

Comparative Superiority Test of Conventional Banking and Islamic Banking in the Context of Bangladesh

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Abstract

The financial sector in Bangladesh is primarily dominated by the commercial banking system, with non-bank financial institutions and the capital market playing a limited role. Commercial banks hold a substantial share of the financial system's assets and significantly contribute to the country's economic development. In this context, it's worth noting that commercial banks in Bangladesh operate using two main models: interest-based conventional banks and interest-free Islamic banks, the latter being based on Islamic Sharia principles. A study has been conducted to analyze the financial performance of these two types of banks, focusing on various factors such as business development, profitability, liquidity, solvency, commitment to the economy and community, efficiency, and productivity. The study results revealed that both types of banks exhibit notable financial performance but with varying strengths in different areas. In particular, the study found that interest-based conventional banks excel in terms of their commitment to the economy and community, productivity, and efficiency. Conversely, interest-free Islamic banks demonstrated superior performance in business development, profitability, as well as liquidity, and solvency. Upon analyzing the overall findings, the study suggests that interest-free Islamic banks hold a superior position in terms of financial performance when compared to interest-based conventional banks. This conclusion provides valuable insights into the distinctive strengths and performance indicators of each banking model, contributing to a comprehensive understanding of the financial landscape in Bangladesh.

Keywords: Interest-based Banking, Non Interest-based Banking, Comparative Performance, Islamic and Conventional Banking.

1. Introduction

Bangladesh possesses a diverse banking framework, comprising nationalized, private, and foreign commercial banks. The Bangladesh Bank acts as the central bank, wielding authority over the country's monetary policies and providing supervision for all commercial banks. Following the attainment of independence, the government initiated the nationalization of the domestic banking system, subsequently restructuring and rechristening different banks. The 1980s marked a significant turning point with the decision to privatize commercial banks, leading to a profound transformation of the banking sector. At present, Bangladesh is home to 61 scheduled banks, encompassing six state-owned banks, three specialized banks, forty-three private commercial banks, ten Islami Shariah-based PCBs, and nine foreign commercial banks. The assessment of banks' financial performance holds immense significance for a wide

array of stakeholders, including owners, investors, debtors, creditors, government entities, depositors, bank managers, and regulatory bodies. The performance of banks plays a pivotal role in providing direction to stakeholders for decision-making. For instance, it influences debtors and investors in evaluating whether to invest in a bank or explore alternative investment avenues. Similarly, it offers guidance to bank managers on optimizing their deposit and loan services to bolster their financial standing. Furthermore, regulatory agencies and governments closely monitor the financial performance of banks for regulatory oversight and policy formulation purposes.

2. Objective of the study:

The main objectives of this study are to comprehensively evaluate and compare the financial performance of interest-based conventional banks and interest-free Islamic banks. This will be achieved by analyzing a variety of financial metrics including business development ratios, profitability ratios, liquidity and solvency ratios, commitment to the economy and community, and productivity and efficiency ratios. The study aims to provide a thorough and detailed comparison of these two types of banks to gain insights into their respective financial performances.

3. Rationale of the study:

Banks and financial institutions are playing a vital role in driving the economic development of Bangladesh. They are actively involved in exploring and investing in different lucrative economic segments as well as providing lending services. In Bangladesh, banks operate from both conventional and Islamic perspectives. Conventional banks adhere to traditional banking practices, including the use of interest, while Islamic banks operate based on Shariah principles and do not support interest-based banking. This presents an opportunity for a comprehensive comparative performance analysis between interest-based conventional banks and interest-free Islamic banks in Bangladesh. Such a study involves a deep and thorough examination of various financial metrics and performance indicators to understand the differences and similarities between these two banking models in the context of Bangladesh's economic landscape. As a result, an extensive data-based study has been initiated to facilitate meaningful comparisons and draw valuable insights for stakeholders in the financial sector. This in-depth analysis aims to provide a clearer understanding of the contributions and performance of both types of banks towards the economic development of Bangladesh.

4. Methodology of the study:

The economic development of Bangladesh is being supported by both interest-based conventional banks and interest-free Islamic banks. This study focuses on five conventional banks (City Bank, Bank Asia, Dhaka Bank, IFIC Bank and Jamuna Bank) and four Islamic banks (Islami Bank Bangladesh, Al-Arafah Islami Bank, EXIM Bank, Social Islami Bank, First Security Islami Bank) over 7 years from 2017 to 2023. These banks were selected based on their year of establishment and availability of regular data to ensure comparability in assessing the performance of both types of banks with similar objectives. In addition to the bank data, this study also incorporates information from international journals and books authored by banking experts. The data was analyzed using "Statistical Package for Social Science" software (SPSS), Microsoft Excel, and other software versions. The analysis involved secondary data, descriptive statistics, T-tests, and hypothesis testing.

5. Tools for analyzing financial performance:

5.1 Profitability Ratios: Profitability is a critical measure of a company's management effectiveness and success. It can be evaluated using the following criteria: Return on Asset (ROA), Return on Equity (ROE), Profit Expense Ratio (PER), Profit Growth, and Earnings Per Share (EPS). ROA, ROE, profit growth rate and EPS are key indicators of managerial efficiency. ROA measures net earnings per unit of a given asset, indicating how effectively a bank can convert its assets into net earnings. A higher ratio signifies better performance. Similarly, ROE measures net earnings per unit of equity capital, with a higher ratio indicating higher managerial performance. A high PER indicates cost efficiency and higher profits relative to expenses. However, it's important to note that profitability is just one aspect of a bank's performance.

5.2 Liquidity and Solvency Ratios: Liquidity ratios assess a company's short-term ability to meet obligations and unexpected cash needs. There's generally a trade-off between returns (profitability) and risks (liquidity), as demonstrated by the relationship between securities and loans. Increasing long-term securities or loans can raise bank returns but also increase liquidity risk while increasing short-term securities can have the opposite effect. A higher liquidity ratio suggests lower risk and lower profitability. Additionally, banks and depository institutions share liquidity risk due to potential high withdrawals compared to new deposits, which can lead to liquidity issues. Cash Deposit Ratio (CDR), Advance Deposit Ratio, Current Asset Ratio, and Equity Multiplier are indicators of a bank's liquidity and solvency. A higher CDR indicates higher liquidity, boosting depositors' confidence. Meanwhile, a higher Advance Deposit Ratio suggests higher financial stress due to excessive lending. A comparatively higher Current Asset Ratio indicates more liquid assets, while a lower ratio suggests illiquidity. Equity Multiplier measures the amount of assets per unit of equity capital, with a higher EM leading to more borrowed funds and greater risk for the bank.

5.3 Business Development Ratios: These ratios measure a bank's financial progress and development over time, reflecting indicators such as total assets growth, deposits growth, advances growth, and investment growth. They also gauge the bank's contribution to the economic development of Bangladesh through financing, investment, and capital formation, both directly and indirectly. Higher ratios signify a successful track record and a significant contribution to the economy.

5.4 Efficiency and Productivity Ratio: The Total Operating Expenses to Deposit Ratio measures banking efficiency and productivity, indicating economies of scale in banking operations.

5.5 Commitment to Economy and Community: Commitment to the economy and community can be measured through the Long-Term Loan (LTL) ratio and Government Bond Investment (GBD) ratio. A high LTL indicates a bank's commitment to supporting long-term development projects, while a higher GBD indicates commitment to the community through investment in government securities, also signifying high liquidity and lower risk.

6. Analysis:

The financial performance ratios have been calculated from the annual financial statements of these banks for the period 2017-2023 to evaluate their performance. A t-test with a significance level of 0.05 has been used to identify significant differences in performance indicators between interest-based conventional banks and interest-free Islamic banks. The statistical hypothesis to compare the financial performance of interest-based conventional banks and interest-free Islamic banks is: "The performance of interest-based conventional banks is superior to that of interest-free Islamic banks." This hypothesis has been tested

separately for each performance ratio between conventional and Islamic banks to determine whether to accept or reject it.

6.1 Statistical Hypothesis:

To assess and compare the financial performance of interest-based conventional banks and interest-free Islamic banks, the assumed null hypothesis is: “The performance of interest-based conventional banks is superior to that of interest-free Islamic banks.” The hypothesis has been rejected or accepted for each performance ratio separately between conventional and Islamic banks.

6.2 City Bank PLC & Islami Bank Bangladesh PLC

6.2.1 Profitability:

In the case of Profitability, the null hypothesis has been accepted concerning the ratios of return on total assets, profit expense ratio, growth of profit, and earnings per share but rejected only for return on equity. That is, the performance of City Bank PLC is superior and indicates higher ability and therefore is an indicator of better managerial performance than that of Islami Bank Bangladesh PLC. But the ROE of Islami Bank Bangladesh PLC is superior to that of City Bank PLC. (See the table-1)

6.2.2 Liquidity and Solvency:

In the case of liquidity and solvency ratios the null hypothesis is rejected at 0.05 level of significance for cash deposit ratio, advance deposit ratio, current asset ratio, and equity multiplier ratio as the statistical t-value is not within the accepted region but accepted for govt. Bond investment ratio. The liquidity & solvency statement is in favor of Islami Bank Bangladesh PLC to that of City Bank. The calculated value reports that Islami Bank Bangladesh takes less financial stress and has borrowed fewer funds to convert into assets with the share capital but the higher govt. Bond investment of City Bank indicates high liquidity and less risk to that of Islami Bank Bangladesh. (See the table-2)

6.2.3 Business development:

Based on the calculated value the null hypothesis is rejected at 0.05 level of significance for total asset growth as the statistical t-value is not within the accepted region but accepted for advance and investment growth that indicates the performance of City Bank is superior to that of Islami Bank Bangladesh and making significant contribution in the economic development of Bangladesh. Although the total asset growth of Islami Bank Bangladesh is higher than the City Bank. (See table-3)

6.2.4 Efficiency and Productivity:

In the case of efficiency & productivity, City Bank is more efficient than Islami Bank Bangladesh PLC because the total operating expenses to deposits ratio of the City Bank is less than Islami Bank Bangladesh which means economies of scale are in favor of City Bank to that of Islami Bank. (See table-4.)

6.2.5 Commitment to Economy and Community:

The long-term loan ratio is calculated to measure superiority in economic commitment where the null hypothesis is rejected at 0.05 level of significance it means Islami Bank Bangladesh is superior to that of City Bank (See table-5)

6.3 Bank Asia PLC & Al Arafah Islami Bank PLC

6.3.1 Profitability:

From the statistical result of profitability, it is clear that the null hypothesis has been rejected concerning the ratios of return on equity, profit expense ratio, profit growth, and earning per share but accepted only

for return of assets. That is, the performance of Al Arafah Islami Bank is superior and indicates higher ability and therefore is an indicator of better managerial performance than that of Bank Asia PLC. However, the return on assets of Bank Asia is superior to that of Al Arafah Bank. (See table-6)

6.3.2 Liquidity and Solvency:

The null hypothesis is rejected at a 0.05 level of significance because the statistical t-value is not within the accepted region for cash deposit ratio, advance deposit ratio, and equity multiplier ratio. The liquidity & solvency statement is in favor of Al Arafah Islami Bank to Bank Asia. However, the calculated value reports that Al Arafah Islami Bank takes less financial stress and has borrowed fewer funds to convert into assets with the share capital but higher investment of Bank Asia in government bonds indicates high liquidity and less risk. The calculated value also reports Bank Asia maintained a higher current asset ratio than Al Arafah Islami Bank which indicates high liquidity and less risk. (See table-7)

6.3.3 Business development:

Based on the calculated value the null hypothesis is accepted at 0.05 level of significance as the statistical t-value is within the accepted region for deposit growth and investment growth that indicates the performance of Bank Asia is superior to that of Al Arafah and makes a significant contribution in the economic development of Bangladesh. However, the null hypothesis is rejected for total assets growth and deposit growth; the performance of Al Arafah is superior in capital formation and asset development. (See table-8)

6.3.4 Commitment to Economy and Community:

In measuring superiority in community development and economic commitment calculated output states that the null hypothesis is rejected at 0.05 level of significance as the statistical t-value is not within the accepted region it means Al Arafah is superior to that of Bank Asia and contributes significantly in the long-term development of different economic segments. (See table-9)

6.3.5 Efficiency and Productivity:

In the case of efficiency & productivity, Al Arafah is more efficient than Bank Asia because the null hypothesis is **rejected** which means economies of scale are in favor of Al Arafah than Bank Asia. (See table-10)

6.4 Dhaka Bank PLC & EXIM Bank PLC

6.4.1 Profitability:

For profitability, the null hypothesis has been rejected concerning the ratios of return on total assets, growth of profit, and earnings per share but accepted for return on equity and profit expense ratio. That is the performance of Dhaka Bank and EXIM Bank is mixed. Dhaka Bank is superior in cost management and maximizing shareholders' wealth whereas EXIM shows better performance in asset return, higher growth in profit, and earnings per share. (See table-11)

6.4.2 Liquidity and Solvency:

In the case of liquidity and solvency ratios, the null hypothesis is accepted at a 0.05 level of significance because the statistical t-value is within the accepted region for cash deposit ratio, advance deposit ratio, equity multiplier, and government investment. However, the null hypothesis is only rejected for the current asset ratio. The calculated value reports that Dhaka Bank is more efficient in liquidity management than EXIM Bank. (See table-12)

6.4.3 Business development:

Based on the calculated value the null hypothesis is rejected at 0.05 level of significance for total assets

and deposits growth but accepted for investment growth that indicates mixed performance of Dhaka Bank and EXIM Bank. (See table-13)

6.4.4 Efficiency and Productivity:

In the case of efficiency & productivity, EXIM Bank is more efficient than Dhaka Bank because the total operating expenses to deposits ratio of EXIM Bank is less than that of Dhaka Bank which means EXIM Bank is more efficient and productive from the perspective of economies of scale. (See table-14)

6.4.5 Commitment to Economy and Community:

The long-term loan ratio is calculated to measure superiority in community development and economic commitment whereas in the long-term loan ratio, the null hypothesis is rejected which means EXIM Bank has a higher contribution to economic development through long-term lending in different economic sectors than Dhaka Bank. (See table-15)

6.5 IFIC PLC & Social Islami Bank PLC

6.5.1 Profitability:

Profitability is one of the most important indicators of financial performance. Based on calculation it is vibrant that the null hypothesis has been rejected concerning the ratios of return on total assets, return on equity, profit expense ratio, and EPS but accepted for only profit growth. The performance of Social Islami Bank is superior in better managerial performance, and cost management with higher earnings per share but the profit growth of IFIC Bank is noteworthy. (See table-16)

6.5.2 Liquidity and Solvency:

The null hypothesis is rejected at a 0.05 level of significance because the statistical t-value is not within the accepted region for advance deposit ratio, current asset ratio, and equity multiplier ratio. That is the liquidity & solvency statement is in favor of Social Islami Bank. The calculated value reports a higher advance deposit ratio, current asset ratio, and equity multiplier ratio that indicates that the Social Islami Bank has utilized borrowed funds and share capital efficiently to that of IFIC Bank. However, the null hypothesis is accepted in the case of cash to deposit ratio and govt investment ratio. However, higher investment of IFIC Bank in government bonds indicates high liquidity and less risk. (See table-17)

6.5.3 Business development:

Based on the calculated value the null hypothesis is accepted at 0.05 level of significance as the statistical t-value is within the accepted region that indicates the performance of IFIC Bank is superior to that of Social Islami Bank and making a significant contribution to the economic development of Bangladesh through higher growth in total assets, deposits and investment. (See table-18)

6.5.4 Commitment to Economy and Community:

To measure superiority in community development and economic commitment long-term loan ratio is calculated where the null hypothesis is accepted at 0.05 level of significance as the statistical t-value is within the accepted region which means IFIC Bank has a superior commitment to the economy and community to that of Social Islami Bank. (See table-19)

6.5.5 Efficiency and Productivity:

In the case of efficiency & productivity, Social Islami Bank is less efficient than IFIC Bank because the null hypothesis is accepted which means the total operating expenses to deposits ratio of IFIC Bank is higher than Social Islami Bank. (See table-20)

6.5 Jamuna Bank PLC & First Security Islami Bank PLC

6.6.1 Profitability:

For profitability, the null hypothesis has been rejected concerning the ratios of return on total equity, profit growth, and earnings per share but accepted for return on assets and profit expense ratio. That is the performance of Jamuna Bank and First Security Islami Bank is mixed. Jamuna Bank is superior in utilizing assets and cost management whereas First Security Islami Bank shows better performance in maximizing shareholders' wealth and profit and higher earnings per share. (See table-21)

6.6.2 Liquidity and Solvency:

In the case of liquidity and solvency ratios, the null hypothesis is rejected at 0.05 level of significance because the statistical t-value is not within the accepted region for cash deposit ratio, advance deposit ratio, current ratio, and equity multiplier ratio. However, the null hypothesis is only accepted for the investment ratio. The calculated value reports that First Security Islami Bank is more efficient in liquidity management than Jamuna Bank. (See table-22)

6.6.3 Business development:

Based on the calculated value the null hypothesis is rejected at 0.05 level of significance for total assets and deposits growth but accepted for investment growth that indicates mixed performance of Jamuna Bank and First Security Bank. (See table-23)

6.6.4 Efficiency and Productivity:

In the case of efficiency & productivity, First Security Bank is more efficient than Jamuna Bank because the total operating expenses to deposits ratio of First Security Bank is less than that of Jamuna Bank. That means from the perspective of economies of scale First Security Bank is more efficient and productive. (See table-24)

6.6.5 Commitment to Economy and Community:

The long-term loan ratio is calculated to measure superiority in community development and economic commitment whereas in the long-term loan ratio, the null hypothesis is rejected; it means First Security Bank has a higher contribution to economic development through long-term lending in different economic sectors than that of Jamuna Bank. (See table-25)

7. Conclusion

The financial system of Bangladesh is a multifaceted structure that encompasses various components, including the central bank, commercial banks, non-bank financial institutions (NBFIs), the capital market, microfinance institutions, cooperatives, and other financial entities. Within this complex system, commercial banks—both conventional and Islamic—play a crucial role in driving the country's economic development and facilitating financial transactions for businesses and individuals alike. Research has shown that the performance of banks is a vital indicator of sustained economic growth, and evaluating this performance is necessary to understand their impact fully. Studies indicate that Islamic banks tend to outperform their conventional counterparts in various aspects of financial performance. This superiority is attributed to factors such as risk-sharing mechanisms and ethical investment practices that align with Shariah laws, which govern Islamic banking operations. However, it is essential to recognize that the success of Islamic banks does not diminish the significant contributions made by conventional banks. Conventional banks also exhibit noteworthy performance and have a pivotal role in different segments of the economy. They provide essential financial services that boost commerce, investment, and job creation, thus supporting overall economic growth. Despite their advantages, Islamic banks face certain limitations

that hinder their full potential. These include challenges related to operational procedures, the availability and diversity of financial instruments, the necessity for trained personnel, and the establishment of a supportive legal framework. Nevertheless, Islamic banks deserve recognition for their strong financial performance, largely attributed to their unique approach to financing, characterized by a focus on partnerships and participatory processes. To further enhance their impact, Islamic banks should prioritize the welfare of marginalized communities and the poor, ensuring that their financial products and services are inclusive and beneficial to all sectors of society. While profit generation remains an important goal, integrating social responsibility and community development into their business models is equally crucial. Moreover, there is considerable potential for conventional banks to embrace Islamic banking practices, either by fully converting to this model or by establishing dedicated Islamic banking windows. Still, it is vital that these banks also target both social and economic development in Bangladesh. In particular, they should focus on enhancing financial services in rural areas, where access to credit and financial products is often limited, rather than concentrating solely on urban markets. By doing so, conventional banks can leverage their strengths to contribute effectively to the holistic development of the economy, addressing the needs of all demographics and fostering inclusive growth throughout the nation.

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