

Profitability Analysis of Conventional and Islamic Banks in Bangladesh: A Comparative Study

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Abstract

This comparative study on profitability analysis of conventional and Islamic banks in Bangladesh from 2018 to 2022 gives an insightful financial performance of the two modes of banking stream. For the analysis, five conventional banks and five Islamic banks were chosen randomly. Financial ratios are calculated from the respective bank's annual financial reports and the Central bank's data to measure profitability. Ten profitability indicators are used to analyze data, comparing the results of two types of banks, and finally, the ANOVA test shows the differences in profitability measures at a 5% level of significance. Conventional banks are performing better in terms of NNII, Spread, Burden, OP, NP, ROA & ROE, but Islamic banks are performing better regarding profit earned, profit paid, and OOE. The differences in profit earned ratio, profit paid ratio, and Spread ratio are significant, which indicate that trends are not identical in conventional and Islamic banks, but the differences in NNII ratio, OOE ratio, Burden ratio, OP ratio, NP ratio, ROA, ROE are not significant which indicate that trends are identical. Deposit and investment trends of Islamic banks are better than conventional banks, and it shows Islamic banks have good prospects in the near future. Overall findings show that conventional banks are doing comparatively better than Islamic banks in terms of profitability measures.

Keywords: Conventional Banks, Islamic Banks, Profitability, ANOVA Test.

1. Introduction

In Bangladesh 61 scheduled banks are running as per Bangladesh Bank Order, 1972 and Bank Company Act, 1991. Commercial banks of three categories (i) full-fledged conventional commercial banks, (ii) full-fledged Islamic commercial banks and (iii) Commercial banks with dual operations are running here. As on 31st December 2022, 10 full-fledged Islamic commercial banks with 1659 branches, 11 conventional banks with 23 Islamic Shariah banking branches and 13 conventional banks with 535 Islamic banking windows are giving Islamic financial services (IFS) in the country's economy. Islamic banking is getting more popularity as a perfect option of conventional banking day after day in Bangladesh. At present, Islamic banking is being successfully operated in the world economy (Rashid et al., 2018). Profit is the primary objective

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of a commercial bank and profitability is the tool used for measuring comparative performance with its counterparts. 'Profit' and 'profitability' in business are treated as 'blood' and 'pulse' in human body (Rahman et al., 2014). Profitability of a commercial bank mainly depends on operational efficiency and asset utilization. Profitability of a commercial bank also depends on advance deposit ratio (Das et al., 2015).

Conventional banking is predetermined interest based where Islamic banking is based on profit – loss sharing, moral values, ethical business transactions and all procedures must be permitted by Islamic Shariah. Islamic banks (IB) and conventional banks (CB) have different features, IB performance must be measured considering Islamic values and principles (Al Arif et al., 2021). Nowadays IB is the fastest rising banking systems and most competitive against existing CB (Suppia et al., 2019).

Profitability is an indicator of growth trend and financial success of a commercial bank (Yuan et al., 2022). Financial performance of a commercial bank can be measured by traditional accounting-based methods: Return on Assets (ROA), Return on Investment (ROI), Return on Equity (ROE), Net Interest Margin (NIM), Earnings per Share (EPS), Price Earnings Ratio (P/E), Net Profit, Dividend Yield and modern value-based methods: Value Added Statement - Economic Value Added (EVA), Market Value Added (MVA) (Rahman, 2016).

Conventional bank is more profitable which differs significantly from Islamic bank with respect to Return on Asset, Return on Equity, Profit Expenses Ratio, Earnings per Share, Net Profit Margin, Profit per Employee and Profit per Branch (Paul et al., 2013). Debt to equity ratio is a measure of leverage which has negative control on profitability of a commercial bank (Uddin, 2022). Deposit and bank size have significant negative impact on profitability of Islamic banks (Rahaman et al., 2016).

In this context, this study intends to compare the profitability of the conventional and Islamic banks in Bangladesh for the period of 2018 to 2022. Thus, through the analysis of their financial performance and the assessment of factors that impact on the level of profitability, this study aims at establishing which of the banking systems in consideration is more efficient in terms of financial performance indicators and operations, and, consequently, what roles they play in the nation's economy.

2. Literature Review

Hasan (2016) studied conversion of conventional banks into Islamic banks in Bangladesh and found higher profitability after conversion. Ahmmed et al. (2015) analyzed four conventional banks and four Islamic banks in Bangladesh from 2009-2013 and found mixed results. Ara (2016) studied 19 CB and 5 IB and found IB's better position in profit efficiency and CB's better position in cost efficiency. Karim et al. (2020) studied and found highest non-compliance in Musharakah and moderate non-compliance in Mudarabah, Ijarah and Quard Hasanah due to internal and external reasons. Rafiq (2016) compared five Islamic banks with five conventional banks during 2008-2014 and found conventional banks perform better than Islamic banks as per ROA, ROE & Cost to Income ratio. Ibrahim et al. (2018) studied and found conventional banks are significantly more profitable than Islamic banks in ROA, ROE and Profit Expense ratio. Akber et al. (2020) studied and found no significance differences according to CAMEL test, traditional commercial

bank performs better as per asset quality and management efficiency and Islamic bank performs better as per liquidity and capital adequacy. Muhiuddin et al. (2020) studied and found Islamic banks have more profitability performance than conventional banks. Shafee et al. (2021) described bankers and customers' relationship is based on confidence and increases of customer confidence in bank lead to expansion of e-banking services which ultimately lead to increase of profit and reduction of costs. Nuhiu et al. (2017) concluded that banks profitability influenced by internal factors –asset quality, management efficiency and capital adequacy but macroeconomic factors influence insignificantly. Sukmana et al. (2016) studied and found conventional banks have higher ROA, CAR than Islamic banks. Haslem (1968) showed the variables- management, time, location and size significantly affect relative profitability of a commercial bank. Paltrinieri et al. (2021) showed increase of non-financing income contributes positively to increase stability and profitability in both banking model. Abduh et al. (2013) studied and showed Islamic bank has progress on efficiency level. Fatema et al. (2013) showed investment to total assets ratio significantly affects Return on Assets.

Bhuiya et al. (2023) studied ten commercial banks of Bangladesh and found NPL ratio, L/D ratio have significant impact in ROA and also showed that NPL has negative impact in ROE. Uddin et al. (2017) studied performance of five conventional and five Islamic banks in Bangladesh using CAMEL analysis and found no significant differences but management quality and asset quality are better in conventional banks where capital adequacy and liquidity position are better in Islamic banks. Khan (2018) studied deposit performance of all private commercial banks and Islamic banks in Bangladesh during 2007-2016 and found average growth of IBs is better. Hoque et al. (2019) studied comparative performance of 5 conventional and 5 Islamic banks in Bangladesh over five years from 2012-2016 and found conventional banks performance is better than Islamic banks. Alam (2019) studied randomly selected four conventional and four Islamic banks in Bangladesh from 2017-2018 and found Islamic banks overall performance is better than conventional banks but conventional banks standard deviation is greater than Islamic ones. Islam (2012) studied and found generally IBs overall performance is better than CBs. Ibrahim et al. (2014) studied 6 Islamic banks in Bangladesh during 2004-2013 and found all IBs perform well which will stimulate CBs to convert banking business as per Islamic Shariah principles. Abdullah et al. (2020) studied 7 Islamic banks and 23 conventional banks of Bangladesh from 2010 to 2018 and found conventional bank is more profitable than Islamic ones and conventional banks have higher Return on Assets and Profit Expenses Ratio than Islamic counterparts but significant difference has no existence in Return on Equity.

2.1. Research Gap

Although a number of papers have attempted to evaluate the performance of conventional and Islamic banks, some research gaps have emerged. Several papers investigated the profitability issue based on the financial data for previous years with less attention paid to current changes and tendencies in the banking sector. To fill these gaps, this study intends to use data from the period 2018-2022 to capture the current dynamics of the banking sector, especially the effects of the COVID-19 pandemic in 2020-2021.

Moreover, unlike most previous studies that have concentrated on a limited number of profitability parameters, ten profitability indicators are adopted in this study: Profit Earned Ratio (PER), Profit

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Paid Ratio (PPR), Net Non-interest (Non-investment) Income [NNII] ratio, Other Operating Expenses (OOE) ratio, Spread ratio or Net Interest (Investment) Margin [NIM], Burden ratio, Operating Profit (OP) ratio, Net Profit (NP) ratio, Return on Asset (ROA), and Return on Equity (ROE).

This approach offers a wider and much more elaborate view of the determinants of profitability in both banking systems. Based on these gaps, this paper aims to present a current picture on the profitability of conventional and Islamic banks in Bangladesh besides adopting a wider range of financial ratios.

2.2. Research Questions

The study aims to answer the following research questions:

What has been the trend of profitability of both conventional and Islamic banks in Bangladesh in the period 2018-2022?

Which banking system between the conventional and the Islamic banking system has the highest performance of the ten profitability measurements in the study period?

To what extent does it explain the variation in profitability between the conventional and the Islamic banks in Bangladesh?

2.3. Hypothesis of the Study

The following hypothesis is developed and tested using one-way ANOVA:

H₀: There is no difference in profitability measures of conventional and Islamic banks in Bangladesh from 2018-2022.

H₁: There is a significant difference in profitability measures of conventional and Islamic banks in Bangladesh from 2018-2022.

In hypothesis testing 5% level of significance is considered. If P value more than 0.05 we will accept the null hypothesis and reject the alternative hypothesis, if P value is less than 0.05 we will reject the null hypothesis and accept the alternative hypothesis (Hassan, 2021).

3. Methodology

3.1. Sample of the Study and Data Sources

The study employs a comparative analysis of the profitability of conventional and Islamic banks in Bangladesh. The population for the study includes the entire banking sector of Bangladesh. A random sampling method was used to select five conventional banks and five Islamic banks for the analysis. The selected banks and their years of establishment are listed in **Table 1**.

Secondary data for the analysis was obtained from the annual reports of the selected banks, their official websites, and the website of the Bangladesh Bank. The study covers a five-year period from 2018 to 2022.

Table 1: Sample Banks and Year of Establishment

Five sample of conventional banks	Establishment	Five sample of Islamic banks	Establishment
1. Pubali Bank Ltd. (PBL)	26 March 1972	Islami Bank Bangladesh Ltd. (IBBL)	30 March 1983
2. Prime Bank Ltd. (Prime BL)	17 April 1995	First Security Islami Bank Limited (FSIBL)	25 October 1999
3. Brac Bank Ltd. (BBL)	July 2001	Social Islami Bank Ltd. (SIBL)	22 November 1995
4. Eastern Bank Ltd. (EBL)	16 August 1992	EXIM Bank Ltd. (EXIM BL)	3 August 1999
5. Dutch Bangla Bank Ltd. (DBBL)	30 June 1996	Shahjalal Islami Bank Ltd. (SJIBL)	10 May 2001

Source: Authors' own explanations.

3.2. Measurement of Profitability

Profitability (profit + ability) means ability or power to make profit with respect to total business, total investment, total equity, total assets, and operating expenses etc. Profitability analysis is instrumental in comprehending the financial position of an organization that is both solvent and solid (Gazi et al. 2021). The following tools and techniques were employed for profitability analysis:

1. **Profitability Model:** Profitability (P) is calculated as:

$$P = \frac{I}{A} \text{ [where I represents income and A represents assets]}$$
2. **Statistical Tools:** The following statistical techniques are applied to analyze the data: Mean (Average), Standard Deviation (SD), and Coefficient of Variation (CV).
3. **Growth Rate Analysis:** The Compound Growth Rate (CGR) is employed to measure the growth trend in profitability performance.
4. **ANOVA Test:** The ANOVA test was applied to assess the accuracy and significance of results, facilitating comparisons between the profitability of conventional and Islamic banks.
5. **Profitability Indicators:** Profitability indicators provide critical insights into the performance and efficiency of banks. The main ten profitability indicators (highlighting their significance) presented in **Table 2** were used to analyze the profitability of conventional and Islamic bank.

Table 2: Profitability Indicators with Significance

SN	Profitability Indicators	Significance
01	Profit Earned Ratio (PER)	Indicates income or profit generated on loans & advances (investments). A bank having higher PER means it has better performance in disbursement of quality loans (investment) than the other one.

02	Profit Paid Ratio (PPR)	Indicates profit paid on deposits of the depositors. A bank having lower PPR means it is more efficient in collecting deposits at lower profit than the other one.
03	Net Non-interest (Non-investment) Income [NNII] ratio	Includes commission, services charges, fees, guarantee fees, net profits from sales of investment securities and foreign exchange profits which indicate diversification of banking activities. A bank having higher NNII means it has better performance in diversification of banking activities than the other one.
04	Other operating expenses (OOE) ratio	Indicates management efficiency to handle daily operating activities at lower cost. A bank having lower OOE means it is more efficient in managing costs than the other one.
05	Spread ratio or Net Interest (Investment) Margin [NIM]	Indicates PER over PPR. A bank having higher spread means it is more efficient in investing the collected deposits than the other one.
06	Burden ratio	Indicates OOE over NNII. A bank having lower burden means it is more efficient in cost control than the other one.
07	Operating Profit (OP) ratio	Indicates total income over total expenses. A bank having higher OP means it is more profitable than the other one.
08	Net profit (NP) ratio	Indicates net profit after tax. A bank having higher NP means it is more profitable (considering NPAT) than the other one.
09	Return on Asset (ROA)	Indicates how banks are utilizing their available assets. A bank having higher ROA means it is efficiently utilizing assets than the other one.
10	Return on Equity (ROE)	Indicates how banks are utilizing shareholders' equity capital. A bank having higher ROE means it is efficiently utilizing equity than its counterpart.

Source: Authors' own explanations.

4. Data Analysis

4.1. Comparative Profitability Ratios

The profitability ratios presented in **Table 3** provide insights into the financial performance of conventional and Islamic banks over the period 2018–2022.

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Table 3: Comparative Profitability Ratios

Sample Banks		Profit Earned	Profit Paid	NNII	OOE	Spread	Burden	OP	NP	ROA	ROE
Conventio nal Banks	PBL	3.40	2.60	1.85	1.37	0.80	-0.48	1.28	0.49	0.69	10.37
	Prime BL	3.75	2.13	1.40	1.53	1.62	0.13	1.49	0.53	0.73	8.82
	BBL	4.46	2.09	1.38	2.06	2.37	0.68	1.68	0.93	1.43	13.35
	EBL	4.02	2.55	1.60	1.33	1.47	-0.27	1.74	0.83	1.23	15.27
	DBBL	3.71	1.18	1.76	2.58	2.53	0.82	1.72	0.79	1.20	17.16
Islamic Banks	IBBL	3.40	2.02	0.58	1.09	1.37	0.51	0.87	0.24	0.43	8.68
	FSIBL	4.82	3.44	0.27	0.87	1.38	0.61	0.78	0.30	0.54	14.18
	SIBL	4.26	2.91	0.57	1.04	1.36	0.46	0.89	0.29	0.48	9.82
	EXIM BL	3.96	2.89	0.68	0.86	1.06	0.18	0.88	0.35	0.59	8.96
	SJIBL	4.10	2.52	0.96	1.16	1.57	0.19	1.38	0.53	0.79	12.63

Source: Authors' calculation from the respective banks' annual reports (2018-2022).

Profit earned ratio of BBL is 4.46% where average is 3.87% which represents better position for investing the loanable fund at higher interest rate compared to other conventional banks and profit earned ratio of FSIBL is 4.82% where average is 4.11% which represents better position for investing the investable fund at higher profit rate compared to other Islamic banks.

Profit paid ratio of DBBL is 1.18% where average is 2.11% which represents better position to collect deposit at lower interest rate compared to other conventional banks and profit paid ratio of IBBL is 2.02% where average is 2.76% which represents better position to collect deposit at lower profit rate compared to other Islamic banks.

NNII ratio of PBL is 1.85% where average is 1.60% which represents better position to earn other fees based income compared to other conventional banks and NNII ratio of SJIBL is 0.96% where average is 0.61% which represents better position to earn other fees based income compared to other Islamic banks.

OOE ratio of EBL is 1.33% where average is 1.78% which represents better position to manage other operating costs compared to other conventional banks and OOE ratio of EXIM is 0.86% where average is 1.00% which represents better position to manage other operating costs compared to other Islamic banks.

Spread ratio of DBBL is 2.53% where average is 1.76% which represents better position to earn more interest on loans & advances over interest payment on deposit compared to other conventional banks and spread ratio of SJIBL is 1.57% where average is 1.35% which represents better position to earn more profit on investment over profit payment on deposit compared to other Islamic banks.

Burden ratio of PBL is -0.48% where average is 0.18% which represents better position to control other operating costs over earning on non-interest fees based income compared to other conventional banks and burden ratio of EXIM is 0.18% where average is 0.39% which represents better position to control other operating costs over earning on non-investment fees based income compared to other Islamic banks.

OP ratio of EBL is 1.74% where average is 1.58% which represents better position to earn total income over total expenses compared to other conventional banks and OP ratio of SJIBL is 1.38% where average is 0.96% which represents better position to earn total income over total expenses compared to other Islamic banks.

NP ratio of BBL is 0.93% where average is 0.71% which represents better position to earn more profit after deduction of all taxes compared to other conventional banks and NP ratio of SJIBL is 0.53% where average is 0.34% which represents better position to earn more profit after deduction of all taxes compared to other Islamic banks.

ROA of BBL is 1.43% where average is 1.06% which represents better position to earn more return through utilization of available assets compared to other conventional banks and ROA of SJIBL is 0.79% where average is 0.57% which represents better position to earn more return through utilization of available assets compared to other Islamic banks.

ROE of DBBL is 17.16% where average is 12.99% which represents better position to earn more return through utilization of shareholder's equity compared to other conventional banks and ROA of FSIBL is 14.18% where average is 10.85% which represents better position to earn more return through utilization of shareholder's equity compared to other Islamic banks.

4.2. Statistical Analysis of the Profitability Indicators

The statistical analysis of profitability indicators provides a deeper understanding of the performance dynamics between conventional and Islamic banks, as summarized in **Table 4**.

Table 4: Statistical Analysis

	Profit Earned	Profit Paid	NNII	OOE	Spread	Burden	OP	NP	ROA	ROE
Conventional Banks										
Mean	3.87	2.11	1.60	1.78	1.76	0.18	1.58	0.71	1.06	12.99
S.D.	0.79	0.44	0.19	0.13	0.42	0.31	0.13	0.04	0.07	1.04
C.V.	20.51	20.71	11.82	7.43	23.82	175.04	8.43	5.82	7.05	8.04
Max.	4.75	2.55	1.78	1.94	2.24	0.57	1.74	0.78	1.18	14.72
Min.	3.03	1.53	1.37	1.62	1.41	-0.11	1.44	0.68	0.99	11.98
CGR	-7.90	-5.36	5.97	-3.44	-8.70	44.52	-2.80	-2.47	-2.86	-2.52
Islamic Banks										
Mean	4.11	2.76	0.61	1.00	1.35	0.39	0.96	0.34	0.57	10.85
S.D.	0.67	0.50	0.11	0.04	0.19	0.09	0.16	0.04	0.05	1.02
C.V.	16.27	18.26	17.56	4.32	13.96	23.33	16.94	10.61	8.52	9.39
Max.	4.78	3.27	0.79	1.04	1.59	0.48	1.14	0.41	0.64	12.66
Min.	3.40	2.21	0.50	0.94	1.18	0.25	0.77	0.32	0.53	10.21
CGR	-7.73	-7.98	9.58	0.18	-6.98	-11.77	-3.07	4.71	2.80	5.42
Conventional and Islamic banks (ANOVA test)										
F-ratio	21.85	5.06	0.33	0.21	2.83	1.53	1.14	1.48	0.19	0.42
P-value	0.01	0.01	0.86	0.93	0.04	0.21	0.35	0.23	0.94	0.79

Source: Authors' calculation from the respective banks' annual reports (2018-2022).

For conventional banks profit earned ratio ranging between 3.03 to 4.75 with an average of 3.87 and in Islamic banks profit earned ratio ranging between 3.40 to 4.78 with an average of 4.11 and

average profit earned in Islamic banks is more consistent which is 1.06 times higher than conventional banks implies that Islamic banks investing efficiently to procure more profit.

In conventional banks profit paid ratio ranging between 1.53 to 2.55 with an average of 2.11 and in Islamic banks profit paid ratio ranging between 2.21 to 3.27 with an average of 2.76 and average profit paid in Islamic banks is more consistent which is 1.31 times higher than conventional banks implies that Islamic banks procuring more deposit through offering competitive rate. It also implies that conventional banks have more scope to procure low cost and no cost deposit than Islamic banks.

In conventional banks NNII ratio ranging between 1.37 to 1.78 with an average of 1.60 and in Islamic banks NNII ratio ranging between 0.50 to 0.79 with an average of 0.61 and average NNII in conventional banks is more consistent which is 2.62 times higher than Islamic banks implies that conventional banks generating fee based income serving in diverse group of customers.

In conventional banks OOE ratio ranging between 1.62 to 1.94 with an average of 1.78 and in Islamic banks OOE ratio ranging between 0.94 to 1.04 with an average of 1.00 and average OOE in Islamic banks is more consistent which is 1.78 times lower than conventional banks implies that Islamic banks have more control over their other operating expenses.

In conventional banks Spread ratio ranging between 1.41 to 2.24 with an average of 1.76 and in Islamic banks Spread ratio ranging between 1.18 to 1.59 with an average of 1.35 and average Spread in Islamic banks is more consistent but it is 1.30 times higher in conventional banks than Islamic banks implies that conventional banks generating higher net interest margin.

In conventional banks Burden ratio ranging between -0.11 to 0.57 with an average of 0.18 and in Islamic banks Burden ratio ranging between 0.25 to 0.48 with an average of 0.39 and average Burden in Islamic banks is more consistent but it is 2.17 times lower in conventional banks than Islamic banks implies that conventional banks can profitably manage non-interest expenses.

In conventional banks OP ratio ranging between 1.44 to 1.74 with an average of 1.58 and in Islamic banks OP ratio ranging between 0.77 to 1.14 with an average of 0.96 and average OP in conventional banks is more consistent which is 1.65 times higher than Islamic banks implies that conventional banks can profitably manage interest income, non-interest income, interest expenses & non-interest expenses.

In conventional banks NP ratio ranging between 0.68 to 0.78 with an average of 0.71 and in Islamic banks NP ratio ranging between 0.32 to 0.41 with an average of 0.34 and average NP in conventional banks is more consistent which is 2.09 times higher than Islamic banks implies that conventional banks can profitably handle all income & expenditure elements.

In conventional banks ROA ranging between 0.99 to 1.18 with an average of 1.06 and in Islamic banks ROA ranging between 0.53 to 0.64 with an average of 0.57 and average ROA in conventional banks is more consistent which is 1.86 times higher than Islamic banks implies that conventional banks can properly utilize assets to generate more return.

In conventional banks ROE ranging between 11.98 to 14.72 with an average of 12.99 and in Islamic banks ROE ranging between 10.21 to 12.66 with an average of 10.85 and average ROE in

conventional banks is more consistent which is 1.20 times higher than Islamic banks implies that conventional banks can properly utilize equities to generate more return.

Thus Islamic banks are in better position than conventional banks in respect of profit earned ratio, profit paid ratio, OOE ratio and conventional banks are in better position than Islamic banks in respect of NNII ratio, Spread ratio, Burden ratio, OP ratio, NP ratio, ROA, ROE. ANOVA shows that this difference in profit earned ratio, profit paid ratio and Spread ratio are significant at 5% significance level resulting null hypothesis is rejected and shows trends are not identical in these three parameters, but the difference in NNII ratio, OOE ratio, Burden ratio, OP ratio, NP ratio, ROA, ROE are not significant at 5% significance level resulting null hypothesis is not rejected and banks trends are identical in these seven parameters.

4.3. Growth Rate Analysis

4.3.1. Total Income Growth Rate

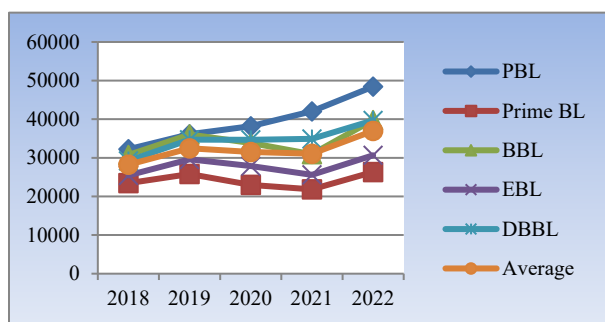
Table 5 as well as **Figure 1** and **Figure 2** reveal that total income growth rate of conventional banks ranging in between 1.12 to 1.50 with an average of 1.30 and total income growth rate of Islamic banks ranging in between 1.00 to 1.37 with an average of 1.17. Thus average total income growth rate in conventional banks is 1.11 times higher than Islamic banks. It is a better indication in favor of conventional banks than Islamic ones.

Table 5: Total Income Growth Rate

Conventional banks	PBL	Prime BL	BBL	EBL	DBBL	Average
	1.50	1.12	1.29	1.20	1.36	1.30
Islamic banks	IBBL	FSIBL	SIBL	EXIM	SJIBL	Average
	1.37	1.21	1.00	1.14	1.13	1.17

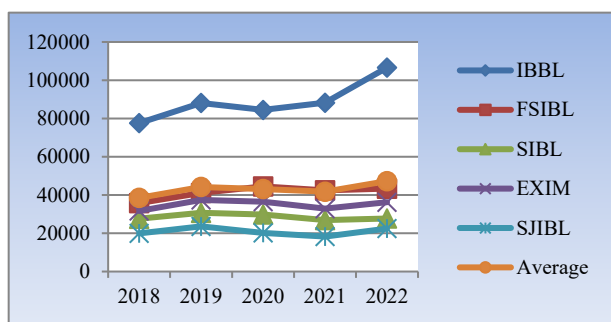
Source: Authors' calculation from the respective banks' annual reports (2018-2022).

Figure 1: Income (Conventional Banks)



Source: Authors' own development.

Figure 2: Income (Islamic Banks)



Source: Authors' own development.

4.3.2. Total Expenditure Growth Rate

From **Table 6**, **Figure 3**, and **Figure 4**, it can be seen that the total expenditure growth rate of conventional banks ranging in between 0.99 to 1.59 with an average of 1.27, and the total expenditure growth rate of Islamic banks ranges between 0.92 to 1.49 with an average of 1.17. Thus, the average total expenditure growth rate in conventional banks is 1.09 times higher than

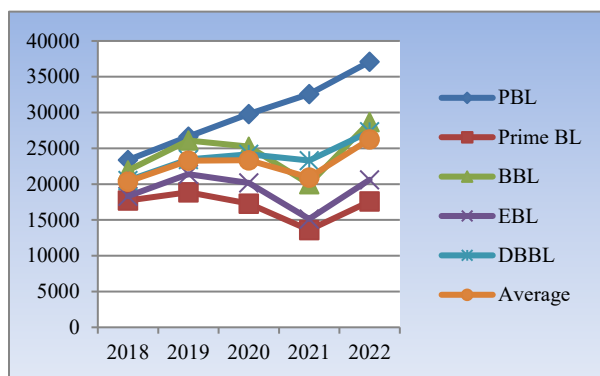
that of Islamic banks. It also indicates that more total income associated with more total expenditure in conventional banking groups.

Table 6: Total Expenditure Growth Rate

Conventional banks	PBL 1.59	Prime BL 0.99	BBL 1.31	EBL 1.13	DBBL 1.33	Average 1.27
Islamic banks	IBBL 1.49	FSIBL 1.19	SIBL 1.07	EXIM 1.18	SJIBL 0.92	Average 1.17

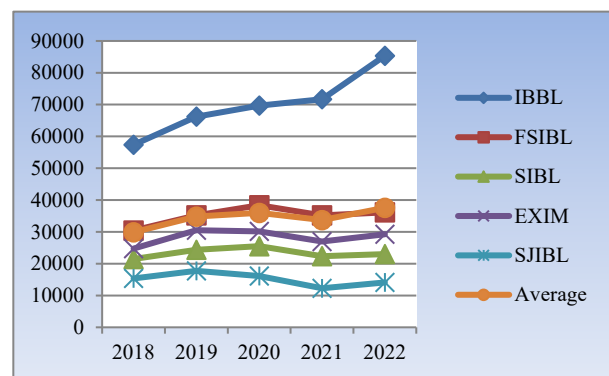
Source: Authors' calculation from the respective banks' annual reports (2018-2022).

Figure 3: Expenditure (Conventional Banks)



Source: Authors' own development.

Figure 4: Expenditure (Islamic Banks)



Source: Authors' own development.

4.3.3. Total Income to Total Expenditure (TI-TE) Growth Rate

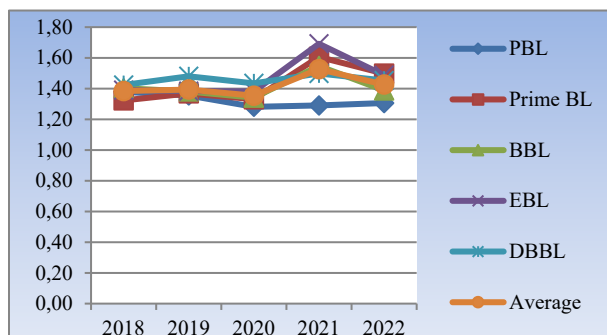
From **Table 7** as well as **Figure 5** and **Figure 6** it is also evident that total income to total expenditure (TI-TE) growth rate of conventional banks ranges in between 0.95 to 1.13 with an average of 1.03 and total income to total expenditure (TI-TE) growth rate of Islamic banks ranges in between 0.92 to 1.23 with an average of 1.01. Thus average TI to TE growth rate of conventional banks is 1.02 times higher than Islamic banks and it indicates that conventional banks are generating more operating income through efficiently managing their operating costs.

Table 7: Total Income to Total Expenditure (TI-TE) Growth Rate

Conventional banks	PBL 0.95	Prime BL 1.13	BBL 0.99	EBL 1.07	DBBL 1.02	Average 1.03
Islamic banks	IBBL 0.92	FSIBL 1.02	SIBL 0.94	EXIM 0.97	SJIBL 1.23	Average 1.01

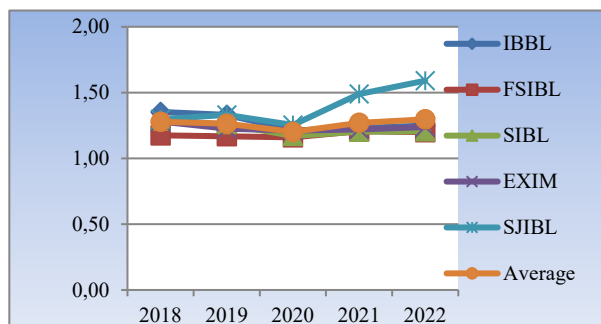
Source: Authors' calculation from the respective banks' annual reports (2018-2022).

Figure 5: TI-TE (Conventional Banks)



Source: Authors' own development.

Figure 6: TI-TE (Islamic Banks)



Source: Authors' own development.

4.3.4. Profit growth Rate

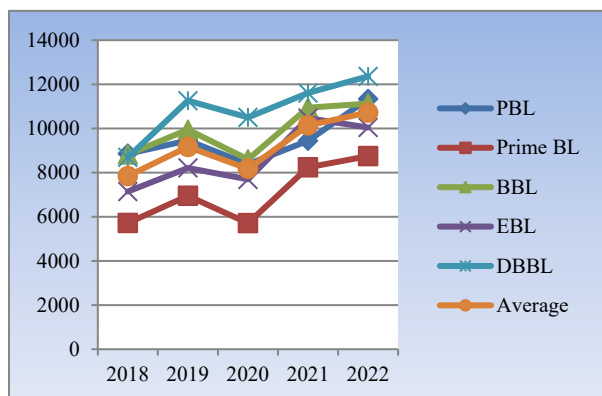
From the **Table 8** also from the **Figure 7** and **Figure 8** it is identified that profit growth rate of conventional banks ranges in between 1.26 to 1.53 with an average of 1.37 and profit growth rate of Islamic banks ranges in between 0.77 to 1.82 with an average of 1.12. Thus average profit growth rate of conventional banks is 1.22 times higher than Islamic banks and it indicates that conventional banks growth trends are better than Islamic counterparts.

Table 8: Profit growth Rate

Conventional banks	PBL	Prime BL	BBL	EBL	DBBL	Average
	1.28	1.53	1.26	1.41	1.42	1.37
Islamic banks	IBBL	FSIBL	SIBL	EXIM	SJIBL	Average
	1.05	1.35	0.77	1.01	1.82	1.12

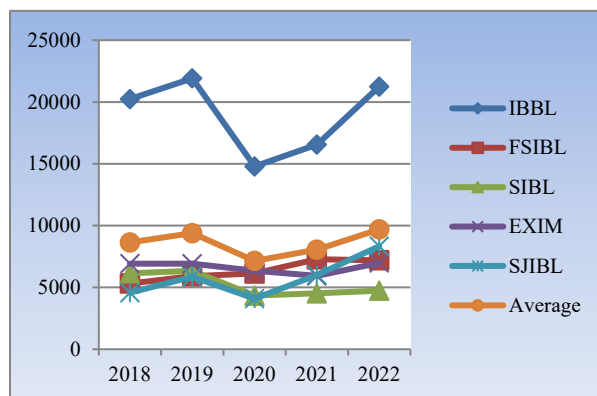
Source: Authors' calculation from the respective banks' annual reports (2018-2022).

Figure 7: Profit (Conventional Banks)



Source: Authors' own development.

Figure 8: Profit (Islamic Banks)



Source: Authors' own development.

4.4. Key Profitability Indicators of CB & IB

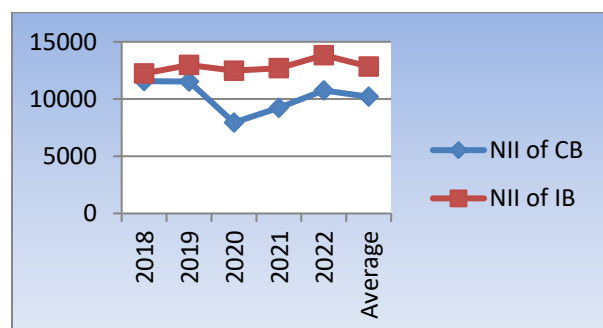
The key profitability indicators are Net Interest Income (Investment Income) [NII], Net Non Interest Income (Non Investment Income) [NNII], Return on Asset [ROA] & Return on Equity [ROE]. The key profitability indicators analyzed in **Table 9** and visualized in **Figures 9 to 12** offer a comparative understanding of the financial performance of conventional banks (CB) and Islamic banks (IB) in Bangladesh during 2018-2022.

Table 9: Profitability Indicators of CB & IB during 2018-2022

	Indicators	2018	2019	2020	2021	2022	Average
Conventional banks	NII	11559.36	11524.60	7941.15	9236.42	10753.58	10203.02
	NNII	(3712.02)	(2359.23)	235.82	904.12	(28.92)	(992.05)
	ROA	1.18	1.03	0.99	1.04	1.04	1.06
	ROE	14.72	12.55	11.98	12.61	13.11	12.99
	Indicators	2018	2019	2020	2021	2022	Average
Islamic banks	NII	12231.30	12973.48	12477.68	12690.98	13832.02	12841.09
	NNII	(3591.87)	(3585.09)	(5334.72)	(4630.92)	(4132.51)	(4255.02)
	ROA	0.59	0.55	0.53	0.53	0.64	0.57
	ROE	10.37	10.21	10.44	10.57	12.66	10.85

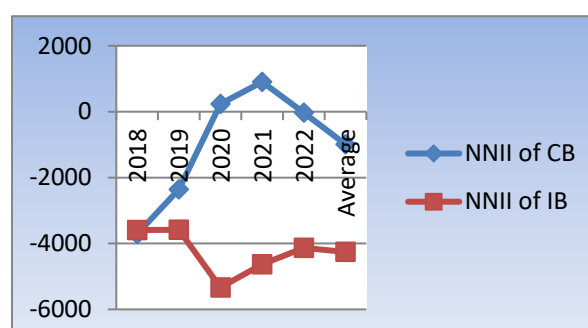
Source: Authors' calculation from the respective banks' annual reports (2018-2022).

Figure 9: NII Comparison of CB and IB



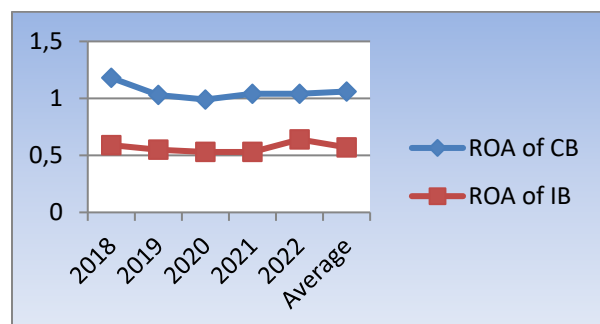
Source: Authors' own development.

Figure 10: NNII Comparison of CB and IB



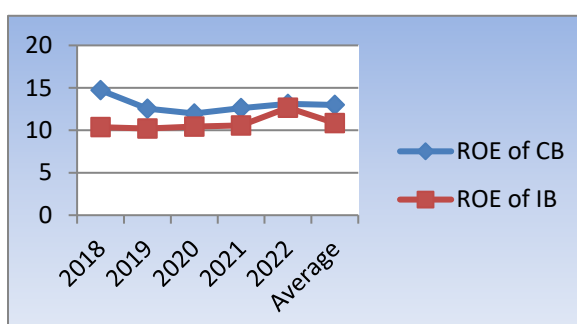
Source: Authors' own development.

Figure 11: ROA Comparison of CB and IB



Source: Authors' own development.

Figure 12: ROE Comparison of CB and IB



Source: Authors' own development.

Islamic banks growth trend with respect to NII are in better position than conventional banks and conventional banks growth trend with respect to NNII, ROA & ROE are in better position than Islamic banks. For measuring profitability of a commercial bank ROA & ROE are the two important weapons. Thus overall profitability of conventional banks is better than Islamic counterparts in Bangladesh during 2018-2022.

4.5. Comparative Deposit and Loans & Advances (Investments) of CB & IB

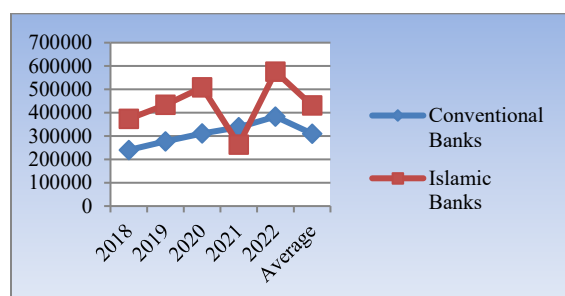
Deposit is the cheap & main source of funding and banking loan (investment) is the main sources of income for a commercial bank. The comparison of deposits and loans & advances (investments) for conventional banks (CB) and Islamic banks (IB), presented in **Table 10** and visualized in **Figures 13 and 14**, highlights the funding and income dynamics of these two banking systems during 2018–2022.

Table 10: Deposit and Loans & Advances of CB & IB during 2018-2022

	Index	2018	2019	2020	2021	2022	Average
Conventional banks	Deposit	240404.69	277299.02	311278.80	337916.10	383274.56	310034.64
	Loans & Advances	231117.48	250674.27	264673.76	309945.11	368391.59	284960.44
	Index	2018	2019	2020	2021	2022	Average
Islamic banks	Deposit	373631.88	433962.40	508693.48	263257.55	575687.86	431046.64
	Investment	377889.84	424607.76	483031.07	257105.73	621347.25	432796.33

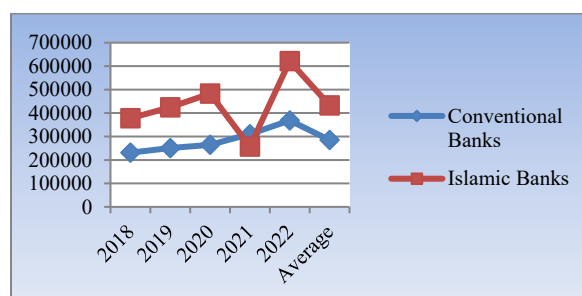
Source: Authors' calculation from the respective banks' annual reports (2018-2022).

Figure 13: Deposit Comparison



Source: Authors' own development.

Figure 14: Loans & Advances (Investments) Comparison



Source: Authors' own development.

Islamic banks are in better position than conventional banks with respect to deposits and loans & advances (investments). Deposits may be procured at no cost, low cost or high cost. Procurement of more deposits leads to disbursement of more loans (investments) which ultimately leads to more profitability. More deposits significantly support profitability (Alharthi, 2016). Higher deposits and investments show a good indication in coming future for Islamic banks in Bangladesh.

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4.6. Findings

5.1. Findings

Islamic banks (IB) perform better in respect of profit earned ratio, profit paid ratio, OOE ratio than conventional banks (CB). These differences in profit earned ratio, profit paid ratio are significant at 5% significance level resulting null hypothesis is rejected and shows trends are not alike in profit earnings and profit payment of two groups of banks, but the difference in OOE ratio is not significant at 5% significance level resulting null hypothesis is accepted and shows trend is alike in other operating expenses (OOE) of CB and IB.

Conventional banks (CB) perform better in respect of NNII ratio, Spread/NIM ratio, Burden ratio, OP ratio, NP ratio, ROA, ROE than Islamic banks (IB). This difference in Spread or NIM ratio is significant at 5% significance level resulting null hypothesis is rejected and shows trend is not alike in spread or NIM of CB and IB, but the differences in NNII ratio, Burden ratio, OP ratio, NP ratio, ROA, ROE are not significant at 5% significance level resulting null hypothesis is accepted and shows trends are alike in NNII, Burden, OP, NP, ROA & ROE of two groups of banks.

Conventional banks have higher Income-to-Expenditure growth rate, profit growth rate, ROA & ROE than Islamic banks. Thus conventional banks are more profitable than Islamic ones.

5.2. Recommendations

To enhance profitability, the following measures are recommended:

1. Conventional banks should increase interest income through disbursement of more quality loans & advances.
2. Conventional banks should procure more deposits bases.
3. Conventional banks should control or minimize other operating expenses.
4. Islamic banks should concentrate to introduce more fees based services for generating more NNII income.

5. Conclusion

This paper aims to conduct a profitability analysis of five conventional and five Islamic banks in Bangladesh for the period of 2018-2022. The analysis shows that conventional banks outperform Islamic banks on key profitability measures, including Return on Assets (ROA) and Return on Equity (ROE), while Islamic banks exhibit stronger performance in Profit Earned Ratio (PER) and Profit Paid Ratio (PPR). It also shows significant differences in certain metrics, such as Spread or Net Interest Margin (NIM), suggesting distinct operational and financial dynamics between the two banking models. Islamic banks are steadily increasing their market share in terms of assets, financing, and deposits, demonstrating their contribution to the economic development of the country. Conventional banks, with their longer-established systems and processes, maintain a competitive edge in profitability, but Islamic banks continue to grow and innovate, signaling promising prospects for the future.

The study provides policy implications for policymakers, bank managers, and stakeholders; it explains that conventional banks should enhance their efficiency by managing costs and diversifying income sources. In the same way, Islamic banks must work on introducing the new

fee-based services and increase operation efficiency in order to raise the level of profitability and competitiveness.

This paper lays down a benchmark for comparing the profitability of conventional and Islamic banks in Bangladesh. The future research work could use greater sample size and increase the period of study to cover wider perspective. The use of macroeconomic variables like inflation and GDP growth can aid in understanding the external factors that affect profitability. Furthermore, the investigation of customers' behavior and their attitude might foster understanding of the impact of consumers' confidence and satisfaction on the performance of the banking sector. Finally, the comparative assessment in terms of the banking models during the period of crises including the COVID-19 pandemic could unveil the strengths and weaknesses of the models.

There are some limitations with this study. First, it has been carried out on five selected conventional and five selected Islamic banks, which might not be sufficient to portray the overall Banking sector of Bangladesh. A larger sample size would increase the generalization of the results obtained. Second, the study period is five years, and this hampers the analysis of long run trends and structural changes in the banking industry. Third, the reliance on secondary data constrains the accuracy of the findings to the reliability of the data sources.

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