DOES THE FINANCIAL PERFORMANCE OF ISLAMIC BANKS ARE HIGHER THAN THE TRADITIONAL BANKS IN BANGLADESH? PANEL DATA ANALYSIS

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ABSTRACT

This study aims to examine the comparative financial performance between traditional and Islamic banks in Bangladesh. The study used secondary data as panel data of banks for 2016-2020. Since the data is secondary, the quantitative approach to research is considered to use financial ratio analysis (FRA). For analyzing the panel data, Decision Analyst Stats 2.0 software was used. This study randomly selected 10 scheduled commercial banks where 5 traditional and 5 Islamic banks. The
results found that the financial performance of Islamic banks and traditional banks is satisfactory but more satisfactory in the case of Islamic banks in Bangladesh. The study also found that profitability has increased significantly in the banking sector in the last five years. Based on empirical findings, financial performance indicators significantly affect the financial performance of the baking sector; that's why policymakers should care about financial performance determining factors and focus on rapid economic growth with risk recovery techniques. The present study is a small attempt to understand the current financial performance of Islamic Banks and Traditional Banks. The findings help the researchers and all parties involved in the banking system understand profitability and its role.

Keywords: Islamic Banks, Traditional Banks, Financial Performance, Panel Data, Ratio.

JEL Classification Codes: F62, G21, G200, G210, G240.

INTRODUCTION

The banking system of Bangladesh has a strong economic foundation. The banking system, which contributes to the economy of Bangladesh, has been providing various benefits to customers for over 50 years. We know a bank is a financial institution playing a vital role in the economic growth and development of any country (Belkhaoui et al., 2020; Mustafa, 2019; Baeshen and Shaheen, 2021). The economy's strength is closely linked to the soundness of a country's banking system (Ledhem & Mekidiche, 2020). Without an effective banking system, the current business and economics cannot be run smoothly as it is considered one of the most important modern service industries in the world. In this competitive environment in today's world, banks increase their facilities in favor of their customers to retain them and capture more market share to be a leader. Competition is increasing day by day. The banking sector needs to be dynamic with continuous development in a highly competitive environment (Rahaman et al., 2020). Sixty-one scheduled banks in Bangladesh are functioning very efficaciously. Their current performance and financial situation are quite satisfactory. Right now in Bangladesh, Banks’ have four divisions, namely, State-owned Commercial Banks (6) and Private Commercial Banks (43=conventional bank 33+Islami Shariah-based bank 10), foreign commercial banks (9), and 9 specialized banks (Bangladesh Bank, 2021).

Along with the traditional banking system of Bangladesh, the Islamic banking system has reached a strong position. Islamic banking system opened new horizons in the banking system of this country in the eighties. Islamic banking has strengthened the economy of Bangladesh side by side with traditional banks. At present, the development of the Islamic banking industry cannot be repudiated, which is growing at least 5% annually (S&P Global Rating, 2020). The Islamic banking system has gained the trust of millions of customers (Majeed & Zainab, 2021). In this Muslim-majority country Bangladesh, where traditional and Islamic banking systems go hand in hand, a different kind of trust and confidence has been created in the Islamic banking system (Berger et al., 2019). There is fierce competition between Islamic and traditional banking systems. In the competition race, Islamic banks are moving against the traditional banks visible in their profit margins. In 1983, Islami Bank Bangladesh (IBBL) set a milestone in the Islamic banking system by launching Shariah-based banking activities (Islam et al., 2019). Subsequently, ten Islamic shariah base banks have been established one after another due to the success of Islami Bank Bangladesh Limited (IBBL). The banking sector contributes more to the economic development of Bangladesh. Bangladesh's banks are now stable and significantly influence the national economy. We attempt to examine both banks' present progress and financial situation in Bangladesh. For this purpose, we analyzed financial performance to find which one is better in position. Therefore, this research will be helpful to depositors and investors to make well-timed decisions concerning investment and fundraising. It directs bank managers to increase the eminence of both financial and deposit services. Ultimately, the results of this study also help financial policymakers and the regulatory author of the banking sector to make accurate decisions.
LITERATURE REVIEW

The bank is a financial institution that is working as the most important organ of the economic growth and development of any country. Banks provide financial security by accepting customer savings, creating high employment opportunities through investment and playing a role in alleviating poverty. Similarly, the economic development of a country also depends on the performance of the banking industry. Researchers have taken the issue of the financial banking industry’s financial performance very seriously. Many previous studies have evaluated comparative financial performance between traditional and Islamic banks.

The literature reveals that numerous studies have scrutinized the financial performance of Islamic banks and Traditional banks and found mixed results (Mustafa, 2019; Safiullah & Shamsuddin, 2019; Hassan et al., 2019; Komijani & Hesary, 2018; Zahid et al., 2016). For instance, Majeed and Zainab (2021) analyzed traditional and Islamic banks’ financial performance using financial ratio analysis (FRA). The finding shows that Islamic banks are better capitalized, have higher liquidity and are less risky than conventional banks. Still, the profit earnings ratio of Islamic banks is lower than conventional banks. Uddin, Ahsan, and Haque (2017) studied on comparison of financial performance of Islamic banks and conventional banks in Bangladesh during 2010-2014 by analyzing CAMEL tests. They didn’t find any difference between Islamic banks and conventional banks in financial performance. They also noticed that traditional banks' assets quality and management quality are better than Islamic banks. Saeed et al. (2013) conducted a study on comparative financial performance between Islamic banks and traditional banks in Pakistan during 2007-2011 by using Data Envelopment Analysis (DEA) and financial ratio analysis (FRA) methods to analyze data. They found from their study that conventional banks are more competent than Islamic banks. Kakakhelet et al. (2013) found that Islamic banks have a better financial position, especially better in cash and assets turnover than conventional banks but less profitable than traditional banks.

On the other hand, Majeed and Zanib (2016) revealed that Islamic banks are highly profitable and proficient. Kias and Ramlan (2016) studied the profitability of Islamic banks and conventional banks in Malaysia, studied period used data from 2006 to 2011. He used a linear regression test to find results. He found that conventional banks are less profitable than Islamic banks, whereas the total loan to total assets is higher than conventional banks. Najjar (2012) studied the financial performance of traditional and Islamic banks in Bahrain by using financial ratio analysis (FRA) and found that Islamic banks’ financial strength is better than traditional banks. Milhem and Istaiteyeh (2015) also analyzed financial performance through ratio analysis and concluded that effective asset management, effective liquidity rates and high profitability of Islamic banks than traditional banks. Ibrahim (2015) studied the financial performance of two UAE-based Islamic and conventional banks during 2000-2006. The findings showed that Islamic banks are more profitable than conventional banks, but there are significant differences between the two banks. Jubilee et al. (2021) assessed the differences between Islamic and conventional banks’ productivity in the context of Asian countries by applying DEA-based MPI panel data methodologies. They found that Islamic banks are more productive than conventional banks but not statistically significant. Rodoni et al. (2017) analyzed a comparison of the productivity and efficiency of the 30 Islamic banks during 2009-2013 in Pakistan, Indonesia and Malaysia using MPI and DEA data analyzing methods. They found Islamic Islamic banks of Malaysia more productive than others countries. Kamarudin et al. (2017) studied 21 Islamic banks belonging to Malaysia and Indonesia using the MPI panel data method during 2006-2014. They found statistically significant of profitability better than banks of Malaysia and Indonesia. Habib (2018) found a significant difference between Islamic banks and conventional banks and noted that the profitability of Islamic banks is better than conventional banks in developing countries and developed countries using panel data DEA and MPI techniques during 2013–2015 for G20 countries. Qureshi and Abbasp (2019) studied 15 traditional banks and two pure Islamic banks in Malaysia using CAMEL ratio analysis during 2010-2017. They found that the financial performance of Islamic banks is more satisfied than traditional banks. Aljahdali and Faleel (2021) argued that Islamic banks are less profitable but more liquid, less risky and more efficient than traditional banks. They concluded this by analyzing 3 Islamic banks and 3 traditional banks using t-test to determine the significance between the two groups.
Thus, we propose the following hypothesis;

\( H_1 \). There is no difference between Islamic banks and traditional banks relating to financial performance.

Based on previous studies, we can be said that many studies have been conducted on traditional banks relating to the financial performance in the world and Bangladesh. Although there is some research on the financial performance of Islamic banks separately, the number of comparative studies is less. Most of the studies have documented different and mixed results. There is little evidence to suggest that both Islamic banks and traditional banks have had productive levels in Bangladesh. So based on the previous studies gap, the purpose of the present study is to provide comparative empirical evidence of two different banking sectors (Islamic and Traditional)

**METHOD**

**Sample Selection**
Except for Bangladesh bank itself, there are 60 scheduled banks among these 43 private commercial banks and 6 state-owned commercial banks providing banking services in Bangladesh (Bangladesh Bank, 2021). This study considered 10 banks as a sample among the private banks by selecting 5 Islamic banks and 5 traditional banks randomly. The following Islamic and traditional banks

| Islamic banks | Traditional banks |
|---------------|-------------------|
| Islami Bank of Bangladesh Limited (IBBL) | Prime Bank Limited (PBL) |
| Social Islami Bank Limited (SIBL) | Mercantile Bank Limited (MBL) |
| Shahjalal Islami Bank Limited (SJIBL) | Dutch Bangla Bank Limited (DBBL) |
| Al-Arafah Islami Bank (AAIB) | Bank Asia Limited (BAL) |
| First Security Islami Bank Limited (FSIBL) | National Bank Limited (NBL) |

The sample banks cover only private banks, which occupy 90% of the banking sector of Bangladesh.

**Variables Covered**
Financial ratios are used to measure capital adequacy (CA), asset quality (AQ), management efficiency (ME), profitability (P), liquidity efficiency (LE), which are the independent variables of this study. On the other hand, financial performance is considered a dependent variable of the current study.

**Data Analysis, Instruments and Measurements**
Various financial and accounting ratios have been used for performance analysis, such as Capital Adequacy Ratio (CAR), Asset Quality Ratio (AQR), Management Efficiency Ratio (MER), Liquidity Ratio (LR) and Profit Ratio (PR). Profit ratio includes ROR, ROE and EPS—Earning per Share. The present study used a very well-known bank’s financial ratio calculation method. Cole (1972) first introduced these ratios to calculate the bank’s financial performance. Many researchers have used this method for similar objectives, i.e., Narayan and Phan (2019); Mukhibad and Kafid (2018); Shawtari et al. (2018); and Bitar et al. (2019). In addition to measuring the performance of concerned banks, different descriptive statistical tools have been used in this study. The FRA model of Panel data has been used to determine a bank’s financial performance. The study used panel data analysis software and Decision Analyst Stats 2.0 for analyzing the data.
Theoretical Framework of the Research

![Figure 1. Theoretical framework](https://www.cribfb.com/journal/index.php/ijfb)

### ANALYSIS AND RESULTS

**Profitability**

*Return on Assets (ROA)*

Table 1. Return on Assets (ROA)

| Name of the banks | 2016 | 2017 | 2018 | 2019 | 2020 | Average Growth (%) | Mean | Z value | P |
|-------------------|------|------|------|------|------|---------------------|------|---------|---|
| IBBL              | 0.88 | 1.28 | 1.44 | 1.37 | 1.45 |                     |      |         |    |
| Growth (%)        |      |      |      |      |      | 16.79%              |      | 1.054   | 0.000 |
| SIBL              | 0.77 | 1.56 | 1.31 | 1.45 | 1.22 |                     |      |         |    |
| Growth (%)        |      |      |      |      |      | 16.27%              |      |         |    |
| AAIBL             | 1.18 | 1.60 | 1.79 | 3.65 | 3.06 |                     |      |         |    |
| Growth (%)        |      |      |      |      |      | 48.22%              |      |         |    |
| SJIBL             | 2.60 | 2.26 | 2.08 | 3.01 | 1.26 |                     |      |         |    |
| Growth (%)        |      |      |      |      |      | 25.84%              |      |         |    |
| FSIBL             | 0.55 | 0.66 | 1.78 | 1.97 | 2.78 |                     |      |         |    |
| Growth (%)        |      |      |      |      |      | 16.88%              |      |         |    |
| PBL               | 2.02 | 1.70 | 3.07 | 1.88 | 2.82 |                     |      |         |    |
| Growth (%)        |      |      |      |      |      | 16.36%              |      |         |    |
| DBBL              | 1.32 | 2.06 | 2.74 | 1.87 | 2.02 |                     |      |         |    |
| Growth (%)        |      |      |      |      |      | 16.79%              |      |         |    |
| MBL               | 1.52 | 1.87 | 0.99 | 2.04 | 1.89 |                     |      |         |    |
| Growth (%)        |      |      |      |      |      | 16.27%              |      |         |    |
| BAL               | 3.01 | 1.99 | 3.24 | 1.44 | 1.45 |                     |      |         |    |
| Growth (%)        |      |      |      |      |      | 16.27%              |      |         |    |
| NBL               | 1.40 | 2.98 | 1.54 | 7.48 | 5.02 |                     |      |         |    |
| Growth (%)        |      |      |      |      |      | 16.27%              |      |         |    |
| Table 1 shows the calculation of ROA. Among the Islamic banks and conventional banks, Islamic Banks' position is strong; Islamic Banks' average growth in ROA is better than conventional banks. The average growth of ROA for Islamic Banks and the traditional bank is 16.79% and 10.27%, respectively. Individually, FISBL is in a better position among the banks; it is also observed that all Islamic banks' performance is good and gained optimum growth rate. The table reveals a significant difference between Islamic banks and traditional banks based on ROA. |
## Return on Equity (ROE)

Table 2. Return on Equity (ROE)

| Name of the banks | 2016  | 2017  | 2018  | 2019  | 2020  | Average Growth (%) | Mean | Z value | P     |
|-------------------|-------|-------|-------|-------|-------|--------------------|------|---------|-------|
| IBBL              | 14    | 19.02 | 16.93 | 19.00 | 17.42 |                    |      | 2.99%   | 0.158 | NS    |
| Growth (%)        | -     | 46.30 | -10.99| 12.22 | -8.31 |                    | 8.85 |         |       |       |
| SIBL              | 19    | 22.15 | 19.32 | 18.87 | 15.69 |                    |      |         |       |       |
| Growth (%)        | -     | 48.21 | 21.75 | 12.35 | 1354  |                    | 7.78 |         |       |       |
| AAIBL             | 16.05 | 24.70 | 24.10 | 20.01 | 18.34 |                    |      |         |       |       |
| Growth (%)        | -     | 44.87 | -2.43 | -16.97| -8.34 |                    | 4.46 |         |       |       |
| SJIB              | 24.21 | 25.58 | 25.10 | 30.71 | 13.18 |                    |      |         |       |       |
| Growth (%)        | -     | 10.21 | -1.88 | 22.35 | -57.08|                    | -5.50|         |       |       |
| FSIBL             | 1.47  | 0.61  | 1.56  | 1.89  | 1.75  |                    |      | 2.14%   | 0.81  | NS    |
| Growth (%)        | -     | 29.78 | 155.73| 21.15 | -7.40 |                    | 38.48|         |       |       |
| PBL               | 32.68 | 20.58 | 30.19 | 32.12 | 19.61 |                    |      |         |       |       |
| Growth (%)        | -     | 1.08  | 38.45 | 7.87  | -8.49 |                    | 1.25 |         |       |       |
| DBBL              | 24.59 | 30.87 | 29.47 | 33.54 | 32.84 |                    |      |         |       |       |
| Growth (%)        | -     | 1.54  | 3.64  | 7.81  | -7.57 |                    | -4.99|         |       |       |
| MBL               | 18.54 | 16.78 | 19.85 | 18.96 | 18.02 |                    |      |         |       |       |
| Growth (%)        | -     | 0.05  | 6.02  | 4.98  | 0.81  |                    | 1.02 |         |       |       |
| BAL               | 34.25 | 22.88 | 31.89 | 34.65 | 20.74 |                    |      |         |       |       |
| Growth (%)        | -     | 28.02 | 40.25 | 1.25  | -25.74|                    | -4.85|         |       |       |
| NBL               | 31.85 | 29.67 | 28.12 | 50.12 | 30.84 |                    |      |         |       |       |
| Growth (%)        | -     | 1.52  | 5.45  | 66.45 | 37.88 |                    | 23.83|         |       |       |

Table 2 shows that the average growth rate of ROE is higher for the Islamic banks; most of the Islamic banks’ financial position based on ROE is good enough than conventional banks. The mean value of Islamic banks is 2.99, whereas the mean value of traditional banks is 2.14. The results reveal that the financial performance of Islamic banks is better than traditional banks but not significant.

## Earnings per Share

Table 3 indicates that the average growth rate of Earning per Share of Islamic banks is 7.80%. In contrast, traditional banks have 5.69%, which means that the financial performance of Islamic banks calculated good in position, particularly the financial performance of Islamic banks are calculated higher in position rather than a traditional one, earning per share of IBBL, SIBL, AAIBL SJIBL and FSIBL of all Islamic banks looks great based on growth rate. Finally, the table-3 reveals that the financial performance based on earnings per share of Islamic banks is higher than traditional banks but not statistically significant.

Table 3. Earnings per Share

| Name of the banks | 2016  | 2017  | 2018  | 2019  | 2020  | Average Growth (%) | Mean | Z value | P     |
|-------------------|-------|-------|-------|-------|-------|--------------------|------|---------|-------|
| IBBL              | 3.87  | 3.99  | 5.48  | 5.02  | 3.89  |                    |      | 7.80%   |       |       |
| Growth (%)        | -     | 45.58 | 5.85  | -2.80 | 9.25  |                    | 19.54|         |       |       |
| SIBL              | 17.82 | 16.48 | 17.85 | 3.28  | 2.05  |                    |      |         |       |       |
| Growth (%)        | -     | 0.08  | 7.64  | 0.99  | 2.18  |                    | 16.33|         |       |       |
| AAIBL             | 3.54  | 4.85  | 1.89  | 3.87  | 4.68  |                    |      |         |       |       |
| Growth (%)        | -     | 47.98 | 2.88  | 10.87 | 8.94  |                    | 22.56|         |       |       |
| SJIBL             | 4.23  | 4.55  | 3.99  | 4.75  | 3.84  |                    |      |         |       |       |
| Growth (%)        | -     | 38.45 | 8.21  | 2.75  | 6.14  |                    | 10.58|         |       |       |
| FSIBL             | 3.50  | 7.35  | 1.42  | 1.61  | 1.71  |                    |      |         |       |       |
Growth (%) - 129.68 -80.68 13.38 6.21 12.45 1.28 NS
PBL 5.87 3.88 8.45 4.87 5.90
Growth (%) - -29.70 80.83 -27.33 -17.39 2.85 5.69%
DBBL 23.58 6.02 6.12 9.87 11.25
Growth (%) - -55.54 4.58 71.89 7.45 2.99
MBL 30.86 27.87 31.57 42.85 33.99
Growth (%) - 0.52 8.21 33.87 0.05 4.33
BAL 49.54 38.45 58.67 62.82 35.88
Growth (%) - 0.06 55.63 3.78 4.58 2.74
NBL 6.21 8.54 6.24 8.54 6.85
Growth (%) - 32.85 0.64 52.47 11.7 12.78

**Capital Adequacy Ratio**
Table 4. Capital Adequacy Ratio

| Banks | 2016  | 2017  | 2018  | 2019  | 2020  | Mean  | Sample Industry Average | Z value | P     |
|-------|-------|-------|-------|-------|-------|-------|-------------------------|--------|-------|
| IBBL  | 11.61%| 12.72%| 12.65%| 13.06%| 14.09%| 13.43%| 11.63%                  | 0.89   | NS    |
| SIBL  | 9.71% | 11.87%| 15.97%| 9.88% | 14.27%| 10.82%|                        |        |       |
| AAIBL | 12.92%| 11.21%| 11.25%| 14.49%| 13.47%| 12.27%|                        |        |       |
| SJIBL | 15.42%| 13.81%| 13.98%| 10.08%| 11.14%| 13.09%|                        |        |       |
| FSIBL | 10.15%| 9.15% | 10.91%| 9.09% | 9%     | 9.46% |                        |        |       |
| PBL   | 12.50%| 10.88%| 14.71%| 11.69%| 12.49%| 11.25%|                        |        |       |
| DBBL  | 10.8% | 10.9% | 11.6% | 9.6%  | 11.2% | 9.02% |                        |        |       |
| MBL   | 12.67%| 10.17%| 10.48%| 9.13% | 10.60%| 10.41%|                        |        |       |
| BAL   | 13.88%| 8.11% | 12.27%| 11.25%| 11.28%| 10.56%|                        |        |       |
| NBL   | 14.11%| 13.42%| 8.61% | 12.29%| 12.65%| 12.02%|                        |        |       |

From table 4, it is clear that the capital adequacy ratio of Islamic Bank Bangladesh (IBBL) is higher among the two categories bank of 13.43% and the average capital adequacy ratio of SIBL, AAIBL, SJIBL and FSIBL is 10.82%, 12027%, 13.09% and 9.46% respectively. On the other hand, the average capital adequacy ratio is highest for NBL from traditional banks group. It is observed from Table 4 that the capital adequacy ratio of the Islamic Banking sector is quite better than the traditional banking sector but not significant.

**Asset Quality**
Table 5. Assets quality

| Banks | 16% | 2017 | 2018 | 2019 | 2020 | Mean | Sample Industry Average | Z value | P     |
|-------|-----|------|------|------|------|------|-------------------------|--------|-------|
| IBBL  | 2.83%| 2.79%| 2.36%| 1.67%| 2.21%| 2.83%| 3.78%                   | 1.258  | NS    |
| SIBL  | 5.93%| 4.68%| 3.29%| 4.26%| 2.93%| 3.18%|                        |        |       |
| AAIBL | 4.72%| 2.25%| 1.60%| 1.24%| 0.85%| 2.05%|                        |        |       |
| SJIBL | 0.72%| 1.44%| 0.84%| 1.44%| 1.62%| 1.61%|                        |        |       |
| FSIBL | 2.52%| 1.25%| 2.14%| 1.87%| 2.47%| 3.2% |                        |        |       |
| PBL   | 2.11%| 1.82%| 0.99%| 1.25%| 1.52%| 1.42%| 2.68%                   |        |       |
| DBBL  | 5.02%| 2.98%| 1.98%| 3.01%| 2.65%| 3.21%|                        |        |       |
| MBL   | 1.95%| 2.02%| 2.82%| 1.87%| 3.40%| 2.06%|                        |        |       |
| BAL   | 2.05%| 2.38%| 2.27%| 3.07%| 1.86%| 2.82%|                        |        |       |
| NBL   | 4.85%| 6.20%| 6.08%| 4.52%| 1.78%| 3.56%|                        |        |       |
Table 5 shows that Islamic and traditional banks' asset quality is different. But calculated shows that Islamic banks’ asset quality is better than traditional banks based on the mean value of asset quality. The average growth rate of Islamic banks is 3.78% and for traditional banks is 2.68% but statistically not significant. If we see all banks individually, most of the Islamic banks' asset quality position is better than traditional banks. Alternatively, the asset quality of traditional banks is also good in Bangladesh.

**Liquidity Ratio**

**Loan to Deposits**

Table 6. Loan to Deposits

| Bank name | 2016 | 2017 | 2018 | 2019 | 2020 | Mean | Sample Industry Average | Z value | P      |
|-----------|------|------|------|------|------|------|--------------------------|--------|--------|
| IBBL      | 0.29 | 0.78 | 0.42 | 0.52 | 0.44 | 0.78 | 11.82%                   | 1.058  | NS     |
| SIBL      | 0.15 | 0.14 | 0.08 | 0.06 | 0.09 | 0.63 |                         |        |        |
| AAIBL     | 0.08 | 0.85 | 0.64 | 0.65 | 0.08 | 0.09 |                         |        |        |
| SJIBL     | 0.71 | 0.45 | 0.09 | 0.06 | 0.06 | 0.08 |                         |        |        |
| FSIBL     | 0.21 | 0.19 | 0.22 | 0.11 | 0.12 | 0.18 |                         |        |        |
| PBL       | 0.19 | 0.21 | 0.09 | 0.08 | 0.07 | 0.15 |                         |        |        |
| DBBL      | 0.44 | 0.54 | 0.57 | 0.45 | 0.08 | 0.56 | 10.77%                   |        |        |
| MBL       | 0.32 | 0.25 | 0.34 | 0.63 | 0.43 | 0.44 |                         |        |        |
| BAL       | 0.45 | 0.34 | 0.06 | 0.04 | 0.64 | 0.39 |                         |        |        |
| NBL       | 0.32 | 0.57 | 0.04 | 0.06 | 0.91 | 0.19 |                         |        |        |

It is observed from table-6 that the loan to deposit ratio for Islamic banks and traditional banks is different based on sample industry average values that are 11.82% and 10.77%, respectively. The calculation value of Islamic banks is higher than that of traditional banks. Individually, IBBL, SIBL, DBBL and MBL are first, second, third and fourth, respectively, based on Mean values (0.78, 0.63, 0.56 and 0.44). Table-6 reveals that loan to deposit as a determinant of financial performance is better for Islamic banks than traditional banks but not a significant difference.

**Net Loans to Total Assets**

Table 7. Net Loans to Total Assets

| Bank name | 2016 | 2017 | 2018 | 2019 | 2020 | Mean | Sample Industry average | Z value | P      |
|-----------|------|------|------|------|------|------|--------------------------|--------|--------|
| IBBL      | 0.82 | 0.88 | 0.93 | 0.47 | 0.82 | 0.81 | 83.12%                   | 1.921  | NS     |
| SIBL      | 0.72 | 0.65 | 0.72 | 0.67 | 0.76 | 0.73 |                         |        |        |
| AAIIBL    | 0.77 | 0.66 | 0.52 | 0.46 | 0.64 | 0.68 |                         |        |        |
| SJIBL     | 0.71 | 0.68 | 0.72 | 0.73 | 0.64 | 0.59 |                         |        |        |
| FSIBL     | 0.55 | 0.54 | 0.51 | 0.46 | 0.51 | 0.52 |                         |        |        |
| PBL       | 0.58 | 0.82 | 0.14 | 0.48 | 0.64 | 0.71 |                         |        |        |
| DBBL      | 0.73 | 0.72 | 0.73 | 0.71 | 0.72 | 0.72 | 72.78%                   |        |        |
| MBL       | 0.72 | 0.74 | 0.74 | 0.76 | 0.74 | 0.74 |                         |        |        |
| BAL       | 0.71 | 0.67 | 0.70 | 0.74 | 0.69 | 0.70 |                         |        |        |
| NBL       | 0.69 | 0.75 | 0.71 | 0.75 | 0.67 | 0.71 |                         |        |        |

Table 7 shows the Islamic and traditional banks’ net loan to total assets ratios. NLAR is good for Islamic banks than others. The mean value of Islamic banks is 83.12%, and the mean value of traditional banks is 72.78%. It is observed that among the Islamic banks. The net loan to total assets ratio is highest for IBBL and lowest for FSIBL. Results reveal a difference between traditional and
Islamic banks but are statistically insignificant.

**Management Efficiency**

**Tax Management Efficiency**

Table 8. Tax Management Efficiency

| Bank name | 2016 | 2017 | 2018 | 2019 | 2020 | Mean | Sample Industry average | Z value | P |
|-----------|------|------|------|------|------|------|--------------------------|--------|---|
| IBBL      | 0.47 | 0.52 | 0.42 | 0.65 | 0.57 | 0.562| 55.62%                   | 0.081  | NS |
| SIBL      | 0.25 | 0.81 | 1.21 | 0.87 | 0.12 | 0.331|                          |        |    |
| AAIBL     | 0.08 | 0.53 | 0.54 | 0.68 | 0.56 | 0.478|                          |        |    |
| SJIBL     | 0.53 | 0.52 | 0.60 | 0.70 | 0.50 | 0.566|                          |        |    |
| FSIBL     | 0.52 | 0.55 | 0.50 | 0.55 | 0.47 | 0.518|                          |        |    |
| PBL       | 0.59 | 0.50 | 0.60 | 0.55 | 0.53 | 0.554|                          |        |    |
| DBBL      | 0.46 | 0.46 | 0.53 | 0.54 | 0.47 | 0.492|                          |        |    |
| MBL       | 0.45 | 0.39 | 0.48 | 0.58 | 0.57 | 0.494|                          |        |    |
| BAL       | 0.56 | 0.54 | 0.58 | 0.48 | 0.53 | 0.538|                          |        |    |
| NBL       | 0.41 | 0.21 | 0.45 | 0.49 | 0.71 | 0.74 |                          |        |    |

Table 8 found that Islamic banks' Average Tax Management Efficiency is improved than conventional banks; values are 55.62% and 53.82 %, respectively. Both categories of banks’ have good tax management efficiency. Among the Islamic banks, SJIBL and IBBL have the better position and gained 1st and 2nd position. PBL and BAL gained the first and second positions among the traditional banks, respectively. Islamic banks’ tax management efficiency is better than traditional banks; Statistical value shows no significant difference between these two groups of banks.

**Expense Control Efficiency**

Table 9. Expense Control Efficiency

| Bank name | 2016 | 2017 | 2018 | 2019 | 2020 | Average of sample bank | Mean | Z value | P |
|-----------|------|------|------|------|------|-------------------------|------|--------|---|
| IBBL      | 1.88 | 0.89 | 0.99 | 0.88 | 0.98 | 1.88                    | 96.9%| 1.054  | 000 |
| SIBL      | 0.72 | 0.64 | 0.87 | 0.91 | 0.91 | 1.81                    |      |        |    |
| AAIBL     | 0.86 | 0.81 | 0.87 | 0.85 | 0.86 | 1.85                    |      |        |    |
| SJIBL     | 1.23 | 1.08 | 1.43 | 1.16 | 1.32 | 1.24                    |      |        |    |
| FSIBL     | 0.25 | 0.72 | 0.75 | 0.25 | 0.43 | 1.54                    |      |        |    |
| PBL       | 0.45 | 0.65 | 0.45 | 0.63 | 0.62 | 0.55                    |      |        |    |
| DBBL      | 0.82 | 0.45 | 0.14 | 0.24 | 0.62 | 0.85                    | 88.6%|        |    |
| MBL       | 0.75 | 0.48 | 1.25 | 1.28 | 0.64 | 1.68                    |      |        |    |
| BAL       | 0.58 | 0.64 | 0.74 | 0.52 | 0.65 | 1.02                    |      |        |    |
| NBL       | 0.41 | 0.44 | 0.87 | 0.52 | 0.45 | 0.82                    |      |        |    |

From Table 9, we see that Islamic banks' Average Expense Control Efficiency is better than traditional banks. The mean value of the Islamic bank group is 96.9%, and traditional banks are 88.6%, respectively. It is also observed that IBBL, AAIBL and SIBL gained 1st and 2nd and 3rd position among the Islamic banks, respectively. Also observed among the traditional banks MBL, BAL and DBBL gained 1st and 2nd and 3rd position respectively. Result reveals from table-9 that there is a significant difference between Islamic banks and traditional banks in the case of Average Expense Control Efficiency.
**Fund Management Efficiency**

Table 10. Fund Management efficiency

| Bank name | 2016 | 2017 | 2018 | 2019 | 2020 | Mean | Sample Industry average | Z value | P |
|-----------|------|------|------|------|------|------|-------------------------|---------|--|
| IBBL      | 17.85| 16.24| 13.47| 15.87| 14.14| 18.24| 18.54                   | 1.054   | NS |
| SIBL      | 12.74| 17.96| 12.22| 13.13| 9.96 | 13.45|                        |         |   |
| AAIBL     | 15.83| 13.78| 12.65| 6.89 | 7.98 | 12.85|                        |         |   |
| SJIBL     | 11.14| 14.28| 12.65| 11.12| 14.02| 13.14|                        |         |   |
| FSIBL     | 23.75| 12.30| 16.74| 16.22| 20.00| 15.88|                        |         |   |
| PBL       | 15.09| 16.49| 10.62| 9.12 | 10.44| 12.38|                        |         |   |
| DBBL      | 21.14| 19.16| 18.79| 14.45| 13.79| 17.55|                        |         |   |
| MBL       | 15.34| 16.11| 15.40| 12.12| 12.06| 15.58|                        |         |   |
| BAL       | 44.62| 31.56| 13.85| 7.56 | 3.08 | 21.54|                        |         |   |
| NBL       | 12.37| 11.78| 10.30| 7.05 | 7.85 | 9.87 |                        |         |   |

Table 10 shows that Islamic banks’ fund management efficiency is better than traditional banks; the mean value of Islamic banks and traditional banks is 18.54% and 16.87%, respectively. It is observed from table-10 that according to the fund management efficiency ratio IBBL is best from the Islamic bank's group, and BAL is the best from traditional banks group. There is a difference between Islamic banks and traditional banks’ financial performance based on Fund Management Efficiency but not significant.

**DISCUSSION**

The study results prove that Islamic banks’ financial performance undoubtedly is higher and progressive than conventional banks. The growth of the Return on Assets (ROA) position and the growth of Islamic banks' Return on Equity (ROE) position are better than traditional banks. There is a significant difference between the Islamic banking sector and the traditional banking system in the case of ROA (table 1) but not significant in the case of ROE (table 2). The results demonstrate (Table 3) Earning per Share ratio of Islamic banks is more than the traditional banks. Islami Bank Bangladesh Limited (IBBL) has a strong position among the studied banks.

On the other hand, the position of traditional banks is also well in the case of Earning per Share Ratio. Several studies, e.g. Mustafa (2019), Habib (2018), and Jubilee et al. (2021) confirmed the same outcomes of the present study. The null hypothesis (H1) is not accepted. Furthermore, in terms of the highest position of Capital Adequacy and Asset quality, the Islamic banks' sector is diminutive healthier than the customary banking sector; the study observed that there is a difference but not significant (table 4 and 5). Few studies have proved the similar result like Islam et al. (2019); Komijani and Hesary (2018); Majeed and Zainab (2021), liquidity ratio of net loans to total assets and the loan to deposits of both banking sector good in position but statistically not significant (table 6 and 7). Several researchers found the same findings (Ledhem & Mekidiche, 2020; Daoud and Kamoun, 2017). Some studies found a significant difference between the Islamic banking system and traditional banking system in the case of management efficiency of banks, i.e., Akram and Rahman (2018); Alsartawi (2019). It is observed that tax management efficiency, expense control efficiency and fund management efficiency of the Islamic banking sector are higher than the traditional banking sector. There is also a significant difference between both banking sectors in the case of expense control efficiency (table 9). Still, there is no significant difference in tax management efficiency (table 8) and fund management efficiency (table 10). Arising from the findings, we can reject the null hypothesis (H2) of there is no difference between Islamic banks and traditional banks relating to financial performance in Bangladesh.
CONCLUSION

The banking sector of Bangladesh is playing a key role in economic prosperity. Traditional and Islamic banks have already been able to earn the trust of their clients by providing timely services together. It has become a partner in the economic development of Bangladesh, not as a rival but as a helper. As a Muslim-majority country, Islamic banks are not enjoying additional benefits, but in some cases, progress is being hampered by shariah-compliant formalities. Since Bangladesh is a Muslim-majority country, the entire financial system is not run according to Islamic shariah.

Similarly, the banking sector is not based on Islamic shariah as an integral part of the economy. For all these reasons, the Islamic banking sector has not achieved the desired success, and the number of Islamic banks is insufficient. In addition, the success of Islamic banks is enviable despite the unfavorable environment of the Islamic banking system. Research has shown that Islamic banks are ahead in the indicators of financial performance appraisal like profitability, management efficiency, asset quality, liquidity position, and capital adequacy look good in the Islamic banking sector that is slightly absent in the traditional banking sector. It is necessary to take all indispensable steps to make the Islamic banking system uninterrupted; Above all, it is time to formulate more research base policies to modernize the banking system of Bangladesh. It is hoped that the results and findings of the present study will benefit all parties involved in the banking sector. Every study has some limitations, and the present study is not out of it. Future researchers have the opportunity to research financial performance analysis of both banking sectors comparatively by taking more sample size and financial performance indicators related variables.

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CONFLICT OF INTEREST STATEMENT

The authors declare that they have no competing interests.

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All authors contributed equally to the conception and design of the study.

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