Assessing the Financial Impact of Mergers on Islamic Banks: A Case Study of Sustainable Finance and Maqasid Approach

Tamy AL-BINALI*

* Hamad Bin Khalifa University, College of Islamic Studies, Doha, Qatar

Abstract

Bank mergers and acquisitions (M&A) have been on the rise globally, particularly in emerging economies where policies aimed at enhancing financial system stability have been driving restructuring in the banking sector. Qatar's M&A market, while comparatively new, has distinct characteristics. A recent study aimed to determine the impact of M&A activity on the financial performance of Barwa Bank (later Dukhan Bank) in Qatar over six years from 2017-2022, covering three years before and three years post-merger. The study found that the bank's liquidity, profitability, solvency, and investment ratios did not vary significantly, suggesting that M&A activity did not significantly affect the bank's financial performance. Despite these findings, the study provides recommendations for future research and implications for theory and practice in this area. The results are discussed in the light of SDGs, and which goals this merger support the most are analyzed. The paper's discussion is expected to be a guideline for future mergers to be more sustainable toward 2030 goals.

Keywords: M&A, Bank Mergers, Financial Analysis, Islamic Banks, Qatar Banks, SDG, Sustainable Finance

* Corresponding Author: talbinali@hbku.edu.qa

Recieved: 17 April 2023 Accepted: 28 April 2023 Published: 30 June 2023

1. Introduction

Organizations employ merger and acquisition (M&A) as a prominent and influential technique to compete in the modern, globalized, and dynamic world (Sherman, 2010). According to the literature, corporations have used mergers and acquisitions (M&A) as a principal and essential strategy to achieve growth and efficiency by creating synergies, reducing costs, purchasing assets, and expanding into new markets.

In response to tighter market conditions, mergers are employed in the Arabian Gulf to lower operating and finance costs, raise profitability, reinforce asset bases, and improve risk-management skills (Bindabel et al., 2017). Efforts to convert economies dependent on hydrocarbons to knowledge-based markets driven by the private sector and less susceptible to fluctuating oil prices are being supported by consolidation across the region. The first bank merger in Qatar was announced by two institutions in 2019, continuing a trend seen across the Gulf. Barwa Bank and International Bank of Qatar (IBQ) said in April that the negotiations had ended, and all regulatory conditions needed to combine activities had been met (Aysan et al., 2022).

In line with Vision 2030, the country's economic growth strategy, which aims to promote economic stability and employment creation through sensible policy, low inflation, and a robust financial sector, the merger of Barwa Bank was carried out. The combined company, now known as Dukhan Bank, has combined assets worth around QR106 billion (\$29.20 billion) and a shareholder ownership base of more than QR14 billion (\$3.90 billion) after the merger (Dukhan Bank Media Center, 2023). Notably, a new company that offers sharia-compliant services to its clients has been founded due to the merger of Barwa Bank, an Islamic bank, and IBQ, a conventional lender. According to rating agency Moody's, the combined firm now holds a 5% market share and is Qatar's third-largest Islamic and sixth-largest general bank.

De Nicol et al. (2003) found a positive correlation between the efficiency of the financial sector and bank mergers and acquisitions. Nevertheless, the relationship between M&A and the performance of the banks has remained hazy. There is conflicting information regarding the effect of M&A on the financial performance of banks. Some studies (Calomiris & Karenski, 2000) indicate that financial performance improves after M&A, whereas other studies indicate a reduction in financial performance (Abbas et al., 2014). In this regard, Stahl and Voigt (2004) indicated that further study is needed on the relationship between banks engaging in M&A and the impact that has on those banks' performance.

In light of these talks, this study aims to ascertain whether there is a correlation between a bank's financial performance and M&A activity in the Qatari banking sector and the potential consequences of such M&A on the overall economy. To identify this, any potential financial implications of a merger on the bank's financial performance three years before and after the merger during six years from 2017 to 2022 will be analyzed. The following paragraphs further explain the procedures utilized and the investigation results.

A quantitative study approach was employed to ascertain the effect of M&A activities on the financial performance of Barwa Bank (later Dukhan Bank). The investigation examined the bank's financial records and ratios for the six years from 2017 to 2022. These ratios included those measuring investment, liquidity, profitability, and solvency. According to the analysis, there were no significant changes in these ratios, which suggests that the M&A activity had little to no impact on the bank's financial performance.

Also, the study examined the bank's stock prices and discovered that they stayed steady across the study period, indicating that the market perceived neither a significant positive nor negative impact of the merger on the bank's financial performance (Aysan & Unal, 2023). Overall, the results of this analysis indicate that M&A activity did not substantially impact Barwa Bank (later Dukhan Bank) in Qatar's financial performance. More investigation is necessary to fully comprehend the possible effects of M&A activity on other banks in Qatar's M&A market (Aysan & Unal, 2021).

This study offers insightful information about Qatar's M&A market, which is still in its infancy. Analyzing the effects of M&A activity on the financial performance of Barwa Bank (later Dukhan Bank) over six years and offering a thorough study of the bank's financial statements and ratios adds to the body of material already in existence. The results of this study may also be helpful for investors and policymakers in the area, who can use them to decide how to proceed with future M&A transactions. Additionally, this research could provide a starting point for future investigations into how M&A activity has affected other banks in Qatar and the surrounding area. Overall, this study provides a solid foundation for further research into the M&A market in Qatar and its potential impact on financial performance.

Due to Qatar's status as a quickly developing economy with an expanding financial industry, the M&A market there is noteworthy and relevant for other nations. The Middle Eastern nation of Qatar is a small, wealthy nation with a rapid economic expansion in recent years. Although the government has invested in diversifying the economy and growing other industries, including finance, the country's economy is still very dependent on oil and gas.

With more banks and other financial institutions functioning in Qatar due to this investment, the country's financial sector has expanded quickly. As businesses look to grow and acquire a competitive edge, this growth has also increased M&A activity in the banking industry.

The results of this study on the effects of M&A activity on Barwa Bank's (later Dukhan Bank's) financial performance in Qatar are thus applicable to other nations that are going through similar trends in their financial sectors. Policymakers, investors, and other stakeholders may find the study's insights on how M&A activity may affect banks' financial performance in developing economies useful. The report also emphasizes the value of thorough research to comprehend how M&A activity affects financial performance, which could help other nations' decision-making (Abbas et al., 2014).

It is important to note that the merger of Barwa Bank and International Bank of Qatar (IBQ) was exceptional because it entailed the union of an Islamic bank with a traditional bank, culminating in the creation of an Islamic bank from the merged firm. This merger was in keeping with Qatar's policy for Islamic finance, which aims to promote Islamic finance as a significant engine of the nation's economic development. A more extensive and diverse Islamic bank was produced due to the merger, allowing it to provide its clients with a broader range of goods and services.

The COVID-19 pandemic has significantly impacted merger and acquisition activity in the Gulf Cooperation Council (GCC) area, particularly Qatar, which is also crucial to highlight. M&A activity has slowed due to firms dealing with uncertain economic conditions and shifting market dynamics; instead, many organizations are concentrating on maintaining operations and managing risks. Nonetheless, as businesses seek to consolidate their operations and acquire a competitive edge, some experts anticipate that the pandemic could result in an uptick in M&A activity in the future.

Also, the pandemic has changed the way that Gulf banks approach entrepreneurship. With social isolation and remote work becoming the norm, the banking industry has emphasized digitization and technological adoption more. In order to maintain business continuity, GCC banks had to change how they operated. Many GCC banks have invested in new technologies for remote working and digital services. As businesses look to purchase businesses with strong digital capabilities and experience, these changes in entrepreneurial practices may impact future M&A activity. Therefore, future research on M&A activity in Qatar and the larger GCC region will need to consider how the COVID-19 outbreak has changed business practices and market dynamics (Abbas et al., 2014).

The use of quantitative analysis to understand the effects of an Islamic bank merger on the SDGs is a novel approach that has the potential to shed new light on the relationship between financial institutions and sustainable development from an Islamic perspective. While there is a growing body of literature on Islamic finance and the SDGs, few studies have used quantitative methods to empirically examine the impact of bank mergers on sustainable development outcomes. By adopting a rigorous and systematic approach to data collection and analysis, this article can provide more robust and reliable evidence on the potential benefits and challenges of bank mergers for achieving the SDGs

in the context of Islamic finance. This can help to inform policy and practice in Qatar and other countries seeking to promote sustainable development through financial sector reform and innovation.

Furthermore, the novelty of this article lies in its focus on the Maqasid al-Shariah, which provides a comprehensive framework for evaluating the positive contributions of bank mergers to the SDGs from an Islamic perspective. By incorporating the Maqasid perspective, this article moves beyond conventional economic and financial indicators of performance and considers the broader social, environmental, and ethical dimensions of sustainable development. This can help to ensure that the benefits of bank mergers are distributed more equitably among different stakeholders, including marginalized and vulnerable groups, and that the resulting financial institutions operate in a manner that is consistent with Islamic values and principles. The use of the Maqasid perspective can also contribute to a more holistic and integrated understanding of the SDGs and their interdependencies, thereby promoting a more sustainable and inclusive approach to development.

The current section of the paper briefly discusses the study's history and setting. The remainder of the paper consists of four additional parts. Section 2 of the article provides a summary of the evaluated literature. Section 3 provides details on the sample and the techniques. Part 4 presents the financial analysis and findings, while Section 5 concludes the article and discusses its limitations.

2. Literature Review

The impact of mergers and acquisitions on the financial performance of organizations is a matter of debate. Several accounting measures for profitability, return to shareholders, and operational efficiency have been used in studies to assess the effects of mergers and acquisitions on the financial performance of banks.

Empirical results on the relationship between M&A activity and bank performance have shown that different outcomes can occur. By highlighting the fact that smaller businesses are more likely to gain from M&A than larger ones, Sufi (2004), for example, adds another factor to the discussion. This is because larger businesses may ultimately create more managerial difficulties. The newly established organization has more market power in addition to having a full range of skills and competencies that can easily overcome many management challenges depending on the intention and effort of decision-makers, which is another way that Weinberg (2007) illustrates how mergers affect the performance of the merged entity. Mantravadi and Reddy (2008) also discovered that positive changes in the market offering of a particular company characterize a company's post-merger period. However, they also point out that the merger had little impact on the firm's profitability (Aysan & Unal, 2021).

Sinha and Gupta (2011) analyzed M&A in the Indian financial sector between 1993 and 2010. The evaluation of merger and acquisition deals in the context of financial indicators served as the primary foundation for this study. The study's conclusions showed that PAT and PBDITA (profit before depreciation, interest, tax, and amortization) increased while business liquidity fell. In both pre- and post-M&A scenarios, it was observed that the interest coverage had a significant role in the return on shareholders' equity (ROE). Also, it was found that the profit difference was very significant. According to studies by Calomiris and Karenski (2000) and Caprion, mergers and acquisitions positively affect the efficiency of most banks (1999). The results of a different study by Amel et al. (2004), however, which were somewhat unexpected, showed that merger and acquisition activity does not favorably impact the efficiency of the US banking sector's performance. Instead of providing a better picture of the relationship between these variables, the results of all these investigations provided contradictory information (Merger & Acquisition and performance). Most of this research examined how detailed accounting ratios and merger and acquisition activity affected cost-effectiveness, which may be a summary of the studies (Berger & De-Young, 1997). Furthermore, specific data from the study by Kwan and Elsenbeis (1999) indicates improved efficiency and decreased costs in scarcity.

The implications of M&A on the operational success of Nigerian banks between 1995 and 2012 were recently examined by Akpan et al. (2018). They detect a definite improvement in investment banks after witnessing M&A. Similar findings are made by Abdou et al. (2016), who find that M&A helps Nigerian banks succeed financially

(Unal & Aysan, 2022). Hassen et al. (2018) looked into 60 institutions in 17 European countries between 2005 and 2013 to see how M&A affected them. They assert that M&A has a positive influence, which means it finally achieves its goals. Awan and Mahmood (2015) examine the effects of mergers and acquisitions on the performance of seven commercial banks in Pakistan between 2002 and 2011. They demonstrate a favorable impact of M&A on banks' financial performance by employing four assessment ratios, including liquidity, profitability, solvency, and investment.

A company's return on equity can be used to determine how successfully and rapidly banking reforms are consolidated and strengthened, according to a 2009 study by Badreldin & Kalhoefer. A performance improvement was seen when these businesses' performances were compared to their pre-merger performances. In their 2010 study, Mishra and Chandra examined the M&A success of Indian pharmaceutical firms. They found that the company's revenue is unaffected over the long term by mergers and acquisitions. After reviewing the available literature, Amel et al. (2004) concluded that mergers in the major industrialized countries are substantially to blame for synergies and efficiencies. It was looked at whether there was any possibility that mergers and acquisitions may help with financial problems. Cornett et al. conducted a study in 2006 to evaluate the efficiency of commercial bank mergers. They found that the merged banks' industry-adjusted running performance dramatically increased after the mergers. After pre- and post-analysis of the enterprises, Pankaj and Sushant (2011) found a positive influence on the firm's profitability, but that liquidity was frequently reduced. After studying the literature on the impact of mergers and acquisitions on organizational performance, it has been determined that there is a relationship between mergers and acquisitions and organizational performance. According to M&A studies, not all mergers and acquisitions have the same effects on the performance of the merged firms globally.

Vitale and Laux found that post-merger revenues had declined in their 2012 examination of the US banking sector, encompassing 105 M&As after 2007. The return and capital sufficiency indicators barely altered despite a minor increase in assets. Knapp and Gart (2014) examined how M&As affected banks' credit risk between 1991 and 2006. The findings showed that the loan portfolio's NPL level and loan charge-offs significantly grew during the post-merger era. The financial performance of the banks did not dramatically improve following the M&A phase, according to Abbas et al. (2015). Profitability, effectiveness, liquidity, and leverage rates all saw reductions. Lee et al. (2013) found that cost-effectiveness decreased immediately following Taiwanese banks' M&As, but that it took roughly three years to regain efficacy.

Market penetration is one of the main goals of M&A, claim Eccles et al. (1999). Businesses also consider vertical expansion when managing their sources of supply, distribution, and similar costs. According to Hubbard and Purcell (2001), M&A allows foreign investors to establish themselves in developing markets. According to Fixler and Zieschang (1993), management competence and skill are just as crucial to the success of strategies for increasing efficiency as cost restrictions. A firm can gain these skills through M&A. In light of this, Resti (1998) asserts that an M&A increases a company's profitability. Additionally, based on their larger size and greater availability of resources, these entities also achieved higher efficiency.

Several accounting methods have been used in the existing literature to evaluate the impact of mergers and acquisitions (M&A) on the financial performance of firms. According to certain studies, smaller businesses benefit more from M&A than larger ones because the latter may present more significant managerial challenges (Aysan et al., 2022). Research on M&A's effects on profitability, return on equity, and operational efficiency in the Indian financial sector, the US banking sector, and European nations have produced conflicting results, with some studies showing positive effects and others negative or neutral ones.

Studies on the performance of commercial banks in Pakistan and more recent studies on the effects of M&A on the operational success of Nigerian banks have indicated positive benefits. However, studies on the US banking industry have revealed that credit risk has grown, and post-merger revenues have decreased. The literature on the effects of M&A on organizational performance demonstrates the complexity of the link between the two and that not all M&A have an identical impact on the global performance of the merged organizations.

3. Research Methodology

There are commonly two ways to assess how a merger affects an organization's performance after an M&A activity. One compares the performance of merged enterprises before and after the merger using the operating performance technique. The share price strategy is the second approach, which assesses the effects of M&A based on the stock prices of the combined firms (Kumar, 2009). Based on preceding research methods, this study uses quantitative techniques to examine financial ratios in four areas for three years prior to the merger (including the year of the merger) and three years after the merger to evaluate the performance of the Barwa Bank (known as Dukhan Bank after the merger). The study uses quantitative research for analyzing the Barwa Bank merger case from a financial performance analysis via ratios. This research is used to detect any potential support towards the sustainable development goals. A bank merger can support the SDGs in various ways, including promoting financial stability and access to finance, supporting economic growth and job creation, contributing to environmental sustainability, and fostering social cohesion and inclusion. By bringing together the resources and expertise of two or more banks, mergers can create more resilient and efficient financial institutions that are better able to support the needs of individuals, businesses, and communities. In particular, bank mergers can enhance the provision of financial services, including credit, insurance, and investment, to underserved or marginalized segments of the population, contributing to greater financial inclusion and reducing poverty.

Additionally, mergers can support sustainable economic growth and development by providing greater access to capital, facilitating innovation and technology transfer, and promoting responsible lending and investment practices. Finally, bank mergers can contribute to the achievement of environmental and social objectives by incorporating environmental and social considerations into their business models and practices, supporting sustainable infrastructure and green finance, and engaging in community development and corporate social responsibility initiatives. Below is a discussion of the four categories and particular ratios used in this research.

3.1. Liquidity Ratios

The term "liquidity" refers to a bank's capability to fulfill its short-term obligations promptly and effectively. Multiple liquidity indicators are commonly employed in the relevant literature. For instance, the current ratio is calculated by dividing a bank's assets by its current obligations. This ratio reflects the bank's capacity to meet its short-term commitments, including claims against current and savings accounts, short-term borrowings from other banks, regulatory reserves with the central bank, payroll, and employee benefits. It is generally believed that a firm's liquidity will improve after a merger or acquisition due to its increased ability to satisfy current obligations with current assets. In this study, the bank's liquidity is evaluated using three ratios: the loan-to-deposit ratio (LDR), which measures a bank's liquidity by comparing its total loans to total deposits during a specific period. The LDR can indicate a bank's capacity to handle loan losses and customer withdrawals.

1) Loan to Deposit Ratio (LDR)

The loan-to-deposit ratio measures a bank's liquidity by comparing all its loans to its deposits for the same period. A bank's loan-to-deposit ratio provides insight into its ability to manage loan losses and customer withdrawals (Suroso, 2022). Banks in the Qatari financial system often have similar LDR ratios. Therefore, there is no expectation for LDR to change significantly in the years after the merger.

$$LDR = \frac{Total\ Loans}{Total\ Deposits}$$

2) Cash to Assets Ratio (CTA)

The cash-asset ratio is another monetary indicator of a bank's liquidity. This metric is increasingly frequently employed to assess banks and investment funds. If a sizable portion of a bank's assets is stored in cash, the management may not be using all the capital at their disposal to invest. Returns will likely suffer as a result, while

this may be the management's prediction of how the financial markets will evolve (Akinroluyo, 2022). Given that the acquiring entity has a higher position in cash holding, the CTA ratio is expected to rise in the post-merger era.

$$CTA = \frac{Cash + Cash\ Equivalents}{Total\ Assets}$$

3) Interest Expense to Total Funds (IETF)

When assessing a bank's liquidity status, it is critical to consider the proportion of interest received to total funds. It is possible to compare annual costs and costs with other banks to understand how cost-effectively different banks operate (Austein & Wijyen, 2005). Suppose the acquiring bank has a higher proportion of deposits, which generally have a lower cost of funds, than the acquired bank. In that case, the merged bank's cost of funds may decrease, resulting in a lower Interest Expense to Total Funds ratio, which is the expected situation for the results of this paper.

$$IETF = \frac{Interest\ Expense}{Total\ Funds}$$

3.2. Investment Ratios

Investment ratios are financial metrics investors utilize to evaluate a bank's ability to generate a profitable and favorable return. Shareholders scrutinize different banks while selecting a suitable investment option based on their objectives. The significance of investment ratios extends beyond regular shareholders, as analysts, competitors, and potential investors also pay close attention to them.

1) Earnings Per Share (EPS)

The earnings per share ratio is a crucial measure that analysts and traders use to determine a bank's financial health. The EPS ratio shows the net income made per share if all profits were distributed to shareholders (Kumar, 2017). In a bank merger, the combined entity's earnings may increase due to synergies and cost savings resulting from the merger, which could result in higher EPS. On the other hand, if the merger involves issuing new shares to finance the deal, the EPS may decrease because the number of outstanding shares has increased. Barwa Bank's merger has resulted in synergy and another layer of trust, which is expected to increase EPS in the post-merger performance.

$$EPS = \frac{Net\ Income\ available\ to\ Shareholders}{Number\ of\ Shares\ Outstanding}$$

2) Dividend Payout Ratio (DPR)

The amount of dividend paid out to shareholders concerning the overall amount of net income the bank earns is known as the dividend payout ratio. In other words, the dividend payout ratio calculates what portion of net revenue is distributed as dividends to shareholders (Rahayuningtyas, 2014). If the merged bank has a higher DPR than one or both of the banks prior to the merger, the DPR of the merged entity may increase. On the other hand, if the merging banks have lower DPRs, the merged entity's DPR may decrease. Given these facts, DPR is expected to rise.

$$DPR = \frac{Total\ Dividend}{Net\ Profit\ After\ Tax}$$

3) Dividend Cover Ratio (DCR)

A vital investor ratio called dividend cover compares the bank's net revenue to the dividend paid to determine how many dividends it can distribute to its shareholders. This merely represents the bank's capacity to distribute dividends to stockholders out of the attributable profit (Rahayuningtyas, 2014). If the merger results in a larger bank with increased earnings, the DCR may improve. The merged entity would have a more extensive income base to cover its debt obligations. On the other hand, if the merger results in increased debt levels or lower earnings, the DCR may worsen. As Dukhan bank has increased earnings compared to pre-merger reports, DCR is also expected to rise.

$$DCR = \frac{Net\ Profit\ After\ Tax}{Total\ Dividend}$$

3.3. Solvency Ratios

Solvency is the ability of a bank to meet its future financial obligations. Solvency is essential to the bank's continued existence since it ensures its ability to conduct business soon. The ability of the bank to pay its long-term responsibilities, whether separate or combined obligations, including those owing to linked firms, is most closely associated with the concept of solvency. For a bank to be viable, it must have more assets than liabilities. Solvency determinants are a variety of variables that have been discovered to be regularly employed in the relevant literature. For instance, the debt-to-equity ratio is the most crucial metric to use when determining insights into the ratio of debt financing to equity financing used to obtain and maintain bank assets. In this study, we measured the solvency of banks through the following three ratios:

1) Debt to Equity Ratio (DER)

The debt-to-equity ratio, also known as the "debt-equity ratio," "risk ratio," or "gearing ratio," is a leverage ratio that computes how much the total amount of debt and financial obligations weigh against the total amount of shareholders' equity (Kumar, 2017). The debt-to-equity ratio employs total equity as a denominator instead of the debt-assets ratio, which uses total assets. This ratio shows how much debt or equity funding is weighted in a bank's capital structure. As with every merger, a portion of the acquisition has been made with debt financing, and the rest is on equity financing. Therefore, the additional debt is expected to raise the DER ratio in the short term after the merger.

$$DER = \frac{Total\ Debt}{Total\ Equity}$$

2) Capital Adequacy Ratio (CAR)

The capital adequacy ratio gauges a bank's capital availability as a proportion of its risk-weighted loan exposures. The capital adequacy ratio also referred to as the capital-to-risk weighted assets ratio (CRAR), is used to safeguard depositors and support the global financial system's security and effectiveness. Tier-1 capital, which can absorb losses without forcing a bank to stop operating, and tier-2 capital, which can absorb losses in the event of a winding-up but offers less security to depositors, are the two kinds of capital that are measured. This research defines *regulatory capital* as the sum of tier-1 and tier-2 capital (Abusharba et al., 2013). After a healthy merger, the size of the merged entity increases significantly, increasing the capital as well. Therefore, with the scale effect, CAR is often expected to rise.

$$CAR = \frac{Regulatory\ Capital}{Risk\ Weighted\ Assets}$$

3) Debt to Asset Ratio (DAR)

A financial indicator called the debt-to-asset ratio can be used to determine how much debt is being used to fund a bank's activities. It is just one of the numerous leverage ratios that can be used to comprehend the capital framework of a bank. A bank's funded debt, called interest-bearing liabilities, determines the debt-to-asset ratio. The ratio excludes total liabilities like accounts payable. It refers to real credit given by direct lenders for interest obligations such as bonds, term loans from a commercial bank, or subordinated debt (Andhani, 2019). Similar to DER, DAR is also expected to rise in the short term after the merger.

$$DAR = \frac{Total\ Funded\ Debt}{Total\ Assets}$$

3.4. Profitability Ratios

The ability of a bank to generate profits when compared against its outlays and other associated costs over a specific time frame defines its profitability. Profitability ratios gauge how effectively a business uses its resources and

manages its costs to produce a respectable rate of return. This research examined profitability at the levels of return on equity, return on assets, and net interest margin. The following variables have thus been evaluated:

1) Return on Equity (ROE)

Return on equity determines a bank's profitability and effectiveness at turning a profit. A higher return on equity indicates that the management of a bank is more effective at producing revenue and growth from its equity financing (Ichsani & Suhardi, 2015).

$$ROE = \frac{Net\ Profit\ After\ TAX}{Average\ Shareholders\ Equity}$$

2) Return on Assets (ROA)

The return on assets shows how much profit a bank can make from its assets. Return on assets, in other terms, gauges how effectively a bank's management generates profit from the resources or assets listed on its balance sheet (Ichsani & Suhardi, 2015).

$$ROA = \frac{Net\ Profit\ After\ Tax}{Total\ Assets}$$

3) Efficiency Ratio (ER)

The efficiency ratio is frequently employed to evaluate how effectively a company uses its internal assets and liabilities. An efficiency ratio has a particular meaning in the banking sector. Non-interest expenses divided by income are a measure of a bank's efficiency. This enables analysts to evaluate the performance of commercial and investment banks because it demonstrates how well the bank's managers manage their overhead (or "back office") costs (Ichsani & Suhardi, 2015).

$$ER = \frac{Operating \; Expense}{Total \; Income}$$

A healthy bank merger may result in improved financial performance and higher shareholder returns, which could increase ROA, ROE, and ER. This could occur if the merger creates economies of scale, expands the bank's customer base, or enhances the bank's ability to generate revenue. The Barwa bank merger is also expected to raise these ratios altogether.

4. Results and Discussion

The study's findings have been discussed in the ensuing paragraphs, and critical information is presented in tables 1 to 8. In total, 12 ratios significant to the banking industry were calculated, i.e., three from each category. The findings and analysis of this study have been contrasted with some earlier research on the same subject.

4.1. Liquidity Ratios

Table 1 reflects the critical financial data extracted from the audited financial statements, essential to calculate the liquidity ratios of the bank over six years period.

Table 1. Financial Data for Liquidity Ratios

	2017	2018	2019	2020	2021	2022
Total Loans	31,676,882	27,756,699	51,924,104	58,536,992	75,221,707	75,676,514
Total Deposits	26,469,886	26,033,499	47,878,014	53,881,539	77,426,227	74,545,206
Cash & Cash Equivales'	2,922,346	2,895,115	3,758,677	6,651,735	9,303,335	4,538,555
Total Assets	48,637,154	44,361,540	77,130,692	86,296,621	110,727,154	106,276,016
Interest Expense	910,949	1,051,120	1,448,975	1,065,911	1,200,712	3,041,636
Total Funds	38,442,457	33,776,451	58,495,071	65,493,805	87,980,548	81,164,964

As reflected in Table 2, the liquidity ratios have only mildly improved in the post-merger period. The LDR represents the disparity between a bank's total loans and deposits. The bank may not have enough liquidity to meet unexpected funding needs if the ratio is too high. Nevertheless, if the percentage is too low, the bank might not make as much money as it could. According to Feroz et al. (2003), 80% to 90% is the optimal LDR. However, the LDR has been over 100% for all years except in 2021, indicating liquidity management discrepancies.

Similarly, CTA and IETF have not shown any significant change after the merger. As the data began in 2017, one must remember that this is the starting year of the Qatari blockade. The Qatar blockade, which began in 2017 and resulted in a diplomatic crisis in the Gulf region, significantly impacted the Qatari economy, including the country's banking sector. One significant effect of the blockade on Qatari banks was a decrease in their customer deposits, which decreased the Cash to Total Assets (CTA) ratio. This decrease in CTA was partly due to a decrease in the banks' access to foreign funds, which negatively impacted on their International Equity to Total Funds (IETF) ratio.

Additionally, the Loan Deposit Ratio (LDR) of Qatari banks increased as they faced difficulties in obtaining external funding and had to rely more heavily on customer deposits to fund their loan portfolios. Despite these challenges, Qatari banks have taken steps to manage their liquidity and maintain their financial stability in the face of the ongoing blockade. Overall, the blockade would be the main reason for limited financial ratio improvement despite the healthy performance.

Table 2. Liquidity Ratios

	2017	2018	2019	2020	2021	2022
LDR	1.197	1.066	1.085	1.086	0.972	1.015
CTA	0.060	0.065	0.049	0.077	0.084	0.043
<i>IETF</i>	0.024	0.031	0.025	0.016	0.014	0.037



Movement of liquidity ratios over the six-year period is graphically illustrated in figure 1.

Figure 1. Liquidity Ratios

4.2. Investment Ratios

Table 3 displays the vital financial information that was taken from the audited financial statements and used to determine the bank's investment ratios over a six-year period.

Table 3. Financial Data for Investment Ratios

	2017	2018	2019	2020	2021	2022
NPAT	754,324	764,966	765,052	566,608	1,193,393	1,553,069
Total Income	2,248,589	2,311,961	3,275,316	3,788,540	4,050,472	4,451,524
Total Dividend	414,600	444,200	520,000	520,000	727,400	831,300

The results of investment ratios are presented in Table 4. Investment ratios have also been largely indifferent despite the merger activity, except for EPS, which dipped in 2019, the year of the merger, and 2020, i.e., the first-year postmerger. The main reason behind this decline was the increase in shares and shareholders and the decline in net profit resulting from an increase in non-operating expenses.

Table 4. Investment Ratios

	2017	2018	2019	2020	2021	2022	
EPS	2.54	2.58	1.69	1.09	2.23	2.27	
DPR	0.55	0.58	0.68	0.92	0.61	0.54	
DCR	1.82	1.72	1.47	1.09	1.64	1.87	

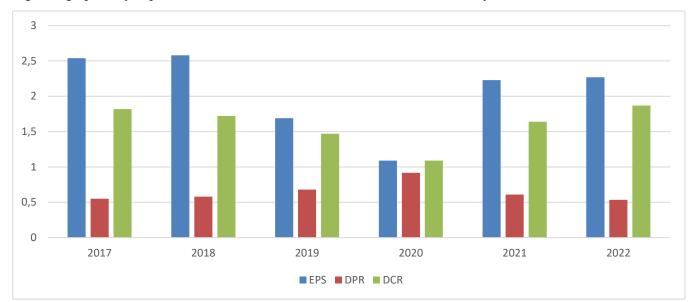


Figure 2 graphically depicts the movement of the investment ratios over the six-year timeframe.

Figure 2. Investment Ratios

4.3. Solvency Ratios

The significant financial data that was extracted from the audited financial statements and applied to calculate the bank's solvency ratios over a six-year timeframe is shown in Table 5.

Table 5. Financial Data for Solvency Ratios
--

	2017	2018	2019	2020	2021	2022
Total Debt	38,442,457	33,776,451	58,495,071	65,493,805	87,980,548	81,164,964
Equity	7,621,609	6,750,059	11,504,446	11,504,038	13,986,561	14,336,052
Risk Weighted Assets	36,719,685	35,476,865	57,280,962	65,091,233	70,985,325	73,065,442
Total Regulatory Capital	6,420,808	5,935,586	10,053,218	10,664,738	13,056,588	13,354,889
Total Funded Debt	38,442,457	33,776,451	58,495,071	65,493,805	87,980,548	81,164,964
Total Assets	48,637,154	44,361,540	77,130,692	86,296,621	110,727,154	106,276,016

As evident from table 6, the bank's solvency situation has slightly deteriorated, particularly the DER, which is a risk indicator for banks. Fridson & Alvarez (2011) have concluded that banks are more solvent if their solvency ratio is higher. However, as Kumar (2009) suggested, this might be because of the heavier debt load than in the pre-M&A situation.

The solvency ratio performance of Dukhan bank following the merger in 2020 may be due to several factors. The strategic measures the bank's management took to strengthen its solvency position, such as lowering non-performing loans and raising its capital adequacy ratio, could be one cause. The nation's economic circumstances, such as interest rates, inflation, and other macroeconomic variables that might have impacted the bank's performance, could also play a role.

Table 6. Solvency Ratios

	2017	2018	2019	2020	2021	2022
DER	5.044	5.004	5.085	5.693	6.290	5.662
CAR	0.175	0.167	0.176	0.164	0.184	0.183
DAR	0.790	0.761	0.758	0.759	0.795	0.764

The change in the solvency ratios over a six-year period is schematically shown in Figure 3.

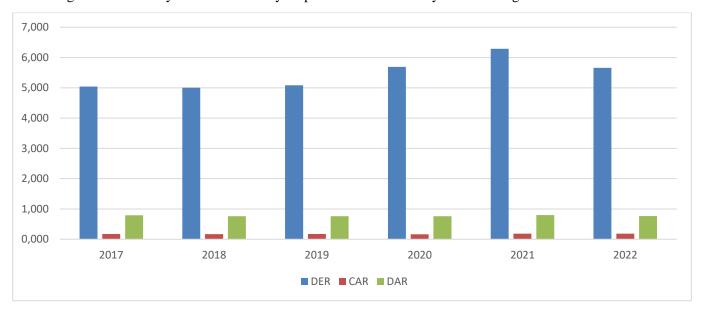


Figure 3. Solvency Ratios

4.4. Profitability Ratios

Table 7 displays the important financial information that was taken from the audited financial statements and used to determine the bank's profitability ratios over a five-year period.

 Table 7. Financial Data for Profitability Ratios

	2017	2018	2019	2020	2021	2022
NPAT	754,324	764,966	765,052	566,608	1,193,393	1,553,069
Average Shareholders' Equity	7,442,411	7,185,834	9,127,253	11,504,242	12,745,300	14,161,307
Total Assets	48,637,154	44,361,540	77,130,692	86,296,621	110,727,154	106,276,016
Operating Expenses	508,522	495,821	715,517	748,583	782,114	750,344
Total Income	2,248,589	2,311,961	3,275,316	3,788,540	4,050,472	4,451,524

Table 8 results confirmed an insignificant difference between pre- and post-merger profitability for the bank. This suggests that there has not been a discernible variation in the banks' overall financial performance between the pre- and post-merger periods. Abbas et al. (2015) also concluded that merger activity does not significantly change the financial performance of banks.

According to the data supplied, the profitability ratios of Dukhan Bank have had a variable response to the merger. Over time, the return on equity (ROE) ratio has changed, reaching a high of 10.6% in 2018 and a low of 4.9% in 2020 before edging up to 11.0% in 2022. The return on assets (ROA) ratio has also changed, peaking at 1.7% in 2018

and declining to 0.7% in 2020 before rising to 1.5% in 2022. The efficiency ratio (ER), which ranged from 19.3% in 2021 to 22.6% in 2017, with a low of 16.9% in 2022, has been comparatively constant.

Many variables, including changes in interest rates, the creditworthiness of loans, and non-interest income, can be blamed for the variations in ROE and ROA. Profitability ratios can be negatively impacted by a drop in interest rates or a rise in non-performing loans, or an increase in interest rates can positively impact them. The bank has successfully managed its operating expenses concerning its revenue, as seen by the constant ER.

Although the profitability ratios have changed, Dukhan Bank's performance has been broadly consistent since the merger. Profitability ratios should be examined in conjunction with other financial measures to thoroughly evaluate the bank's financial health because various internal and external factors can influence them.

Several factors, like the COVID-19 epidemic and the Qatari blockade, could impact the profitability ratios for Dukhan Bank following the merger.

The negative impact of the COVID-19 pandemic on the general economic activity and financial markets, which resulted in a drop in profitability, may be responsible for the decrease in ROE and ROA ratios in 2020 and 2021. A decline in equity as a percentage of total assets can bring about a lower ER ratio in 2021.

Also, as it may have affected trade and investment flows, the Qatar blockade may have contributed to the lower profitability ratios in 2020 and 2021 by slowing down the nation's economic activity. The impact of the blockage may be shown in the total income decline in 2020 compared to 2019, while some recovery may be indicated by the increase in 2021.

It is crucial to remember that various variables, including market conditions, legislative changes, and macroeconomic trends, can impact a bank's profitability ratios. A more thorough examination would be needed to pinpoint the precise causes of the observed changes.

Table 8. Profitability Ratios

	2017	2018	2019	2020	2021	2022
ROE	0.101	0.106	0.084	0.049	0.094	0.110
ROA	0.016	0.017	0.010	0.007	0.011	0.015
ER	0.226	0.214	0.218	0.198	0.193	0.169

Figure 4 visually depicts how the profitability ratios adjusted over a six-year span.

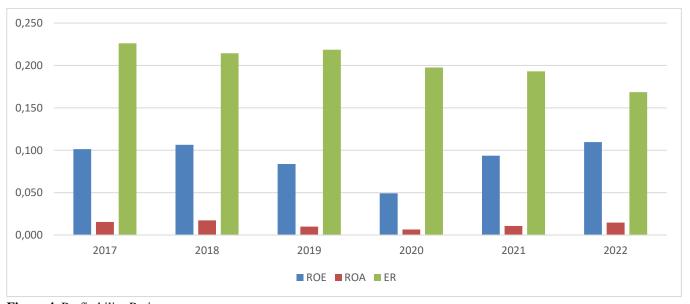


Figure 4. Profitability Ratios

4.5. Discussion and Effects on SDG Strategy

This merger in Qatar has the potential to positively contribute to the United Nations' Sustainable Development Goals (SDGs) through various channels. Firstly, a merger can enhance financial stability and resilience of the consolidated entity, which aligns with SDG 16: "Peace, Justice and Strong Institutions." A more stable and robust financial institution resulting from a merger can contribute to a stable financial system in Qatar, promoting economic growth and reducing risks associated with financial instability (Aysan & Unal, 2023).

Secondly, a bank merger can lead to increased operational efficiencies and cost savings, which can contribute to SDG 9: "Industry, Innovation, and Infrastructure." Mergers can create synergies and economies of scale, resulting in improved operational effectiveness, streamlined processes, and enhanced technological capabilities. These efficiencies can lead to increased investment in innovative solutions and improved infrastructure, which can further support economic growth and development in Qatar.

Furthermore, a bank merger can enhance corporate governance and transparency, aligning with SDG 16. Merged entities can implement robust corporate governance practices, including risk management, accountability, and transparency, which can contribute to a more stable and resilient financial system, fostering investor confidence and sustainable business practices.

Finally, a bank merger can also contribute to SDG 17: "Partnerships for Goals." The consolidation of banks can result in stronger financial institutions that are better positioned to engage in partnerships with various stakeholders, including other financial institutions, governments, civil society organizations, and international organizations, to collectively work towards achieving the SDGs in Qatar.

In conclusion, the discussed merger case has the potential to contribute positively to several SDGs, including SDG 1, SDG 5, SDG 8, SDG 9, SDG 16, and SDG 17, through enhanced financial stability, operational efficiencies, inclusive financial services, gender equality, improved governance, and partnerships for sustainable development. However, the actual impact of a bank merger on the SDGs would depend on the specific context, strategies, and actions undertaken by the merged entity to align with and prioritize these goals. Further research and monitoring of the outcomes of bank mergers in Qatar would be necessary to assess their actual contributions to the SDGs.

Financial robustness, resulting from this merger, can contribute significantly to the achievement of several Sustainable Development Goals (SDGs) established by the United Nations.

Firstly, financial robustness achieved through a bank merger can contribute to SDG 8: "Decent Work and Economic Growth." A financially robust and stable bank can support economic growth and development by providing a reliable source of financing for businesses and individuals, facilitating investment, and promoting entrepreneurship (Aysan & Unal, 2023). This can create job opportunities, generate income, and contribute to overall economic prosperity, which aligns with SDG 8's objective of fostering sustained, inclusive, and sustainable economic growth.

Secondly, financial robustness can contribute to SDG 9: "Industry, Innovation, and Infrastructure." A merged bank with increased financial resources and technological capabilities can invest in innovation, research, and development of new financial products, services, and infrastructure. This can contribute to the advancement of the financial industry, promote technological innovation, and improve financial inclusion, thereby supporting the development of resilient and sustainable infrastructure, which is a key target of SDG 9 (Abbas et al., 2014).

Additionally, financial robustness can contribute to SDG 17: "Partnerships for the Goals." A merged bank can leverage its increased size and resources to engage in partnerships with various stakeholders, including other financial institutions, governments, civil society organizations, and international organizations, to collectively work towards achieving the SDGs. This can foster collaborative efforts, knowledge sharing, and resource mobilization, which are essential elements of SDG 17's call for global partnerships to achieve the SDGs.

In summary, financial robustness resulting from M&As can have positive contributions to multiple SDGs, including SDG 1, SDG 8, SDG 9, SDG 16, and SDG 17. Through supporting economic growth, promoting innovation and

infrastructure, reducing poverty, enhancing governance, and fostering partnerships, a financially robust merged bank can play a significant role in advancing sustainable development in Qatar and contributing to the achievement of the SDGs. However, it is important to note that the actual impact of a bank merger on the SDGs would depend on the specific strategies, actions, and implementation of sustainable practices by the merged entity, which would require further research, monitoring, and evaluation.

4.6. Contributions from a Magasid al-Shariah Perspective

The Maqasid al-Shariah, or the higher objectives of Islamic law, provide a comprehensive framework for evaluating the positive contributions of bank mergers in Qatar to the Sustainable Development Goals (SDGs) from an Islamic perspective (Abbas et al., 2014).

One key principle from a Maqasid perspective is justice. Bank mergers should promote equitable access to financial services, ensuring that the benefits of mergers are distributed fairly among stakeholders, including customers, employees, shareholders, and local communities. This can be evaluated by assessing the impact of bank mergers on financial inclusion, affordability, and accessibility of banking services, as well as the fairness of distribution of benefits among different stakeholders.

Another principle is welfare. Bank mergers should contribute to the economic welfare and well-being of individuals and communities by promoting sustainable economic growth, job creation, and poverty alleviation. This can be evaluated by assessing the impact of bank mergers on economic indicators such as GDP growth, employment generation, and poverty reduction, and examining the extent to which merged banks support the financial needs of individuals and businesses in a sustainable manner (Abbas et al., 2014).

Sustainability is also a crucial principle. Bank mergers should promote environmentally sustainable practices and contribute to the protection of the environment, including natural resources, ecosystems, and biodiversity. This can be assessed by evaluating the environmental policies, practices, and performance of merged banks, including their commitment to responsible lending, investment in environmentally friendly projects, and implementation of sustainable business practices (Knapp & Gart, 2014).

Ethical conduct is another important consideration. Bank mergers should adhere to ethical principles and values in their business operations, including transparency, accountability, and social responsibility. This can be evaluated by examining the corporate governance practices of merged banks, their commitment to ethical conduct, and their engagement in socially responsible initiatives that benefit the society at large.

Social cohesion is also a relevant principle. Bank mergers should promote social cohesion and harmony within communities by supporting inclusive and socially responsible practices that foster social integration, diversity, and inclusivity. This can be assessed by evaluating the impact of bank mergers on social indicators such as community engagement, stakeholder participation, and support for social initiatives that contribute to social cohesion and inclusivity (Bindabel et al., 2017).

In conclusion, evaluating the positive contributions of bank mergers in Qatar to the SDGs from a Maqasid perspective involves assessing their adherence to the principles of justice, welfare, sustainability, ethical conduct, and social cohesion. By promoting these principles in the context of bank mergers, Qatar can ensure that the resulting financial institutions contribute to the overall well-being and sustainable development of the society in line with Islamic values and the broader goals of the SDGs.

4.7. Policy Recommendations

Based on the potential positive contributions of a bank merger to the Sustainable Development Goals (SDGs), the following policy recommendations can be proposed:

Promote Financial Inclusion: The merged bank should prioritize efforts to promote financial inclusion by ensuring access to affordable and accessible financial services for all segments of society, including underserved and

vulnerable populations. This can be achieved through innovative product offerings, digital financial services, and partnerships with local communities and stakeholders.

Foster Innovation and Technology Adoption: The merged bank should invest in research and development of innovative financial products and services, as well as adopt advanced technologies to enhance operational efficiency, risk management, and customer experience. This can include leveraging fintech partnerships, promoting digital payments, and utilizing data analytics for informed decision-making (Knapp & Gart, 2014).

Strengthen Corporate Governance: The merged bank should prioritize good corporate governance practices, including transparency, accountability, and risk management, to ensure sound and responsible financial management. This can include establishing robust risk management frameworks, conducting regular audits, and adhering to international best practices in corporate governance.

Support Sustainable Economic Growth: The merged bank should prioritize financing and supporting sustainable economic sectors, such as renewable energy, green infrastructure, and social enterprises, to contribute to Qatar's economic diversification and environmental sustainability goals (Bindabel et al., 2017). This can involve developing dedicated financing programs, offering preferential rates for sustainable projects, and incorporating environmental, social, and governance (ESG) considerations in lending and investment decisions.

Foster Partnerships for SDG Alignment: The merged bank should actively engage in partnerships with other financial institutions, government entities, civil society organizations, and international organizations to collectively work towards achieving the SDGs in Qatar. This can include joint initiatives for capacity-building, knowledge sharing, and collaborative projects that address social, economic, and environmental challenges.

Monitor and Report SDG Progress: The merged bank should establish a robust system for monitoring, measuring, and reporting its progress towards contributing to the SDGs. This can involve setting clear targets and indicators aligned with the SDGs, conducting regular impact assessments, and transparently reporting on the bank's SDG-related initiatives, outcomes, and challenges.

Engage Stakeholders in Decision-Making: The merged bank should actively engage relevant stakeholders, including customers, employees, shareholders, and local communities, in the decision-making processes related to sustainable development initiatives. This can involve soliciting feedback, conducting stakeholder consultations, and incorporating diverse perspectives to ensure inclusive and participatory decision-making (Knapp & Gart, 2014).

In conclusion, implementing these policy recommendations can help ensure that a bank merger in Qatar contributes positively to the SDGs, aligning the merged bank's operations with Qatar's sustainable development priorities and supporting the country's progress towards achieving the SDGs by 2030.

5. Conclusion and Limitations

Globally, M&A between banks has become increasingly prevalent. Bank M&A has frequently been influenced by policies for revamping the banking sector in many developing economies to enhance financial system stability. Despite the scant proof that M&A can improve banks' performance, this is true. In light of this, this research aimed to conduct a comparative analysis of the effects of pre- and post-M&A on the financial performance of the first bank that went under the merger process three years prior and three years' post-merger. The results indicate that the experience of M&A has an insignificant effect on the banks' liquidity, profitability, solvency, and investment.

The findings of this study are comparable to those of Abbas et al. (2015) investigation into the financial performance of Pakistani banks, which found no discernible difference between the pre-and post-merger financial performance of banks. However, where studies by Berger & Humphrey (1992), Abbas et al. (2014), and Mantravadi & Reddy (2008) indicated a decline in financial performance after M&A, other studies, such as Caprion (1999), Calomiris & Karenski (2000), and De Nicolo et al. (2003), have reported an improvement in the financial performance after M&A.

It is advised that policymakers and regulators consider developing policies that encourage consolidation within the banking sector in Qatar in light of this research's findings. Banks' performance, effectiveness, and liquidity may increase due to mergers and acquisitions, which could eventually be advantageous to the entire economy. In order to increase transparency and comparability among banks, governments should also promote the implementation of standardized financial reporting systems and disclosure criteria.

This study's policy implications include the requirement for continuous monitoring and evaluation of Qatar's banking sector. Frequent evaluations of bank performance, financial stability, and risk management procedures can assist in pinpointing problem areas and make sure that the sector is still able to withstand possible shocks. Also, governments ought to think about taking action to assist smaller banks that might struggle to compete with bigger, more established banks (Aysan et al., 2022).

Some areas of research could build on the findings of this analysis in terms of future investigations. Investigating how other macroeconomic factors, such as variations in interest rates or inflation, affect the financial performance of banks in Qatar is one possible line of inquiry. Examining the performance of other banks in the area and contrasting their financial ratios with those of Dukhan Bank could be another subject for future research. This could assist in discovering trends and patterns that are particular to Dukhan Bank and offer a broader view of the performance of banks in the Qatari banking sector (Calomiris & Karenski, 2000).

Furthermore, a more thorough examination of Dukhan Bank's activities might reveal some underlying causes of poor financial performance. For instance, a review of the bank's lending portfolio could show which economic sectors are fueling loan growth and whether the bank's lending policies are long-term viable. The bank's cost structure may also offer the potential for cost savings, which could eventually lead to higher profitability. Researchers could get a more nuanced picture of the elements influencing Dukhan Bank's financial performance and pinpoint specific areas for improvement by performing more in-depth examinations of particular components of the bank's operations.

In conclusion, Dukhan Bank merger has the potential to positively contribute to the Sustainable Development Goals (SDGs) through various means such as enhanced financial robustness, increased access to finance, innovation and technology adoption, sustainable financing, strong corporate governance, partnerships for SDG alignment, and stakeholder engagement. By prioritizing sustainable practices, the merged bank can play a critical role in promoting inclusive economic growth, social development, and environmental sustainability in Qatar.

There are several potential areas for future research related to the positive contributions of bank mergers in Qatar to the Sustainable Development Goals (SDGs).

One area of research could focus on conducting impact assessments to evaluate the actual impact of bank mergers on the SDGs in Qatar using quantitative and qualitative research methods. Such assessments can help measure the outcomes and impacts of merged banks on various SDG targets, such as financial inclusion, innovation, sustainable financing, and stakeholder engagement (Aysan et al., 2022).

Another area of research could explore stakeholder perspectives and perceptions on the positive contributions of bank mergers to the SDGs. This can involve qualitative research methods such as interviews, focus groups, and surveys to understand stakeholder perceptions, expectations, and experiences related to SDG-aligned banking practices. Understanding stakeholder perspectives can provide insights into the effectiveness and relevance of bank mergers in promoting SDG alignment from different stakeholder viewpoints, including customers, employees, shareholders, local communities, and government entities.

Comparative studies can provide valuable insights into best practices, lessons learned, and potential transferable strategies for promoting SDG alignment in the context of bank mergers. Researchers can benchmark the performance of bank mergers in Qatar against similar experiences in other countries or regions to identify similarities, differences, and potential strategies for promoting sustainable banking practices.

Long-term sustainability is another area that can be explored in future research related to bank mergers and the SDGs (Bindabel et al., 2017). This can involve assessing the resilience of SDG-aligned practices in merged banks to external shocks, evaluating their financial performance over time, and identifying challenges and opportunities for sustaining SDG-aligned practices over the long term.

The role of technology and innovation in driving positive contributions of bank mergers to the SDGs can also be an interesting area of research. This can involve studying the adoption and impact of fintech, digital financial services, and other technological innovations in promoting financial inclusion, enhancing operational efficiency, and supporting sustainable financing practices (Aysan et al., 2022).

Lastly, conducting research to evaluate the long-term impact of bank mergers on the SDGs can provide insights into the sustained contribution of merged banks to specific SDG targets over time. This can help identify strategies to maximize the positive impact of bank mergers on the SDGs in the long run.

By conducting research in these areas, we can further enhance our understanding of the potential positive contributions of bank mergers to the SDGs in Qatar and identify strategies for promoting sustainable banking practices that align with Qatar's sustainable development agenda.

Overall, Dukhan bank merger in Qatar has the potential to be a catalyst for positive change and contribute significantly to the country's sustainable development agenda. By aligning their operations with the SDGs and adopting responsible business practices, the merged bank can create a positive impact on society while generating long-term value for all stakeholders involved.

References

- Abbas, Q., Hunjra, A. I., Azam, R. I., Ijaz, M. S., & Zahid, M. (2014). Financial performance of banks in Pakistan after Merger and Acquisition. *Journal of Global Entrepreneurship Research*, 4(13), 1-15.
- Abbas, Q., Hunjra, A., Saeed, R. Ehsan U. & Ijaz, M. (2015). Analysis of Pre and Post Merger and Acquisition Financial Performance of Banks in Pakistan. *Information Management and Business Review*, 6(4), 177-190.
- Abdou, H., Agbeyo, B., Jones, K., & Sorour, K. (2016). The impact of M&A on the Nigerian financial market: A pre-post analysis. *Investment Management and Financial Innovation*, 13(1), 138-150.
- Abubakar, J., AlQashouti, B., Aysan, A., & Unal, I. M. (2022). Is Islamic Finance A Panacea for Global Economic Disruptions after COVID-19 Outbreak?. *Available at SSRN 4085941*.
- Abusharba, M. T., Triyuwono, I., Ismail, M., & Rahman, A. F. (2013). Determinants of capital adequacy ratio (CAR) in Indonesian Islamic commercial banks. *Global review of accounting and finance*, 4(1), 159-170.
- Akinroluyo, B. I. (2022). Capital Adequacy and Deposit Money Bank's Return On Asset (Roa) In Nigeria. *Finance & Accounting Research Journal*, 4(1), 1-13.
- Akpan, M. N. U., Aik, N. C., Wanke, P. F., & Chau, W. H. (2018). Exploring the long-term trade-off between efficiency and value creation in horizontal M&As: Evidence from Nigeria. *African Journal of Economic and Management Studies*, 9(2), 130-147.
- Amel, D., Barnes, C., Panetta, F. & Salleo, C. (2004). Consolidation & efficiency in the financial sector: A review of the international evidence. *Journal of Banking & Finance*, 3, 2493-2519.
- Andhani, D. (2019). Pengaruh Debt to Total Asset Ratio (DAR) dan Debt to Equity Ratio (DER) Terhadap Net Profit Margin (NPM) Serta dampaknya terhadap Harga Saham pada Perusahaan Elektronik di Bursa Efek Tokyo tahun 2007-2016. *Jurnal SEKURITAS (Saham, Ekonomi, Keuangan Dan Investasi*), 3(1), 45.
- Austein, R., & Wijnen, B. (2005). Structure of the IETF Administrative Support Activity (IASA) (No. rfc4071).
- Aysan, Ahmet Faruk and Unal, Ibrahim Musa (2021): A Bibliometric Analysis of Fintech and Blockchain in Islamic Finance. Forthcoming in: *Efil Journal of Economic Research*, 4(15) (1 September 2021).
- Aysan, A. F., Belatik, A., Unal, I. M., & Ettaai, R. (2022). Fintech strategies of Islamic banks: a global empirical analysis. *FinTech*, 1(2), 206-215.
- Aysan, A. F., & Unal, I. M. (2023). Challenges in Islamic Fintech and Digitalization: An Extensive Literature Review. World Scientific Annual Review of Islamic Finance, 1-12.

- Awan, A. G., & Mahmood, U. B. (2015). Impact of mergers and acquisitions on the performance of commercial banks in Pakistan. Journal of Poverty, *Investment and Development*, 16, 48-56.
- Badreldin, A. & Kalhoefer, C. (2009). The effect of mergers and acquisitions on bank performance in Egypt. *Journal of Management Technology*, 25, 1-15.
- Berger, A. N. & DeYoung, L. (1997). Problem loans and cost efficiency in commercial banks. Journal of Banking and Finance, 21, 849-870.
- Bindabel, W., Patel, A., & Yekini, C. O. (2017). The challenges faced by integrating Islamic corporate governance in companies of Gulf countries with non-Islamic companies across border through merger and acquisition. SSRN, September 2017.
- Calomiris, C., & Karceski, J. (2000). Is the bank merger wave of the 1990s efficient? Lessons from nine case studies. In S. N. Kaplan (Ed.), Mergers and productivity (pp. 93-178). Chicago, USA: *University of Chicago Press*.
- Caprion, L. (1999). The long-term performance of horizontal acquisitions: INSEAD Work Paper, 99/24/SM, April.
- Cornett, M. M., McNutt, J. J. & Tehranian, H. (2006). Performance changes around bank mergers: Revenue enhancements versus cost reductions. *Journal of Money, Credit and Banking*, 38(4), 1013-1050.
- De Nicoló, M. G., Zephirin, M. M., Bartholomew, P. F., & Zaman, J. (2003). Bank consolidation, internationalization and conglomeration: Trends and implications for financial risk (*IMF Working Papers No. 158*). *International Monetary Fund*.
- Dukhan bank Media Center, Dukhan Bank Discloses Its Financial Results for The Year Ending 31 December 2022 Following Successful Listing on the Qatar Stock Exchange, February 2023, Accessed in March 2023, Accessed on: https://www.dukhanbank.com/media-center/press-release/dukhan-bank-discloses-its-financial-results-year-ending-31-december-2022%C2%A0
- Eccles, R. G., Lanes, K. L., & Wilson, T. C. (1999). Are you paying too much for that acquisition? Harvard Business Review, 77(4), 136-146.
- Feroz, E. H., Kim, S., & Raab, R. L. (2003). Financial statement analysis: A data envelopment analysis approach. *Journal of the Operational Research Society*, 54(1), 48-58.
- Fixler, D. J., & Zieschang, K. D. (1993). An index number approach to measuring bank efficiency: An application to mergers. *Journal of Banking & Finance*, 17(2-3), 437-450.
- Fridson, M. S., & Alvarez, F. (2011). Financial statement analysis: A practitioner's guide (Vol. 597). John Wiley & Sons.
- Hassen, T., Fakhri, I., Bilel, A., Wassim, T., & Faouzi, H. (2018). Dynamic effects of mergers and acquisitions on the performance of Commercial European Banks. *Journal of the Knowledge Economy*, 9(3), 1032-1048.
- Hubbard, N., & Purcell, J. (2001). Managing employee expectations during acquisitions. *Human Resource Management Journal*, 11(2), 17-33.
- Ichsani, S., & Suhardi, A. R. (2015). The effect of return on equity (ROE) and return on investment (ROI) on trading volume. *Procedia-Social and Behavioral Sciences*, 211, 896-902.
- Knapp, M. & Gart, A. (2014). Post-merger changes in bank credit risk: 1991-2006. Managerial Finance, 40(1), 51-71.
- Kumar, R. (2009). Post-Merger Corporate Performance: An Indian Perspective. Management Research News, 145-157.
- Kumar, P. (2017). Impact of earning per share and price earnings ratio on market price of share: a study on auto sector in India. *International Journal of Research*, 5(2), 113-118.
- Kwan, S. H. & Eisenbeis, R. B. (1999). Mergers of publicly traded banking organizations revisited. *Economic Review*, q4, 26-37.
- Lee, T., Liang, L. & Huang, B. (2013). Do Mergers Improve the Efficiency of Banks in Taiwan? Evidence from Stochastic Frontier Approach. *The Journal of Developing Areas*, 47(1), 395-416.
- Mantravadi, P., & Reddy, A. V. (2008). Type of merger and impact on operating performance: The Indian experience. *Economic and Political Weekly*, 66-74.
- Mishra, P. & Chandra, T. (2010). Mergers, acquisitions and firms' performance: Experience of Indian pharmaceutical industry. *Eurasian Journal of Business and Economics*, 3(5), 111-126.
- Pankaj, S. & Sushant, G. (2011). Mergers and Acquisitions: A pre-post analysis for the Indian financial services sector.
- Rahayuningtyas, S. (2014). Pengaruh Rasio-Rasio Keuangan Terhadap Dividend Payout Ratio (DPR) (Studi Pada Perusahaan Yang Listing Di BEI Tahun 2009–2011) (Doctoral dissertation, Brawijaya University).
- Resti, A. (1998). Regulation can foster mergers; can mergers foster efficiency? The Italian case. *Journal of Economics and Business*, 50(2), 157-169.

- Sherman, A. J. (2010). Mergers & Acquisitions: From A to Z (3rd ed.). New York, USA: AMACOM.
- Sinha, P. & Gupta, S. (2011). Mergers and Acquisitions: A Pre-Post Analysis for the Indian Financial Services Sector.
- Stahl, G. K., & Voigt, A. (2004). Impact of cultural differences on merger and acquisition performance: A critical research review and an integrative model. In C. Cooper, & S. Finkelstein (Eds.), *Advances in Mergers and Acquisitions* (Vol. 4, pp. 51-82). Bingley, UK: Emerald Group Publishing Limited.
- Sufi, A. (2004). Does joint production of lending and underwriting help or hurt firms? A fixed effect approach. SSRN. November 2004.
- Suroso, S. (2022). Analysis of the Effect of Capital Adequacy Ratio (CAR) and Loan to Deposit Ratio (LDR) on the Profits of Go Public Banks in the Indonesia Stock Exchange (IDX) Period 2016–2021. *Economit Journal: Scientific Journal of Accountancy, Management and Finance*, 2(1), 45-53.
- Unal, I. M., & Aysan, A. F. (2022). Fintech, Digitalization, and Blockchain in Islamic Finance: Retrospective Investigation. *FinTech*, 1(4), 388-398.
- Vitale, R. & Laux, J. A. (2012). The Economic Efficacy of Banking Mergers: 2006-2008. *Journal of Applied Business Research*, 28(6), 1211-1215
- Weinberg, M. (2007). The price effects of horizontal mergers. Journal of Competition Law and Economics, 4(2), 433-447.