve as a benchmark for evaluating the performance of the stocks included in that index in addition to serving as an indicator of market movements, which have a significant impact on economic growth (Rajesh & Bhaskar, 2015).

Bank efficiency strategies

Efficiency is the capacity of an organization to produce its intended results with the least amount of input (Abii, Ogula, & Rose, 2013). It emphasizes the use of minimal inputs to produce the best output through resource optimization to produce the best products at the lowest possible cost. In the context of banking, a financial system's contribution to productivity and economic growth increases with how effectively those resources are generated and distributed. The definition of efficiency in terms of cost reduction and profit maximization is the same (Jaouadi & Zorgui, 2014). Due to an interest cap law that reduced lending margins, Kenyan banks have been operating in a low interest rate environment since late 2016. Commercial banks needed to maximize efficiency and cut costs in such a setting. As a result, banks implemented strategies such as restructuring, digitization, and process innovations to combat interest rate capping.

Significant structural changes are made as a result of firm restructuring, which may also include the establishment of new divisional boundaries, a reduction in hierarchy levels and the spread of control, a reduction in product diversification, a

reevaluation of compensation, a balancing of processes, and a reformation of governance while reducing employment. It entails reducing management levels, changing the company's constituents through divestiture and/or acquisition, and reducing the number of employees. Bank restructuring is typically done to address issues with individual banks that are having issues with efficiency or to address issues that are affecting the entire banking system, like declining revenue margins, and to restore and maintain faith and confidence in the individual banks' profitability and efficiency within the banking system (Hoenig & Morris, 2012).

The restructuring process is used by organizations to reorganize their operations for a variety of reasons, according to contemporary literature. These include business and economic variables like environmental changes, political variables, and globalization. Other causes include the decision to target different customer demographics, the opening of new service outlets through a merger, acquisition, or internal expansion, and the addition of new product lines and production facilities. As a result, the purpose of corporate restructuring may be one or many, with its primary goal being to contribute to the success of the organization. A successful corporate restructuring company won't point out problems where money is lost, but other solutions can be offered to help a business figure out how to handle these strategic problems. Corporate restructuring ultimately supports the recovery, preservation, and enhancement of an organization's value (Goodhart & Avgouleas, 2014).

Four approaches are used in corporate restructuring strategies: financial, portfolio, operational, and organizational. Portfolio restructuring is the alteration and manipulation of a portfolio through the sale of unnecessary assets and the replacement of those assets with those that are essential to the operation of the organization. Organizational restructuring can range from changes in institutional human resource policies as a result of shifts in the environment the organization operates in or based on the circumstances of the firm, whereas financial restructuring is a process meant to prevent a company from going out of business. Organizational restructuring also entails significant structural changes, such as the establishment of new divisional boundaries, a reduction in hierarchy levels and the spread of control, a reduction in product diversification, a review of compensation, a balancing of processes, and a reform of governance while a decrease in employment (James & Joseph, 2015).

Theoretical framework

The Balance Scorecard (BSC), which has a strong connection to firm performance, served as the study's theoretical cornerstone. A company's performance, which is directly influenced by the creation and implementation of sound strategies, determines its long-term success. Companies are aware that having the appropriate strategies and a way to track performance are essential for their survival in the cutthroat business environment of today. Therefore, businesses strive to create the best performance management strategies in order to comprehend how their operations work and how they can improve. Systematic and occasionally ad hoc performance measurement is done across the board. The challenge that many businesses have encountered is the creation and use of the appropriate measurements that will drive the strategy to increase performance. Traditional accounting metrics, which primarily concentrate on financial factors, have come under fire and been branded as irrelevant and outdated (Kaplan and Norton 1992). Because of this, the emphasis on non-financial measures of performance is currently gaining ground and more support from the business community. The balanced scorecard is a performance measurement tool that has gained popularity in both literature and practice (Hansen & Schaltegger, 2016).

A Balanced Scorecard (BSC) is a management tool that links objectives, initiatives, and measures to an organization's overall strategy in order to implement and manage strategy at all levels of an enterprise. It is a performance measurement technique with goals created based on viewpoints, standards, and strategic actions grouped in accordance with a predetermined structure that enables organizations to define their vision and strategy and put them into practice. The term "balanced scorecard" refers to the idea of using both conventional financial measures and strategic metrics to obtain a more "balanced" picture of performance (Awadallah & Allam, 2015). The balanced scorecard idea has developed beyond the straightforward application of perspectives to become a comprehensive system for managing strategy. The ability to "connect the dots" between

the various elements of strategic planning and management is one of the main advantages of using a disciplined framework. This means that there will be a clear connection between the initiatives and programs that people are working on, the metrics being used to track success (KPIs), the strategic goals the organization is trying to achieve, and the mission, vision, and strategy of the organization.

By converting an organization's visions and strategies into operational objectives and performance measures for the discernable perspectives, the BSC was first introduced by (Kaplan & Norton, 2007) as a measure to evaluate firm performance from both financial and non-financial perspectives. Traditional financial metrics by themselves cannot be used to assess organizational performance, according to (Kaplan & Norton, 2001). The value of intangible and intellectual assets, which are becoming more significant in today's knowledge-based economy, is not taken into account by such conventional measurements. The Balanced Scorecard aims to give managers richer and more pertinent information about the activities they are managing than is provided by financial measures alone by combining financial measures and non-financial measures in a single report. Kaplan and Norton suggested that the number of measures on a balanced scorecard should also be limited and grouped into four categories to improve clarity and utility. The original definition of the balanced scorecard was vague beyond this. However, it was immediately apparent that choosing the right measures for filtering and clustering would be a crucial task. Kaplan and Norton suggested that the selection of measures should concentrate on data pertinent to the execution of strategic plans and that straightforward attitude questions be used to assist in determining the proper allocation of measures to perspectives. The financial, customer, internal processes, and learning and growth perspectives are the four main categories or perspectives for strategy implementation that make up the balanced scorecards core (Kaplan & Cooper, 1998).

Empirical literature Review

The study looked at the body of research on bank performance and corporate financial health. Efficiency, according to Drucker (1963), is the capacity of an organization to produce its intended results with the least amount of input. He defines "doing things right" as efficiency, which is the highest possible ratio between the output and the input of the product development process. This ratio demonstrates the best use of the resources that are at hand and would enable achieving the maximum. The fundamental objective of efficiency is to deliver high-quality goods and services to customers in the most affordable and timely manner possible without sacrificing quality, allowing businesses to grow their revenue and performance (Chortareas, Girardone, & Ventouri, 2012). This is due to the fact that increasing efficiency has a direct impact on how well businesses perform and is frequently accomplished by streamlining businesses' core processes in order to effectively and economically respond to constantly changing market forces (Liu, Ke, Kee Wei, & Hua, 2013).

A broader definition of efficiency takes into account scale and scope economies: an efficient firm is one that grows to the ideal size for its sector (scale) and produces the ideal product mix given the costs of its inputs (scope) (Harjunkoski et al., 2014). Scale economies often arise from the ability of larger firms to allocate fixed costs, such as advertising expenses or the cost of technology, across a greater volume of output. Revenue scale economies can arise if customers prefer to deal with large banks, for example because of the convenience of one-stop shopping or because of the importance of the branch network (Van Reenen, 2018). Scope economies may result from sharing information, such as knowledge of customers' habits, across product lines. Beyond a certain scale or scope, diseconomies may appear as manager's move beyond their areas of expertise or as size and the internal hierarchical structure of firms reduces the control of owners over managers. Minimum efficient size and optimal product mix vary with technology, regulation and consumers' tastes.

Businesses create and modify their business models to increase efficiency and successfully compete in a market. When the operating environment changes, banks typically reevaluate and/or modify their business strategies and models. For a bank to turn a healthy and sustainable profit, such evaluations and modifications of the business model are necessary (Koch & MacDonald, 2014). Since the differences in banks' business models could be systematically associated with differences in their performances and because of banks' special social and economic role, bank business models (BBM) are also of interest to the policymakers (Farnè & Vouldis, 2017)). Empirically, for the first element, banks resort to diversification by defining a bank's

strategic choice possibility set with respect to sources of income. Secondly, banks attain efficiency by redesigning their cost levels by minimizing redundancy and waste while leveraging their resources that contribute to high performance by optimizing the use of workforce, technology and business processes. Reduced internal costs that result from efficiency help firms to be more successful in highly competitive markets, thereby achieving higher performance. Thus, the pursuit of efficiency is a fundamental concern for all businesses, including financial institutions and the common assumption, which underpins much of the efficiency research and discussion, is that increasing efficiency will lead to improved financial performance (Gill, 2015).

H_{01}: Bank efficiency strategies has no significant effect on firm financial performance among banks in Kenya

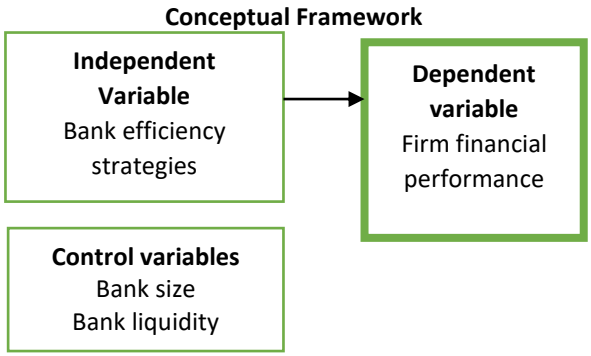

Figure 1: Conceptual framework

Methodology

The study took a positivism position. The study used explanatory research design. Explanatory research assesses the impact of specific changes to existing situations and goes beyond description to explain the reasons for a phenomenon in order to predict future occurrences (Wynn Jr & Williams, 2012). Considering the cross-sectional nature of the study with a view to explain the nature of the relationship between bank efficiency and firm financial performance, the explanatory research design was deemed most appropriate. The target population for this study was 42 banks in Kenya. All banks in Kenya formed the unit of analysis for the study and the sampling frame was CBK database for the year ended 2019. The inclusion criteria entailed banks which were in operation during the research period from 2013 to 2019 as per CBK database. The exclusion criteria entailed isolating banks that were placed under receivership or registered in Kenya after 2013. Therefore, the sample reduced to 35 banks. Secondary data from annual audited financial reports for the sampled banks for the periods 2013 to 2019 were used to meet the objectives of the study. Further, the CBK bank supervision annual report was also utilized to compliment bank annual audited financial reports. Data was analyzed using descriptive and inferential statistics. The study used measures of central tendency such as mean, and standard deviation to check for trends and to describe the data. The study also used Pearson's moment's correlation and hierarchical regression analysis to draw conclusion about the whole study population

Table 1: Measurements of variables

Variable	Type	Measurement	Reference
Firm financial performance	Dependent Variable	ROA=Total Revenue / Total Assets	(Marti, Rovira-Val, & Drescher, 2015), (DiSegni, Huly, & Akron, 2015), and (Eccles & Krzus, 2014)
Bank efficiency strategies	Independent Variable	cost-to-income ratio CIR=Operating Cost/Total Revenue	(Baik, Chae, Choi, & Farber, 2013), (Gill, 2014)and (David & NS)
Bank size	Control variable	Bank Size=Log of Total Assets	(Petria, Capraru, & Ihnatov, 2015), (Saeed, 2014) and (Antoun, Coskun, & Georgievski, 2018)
Bank liquidity	Control variable	Loan-to-Deposit (LD Ratio) =Total Loans/Total Deposits	(Wambu, 2013),

Model specification

$FP_{it} = \alpha + \beta_1 BS_{it} + \beta_2 BL_{it} + \varepsilon$ 1

$FP_{it} = \alpha + C + \beta_1 BE_{it} + \varepsilon$ 2

Results

The table 2 presents the descriptive statistics and correlation matrix of the variables under consideration, namely Firm Financial Performance (FP), Bank Efficiency Strategies (BE), Bank Size (BS), and Bank Liquidity (BL). These statistics provide insights into the central tendencies, variability, and relationships among these variables. Starting with the descriptive statistics, the mean represents the average value of each variable, while the standard deviation (SD) quantifies the dispersion or spread of the data points around the mean.

For the Firm Financial Performance, the mean is approximately 0.720 and the standard deviation is around 0.022. This suggests that the financial performance of firms, has a relatively narrow spread around the mean value of 0.720, indicating a certain level of consistency across the sample. Bank Efficiency Strategies, the mean is about 0.745 with a standard deviation of roughly 0.263. This indicates that the strategies employed by banks to enhance efficiency show relatively higher variability compared to the firm financial performance variable. The Bank Size, has a mean of approximately 10.849 and a standard deviation of 1.414. This suggests that bank sizes in the sample exhibit a wide range, with data points spreading out around the mean value. Lastly, Bank Liquidity, has a mean of around 0.752 and a standard deviation of roughly 0.168. This indicates that bank liquidity levels have relatively less variability compared to bank efficiency strategies and bank size.

Table 2: Descriptive statistics and correlation matrix

Variable	Mean	SD	FP	BE	BS	BL
FP	0.720414	0.0215203	1			
BE	0.7450336	0.2628885	0.5963	1		
BS	10.84872	1.413863	-0.6846	-0.3876	1	
BL	0.7521941	0.1681859	0.0537	0.0924	0.2226	1

FP: Firm financial performance, BE: Bank efficiency strategies, BS: Bank size, and BL: Bank liquidity

Turning to the correlation matrix, it's apparent that the correlation values range from -1 to 1, with 1 indicating a perfect positive linear relationship, -1 indicating a perfect negative linear relationship, and 0 indicating no linear relationship between the variables. In terms of inter-variable relationships, there is a positive correlation of 0.596 between Bank Efficiency Strategies and firm financial performance, suggesting that banks employing more efficient strategies tend to have higher firm financial performance. On the other hand, there is a negative correlation of -0.685 between Bank Size and firm financial performance, indicating that larger banks might have a slightly lower firm financial performance. Similarly, there is a positive correlation of 0.223 between Bank Liquidity and Bank size, implying that large banks tend to have higher liquidity. Additionally, there is a positive correlation of 0.092 between Bank Efficiency Strategies and Bank Liquidity.

The table 3 presents the results of a regression analysis that aims to understand the relationship between Firm Financial Performance and the predictor variable, Bank Efficiency Strategies, and control variables: Bank Size, and Bank Liquidity. Additionally, a constant term is included in the regression equation. The coefficients and p-values for each variable are provided, allowing us to assess the strength and significance of their effects on the dependent variable, Firm Financial Performance.

Starting with Bank Efficiency Strategies, the coefficient of 0.433 indicates a positive relationship between bank efficiency strategies and Firm Financial Performance. The coefficient suggests that, on average, a one-unit increase in bank efficiency strategies is associated with a 0.433-unit increase in firm financial performance. The associated p-value of 0.000 is significantly less than the conventional threshold of 0.05, indicating strong evidence that the relationship is not due to random chance. Therefore,

we can conclude that there is a statistically significant positive association between bank efficiency strategies and firm financial performance.

Bank Size had a coefficient of -0.004 signifying a negative relationship between bank size and firm financial performance. This implies that, on average, a one-unit increase in bank size is associated with a decrease of 0.004 units in firm financial performance. Similar to the previous variable, the p-value of 0.000 indicates that this relationship is statistically significant. Consequently, we can conclude that bank size has a significant negative impact on firm financial performance.

Bank Liquidity had a coefficient of 0.014 suggesting a positive relationship between bank liquidity and firm financial performance. This indicated that, on average, a one-unit increase in bank liquidity is associated with a 0.014-unit increase in firm financial performance. The associated p-value of 0.001 is below the significance threshold, indicating that the relationship is statistically significant. As such, we can infer that bank liquidity has a positive and significant influence on firm financial performance.

The constant term in the regression equation is represented by the coefficient of 0.066. This constant term captures the baseline value of firm financial performance when all predictor variable and control variables bank efficiency strategies, bank size, and bank liquidity are zero. The associated p-value of 0.000 suggests that this constant term is statistically significant, meaning that even without any input from the predictor variables, there is a significant baseline value of firm financial performance.

Table 3: Regression analysis

Variable		
Firm financial performance	**Coefficient**	**p-value**
Bank efficiency strategies	0.433	0.000
Bank size	-0.004	0.000
Bank liquidity	0.014	0.001
constant	0.066	0.000

Discussion

The positive coefficient for Bank Efficiency Strategies (0.433) suggests that as banks implement more efficient strategies, there is a significant improvement in their financial performance. This finding aligns with economic intuition: banks that optimize their operations and processes tend to allocate resources more effectively, leading to higher returns. Efficient strategies might involve streamlining internal processes, reducing costs, and optimizing resource allocation. Such efficient banks are likely to benefit from improved financial performance, which could contribute to enhanced profitability and competitiveness. This was consistent with the findings of (Chortareas, Girardone, & Ventouri, 2012) that the fundamental objective of efficiency is to deliver high-quality goods and services to customers in the most affordable and timely manner possible without sacrificing quality, allowing businesses to grow their revenue and performance, (Liu, Ke, Kee Wei, & Hua, 2013) that increasing efficiency has a direct impact on how well businesses perform and is frequently accomplished by streamlining businesses' core processes in order to effectively and economically respond to constantly changing market forces.

The negative coefficient for Bank Size (-0.004) indicates that larger banks are associated with lower firm financial performance. This finding may be due to several factors. Larger banks often have more complex structures and larger overheads, which can lead to higher costs. Additionally, larger banks might be more risk-averse and cautious in their lending practices, which could impact the availability of credit for firms. Smaller banks might offer more personalized services and be more agile in catering to the needs of firms, potentially leading to better financial performance.

The positive coefficient for Bank Liquidity (0.014) implies that more liquid banks experience improved financial performance. Bank liquidity is a measure of the bank's ability to meet its short-term obligations. A bank with higher liquidity can provide timely credit and support to its clients, which can positively influence the financial stability of those firms. More liquid banks are better positioned to weather economic downturns and capitalize on growth opportunities.

Conclusions and recommendation

In conclusion, the analysis undertaken through regression provided valuable insights into the complex relationships between various factors and Firm Financial Performance. The findings shed light on the significant influence of Bank Efficiency Strategies, Bank Size, and Bank Liquidity on the financial performance of firms. These conclusions had important implications for both firms and banks in their pursuit of growth, profitability, and stability. The positive relationship observed between Bank Efficiency Strategies and Firm Financial Performance underscored the importance of streamlined operations and resource allocation for achieving financial success. Banks employing efficient strategies are more likely to experience improved financial outcomes, as these strategies contribute to better resource utilization and cost management. The negative association between Bank Size and Firm Financial Performance suggests that while larger banks might offer advantages in terms of resources and services, they can also face challenges related to increased complexity and risk aversion. Smaller banks might be better positioned leading to enhanced financial performance. The positive correlation between Bank Liquidity and Firm Financial Performance highlights the critical role of liquidity management for banks. Banks that are more liquid are better equipped to navigate uncertain economic conditions, access deposits when needed, and capitalize on growth opportunities.

References

Abii, F. E., Ogula, D. C., & Rose, J. M. (2013). Effects of individual and organizational factors on the turnover intentions of information technology professionals. *International Journal of Management, 30*(2), 740.

Anderson, S. J., Chandy, R., & Zia, B. (2018). Pathways to profits: The impact of marketing vs. finance skills on business performance. *Management Science, 64*(12), 5559-5583.

Antoun, R., Coskun, A., & Georgievski, B. (2018). Determinants of financial performance of banks in Central and Eastern Europe. *Business and Economic Horizons, 14*(3), 513-529.

Awadallah, E. A., & Allam, A. (2015). A critique of the balanced scorecard as a performance measurement tool. *International Journal of Business and Social Science, 6*(7), 91-99.

Baik, B., Chae, J., Choi, S., & Farber, D. B. (2013). Changes in operational efficiency and firm performance: A frontier analysis approach. *Contemporary Accounting Research, 30*(3), 996-1026.

Bătae, O. M., Dragomir, V. D., & Feleagă, L. (2021). The relationship between environmental, social, and financial performance in the banking sector: A European study. *Journal of cleaner production, 290*, 125791.

Borio, C., & Gambacorta, L. (2017). Monetary policy and bank lending in a low interest rate environment: diminishing effectiveness? *Journal of Macroeconomics, 54*, 217-231.

Chortareas, G. E., Girardone, C., & Ventouri, A. (2012). Bank supervision, regulation, and efficiency: Evidence from the European Union. *Journal of financial stability, 8*(4), 292-302.

David, S., & NS, A. Effect of Management Efficiency on Performance of Listed Consumer Goods Companies in Nigeria.

Deephouse, D. L., & Jaskiewicz, P. (2013). Do family firms have better reputations than non-family firms? An integration of socioemotional wealth and social identity theories. *Journal of management studies, 50*(3), 337-360.

DiSegni, D. M., Huly, M., & Akron, S. (2015). Corporate social responsibility, environmental leadership and financial performance. *Social Responsibility Journal, 11*(1), 131-148.

Eccles, R. G., & Krzus, M. P. (2014). *The integrated reporting movement: Meaning, momentum, motives, and materiality*: John Wiley & Sons.

Elbanna, S. (2012). Slack, planning and organizational performance: Evidence from the Arab Middle East. *European Management Review, 9*(2), 99-115.

Elena-Iuliana, I., & Maria, C. (2016). Organizational Performance-A Concept That Self-Seeks to Find Itself. *Annals of'Constantin Brancusi'University of Targu-Jiu. Economy Series*(4).

Farnè, M., & Vouldis, A. (2017). *Business models of the banks in the euro area*: ECB Working Paper.

Gill, M. J. (2014). The possibilities of phenomenology for organizational research. *Organizational research methods, 17*(2), 118-137.

Gill, R. (2015). Why the PR strategy of storytelling improves employee engagement and adds value to CSR: An integrated literature review. *Public relations review, 41*(5), 662-674.

Glick, R., & Hutchison, M. (2005). Capital controls and exchange rate instability in developing economies. *Journal of International Money and Finance, 24*(3), 387-412.

Goodhart, C., & Avgouleas, E. (2014). A critical evaluation of bail-ins as bank recapitalisation mechanisms. *Available at SSRN 2478647*.

Hansen, E. G., & Schaltegger, S. (2016). The sustainability balanced scorecard: A systematic review of architectures. *Journal of Business Ethics, 133*, 193-221.

Harjunkoski, I., Maravelias, C. T., Bongers, P., Castro, P. M., Engell, S., Grossmann, I. E., . . . Wassick, J. (2014). Scope for industrial applications of production scheduling models and solution methods. *Computers & Chemical Engineering, 62*, 161-193.

Hoenig, T., & Morris, C. (2012). Restructuring the banking system to improve safetyand soundness. *Federal Deposit Insurance Corporation and Federal Reserve Bank of Kansas City*.

James, B. J., & Joseph, C. (2015). Corporate governance mechanisms and bank performance: Resource-based view. *Procedia Economics and Finance, 31*, 117-123.

Jansen, J. J., Simsek, Z., & Cao, Q. (2012). Ambidexterity and performance in multiunit contexts: Cross-level

moderating effects of structural and resource attributes. *Strategic Management Journal, 33*(11), 1286-1303.

Jaouadi, S., & Zorgui, I. (2014). Exploring effectiveness and efficiency of banks in Switzerland. *International Journal of Academic Research in Business and Social Sciences, 4*(4), 313-325.

Kaplan, R. S., & Cooper, R. (1998). *Cost & effect: using integrated cost systems to drive profitability and performance*: Harvard Business Press.

Kaplan, R. S., & Norton, D. P. (2001). Transforming the balanced scorecard from performance measurement to strategic management: Part 1. *Accounting horizons, 15*(1), 87-104.

Kaplan, R. S., & Norton, D. P. (2007). *Balanced scorecard*: Springer.

Khan, S. M., Ali, M., Puah, C.-H., Amin, H., & Mubarak, M. S. (2023). Islamic bank customer satisfaction, trust, loyalty and word of mouth: the CREATOR model. *Journal of Islamic Accounting and Business Research, 14*(5), 740-766.

Koch, T. W., & MacDonald, S. S. (2014). *Bank management*: Cengage Learning.

Lingaraja, K., Selvam, M., & Venkateswar, S. (2015). An empirical examination of returns on select Asian stock market indices. *Journal of Applied Finance and Banking, 5*(2), 97.

Liu, H., Ke, W., Kee Wei, K., & Hua, Z. (2013). Effects of supply chain integration and market orientation on firm performance: Evidence from China. *International Journal of Operations & Production Management, 33*(3), 322-346.

Marti, C. P., Rovira-Val, M. R., & Drescher, L. G. (2015). Are firms that contribute to sustainable development better financially? *Corporate Social Responsibility and Environmental Management, 22*(5), 305-319.

Mkandawire, T. (2015). Neopatrimonialism and the political economy of economic performance in Africa: Critical reflections. *World Politics, 67*(3), 563-612.

Mugo, A. W. (2018). *Preventing Failure Of Commercial Banks In Kenya: An Analysis Of The Supervisory Role Of The Central Bank.* University of Nairobi.

Petria, N., Capraru, B., & Ihnatov, I. (2015). Determinants of banks' profitability: evidence from EU 27 banking systems. *Procedia Economics and Finance, 20*, 518-524.

Rajesh, M., & Bhaskar, K. (2015). Impact of fundamental factors on share price movements-A study on select listed companies of Indian manufacturing industries in Bombay Stock Exchange. *Indian Journal of Applied Research, 5*(3), 208.

Saeed, M. S. (2014). Bank-related, industry-related and macroeconomic factors affecting bank profitability: A case of the United Kingdom. *Research Journal Of Finance And Accounting, 5*(2), 42-50.

Savitz, A. (2013). *Talent, transformation, and the triple bottom line: How companies can leverage human resources to achieve sustainable growth*: John Wiley & Sons.

Selvam, M., Gayathri, J., Vasanth, V., Lingaraja, K., & Marxiaoli, S. (2016). Determinants of firm performance: A subjective model. *Int'l J. Soc. Sci. Stud., 4*, 90.

Tan, L. H., Chew, B. C., & Hamid, S. R. (2017). A holistic perspective on sustainable banking operating system drivers: A case study of Maybank group. *Qualitative Research in Financial Markets, 9*(3), 240-262.

Van Dooren, W., Bouckaert, G., & Halligan, J. (2015). *Performance management in the public sector*: Routledge.

Van Reenen, J. (2018). Increasing differences between firms: market power and the macro-economy.

Wambu, T. M. (2013). *The relationship between profitability and liquidity of commercial banks in Kenya.* University of Nairobi.

Wynn Jr, D., & Williams, C. K. (2012). Principles for conducting critical realist case study research in information systems. *MIS quarterly*, 787-810.