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Research Article

Analyzing the Financial Performance of Banks Before and After Mergers and Acquisitions

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ARTICLE INFO **ABSTRACT**

Mergers and Acquisitions in the banking industry are now recognized as a make-or-break plan to increase visibility in the market, productivity, and value for shareholders. Nevertheless, the issue of the post-M&A banking financial performance issue still raises concerns, as the results of these transactions may differ due to numerous factors. This review seeks to evaluate the pre and post-M&As banks' financial performance using the following indicators; Return on assets (ROA), Return on equity (ROE), Earnings per share (EPS), and Net interest margin (NIM). It examines the role of internal M&A factors such as management actions and integration activities, and external factors including economic environment, regulatory environment, and competition on post M&A performance. Furthermore, the article presents methodological concerns like data constraints and problems in establishing the impact of M&As on financial performance. The results stress the need to assess the pre-acquisition environment and to implement the post-acquisition integration plans successfully to achieve the desired financial performance. The management of M&A transactions is a critical success factor as evidenced by the fact that well-managed M&As result in enhanced financial performance while on the other end of the spectrum poorly managed M&As result in poor financial performance and loss of market share. This review calls for more empirical studies to investigate the long-run financial effects of M&As in the banking sector, which provides important information for banking managers and policymakers to improve M&A strategies.

Keywords: Mergers and Acquisitions, Financial Performance, Banking Sector, Return on Assets, Return on Equity, Earnings Per Share, Net Interest Margin.

INTRODUCTION

Background and Purpose of the Review

M&As have also been common in the current banking system since institutions felt the need to complement competitiveness, efficiency, and larger market share. The banking industry around the world has experienced many changes in the past decades and this process is marked by consolidation tendencies. For example, M&A activities in the banking sector of the United States of America were on the rise in the late 1990s and early, 2000 and this was occasioned by several factors including deregulation and innovations in technology (Berger, Demsetz, & Strahan, 1999). This trend has not only changed the face of the banking industry but has also brought issues of financial performance of the merging companies into the forefront.

This paper seeks to review the literature on the impact of M&S on the financial performance of banks and the changes that occur to the various financial indicators. Therefore, creditable appraisal of the M&A's impacts on the financial performance is beneficial for investors, regulators, and the management of banks who need to predict the direction and investment result critically. Earlier empirical findings have presented ambiguous results concerning the financial gains from M&As; some of the research has shown enhanced profitability and efficiency in the post-M&A period and other research has pointed out the possibility of a post-M&A decline in performance (Bauer & Matzler, 2014). This review aims to make a clear analysis of the nature of bank performance in light of M&As, the determinants of success or failure of the transactions, and lessons that can be learned for future M&As.

Banking M&As and Financial Performance Indicators

The kind of mergers and acquisitions that can occur in the banking sector can be described as horizontal, vertical, and conglomerate mergers. Horizontal integration is the process where two banks join together intending to operate in the same market, to gain a larger market share and thus more business. Vertical mergers involve the acquisition of a bank with another institution that it buys services from for instance a mortgage lender or an insurance company. While, conglomerate merges involve the merging of banks with different product lines or areas of specialization (Abdulwahab & Ganguli, 2017). Both types of mergers involve specific risks and benefits that can sharply affect the financial results of the organizations.

In evaluating the pre-and post-M&As financial performance of banks, several financial indicators are used as follows. These are the return on assets (ROA), return on equity (ROE), earnings per share (EPS), and net interest margin (NIM). There is the Return on Asset which gives the ability of a bank to get a profit from assets or makes an evaluation of the efficiency of the bank in operation. On the other hand, ROE measures the kind of return that is produced on shareholders' funds, which indicates how efficiently the management uses capital (Altunbas, Evans, & Molyneux, 2001). EPS stands for Earning Per Share, which is the profitability of a bank per share, which is very important for investors. NIM evaluates the possibility of variation between interest income earned and interest expense, which reveals the extent to which a bank can optimize its interest-earning activities.

The examination of these measures before and after M&As allows the identification of conclusions about the financial effects of such transactions. However, it is important to note the limitations of these measures when used individually. Performance in a financial context is sometimes related to many factors such as market situations, little changes in the rules and regulations, and the management of the business organization. Thus, the eight M&A factors presented in this work imply that a more integrated approach that takes into account qualitative as well as quantitative measures is required for receiving a sensible view of the M&A effects (Adhikari, Kavanagh, & Hampson, 2023).

Antecedents Affecting the Financial Performance after M&A

As highlighted by this paper, internal and external factors define the post-M&A financial performance of banks. In its internal environment management decisions on integration processes, organization culture, and resource allocation have a significant impact on the success or otherwise of M&A transactions. Strategies when implemented with the overall goals and objectives of the merging entities considered could ease integration and improve efficiency (Allen & Gale, 2000). On the other hand, badly integrated strategies can affect the job satisfaction of the employees, organizational turnover, and a decline in productivity.

Externally, there is strong evidence that economic factors, as well as characteristics of the regulatory environment, exercise considerable pressure on merged banks' financial performance. In addition, competition in the banking sector can affect M&A outcomes because the merged banks have to operate in a competitive environment and at the same time pursue their goals. This introduction underscores the increasing trend in the use of M&As in the banking industry and provides a background to the subsequent discussion on the impact of M&As on the financial performance of the banking sector (Anthony, 2019). This section gives the historical background, rationale, and importance of the study to establish the nature of the challenges surrounding M&A transactions. The following sections will expand on the performance evaluation criteria, post-M&A performance determinants, and the issues that banks encounter in the M&A environment (Baker, 2012).In Figure 1, the main aspects concerning M&A activities in the banking sector are illustrated. The first part of the diagram is the main goal of M&As which is the increase of competitiveness, efficiency, and market share. It then categorizes the three types of mergers: These are horizontal, vertical, and conglomerate acquisitions. Also, the chart shows other financial ratios that are applied to evaluate the performance of the banks after M&As, including ROA, ROE, EPS, and NIM. Lastly, the post-M&A performance and the management decisions, organizational culture, economic factors, regulation, and competition are discussed.

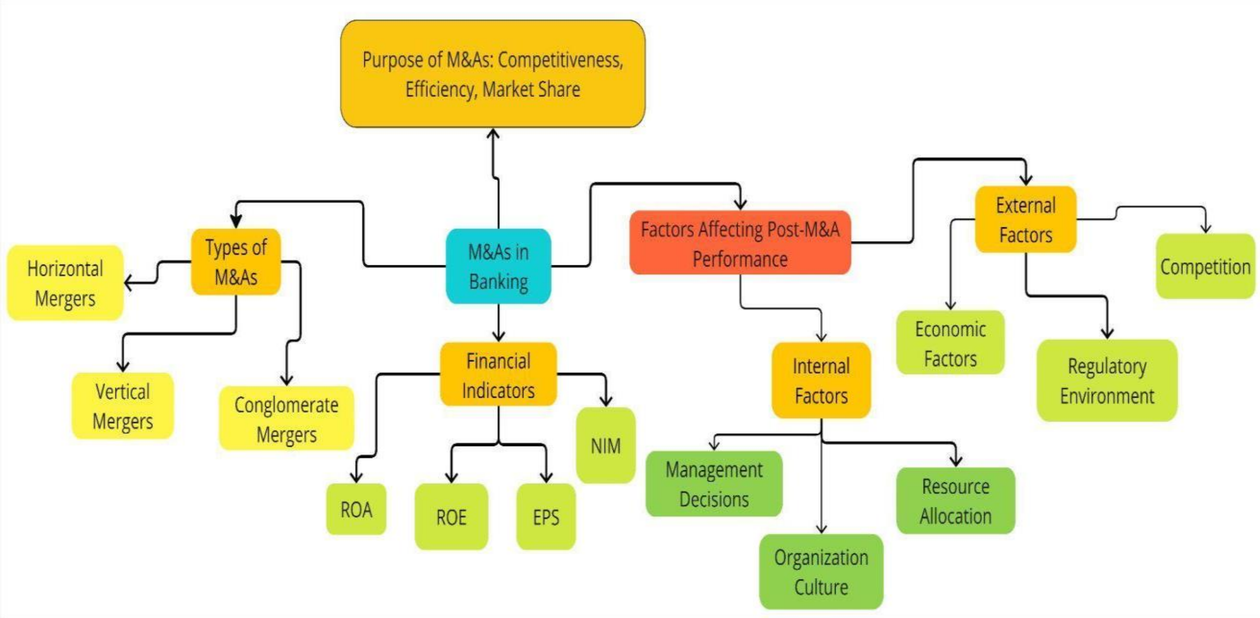

Fig. 1: Mergers and Acquisitions (M&A) in Banking and Financial Performance

MERGERS AND ACQUISITIONS IN THE BANKING SECTOR

Definition and Types of M&As

Mergers and Acquisitions (M&As) are Strategic transactions by which companies join or divest their operations to provide competitive advantage achieve operational efficiency or expand in the market. Merger is the combination of two or more equalsized, while acquisition is one company buying another one, which may be absorbed into the former (Brealey *et al.*, 2011). M&As in the banking sector can be horizontal, where banks of the same type and size merge, vertical, where banks merge with firms in their supply chain, or conglomerate, where banks merge with firms in unrelated industries (Basel Committee on Banking Supervision, 2010).

The strategic maneuvers are aimed at synergies that can result in better financial performance and risk diversification as well as better service offerings. For instance, horizontal mergers are often done to get economies of scale and ultimately for banks to reduce operating costs and hence increase profitability (Basel Committee on Banking Supervision, 2010). By contrast, such vertical mergers might strengthen a bank's service capabilities by allowing the integration of complementary services, such as insurance or investment services, to expand the bank's offering of financial services (Basel Committee on Banking Supervision, 2011).

Historical Context: Trends in Banking M&As

The past few decades were a time when the banking M&A landscape went through some significant transformations. The banking industry was consolidated in the late 20th century, in the 1990s in particular, due to deregulation and technology (Basel Committee on Banking Supervision, 2011). The repeal in 1999 of the Glass-Steagall Act, which had previously restricted banking firms to only have affiliations with one another, allowed the M&A floodgates to open in the United States, as institutions sought to cross enough institutional boundaries to diversify their experiences and improve their market standings (Bauer & Matzler, 2014).

In the U.S., but not globally, the trend of banking consolidation has been ongoing. Both Europe and Asia have seen a great degree of M&A activity. For example, the European banking sector has had to resort to increasing mergers to tackle low interest rates and rigorous regulatory pressure (Berger, Demsetz, & Strahan, 1999). Likewise, banking in emerging markets has in recent years seen a rise in consolidation amongst institutions, as they look to compete in an increasingly globalized financial world (World Bank, 2016). In the meantime, recent years have also experienced significant growth in the cross-border M&A phenomenon wherein banks acquire or merge with banks of other countries. Motivated by the need to access new markets, diversify risks, and leverage economies of scale, these transactions are generally the reason. The report compiled by the International Monetary Fund in 2018 says cross-border M&As in the banking sector are getting more common, reflecting how global financial markets are getting more interconnected (Brealey, Myers, & Allen, 2011).

M&A activities Driven by Regulatory and Market Forces

Banking M&A dynamics are to a large extent described by regulatory frameworks, and market forces. Capital adequacy and risk management regulatory policies are important determinants of the M&A landscape. When the Basel III framework was unveiled post-2008 financial crisis to mitigate the threat of another, banks understood that to beef up their capital positions and reduce their risk profiles, they needed to do some M&As which is why banks pursued M&As (Basel Committee on Banking Supervision, 2011). This regulatory impetus has spurred many banks to merge to improve their financial stability and compliance with ever-changing regulatory demands.

M&A activities are intrinsically affected by market forces. Banks' strategic decisions concerning mergers and acquisitions are dependent on economic conditions, interest rates, and the competitive environment within the banking sector. In favor of M&As banks are more often during economic expansion when they are drinking growth opportunities and improving profitability. On the other hand, banks might concentrate on the consolidation of operations in the wake of economic downturns based on the tendency to take on less risk that can facilitate operational efficiency (Cartwright & Cooper, 1996).

Additionally, traditional banks are experiencing challenges and opportunities in the appearance of fintech companies. The advent of technology has been changing the face of banking and traditional institutions are forced to change with the times, to meet the changing consumer preferences and competitive pressures. As a result of this, partnerships and acquisitions of fintech firms become commonplace and allow banks to upgrade their technological capabilities and further improve their service offerings (Philippon, 2016). This has led to technology being added to banking operations, a critical driver of M&A activity in recent years(Casu & Molyneux, 2003).

FINANCIAL PERFORMANCE METRICS

Financial Ratios for Measuring Bank Performance

When it comes to the assessments of the performance of any bank – especially in the context of M&As – it is necessary to use the financial ratios that to a large extent shed light on its performance in terms of the generation of profits, proper management of the resources, and organizational efficiency. Some of the most used are the Return on Assets (ROA), the Return on Equity (ROE), the Earnings per Share (EPS), and the Net Interest Margin (NIM). All of these measures give information on different aspects of the financial health of a bank.

Return on Assets (ROA) is an essential measure of the effectiveness of using assets to generate revenues in a bank. ROA is the measure of the overall profitability of a bank about the total asset base obtained by dividing net income by the total assets of the bank (Shah & Thaker, 2020). A higher ROA means better asset management which implies that the bank is well able to turn its investments into profit. However, a decreasing ROA may imply inefficiency, or difficulties with operational strategy after an M&A (Drexler & S, 2020). Another important indicator is Return on Equity (ROE) which reflects how much profit a bank can get per one-dollar shareholders' equity. It is computed by using the formula Net Income/Total Equity. For investors' use, ROE is an essential sign that shows how effectively the bank in question is managing its equity to make profits (El-Masry & El-Gazzar, 2005). A rise in ROE after the merger is an indication that the two merging entities have combined operations and gotten a value of synergy which generates profitability. But when ROE falls, it means that there is a challenge to reach the expected financial performance or effective capital management.

Earnings per Share (EPS) is an easy way of evaluating the profitability of a bank on a per-share basis. It is arrived at by a process of dividing Net income by number of shares in circulation. The trend in EPS means that the bank has been showing better earnings per share, which is more appealing to investors than a dwindling EPS would mean a negative outlook for the bank (Hughes & Mester, 2008). Relative to M&As, Where the EPS post-merger goes up, it means successful M&As and improved profitability; Where the EPS post-merger declines it means that there are issues with achieving the merger's Financial objectives. Net Interest Margin (NIM) is a measure of the difference between interest income, created by investing capital into interest-earning assets, and the cost of money to service liabilities. This measure is important in assessing the ability of a bank to manage its interest-earning activities (Homburg, Hoyer, & Fassnacht, 2002). A higher NIM means that the bank can make good profits from its lending function compared to its source of funds. After the completion of the merger, the changes in the value of NIM may demonstrate a successful combination of the balance sheets of the merging companies, as well as the achievement of synergies, while deteriorations in the NIM point out inefficiencies within the operating structure as well as growing competitive pressures.

Effect of M&As on Financial Ratios

The financial ratios highlighted above are used to compare the effects of M&As on the performance of the banks. It has been discovered that M&As may produce enhancements or deterioration in these indices depending on several factors, such as the purpose of the merger, the process, and the environmental conditions prevalent at the time of the merger (Kwan, 2004). In most M&As efficiency reasons are targeted at increasing the level of scale economies, which in turn will positively impact ROA and ROE. For instance, where there are several similar banks, the bigger banks would be able to have lower average costs because of operation economies which can help to boost the profitability and return figures. Research has shown that increases in ROA and ROE provide evidence of enhanced efficiency in the use of corporate resources and capital after a merger (Kurada, Jaya Surya, Kumpatla, & Rao, 2023). While M&As are likely to increase these metrics, success is not guaranteed as a wrong merger can bring operational disruption, culture clash, and employee morale downhill causing financial performance to plunge.

In most cases, this change depends on the structure of the M&As as well as the strategies implemented by the acquiring bank. Let's take an example where a bank acquires another at a premium price, which will eventually lead to short-term pressure on EPS due to the bank absorbing the costs of the acquisition. But if integration is good and the operations of the acquired bank are adding to the overall profitability then EPS can increase over time (Liu & Wu, 2020). Other aspects that could be analyzed include the changes in the Net Interest Margin (NIM) before and after the merger to gain some understanding of the way that the merged entity is managing the interest-earning assets. A successful merger may increase NIM through the 1ability of the newly merged institution to adjust its balance sheet in a way that increases its profitability on interest income (Lozano-Vivas *et al.,* 2011). On the other hand, where the merged entity has proved to have acted poorly in controlling its interest rate risk or where the merged entity is confronted with increased competition, NIM could reduce, suggesting a dwindling bank profitability emanating from the core business of banking.

Flaws of Using Financial Performance Metrics

Although several studies have focused on evaluating the financial performance of M&As in banking industries, it is important to accept the fact that these measures are not perfect and have their shortcomings. This approach may fail to capture qualitative aspects that have a huge impact on performance results. For instance, organizational culture, workforce satisfaction, and customer loyalty are other relevant success factors in mergers that are embarrassing to the financial models (Marks & Mirvis, 2011. Furthermore, there are factors outside the firm that affect the financial performance including; Economic factors, Legal factors, and Rivalry factors. For instance, fluctuations in the economy can decline loan turnover and raise the default level, in turn, affecting ROA, ROE, and NIM even the efficiency of the merger (Philippon, 2016). Hence, for the evaluation of the merged bank's performance post-M&A, it is helpful to use the broad-ranging analysis of both, the financial and non-financial indicators. Figure 2 illustrates the most important financial ratios for the assessment of the merged and acquired banks. Metrics that can be easily observed are depicted on the diagram, including Return on Assets (ROA), Return on Equity (ROE), Earnings per Share (EPS), and Net Interest Margin (NIM). All of them give information about the bank's financial situation from the perspectives of profitability, efficiency of assets usage, and capital. ROA gives the ratio of total net operating incomes derived from the resources of the respective firms while ROE indicates the ability of the bank to gain the profits from shareholder's investment. EPS measures the bank's profitability per share while NIM measures the efficiency of earning interest. These are important in assessing the synergy and operational efficiency of mergers and acquisitions, and any decline may well point to financial or strategic issues.

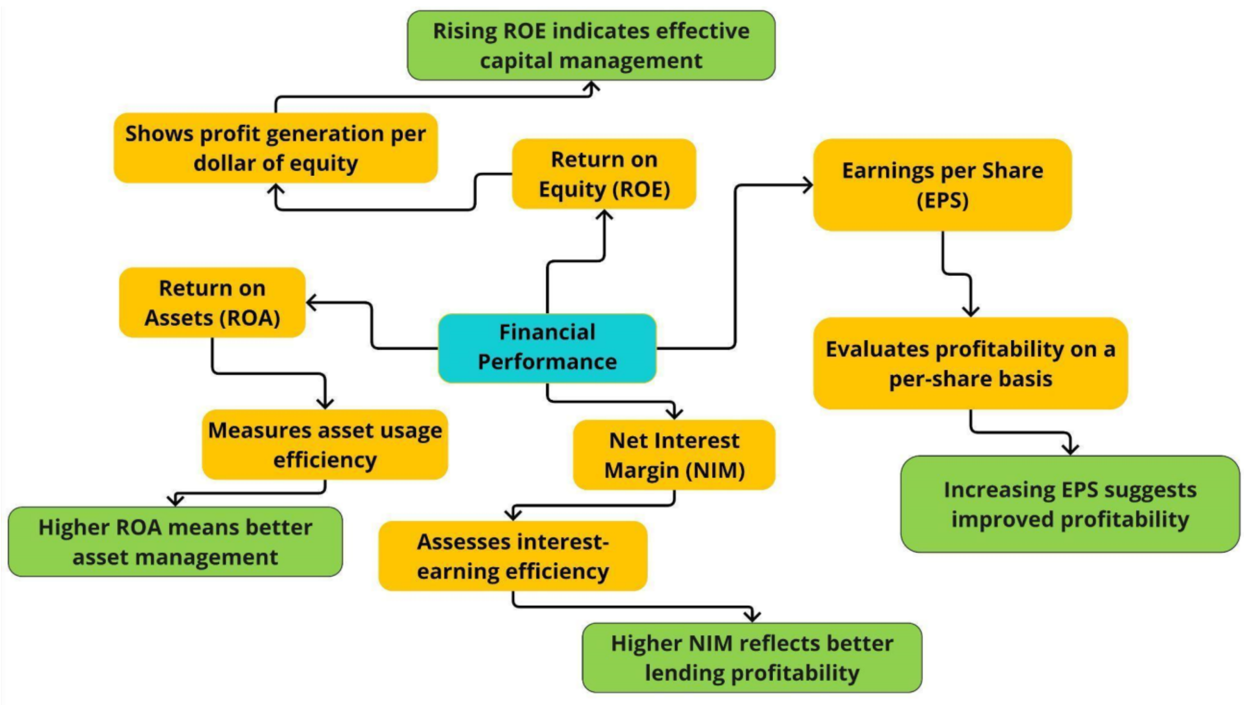

Fig. 2: Financial Performance Metrics for Banks Post-M&A

FACTORS INFLUENCING POST-M&A FINANCIAL PERFORMANCE

Internal Factors: Managerial Actions and Integration Activities

It has also been found that M&As in the banking sector, for the most part, depend on internal aspects and especially management decisions as well as integration processes. The integration phase is important since it entails the merging of two different corporate personalities, structures, and goals. Remarkably, the managerial decisions that occur during this phase are in a row with leadership responsibilities, resource deployment, and communication plans. For example, it can be agreed that the influence of leaders who can understand organizational culture in both merging institutions will increase the probability of merger success (Rehman, Ali, & Jebran, 2017). Tuch and O'Sullivan (2007, p.14), show through research that banks with established clear leadership roles and promote open communication will have higher employee morale and better performance

outcomes. On the other hand, failure to do so leads to poor satisfaction and high turnover among the employees, poor productivity, and hence poor financial performance.
Resource management is a critical factor of consideration during the integration process. Banks have to decide how to integrate assets, people, and processes effectively. Lack of integration may result in duplication of activities, system incompatibility, and high costs which negate the expected financial synergies from the merger (Riaz, 2020). Hannan and Pilloff (2009) pointed out that the banks, that have well-defined integration strategies, dedicated to the alignment of resources and processes, exhibit superior financial performance compared to the banks that do not have such strategies. Table 1 shows the internal factors that are key determinants of post-M&A financial performance. Synergies are achieved through effective managerial actions, integration strategies, and resource management. Cultural understanding of open employee communication helps foster cohesion, while integration strategies and training do the same for defined integration. Building trust requires leadership engagement and ultimately increases organizational morale and financial outcomes.

Table 1: Internal Factors Influencing Post-M&A Financial Performance

Factor	**Description**	**Importance**	**Key Aspects**	**Challenges**	**Impact on Performance**	**Reference**
Leadership roles during integration	Critical for success	Decision-making, resource allocation	Lack of clarity in roles	Low employee engagement	Higher morale, better outcomes	Abdulwahab & Ganguli (2017)
Integration Strategy	A clear strategy for merging operations	Essential for achieving synergies	Alignment of goals	Poor planning	Effective resource use	Adhikari et al. (2023)
Resource Management	Effective integration of assets and processes	Prevents inefficiencies	Asset allocation	Duplication of efforts	Improved financial efficiency	Allen & Gale (2000)
Employee Communication	Open channels for feedback and information	Boosts employee morale	Team collaboration	Miscommunication	Higher productivity	Altunbas et al. (2001)
Cultural Understanding	Awareness of differing organizational cultures	Affects team cohesion	Cultural alignment	Resistance to change	Better integration	Anthony (2019)
Defined Integration Strategies	Specific plans for merging operations	Drives successful transitions	Process alignment	Overlooked details	Enhanced financial performance	Baker (2012)
Training and Development	Ongoing support for employees during the transition	Ensures smooth adaptation	Skill enhancement	Lack of training resources	Improved performance	Basel Committee (2010)
Leadership Engagement	Active involvement of leaders in integration	Builds trust and commitment	Visibility and support	Lack of leadership presence	Increased employee satisfaction	Basel Committee (2011)

External Factors: Economic Conditions and Competition in the buyer's market

It is important, however, to note that external attributes have a very strong impact on the financial performance of the banks after M&As Economic conditions such as; interest rates, inflation and growth in the overall economic growth facilitate the success of the merged entities. For example, a good economic environment facilitates consumers' confidence in spending, more credit demands, and better performance of the banking institutions (Rhoades, 1998). On the other hand, a recession can hurt the financial position by an increased ratio of customers defaulting on their loans and fewer people running to banks.
Specifically, the analysis of interest rates, shows how decisive they are for banking institutions' performances. That means that the central bank's policies can affect the interest rate for credit and the profitability of credit. The work of Allen and Gale (2000) shows that during a low interest rate environment, the interest margin of the banks can be a problem and hence the profitability of the banks can also be a problem. Additionally, macroeconomic things such as inflation may affect the potency of purchasing something which may impact the banking conduct and the demand for financial items as spoke to by Casu and Molyneux (2003). Competition within the market results in the overall performance features of the banks after the M&A. In highly competitive areas of the globe, merged banks have to deal with the issues arising out of competition with other banks.

Higher competition results in price pressures, which will make it hard for the banks to maintain their profit margins. According to Rhoades (1998), the pressures arising from competition in markets may make it difficult for banks to realize the expected gains of M&As (Rose, 1987).
Another problem that the external environment poses to banking M&As is created by regulatory changes after the merger or acquisition. Banking is a very regulated industry and any changes in the regulatory environment affect organizational procedures and financial outcomes. One example of this is the Dodd-Frank Act, which was meant to raise transparency and accountability in the banking industry. Though the above regulations were aimed at safeguarding consumers and market stability, they also led to extra compliance costs for the banks (Schoenmaker & Oosterloo, 2013). Banks must continue to operate flexibly to meet the changing regulatory environment to sustain competitiveness, and profitability in the post-merger phase. The external factors that have a significant impact on post-M&A financial performance in the banking sector are highlighted in Table 2. All this is influenced by the economy, competition regulatory changes strategic decisions, and profitability. The credit demand and revenue generator are determined by customer behavior and interest rate and by operations efficiency. Furthermore, banks have to adapt to a dynamic environment and remain competitive in a global environment where economic factors are expressed globally and both challenge banks and provide opportunity to the banks.

Table 2: External Factors Influencing Post-M&A Financial Performance

Factor	**Description**	**Importance**	**Key Aspects**	**Challenges**	**Impact on Performance**	**Reference**
Economic Conditions	Overall economic environment affecting banks	Influences credit demand	Interest rates, inflation	Economic downturns	Affects profitability	Berger et al. (1999)
Competition	Market dynamics and rival institutions	Determines pricing strategies	Market share	Price wars	Squeezes profit margins	Brealey et al. (2011)
Regulatory Changes	Laws and regulations affecting banking operations	Compliance requirements	Adaptation to new rules	Increased operational costs	May hinder financial outcomes	Cartwright & Cooper (1996)
Customer Behavior	Consumer confidence and spending habits	Impacts credit growth	Loan defaults	Economic uncertainty	Influences revenue generation	Casu & Molyneux (2003)
Interest Rates	Central bank policies affecting credit terms	Affects bank profitability	Lending rates	Tightening credit conditions	Influences loan volume	Drexler & Ganguli (2020)
Technological Advancements	Innovations Impacting Banking Operations	Enhances efficiency	Digital transformation	Adoption costs	Improves service delivery	El-Masry & El-Gazzar (2005)
Market Trends	Shifts in consumer preferences and behaviors	Guides strategic decisions	Adapting to trends	Lagging behind competitors	Impacts customer acquisition	Hughes & Mester (2008)
Global Economic Factors	International market conditions	Affects overall banking performance	Global trade dynamics	Exposure to international risks	Influences financial stability	Kwan (2004)

METHODOLOGICAL CHALLENGES IN ANALYZING FINANCIAL PERFORMANCE

Data Limitations: There are issues with Data Availability and Comparability.

Mergers and acquisitions (M&As) of banks are fraught with methodological challenges in analyzing the financial performance of banks involved in M&As, due to data limitations. A primary issue is the lack of availability of consistent and comprehensive financial data across institutions and across different periods. Publicly available financial statements are used in many studies, but these documents can be very different in format and detail, which makes comparative analysis difficult (Servaes & Zenner, 1996). In addition, different reporting standards applied by banks operating under different regulatory frameworks may cause similarities in financials to be reported differently, on a like-for-like basis, discouraging meaningful comparison across institutions. Moreover, financial disclosures of banks are not made at the same time, resulting in discrepancies in performance evaluation over certain periods (Sharma *et al.,* 2019).

In the case of smaller banks, the availability of data regarding pre-merger performance may be incomplete or even non-existent, since they might not be publicly traded. However, the lack of data can constrain researchers' ability to conduct robust pre- and post-merger analyses since studies usually need a full dataset to evaluate the effect of M&As (Shimizu, Hitt, Vaidyanath, & Pisano, 2004). In addition, the measurement and its definition may vary from one study to another which may lead to biases in concluding on the financial effect of M&As. For example, return on assets (ROA) and return on equity (ROE) are well-known financial performance indicators, but the way they are calculated may produce different results in the literature (Sudarsanam, 2010). If we have this broader issue with comparability and it's not just confined to financial metrics, but also things related to economic conditions, it means that the structure itself needs some adjusting. However, interest rates, economic cycles, or regulatory changes vary too much by region and time to isolate the effects of M&As from other influences on financial performance (Tan & Floros, 2012). To summarize, with very few exceptions, data limitations make it extremely difficult to have anything meaningful to say about the impact of M&As on the financial performance of banks, and this exercise provides yet more demonstration of the hazards and pitfalls of analysis in this area.

Methodological Issues: The Problem of Isolating the Impact of M&As on Financial Performance

A second important methodological challenge in studying the financial performance of banks after M&A is the inability to separate the effect of M&A on performance metrics. Furthermore, M&As are often woven together in a package of strategic initiatives to improve profitability and operational efficiency, so it is difficult to disentangle some of the observed changes in financial performance to see whether it was the merger by itself or the total package that caused the change (Teerikangas & Colman, 2020). The problem is compounded by the fact that banks' performance is determined by many external factors such as macroeconomic conditions and competitive pressures that can distort the perceived effect of M&As (Teerikangas & Colman, 2020).

To overcome these methodological challenges, researchers often use regression analysis to control for differences that developmentally independent accounting data cannot, and that isolate M&A effects from others that may influence firm performance. However, the choice of control variables is highly important, as then otherwise important variables are left out and estimates of the merger's impact on financial performance can be biased (Tuch & O'Sullivan, 2007). Furthermore, the time frame chosen for the analysis can have a huge effect on the results. Transient effects that occur immediately following a merger might be captured by short-term studies, in contrast, long-term studies might provide a more holistic view of the changes in performance over time. Therefore, researchers need to be mindful of the time horizons on which they evaluate M&A impacts to avoid picking up short-lived anomalies rather than meaningful trends (Philippon, 2016). The complexities of the banking sector make the methodology even more challenging. M&A activities may have heterogeneous outcomes across the industry, for example, different types of banks (such as commercial, investment, or community banks) may respond differently (Tuch & O'Sullivan, 2007). However, this heterogeneity makes more granular analyses necessary, such as industry segmentation and analysis of particular types of mergers, which can greatly increase the complexity of the research design and data analysis.

Alternative approaches: This thesis addresses methodological limitations.

To overcome the methodological difficulties associated with analyzing the financial performance of banks after M&A, researchers have started to explore alternative approaches that improve the robustness and reliability of their findings. A promising technique for providing insight into the integration process and strategic decisions made during mergers and acquisitions (M&As) is the use of qualitative techniques, e.g. case studies and interview data from key stakeholders (Verma & Rathore, 2018). Through the combination of qualitative and quantitative approaches, researchers can gain a more holistic picture of the factors affecting financial performance, and find successful best practices for mergers.

A second option is to use a statistical technique known as propensity score matching which can control for selection bias by matching M&A banks with similar nonacquiring institutions (Verma & Rathore, 2018). By using this method, researchers can form comparable groups and lessen the effect of confounding variables, so they get more accurate estimates of the effect of M&As on firms' financial performance. Further, using panel data analysis can overcome some of the caveats of cross-sectional studies by incorporating time series data to trace changes in performance across time, to have a more all-encompassing view of M&A effects. In the wake of M&As, researchers are increasingly recognizing that the broader contextual factors may also affect financial performance. Studying the configurations of the regulatory, competitive environment, and economic conditions that encircle M&As enables researchers to offer more nuanced accounts of the observed performance outcomes. For example, studying cultural integration and employee satisfaction in the post-merger environment can provide useful information as to what factors contribute to financial success or failure (World Bank, 2016).

Analyzing the financial performance of banks involved in mergers and acquisitions is fraught with methodological problems arising from data limitations and problems with separating M&A effects. However, no other approaches exist with the potential to improve the robustness of research findings, especially for building causal inferences from qualitative methods, being more sophisticated in the choice of statistical techniques, and examining additional context factors. Future studies can therefore help address methodological issues in this area and help in a better understanding and in making bank managers more effective decisions during strategic decision-making such as M&A. The methodological challenges associated with analyzing financial performance post-M&A are presented in Table 3, including data limitations and measurement variability that can make accurate assessment difficult, and isolating M&A impacts is often complicated by external influences. For valid results, it is important to choose appropriate control variables and to deal with time frame discrepancies. In addition, industry heterogeneity and contextual factors require thorough analysis, and in particular, qualitative insights are needed to deepen understanding.

Table 3: Methodological Challenges in Analyzing Financial Performance

Challenge	Description	Importance	Key Aspects	Consequences	Solutions	Reference
Data Limitations	Inconsistencies in financial data availability	Hinders accurate analysis	Variability in reporting formats	Compromised research quality	Standardized data collection methods	Chui et al. (2010)
Measurement Variability	Differences in financial metric definitions	Leads to bias in conclusions	Inconsistent calculations	Misinterpretation of results	Clear metric definitions	Cartwright & Schoenberg (2006)
Isolating M&A Impact	Difficulty in separating M&A effects	Challenges causal inference	Influence of external factors	Inaccurate assessments	Use of robust statistical techniques	King et al. (2004)
Choice of Control Variables	Importance of selecting appropriate variables	Affects accuracy of impact estimates	Relevant external influences	Skewed results	Thorough variable selection process	Barkema & Schijven (2008)
Time Frame Issues	Short-term vs. long-term analysis discrepancies	Influences perceived performance	Immediate vs. sustained effects	Missed trends	Longitudinal studies	Haleblian et al. (2009)
Industry Heterogeneity	Variability across different banking types	Necessitates granular analysis	Differences in performance outcomes	Complexity in research design	Segmented analysis by banking type	Powell & Stark (2005)
Contextual Factors	Broader influences on financial performance	Essential for nuanced understanding	Regulatory and market conditions	Overlooked variables	Comprehensive contextual analysis	Hitt et al. (2012)
Qualitative Insights	Lack of qualitative data in performance studies	Limits depth of understanding	Employee perspectives	Missed insights into integration	Incorporate case studies and interviews	Datta et al. (1992)

CONCLUSION

The financial performance of banks before and after mergers and acquisitions was analyzed in this review, and several key insights were highlighted. Second, M&As frequently result in ambiguous outcomes concerning financial performance, as several studies document improved ROA and ROE outcomes, while others find decreases due to integration difficulties and market conditions. Factors such as effective management strategies, organizational culture, and external economic conditions have the clearest influence on the success of M&As. Additionally, the evaluation indicates the necessity to employ an inclusive method that takes into account both quantitative monetary proportions and their qualitative equivalents, such as employee satisfaction and market positioning. Yet, there are gaps in the existing body of research, particularly concerning the long-run effects of M&As on smaller banks and the impact of emerging technologies on financial performance. However, future research should explore these areas more deeply by developing the connection of fintech and digital banking with M&As and by conducting a comparative analysis of horizontal, vertical, and conglomerate mergers to determine their different effects on the performance of banks. Imputing data to address these gaps will contribute to a richer analysis of the factors that determine success in banking M&As and provide best-practice guidance for future deals.

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