Financial Performance Comparison between State-Owned Commercial Banks and Islamic Banks in Bangladesh

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Abstract
In this modern era of banking, state-owned commercial banks and Islamic banks have been playing an evolving induct for a country’s economic acceleration, like Bangladesh. Current research aims to assess and assimilate the financial performance of Islamic banks and state-owned commercial banks in Bangladesh. For this study, researchers assemble secondary data from the annual reports of five Islamic banks and five state-owned commercial banks from 2015 to 2019. Researchers employed panel data for analyzing and determining the significant determinants of the banks’ performance to compare. As a measure of profitability, Return on Equity (ROE) has been considered as a dependent variable whereas the total asset, capital, capital adequacy ratio, liquidity, credit to deposit, Gross Domestic Product (GDP), and inflation are considered as independent variables. The findings of this study reveal that total asset, capital adequacy, and liquidity variables affect Islamic banks momentously whereas state-owned commercial banks are momentously affected by total asset and liquidity. But credit to deposit has no significant effect on both categories of banks. From these viewpoints, Islamic banks have a greater ability to influence the ROE than that of state-owned commercial banks and in terms of financial performance; Islamic banks are categorized as better-performing banks.

Keywords: Islamic banks, State-owned commercial banks, Financial performance, Return on equity (ROE), Bangladesh

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Introduction
The bank is a financial institution that works as an intermediary between borrowers and lenders. The banking system has become a vital player in the economy of the world (De Jonghe, 2010) and Bangladesh is not an exception from the advantage of the banking sector. For instance, if we consider a direct input, the contribution of the banking sector to GDP is almost 7.7% of the total GDP of Bangladesh. Hence, if the banking sector doesn’t perform well, the country’s economic progress and development will be hindered badly.

Researcher have found to assess the performance of commercial banks from different studies and these studies revealed that the relation between total asset and performance of banks is positive (Doğan, 2013; Stierwald, 2009; Niresh & Velnampy, 2014) whereas Banchuenvijit (2012) found the negative relationship between total asset and profitability. The measurement of financial performance
is reflected by the variables that are mainly found in the financial reports (Platonova et al., 2018 and Kioko, 2013). For appraising the performance, Rahman & Saif, 2021; Jahangir et al. 2007; Faruk and Habib, 2010 used ratio analysis that yielded a general explanation about the firm’s performance. Bangladeshi banking companies' financial performance has been investigated considering the firm size only (Hossain & Saif, 2019). Ullah et al., 2019 considered some microeconomic variables to measure the performance of conventional banks and Islamic banks. Further study has been conducted for performance evaluation of several listed companies in Bangladesh incorporating macroeconomic variables also (Rahman & Saif, 2021). The authors considered only some ratios for measuring the relationship of some selected variables with the profitability of state-owned commercial banks of Bangladesh (Banik & Das, 2013). Yet, there is a dearth of pieces of literature that considered macroeconomic indicators for measuring and comparing the financial performance of state-owned commercial banks and Islamic banks. Hence, researchers concentrate on measuring and comparing the financial performance between Islamic banks and state-owned commercial banks of Bangladesh considering the firm-specific determinants like the total asset, capital, capital adequacy ratio, liquidity, and credit to deposit; and GDP, inflation as macroeconomic variables.

No specific studies have been done to compare the performance between state-owned commercial banks and Islamic banks in Bangladesh. Hence, the researchers have exploited this research gap to cover the existing dearth of knowledge in this certain field of research. For filling this research gap, the following research questions need to be addressed.

Research Question 1: Which variables momentously affect the performance of both categories of banks?
Research Question 2: Which category of banks does perform better?

Hence, to address those research questions, the following specific objectives have been set.

- To determine the significant variables that affect the financial performance of both categories of banks
- To identify the better performing category of banks in terms of financial performance
- To draw some recommendations from the result.

**Literature Review and Hypothesis Development**

The banking sector of Bangladesh basically comprises of conventional commercial banks, state-owned commercial banks, and Islamic banks. The overall economic development of a lower-middle income country like Bangladesh largely depends on the prolific performance of banking sector. Therefore, it is indeed a necessity to appraise the ongoing performance of different categories of banks operating in Bangladesh. For understanding the ongoing banking situation, we need to appraise their performances recurrently (Al-Jafari and Samman, 2015).

Abedifar et al. (2020) found that Islamic banks belong to lower stock return and have lower influence to predict the future earnings than the conventional banks. Authors of this study recommended that banks require higher direct supervision to enhance performance. Abdul-Majid et al. (2017) conducted a study on the Malaysian banks, used stochastic frontier analysis, and adopts a meta-frontier approach. This study revealed that the Islamic banks are cost-efficient than conventional banks. Usman (2015) illustrated an overall understanding of customer trust for Islamic banks and analyzed the influence of trust on Islamic banking services. For doing this study, the author considered three types of bank customers like Islamic bank customers, conventional bank customers, and both bank customers. Among these three types of customers, 375 questionnaires were distributed. For measuring trust, three benchmarks; likeability, integrity, and benevolence have been considered. The outcome of this study showed that customers have a high degree of trust towards Islamic banks and this high degree of trust has a momentous influence on the services rendered by the Islamic banks.
Banik & Das (2013) aimed to measure the financial performance of four state-owned commercial banks in Bangladesh using ratio analysis. The authors collected data from 2000 to 2010 and performed multivariate regression analysis to predict the influence of non-performing loan ratio, loan to asset ratio, and percentage of classified loan on the financial profitability, and credit to deposit ratio. The outcome of this study exposed that the same line of banks has various ranks at different financial ratios. The prediction result disclosed that return on the asset has a momentous effect by the percentage of the classified loan and capital adequacy ratio.

Khokhar et al. (2020) appraised the financial performance of conventional and Islamic banks. Authors assembled data from 2010-2016 and considered deposits, assets, and capital as input variables to determine the output of their study. The result of this study revealed that from the efficiency side, Islamic banks are doing better than conventional banks. The researchers also appraised the individual performance of the banks with the updated data. Noman et al. (2015) explored to find out the better performing category of banks between Islamic and conventional banks in Bangladesh. For conducting the study the authors considered 7 Islamic banks and 23 convention banks of Bangladesh. The outcome exhibited that conventional banks have less profitability, efficiency, liquidity than Islamic banks. The outcome ensures that from the perspective of capitalization and credit risk management Islamic banks perform better than conventional banks in Bangladesh.

Rashid & Jabeen (2016) tried to evaluate the financial and macroeconomic determinants of the performance of conventional and Islamic banks in Pakistan. The authors built the financial performance index (FPI) based on the CAMEL ratios and used the unbalanced panel data from the year 2006 to 2012 for running GLS regression. The outcome showed that the significant determinants are reserves, overheads, and operating efficiency for the conventional banks whereas for the Islamic banks the momentous determinants are market concentration, deposits, and operating efficiency. Researchers also demonstrated the influence of macroeconomic variables (GDP and interest rate) on the performance of conventional and Islamic banks. Maatoug et al. (2019) looked into the association between capital buffers and the business cycle of Islamic banks and conventional banks in the Middle East and North African regions during the period 2000 to 2014. The authors mainly found that there had a positive influence of nonperforming loans on the capital buffer and other determinants had no pro-cyclical capital buffers for Islamic and conventional banks. This result was beneficial for implementing the Basel III guidelines. Ibrahim et al. (2018) perform this work to investigate whether Islamic banks were better than conventional banks in terms of stable financing supply. The findings of the study exhibited that Islamic banks were more capable regarding stable financing supply.

Doumpo et al. (2017) focused on the widening of the study by assimilating Islamic banks, conventional banks, and financial strength index. This index improved with the holding of banks’ asset quality, earnings, liquidity, management quality, and capital. Grira & Labidi (2020) made attention to Islamic banking regulations, Islamic fund management, and risk management to show the present position of Islamic finance. The authors also described a regulatory framework as a parameter. From the Islamic fund management side, Islamic banks have high growth potential. Mahdi & Abbes (2018) aimed to describe risk-taking behavior in Islamic and conventional banks. The outcome of this study revealed that Islamic banks and conventional banks were very alike in terms of risk-taking behavior aligned with Fishburn’s (1977) risk measure and Tversky and Kahneman’s (1992) cumulative prospect theory. But in case if Islamic banks, governance systems affect liquidity
generation based on managerial ability (Safiullah et al., 2020). The findings unveiled that liquidity generation is influenced by board of directors and managerial capacity.

Bitar and Tarazi (2019) emphasized on the creditors’ rights and found that creditors’ protection is impertinent only for Islamic banks. Noreen (2019) concentrated on appraising the capital structure affecting power on the profitability of both Islamic and conventional banks in Pakistan. Authors considered 10 banks as a sample for the period 2006 to 2016 and used T-test and regression for the analysis. The outcome of this study exposed that both categories of banks have similar capital structures except bank size that had momentous differences. In between both categories of banks, ROA is negatively associated whereas ROE is positively associated. Alandejani et al. (2017) found that conventional banks have a longer survival time than Islamic banks. A discrete model showed that the uncertainty rate increased with Islamic banks. The influence of independent variables on survival time varies between Islamic banks and conventional banks.

Zainuldin & Lui (2020) investigated the earning management capacity of conventional banks and Islamic banks in the emerging market. Researchers also appraised the ownership structure that influenced earning management of conventional and Islamic banks. The result showed that Islamic banks enjoy greater earning management capacity than conventional banks. Miah & Uddin (2017) explored the business inclination, productivity, and steadiness between conventional and Islamic banks. For conducting this study, researchers collected data on 28 Islamic banks and conventional banks from the Gulf Cooperation Council (GCC) countries for the period 2005 to 2014. The authors used ordinary least square (OLS) regression and accounting ratios, Stochastic Frontier Analysis (SFA) for analysis. The result exhibits that Islamic banks’ efficiency of managing costs was lower than conventional banks. Furthermore, the outcome showed that the greater capitalized banking institutions were in greater steadiness but cost-inefficient.

Ramadhan et al. (2019) intended to select the determinants that had an impact on the performance of both Islamic and conventional banks. For measuring the performance, the researchers collected data from 7 Islamic banks and 4 conventional banks for the period 2003 to 2016. For making this comparative study, researchers used multiple regression and sample t-test. Return on assets (ROA) and return on equity (ROE) are scrutinized as dependent variables for quantifying the performance. The outcome of this paper exposed the productivity of conventional banks’ Islamic banks. The outcomes also revealed that ROA was related to risk, cost of intermediation and productivity ratios whereas ROE is greatly subjective to risk ratios only. It was also shown that the association between asset size and the performance of banks was irreverent, whereas the association between the number of branches and both ROA and ROE were momentous.

Profitability variables like “Net interest margin” and “return on asset” were adopted to assess the performance of conventional and Islamic banks (Ali & Khattak, 2020; Yanikkaya et al., 2018). Mursyid et al. (2021) analyzed the performance of Islamic banks using Islamic banks’ annual reports from 2014 to 2018 and used the Simple Additive Weighted Method (SAW) to figure out the multi-attribute decision problems. The authors also used ROA and ROE in this context. From the cost efficiency and profitability, the conventional banks suffered less than Islamic banks (Alqahtani et al., 2017). According to Sukmana & Febriyati (2016), data on Non-Performing Loan (NPL) /Non-Performing Financing (NPF), Capital Adequacy Ratio (CAR), Return on Asset (ROA), Loan Deposit Ratio (LDR)/ Financing Deposit Ratio (FDR), and Operational Cost/ Operational Revenue were gathered from the period 2004 to 2014. The panel data regression model incorporating
macroeconomic variables, bank specification, governance, and ownership-related variables was instigated (Mohammad et al., 2020).

In line with the discussion, Return on Equity (ROE) has been considered as a dependent variable whereas the total asset, capital, capital adequacy ratio, liquidity, credit to deposit, Gross Domestic Product (GDP), and inflation are considered as independent variables. Thus, the following hypotheses have been formulated.

H0: Independent variable has an insignificant impact on the performance of dependent variable
H1: Independent variable has a significant impact on the performance of dependent variable

**Methods and Procedures**

For performing the analysis, the authors randomly selected five state-owned commercial banks out of five and five Islamic banks out of nine Islamic banks in the market. The selected banks are shown and listed in the appendix section.

Available secondary data from the selected banks’ annual reports were assembled for the time interval 2015 to 2019. Researchers used panel data for analyzing and determining the significant determinants of the banks’ performance. Panel data grasp higher fluctuation than pure time-series data or even cross-sectional data (Uribe & Guillén, 2020; Gocer et al., 2016; Gill & Kaur, 2015). Panel data can also determine the statistical measures to be used that cross-sectional data can’t (Pesaran, 2015; Bonhomme & Manresa, 2015; Ando & Bai, 2017; Rahman & Saif, 2021). Though this research has been conducted using the available secondary data and numbers of observations are relatively low, it has been shown that panel data are not only about snowballing the number of observations but also about entering into the research method facts that are unobservable to the researchers (Pindado & Requejo, 2015). Pindado & Requejo (2015) argued that even when the number of periods is small, an acceptable approach is to adopt the presently available instruments. When the periods increase, the instrument's availability increases which, according to Roodman (2009), overfits the preset variables. The well-known method is to confine the availability of the instrument (Pindado & Requejo, 2015).

Therefore, for these panel data, authors deliberated the Panel Least Squares method to drive the regression and project the comportment of dependent variables. For measuring the performance, the authors considered Return on Equity (ROE) as a dependent variable; GDP and inflation are the macroeconomic variables that are considered as the independent variables. Additionally, total asset, capital, capital adequacy ratio, liquidity, credit to deposit are the firm-specific determinants that are considered as independent variables. For considering the percentage of the variables, the natural log was taken for the total asset, GDP, and inflation. The authors’ intents in this paper are to assess the performance of the Islamic banks and state-owned commercial Banks and determine the prime variables that affect the performance of the selected banks.

The dependent variable Return on equity (ROE) is a profitability ratio that calculates the capacity of a firm to generate profit from shareholders’ investment.
**Table 1: Notation and variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement</th>
<th>Notation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variables</strong></td>
<td>Profitability</td>
<td>ROE</td>
</tr>
<tr>
<td></td>
<td>Return On Equity(ROE) = (Net Profit/Equity)</td>
<td></td>
</tr>
<tr>
<td><strong>Company-specific</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Independent variables</strong></td>
<td>1) Asset Size.</td>
<td>1) Log (TA)</td>
</tr>
<tr>
<td></td>
<td>2) Capital Adequacy</td>
<td>2) CAR</td>
</tr>
<tr>
<td></td>
<td>3) Liquidity.</td>
<td>3) LAR</td>
</tr>
<tr>
<td></td>
<td>4) Credit to Deposit</td>
<td>4) CDR</td>
</tr>
<tr>
<td><strong>Macroeconomic</strong></td>
<td>1) GDP</td>
<td>1) Log(GDP)</td>
</tr>
<tr>
<td><strong>Independent variables</strong></td>
<td>2) Inflation</td>
<td>2) Log( INF)</td>
</tr>
</tbody>
</table>

**Research Model**

The authors have employed the Panel Least Squares approach. Panel data ensure coherence with the following model.

\[
ROE_t = \beta_0 + \beta_1 \log (TA)_t + \beta_2 \text{CAR}_t + \beta_3 \text{LAR}_t + \beta_4 \text{CDR}_t + \beta_5 \log (GDP)_t + \beta_6 \log (\text{INF})_t + \mu_{it} \ldots \ldots 1
\]

ROE is the dependent variable for State-owned banks.

\[
ROE_t = \beta_0 + \beta_1 \log (TA)_t + \beta_2 \text{CAR}_t + \beta_3 \text{LAR}_t + \beta_4 \text{CDR}_t + \beta_5 \log (GDP)_t + \beta_6 \log (\text{INF})_t + \mu_{it} \ldots \ldots 2
\]

Where,

- ROE\(_t\) = Return on Equity of company for year \(t\).
- Log (TA)\(_t\) = Natural Logarithm of total Asset of the company for year \(t\).
- CAR\(_t\) = Capital Adequacy of the company for year \(t\).
- LAR\(_t\) = Liquidity of a company for year \(t\).
- CDR\(_t\) = Credit to Deposit.
- Log (GDP)\(_t\) = Natural Logarithm of GDP of the company for year \(t\).
- Log (GDP)\(_t\) = Natural Logarithm of GDP of the company for year \(t\).
- Log (INF)\(_t\) = Natural Logarithm of INF of the company for year \(t\).
- \(\beta_1\) = Coefficient of the Variables.
- \(\mu_{it}\) = Error term.
Results and Interpretations

Islamic Banks
Regression Outcome of ROE

<table>
<thead>
<tr>
<th>Table 2: Regression outcome of ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regression Statistics</strong></td>
</tr>
<tr>
<td>Multiple R</td>
</tr>
<tr>
<td>R Square</td>
</tr>
<tr>
<td>Adjusted R Square</td>
</tr>
<tr>
<td>Standard Error</td>
</tr>
<tr>
<td>Observations</td>
</tr>
</tbody>
</table>

Regression Summary of ROE

<table>
<thead>
<tr>
<th>Table 3: Regression summary of ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Intercept</td>
</tr>
<tr>
<td>Total Asset</td>
</tr>
<tr>
<td>Capital Adequacy</td>
</tr>
<tr>
<td>Liquidity</td>
</tr>
<tr>
<td>Credit to Deposit</td>
</tr>
<tr>
<td>GDP</td>
</tr>
<tr>
<td>Inflation</td>
</tr>
</tbody>
</table>

Notes: * significant impact
5% level of significance
P < .05 and t > 2, significant effect

The following regression line has been derived from the above outcome.

ROE = -0.0475 - 0.0048Log (TA) + 0.0057 CAR + 0.0649 LAR + 0.0012 CDR -0.0171Log (GDP) -0.0393 (INF)

From this regression outcome of Islamic banks’ historical data, the authors found that three variables total asset, capital adequacy, and liquidity [LOG (TA), CAR (E/A), LAR (LA/TA)] were significant to influence the profitability (ROE) of Islamic banks in Bangladesh. Total asset negatively affects, capital adequacy positively affects, and liquidity positively affects profitability. Rest three variables credit to deposit (CDR), GDP, and inflation have no momentous impact on profitability. But credit to deposit (CDR) is positively related to profitability (ROE) whereas GDP and inflation are oppositely related.

Hence, the result showed that one company-specific variable credit to deposit has no significant impact and both macroeconomic variables (GDP, inflation) have no momentous impact on ROE. From the regression model, it is revealed that $R^2$ (coefficient of determination) is .8135 or 81.35% and adjusted $R^2$ is .7502 or 75.02%. So, goodness of fit is well accepted for explaining by the model.
State-Owned Commercial Banks

Regression outcome of ROE

Table 4: Regression outcome of ROE

<table>
<thead>
<tr>
<th>Regression Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>0.87342</td>
</tr>
<tr>
<td>R Square</td>
<td>0.75251</td>
</tr>
<tr>
<td>Adjusted R Square</td>
<td>0.6718</td>
</tr>
<tr>
<td>Standard Error</td>
<td>0.00654</td>
</tr>
<tr>
<td>Observations</td>
<td>25</td>
</tr>
</tbody>
</table>

Regression summary of ROE

Table 5: Regression summary of ROE

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Standard Error</th>
<th>t Stat</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>4.7265</td>
<td>14.7245</td>
<td>0.3210</td>
</tr>
<tr>
<td>Total Asset</td>
<td>0.5442</td>
<td>0.2224</td>
<td>2.4467</td>
</tr>
<tr>
<td>Capital Adequacy</td>
<td>-0.1310</td>
<td>0.3259</td>
<td>-0.4019</td>
</tr>
<tr>
<td>Liquidity</td>
<td>0.3324</td>
<td>0.1197</td>
<td>2.7779</td>
</tr>
<tr>
<td>Credit to Deposit</td>
<td>-0.0069</td>
<td>0.1026</td>
<td>-0.067</td>
</tr>
<tr>
<td>GDP</td>
<td>-0.2170</td>
<td>4.2905</td>
<td>-0.0506</td>
</tr>
<tr>
<td>Inflation</td>
<td>6.228</td>
<td>8.030</td>
<td>0.7756</td>
</tr>
</tbody>
</table>

Notes: * significant impact  
5% level of significance  
P < .05 and t > 2, significant effect  

The following regression line has been derived from the above outcome.

\[ \text{ROE}= 4.7265 + 0.5442 (TA) -0.1310 \text{CAR} + 0.3324 \text{LAR}-0.0069 \text{CDR} -0.2170 \log (\text{GDP}) + 6.228 (\text{INF}) \]

From this regression outcome of state-owned commercial banks’ historical data, the authors found that two company-specific variables total asset and liquidity have a momentous influence on profitability (ROE). The total asset has a positive momentous impact on ROE and liquidity has also a positive significant impact on ROE. The other two company-specific variables capital adequacy and credit to deposit have no significant impact on profitability and both these variables are negatively related to ROE.

The two macroeconomic variables, GDP and inflation have no significant impact on ROE, and out of these two variables, GDP is negatively linked to profitability, and inflation is oppositely linked to ROE.

From the regression model, it is revealed that \( R^2 \) (coefficient of determination) is almost 76% and adjusted \( R^2 \) is .6718 or 67.18%. So, the goodness of fit is well accepted for explaining by the model.
Comparison
Comparison between state-owned commercial banks and Islamic banks are shown below.

Table 6: Comparison between state-owned commercial banks and Islamic banks

<table>
<thead>
<tr>
<th></th>
<th>Islamic banks</th>
<th>State-owned commercial banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>R²</td>
<td>81.35%</td>
<td>76%</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>75.02%</td>
<td>67.18%</td>
</tr>
<tr>
<td>Total Asset</td>
<td>-0.00048 (Significant)</td>
<td>0.5442 (Significant)</td>
</tr>
<tr>
<td>Capital Adequacy</td>
<td>0.0057 (Significant)</td>
<td>-0.1310 (Insignificant)</td>
</tr>
<tr>
<td>Liquidity</td>
<td>0.0649 (Significant)</td>
<td>0.3324 (Significant)</td>
</tr>
<tr>
<td>Credit to deposit</td>
<td>0.0012 (Insignificant)</td>
<td>-0.00069 (Insignificant)</td>
</tr>
<tr>
<td>GDP</td>
<td>-0.00171 (Insignificant)</td>
<td>-0.2179 (Insignificant)</td>
</tr>
<tr>
<td>Inflation</td>
<td>-0.0393 (Insignificant)</td>
<td>6.2283 (Insignificant)</td>
</tr>
</tbody>
</table>

Islamic banks have one more significant variable (capital adequacy) but credit to deposit has no significance for both categories of banks. So, from this perspective, Islamic banks have a greater ability to influence the ROE than that of state-owned banks.

And R² (81.35%) of Islamic banks is higher than the R² (76%) of state-owned commercial banks. From this perspective, Islamic banks also have a greater ability to explain by the OLS model than that of state-owned commercial banks. Overall, the findings, indicate that the performance of Islamic banks is better than the state-owned commercial banks in Bangladesh. The findings of the current study are also aligned to the results of the previous studies that depicted comparatively superior financial performance for Islamic banks in Bangladesh (Safiullah, 2010; Islam & Chowdhury, 2009).

Recommendations
For performing better, Islamic banks need to focus more on the total asset, capital adequacy, and liquidity as these variables are significant. From the selected company-specific variables, only credit to deposit has no significance but this is also an important determinant of performance for a bank, hence, Islamic banks need to focus on this determinant to make a further impact on ROE. Two macroeconomic variables, GDP and inflation are important determinants of the economic strength though these have no significant impact on ROE. As these are also important in the long-term, banks should prepare them so that they remain capable of incorporating macroeconomic variables to augment their performance.

The company-specific variables, total assets, and liquidity have a significant impact on profitability. So, state-owned commercial banks should focus more on these two variables as this will help to create an added return on equity for banks. Capital adequacy and credit to deposit have no significant impact but these determinants are also equally important for the state-owned commercial banks’ performance. So, state-owned commercial banks should take initiatives to improve the performance of these two variables as these two will lead to augmenting the return on equity. Two macroeconomic variables, GDP and inflation are important determinants of the overall economy through these have no direct significant impact on ROE. As these are imperative in the long-term, banks should prepare them so that they remain capable of incorporating macroeconomic variables to extend their performance.
Research Limitation and Future Direction

For doing this research authors have considered the secondary data from 2015 to 2019 of these selected banks. But from 2020, the whole world is affected by the COVID-19 pandemic which has a great impact on the banking sector. Hence, the outcome of this study would reflect the before COVID-19 pandemic as authors couldn’t incorporate the data during the COVID pandemic. Besides, the ability of debtors in bearing their credit obligation and the banking performance has been hampered by the spread of COVID-19 (Sytra & Smail, 2020). Due to the COVID-19 pandemic, a large number of people/employees lost their jobs and that creates difficulties in financing payments as debtors wouldn’t be able to make regular payments (Ichsan et al., 2021). Hence, this is one of the limitations of this study. Moreover, Ullah et al., (2019) state that the working system of Conventional banks and Islamic Banks are different and as per their studies profitability of conventional banks are inadequate for Islamic banks in Bangladesh.

Future researchers can extend this study by changing the explanatory variables, taking the data during the COVID-19 pandemic as well as enhancing the number of observations to better fit the research problem to a wider context using panel data.

Conclusion

In this study, the author appraises the performance of the conventional and Islamic banks in Bangladesh. Return on Equity (ROE) is considered a dependent variable that indicates the profitability of the firm. Total Asset, Capital Adequacy, Liquidity, Credit to deposit, GDP, and Inflation are the independent variables whereas Total Asset, Capital Adequacy, Liquidity, Credit to deposit at the company determinants, and GDP, as well as Inflation, is the macro-economic determinants. From the analysis, authors have found that Islamic banks are being affected significantly by the four variables (Total asset, Capital Adequacy, Liquidity, Credit to deposit) from the selected six variables whereas the Conventional banks are being affected significantly by the two variables (Total asset and Liquidity) from the selected six variables. The interesting finding is that. The Islamic banks are not being affected momentously by the macro-economic determinants (GDP and Inflation) but the Conventional banks are not being influenced momentously by both company determinants (Capital Adequacy and Credit to deposit) and the macro-economic determinants (GDP and Inflation). So this outcome depicts that the financial performance of Islamic banks is superior to the financial performance of state-owned commercial banks in Bangladesh from the above analysis. Comparative studies have been done before between conventional and Islamic banks and yielded fluctuating results concerning countries and regions. This specific work has been done to yield a financial performance comparison between state-owned commercial banks and Islamic banks in Bangladesh.

The banking system plays a vital role in the economic system of third-world countries (Agbada, 2010). In Bangladesh, the banking system also plays a momentous role in the economy. Islamic banks are the largest private bank in Bangladesh whereas Islami Bank Bangladesh Limited has become the country's top deposit holder as reported in the bank's managerial conference held on Hotel Pan Pacific Sonargaon, Dhaka as reported by the leading daily of the country,' the daily star ' on 16th January 2022.

To get more benefits from the conventional and Islamic banks in Bangladesh, the policymakers and bank stakeholders may consider the above-mentioned recommendations.
References


### Appendix

**List of selected banks from both categories**

<table>
<thead>
<tr>
<th>Islamic Banks</th>
<th>Established Year</th>
<th>Branches</th>
<th>State-owned commercial Banks</th>
<th>Established Year</th>
<th>Branches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Islamic Bank Bangladesh Ltd</td>
<td>1983</td>
<td>350</td>
<td>Sonali Bank</td>
<td>1972</td>
<td>1200</td>
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