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Fundamental Analysis of DSE Listed Islamic Banks in Bangladesh

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Abstract: *Fundamental Analysis provides more pertinent information regarding the profitability and growth of the firm which assists the investors to make informative investment decisions. The aim of this study is to conduct fundamental analysis of some DSE-listed Islamic banks in Bangladesh and to find out the significant differences among selected variables. EPS, P/E Ratio, P/B Ratio, ROE, Dividend Yield, and Dividend Payout Ratio are the chosen variables to conduct fundamental analysis. Secondary data from the annual reports of the selected Islamic Banks in Bangladesh from 2013 to 2020 have been used. Collected data have been analyzed using descriptive statistics and inferential statistics such as Mean, Standard Deviation, and ANOVA analysis. The outcome of the study reveals that Al-Arafah Islami Bank has better ROE followed by Shajalal Islami Bank and EXIM Bank. Al-Arafah Islami Bank has the highest average dividend yield and dividend payout ratio followed by EXIM Bank, First Security Islami bank. Shajalal Islami Bank holds the highest average P/B ratio followed by Al-Arafah Islami Bank. Islami bank has the highest average EPS of 2.92. Lastly, Shajalal Islami Bank has the highest average P/E ratio. The study also reveals that there are the momentous differences among selected variables. This study will help the investors to adopt the relevant investment decisions and the selected Islamic Banks management will be able to improve their performance through adopting the suggested recommendations.*

Keywords: : Islamic banks, EPS, P/E ratio, P/B ratio, ROE, Dividend yield, Dividend payout ratio.

1. Introduction

Banks play a very significant role in an economic system. A healthy banking system is significant part of the health of an economy. Banks create several new wealth through their borrowings, lending, and related activities that help the process of product distribution,

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exchange, and wealth of consumption. Thus, banks become the efficient partner of the economic development process. Modem banks play a useful role for a country in ensuring proper utilization of economic resources. If there is no bank, a large number of funds would remain idle (Islam, 2012). Banks work as intermediaries between surplus funds and shortage funds (Haralayya & Aithal, 2021a). And this banking system turns deposits into the productive investment that will magnify the economic development (Tanwar et al., 2020). Thus, banking functions are the significant drivers to augment the socio-economic development (Haralayya & Aithal, 2021b). The contribution of the financial sector on the GDP of Bangladesh was 3.39% in FY 2020 (Kabir, 2020; Ahmed et al., 2013). Regardless of their type, banks add value to the GDP through working under the regulated environment.

The working system of banks has been modified due to technological advancement (Sodhi & Waraich, 2016). The welfare and productivity of the economy have been improved for the wide network of financial services. This advanced technology creates the opportunity for the public to generate savings, to do investments, to provide safety against economic disturbances (Sodhi & Waraich, 2016). Conventional banks in Bangladesh play a significant contribution to economic development of the country. Along with conventional banks, Islamic banks have valuable impact on economic development. As per Bangladesh bank, demand deposit was BDT 290049.47 million and the time deposit was BDT 2622989.54 million at the end of June 2020. Among all banks, total deposits of Islamic banks accounted for 24.67%. Besides, Islamic banks in Bangladesh are holding the first position in deposit holder (Bank, 2021; Zayed, 2018).

However, there have some unwanted challenges that the banking industry faces in Bangladesh. High competition, increased Non-Performing Assets (NPAs) and decreased quality of the asset are the major challenges for banking system. Due to reduced earning, economic fall down, rising NPAs and depressed profitability of the banking industry, today Banks are facing the severe pressure to enhance their needed capital with the BASEL III conditions. The total Non-Performing Loan (NPL) of the six state-owned banks (SoCBs) of Bangladesh was BDT 440.6 billion during the first nine months of 2021 whereas NPL of private commercial banks (PCBs) were 507.43 billion (Islam, 2021; Vygodchikova et al., 2021).

Generally, DSE-listed banks raise their capital from the investors and the investors invest with the expectation of capital gain and dividends. The investors invest at a listed bank after analyzing the banks' prospects and performance. These analyses are two types- fundamental analysis and technical analysis (Palat, 2016; Walia, 2012). Intrinsic value is the vital point of the fundamental analysis whereas technical analysis deals with the price movement of the stocks or shares (Palat, 2016). For the long-term investment, investors consider the fundamental analysis. The different investors use a different

approach for their investment strategy. This fundamental analysis concentrates on the selecting and analyzing the factors that affect the stock prices (Pathade, 2017). Investors who are driven by their higher aspiration and turnover of the firm take more risk. But most of the investors depend on the fundamental analysis as such analysis is momentous for increasing the return on investment and reducing the investment risk (Pathade, 2017; Hoffmann et al., 2014; Sadat et al., 2020).

This paper deals with Dhaka Stock Exchange (DSE) Listed Islamic Banks in Bangladesh. Because of increasing competition in banking sector, private banks and foreign banks are trying their best to improve their performance. So, there is a need to study the fundamentals and efficiency of Islamic banks. This fundamental analysis will examine the key financial ratios of banks and help in identifying the value of stocks of these banks to identify investment opportunities.

2. Literature Review

Rao & Sudhendu (2014) focused on the fundamental analysis of the Indian banking sector where authors considered operating profit margin, net profit margin, ROE, EPS, P/E ratio, dividend per share, D/P ratio from 2006 to 2012 as key variables. Sugandharaj (2011) also studied the fundamental analysis of ONGC. In this study, the author discussed the rationality of fundamental analysis and tried to capture the intrinsic value of the share. The study of Devika & Poornima (2015) exhibited the comparison of fundamental analysis concerning technical analysis where technical analysis was concerned with the price movement of shares. The author also focused on market capitalization and organization structure. With the aim of ensuring a better stock valuation model through fundamental analysis Wafi et al. (2015) conducted a study using fundamental analysis. In that study they depended on financial ratios to analyze the firm's value.

For this analysis, the author considers the financial position, industry, and economic environment. Aim of the study is to identify the right time to invest when the companies are considered in undervalue. Basu (2020) focused to appraise the economic sustainability and the performance of five Non-Banking Financial Corporations (NBFC) through the fundamental analysis of these NBFCs. The authors evaluated the past information of the NBFCs and concluded that these NBFCs are performing up to the mark (Basu, 2020; Nazneen & Dhawan, 2018; Rahman et al., 2015).

Ashraf and Rehman (2011) directed a study based on the comparison and analysis of conventional banking performance and Islamic banking performance in Pakistan. Authors considered five dimensions for their studies such as profitability, earnings, liquidity, credit risk, and asset activity during 2007-2010. The authors concluded that

the Islamic Banks' performance is lagged behind due to raising the cost and inefficiency (Ashraf & Rehman, 2011). Cost and profitability are the major dimensions of business performance (Rupa & Saif, 2021). A study exposed that commercial banks are performing well and adding value to the country's economic development. From 1980 to 1995, the average profitability of all commercial banks was 0.09% collectively (Ashraf & Rehman, 2011). Moreover, Ranjan et al. (2015) analyzed the operational efficiency and challenges of the public sector banks in India taking labor productivity, branch expansion, and profitability ratios into account. They summarized that foreign banks' employee efficiency and internal management efficiency are better than that of public sector commercial banks in India (Ranjan et al., 2015; Rahman et al., 2021).

Walia (2014) steered a study to gauge the influence of credit deposit ratio, investment in government securities and loan to GDP ratios. And he also considered different aspects of private and public sector banks for examining the performance (Walia, 2014); Goel & Rekhi, 2013). Dwivedi and Charyulu (2011) evaluated the influence of the efficiency of Indian banks on various market and regulatory initiatives. The authors summarize that the reformation process influences the efficiency of the banks. Rajan and Pandit (2012) focused on the technical efficiency and productivity of Indian scheduled commercial banks. The authors collected the data from 1979-2008 and utilized semi-parametric method. Ullah et al. (2021) concluded that conventional banks operating profit of Bangladesh is momentously influenced by the investment in securities, total loans, balance with other banks, borrowing from others, and money at call whereas the operating profit of Islamic banks of Bangladesh is significantly affected by the investment in securities, total deposit and balanced with others (Nahar et al., 2021).

Rahman and Saif (2021) stated that the dependent variable ROA is significantly impacted by all company determinants (total asset, capital adequacy, net revenue margin, and liquidity) whereas dependent variable ROE is momentously affected by the one company determinants (total asset) and one macro-economic determinant (GDP) (Kader et al., 2021).

Uppal (2011) focuses on the efficiency of all bank groups for the period 1999-2006. This study revealed that among all banks new private banks are doing much better though foreign banks have an edge over new private banks. Rajput et al. (2013) stated that the banking system faced some significant changes through mergers and acquisitions, advanced technology, international banking players, international banking human resources, off-shore banking, and risk management. Authors concluded that the south Asian banking system, especially in India and Bangladesh transformed from domestic banking to international banking (Mishu et al., 2019; Islam et al., 2019).

Dhingra (2013) concentrates on the fundamental analysis focusing on different fundamental variables that influence the risk and return. The authors conclude that

fundamental analysis assists in explaining the strength of the Indian banking sector and it gives information on the Indian banking sector's long-term sustainability and future growth prospects. Undavia (2016) concentrates on the fundamental analysis of some banking companies using independent financial ratios. Net profit margin, operating profit margin, ROE, EPS, P/E ratio and, D/P ratio during 2010-2015 are taken into account for this study. SBI has the highest EPS but SBI in Compound annual growth rate (CAGR) and all other parameters have negative value without in Net profit margin. PNB is doing better in operating profit margin and it has also been positive in CAGR and D/P ratio (Hasan et al., 2019).

Bayramoglu and Hamzacebi (2016) steered fundamental analysis using micro-macro variables for the selection of common stock of nine different corporations in Istanbul. Grey Relational Analysis (GRA) has been used to select common stock and efficiency. Seng and Hancock (2012) used fundamental analysis to look into how financial statement data would use in the decision making by appraising the changes in the fundamental signals. Suing data from 1990 to 2000, it has been found that fundamental signals are momentous predictors for short and long-term future earnings. Zafar et al. (2010) examined the profitability of five Indian public banks and considered operating profit margin, net profit margin, earning per share, dividend, D/P ratio, P/E ratio, current ratio, debt-equity ratio as critical ratios. Authors have used random sampling and secondary data from the annual reports during 2004-2009. The study revealed that the Oriental Bank of Commerce had better control over efficient utilization of resources. This bank has the highest operating profit margin in comparison to others. State bank of India is doing better than others in terms of EPS, dividend per share, and P/E ratio (Hasan & Zayed, 2018).

Haque (2013) examines the financial performance of some private commercial banks in Bangladesh and tries to capture whether there is any relationship between the banks' operations and its performance. The author collected secondary data of 2006-2011 from the banks' annual reports and used the ratio analysis. The study reveals that there is no significant relationship between banks' operation and their performance and the performance depends on the management's capacities. Rajeswari (2020) used fundamental analysis to assess the financial position of the selected companies. This study attempted to assist investors in assessing risks of investment.

Iyer et al. (2020) appraised the performance of some public and private banks in India. The authors mainly conducted the fundamental analysis in this study where HDFC bank has the best performance among all others. Hema and Ariram (2016) also led a study on the fundamental analysis of the pharmaceutical companies listed in NSE where authors analyzed the market fundamentally and technically. And authors suggest to do such analysis before investing money.

Many studies have been conducted on fundamental analysis of different financial and non-financial companies in Bangladesh, India, and in many countries in the world. But there is no specific study regarding the fundamental analysis of Sariah based banking system in Bangladesh. This is the research gap of this study. In this study, the author is going to fill this research gap by analyzing the fundamentals of the Islamic banks in Bangladesh which are listed in DSE (Shahriar et al., 2021).

For better understanding the objective of this study, the following research questions need to be addressed:

1. **Research Question 1:** What is the fundamental position of the DSE-listed Islamic banks in Bangladesh?
2. **Research Question 2:** What are the significant differences among selected variables (ROE, EPS, P/E ratio, dividend per share, dividend yield, D/P ratio) for this study?

2.1 Objectives of this Study

The primary objective is to conduct fundamental analysis of DSE listed Islamic banks in Bangladesh and find out the significant differences among selected variables (ROE, EPS, P/E ratio, dividend per share, dividend yield, and D/P ratio).

3. Research Methodology

In this study, researchers are going to analyze the six fundamental ratios of selected Islamic banks in Bangladesh to determine whether there is a momentous difference between selected variables or not. For this study, secondary data has been used. The seven Islamic banks in Bangladesh have been considered as the sample for this study as authors consider only the DSE listed Islamic banks in Bangladesh. And in Bangladesh these seven banks are DSE listed out of ten Islamic banks. The sample banks are Islami Bank Bangladesh Ltd, ICB Islamic Bank Ltd, Al-Arafah Islami Bank Ltd, Social Islami Bank Ltd, First Security Islami Bank Ltd, EXIM Bank Ltd, Shahjalal Islami Bank Ltd. Most studies used six fundamental variables such as ROE, EPS, P/E ratio, dividend per share, dividend yield, D/P ratio for conducting fundamental analysis (Sodhi, & Waraich, 2016). Authors have collected data of those banks from 2013 to 2020 from different secondary sources like annual reports, official websites of those banks, bulletins published by Bangladesh Bank and from various journals where only this seven years' secondary data are available. In this study, researchers have adopted different statistical tools for analyzing the data. Both descriptive analysis and inferential analysis have been used. Descriptive analysis includes tabular analysis and statistical parameter such as mean and standard deviation. One way-ANOVA has been used to find the momentous difference of means of more than two samples.

3.1 Hypothesis Development

To determine the significance of the variables, the hypothesis is a good way to find those variables.

Ho: *There is no momentous difference among the selected variables of* selected Islamic banks.

H1: *There is a momentous difference among the selected variable of* selected Islamic banks.

Based on above hypothesis following hypotheses can be derived:

Hypothesis- Ho.1: *There is no significant difference of ROE of* selected Islamic banks.

Hypothesis-H1.1: *There is significant difference of ROE of* selected Islamic banks.

Hypothesis- Ho.2: *There is no significant difference of* P/E ratio of selected Islamic banks.

Hypothesis-1.2: *There is significant difference of P/E ratio of* selected Islamic banks.

Hypothesis- Ho.3: *There is no significant difference of* Dividend Yield of selected Islamic banks.

Hypothesis-1.3: *There is significant difference of* Dividend Yield of selected Islamic banks.

Hypothesis- Ho.4: *There is no significant difference among the Dividend Payout (D/P) ratio* selected Islamic banks.

Hypothesis- H1.4: *There is a significant difference among the Dividend Payout (D/P) ratio* selected Islamic banks.

Hypothesis- Ho.5: *There is no significant difference among the* Price to Book Ratio (P/B) *ratio* selected Islamic banks.

Hypothesis- H1.5: *There is a significant difference among the* EPS *ratio* selected Islamic banks.

Hypothesis- Ho.6: *There is no significant difference among the* Price to Book Ratio (P/B) *ratio* selected Islamic banks.

Hypothesis- H1.6: *There is a significant difference among the EPS ratio of* selected Islamic banks.

4. Data Analysis and Findings

For this study authors consider six fundamental variables such as EPS, P/E Ratio, P/B Ratio, ROE, dividend yield, dividend payout ratio as these are the main fundamental variables as per the fundamental analysis. The analysis and findings are given below.

4.1 Return on Equity (ROE)

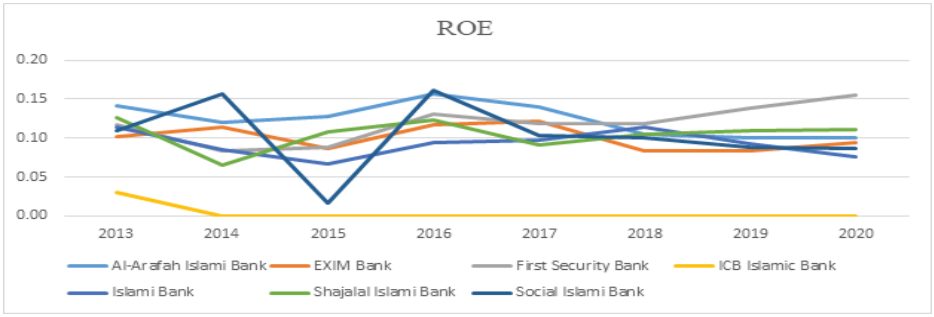
Table 1: ROE of all Selected Banks

Year	Al-Arafah Islami Bank	EXIM Bank	First Security Bank	ICB Islamic Bank	Islami Bank Bangladesh	Shajalal Islami Bank	Social Islami Bank
2013	14.15	10.18	0.12	0.03	0.11	12.67	0.11
2014	12.80	11.34	0.08	0.00	0.09	6.60	0.16
2015	12.82	8.68	0.09	0.00	0.07	10.78	0.02
2016	15.70	11.78	0.13	0.00	0.09	12.40	0.16
2017	14.07	12.19	0.12	0.00	0.10	9.14	0.10
2018	10.46	8.35	0.12	0.00	0.11	10.47	0.10
2019	10.05	8.30	0.14	0.00	0.09	10.98	0.09
2020	10.10	9.42	0.16	0.00	0.08	11.08	0.09
Average	**12.52**	**10.03**	**0.12**	**0.00**	**0.09**	**10.52**	**0.10**
Standard Deviation	**31.54**	**17.48**	**0.00**	**0.00**	**0.00**	**26.02**	**0.01**

Source: Authors' Construction from the Annual Reports.

Return on Equity (ROE) is the most prominent element in fundamental analysis which measures how efficiently a firm utilizes its equity to generate profit (Laing & Dunbar, 2015). Table-1 shows that Al-Arafah Islami Bank has the highest average ROE of 12.52 followed by Shajalal Islami Bank (10.52) and EXIM Bank (10.03). So, Al-Arafah Islami bank is the most efficient in utilizing the resources and controlling the cost of its operation. First Security Bank, ICB Islamic Bank, Islami Bank has zero variability with the lowest average ROE. Standard deviation or variability of ROE of Al-Arafah Islami Bank is 31.54 which is the highest value followed by Shajalal Islami Bank (26.02), EXIM Bank(17.48), and so on.

Figure 1: ROE Trends of all Selected Banks



Source: Authors' Construction from the Annual Reports.

The above Figure-1 exhibits the trend of ROE of all selected banks where most of the banks' ROE fluctuate over the observing period. But ROE of ICB Islami Bank in 2013 was 0.03. In 2020 ROE of ICB Islami Bank was almost close to zero. Social Islami Bank's ROE fluctuates much more frequently than that of any other banks.

4.1.1 One Way ANOVA of ROE

Table 2: ANOVA of ROE

Source of Variation	SS	DF	MS	F	P-value	F crit.
Between Groups	1669.832	6	278.302	181.676	1.087E	2.291
Within Groups	75.061	49	1.531			
Total	1744.894	55				

Source: Authors' Construction from the Annual Reports.

The computed value is 181.676 which is greater than the critical value of 2.291 at a 5% level of significance. So, the null hypothesis is rejected. Hence, there is a momentous difference between ROE of sample banks.

4.2 Price Earnings Ratio (P/E Ratio)

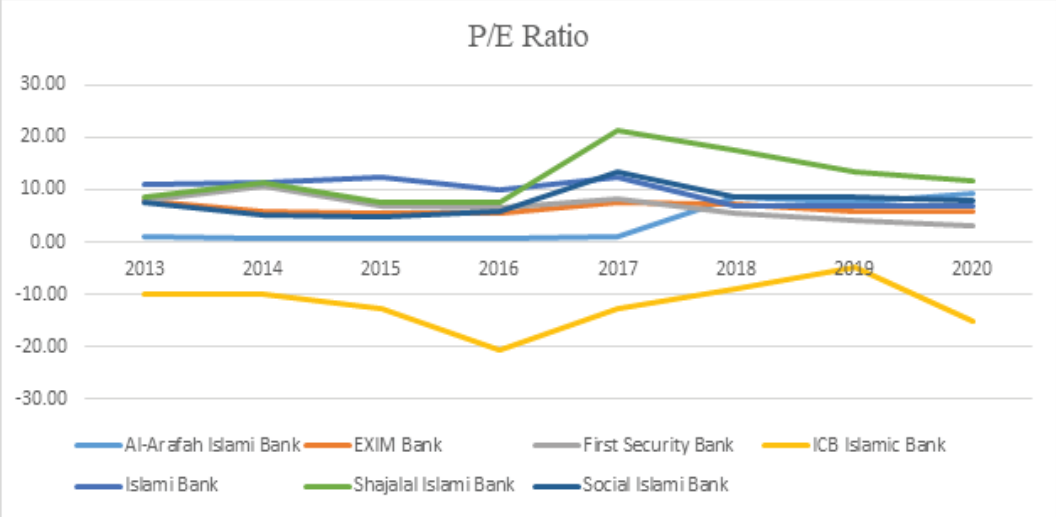
Table 3: P/E Ratio of the Selected Banks

Year	Al-Arafah Islami Bank	EXIM Bank	First Security Bank	ICB Islamic Bank	Islami Bank Bangladesh	Shajalal Islami Bank	Social Islami Bank
2013	0.99	7.8	7.99	-9.76	11.17	8.6	7.64
2014	0.78	5.74	10.69	-9.76	11.24	11.27	5.02
2015	0.72	5.54	6.98	-12.76	12.54	7.67	4.88
2016	0.74	5.63	6.68	-20.73	10.11	7.43	5.73
2017	1.15	7.61	8.33	-12.52	12.24	21.29	13.58
2018	8.48	7.15	5.39	-8.73	6.87	17.51	8.70
2019	7.56	5.98	4.07	-4.71	7.05	13.35	8.52
2020	9.22	5.93	3.06	-15	7.01	11.76	7.88
Average	**3.71**	**6.42**	**6.65**	**-11.75**	**9.78**	**12.36**	**7.74**
Standard Deviation	**108.23**	**6.15**	**42.18**	**159.42**	**41.44**	**169.23**	**55.22**

Source: Authors' Construction from the Annual Reports.

P/E ratio indicates the number of times that an investor ready to pay as compared to its earnings. Table-3 exhibits the P/E ratio of all banks. Shajalal Islami bank has the highest average P/E of 12.36 and ICB Islamic Bank has the lowest average P/E of -11.75. Shajalal Islami bank has the highest variability of P/E (169.23) and EXIM bank has the lowest variability of P/E (6.15) with an average P/E of 6.42 indicating greater stability.

Figure 2: Trend of the P/E Ratio of the Selected Banks



Source: Authors' Construction from the Annual Reports.

Figure-2 shows the trend of P/E of all selected banks over the observing period. ICB Islami bank has the stable trend in terms of P/E. In 2013, Islami bank has the highest P/E (11.17) and ICB Islami bank had the lowest P/E (-9.76). From 2018 to 2020 all have observed quite stability in P/E metric. Shajalal Islami Bank had the highest P/E followed by Al-Arafah Islami Bank, Social Islami Bank and so on.

4.2.1 One Way ANOVA of the P/E ratio

Table 4: ANOVA of P/E Ratio

Source of Variation	SS	DF	MS	F	P-value	F crit.
Between Groups	2971.10	6	495.184	41.7000	1.35E	2.29043
Within Groups	581.870	49	11.870			
Total	3552.97	55				

Source: Authors' Construction from the Annual Reports.

The critical F value of 2.291 is lower than the calculated F value of 41.700 at a 5% level of significance. So, the null is rejected. Hence, there is a significant difference between the P/E ratios of selected sample banks.

4.3 Dividend Yield

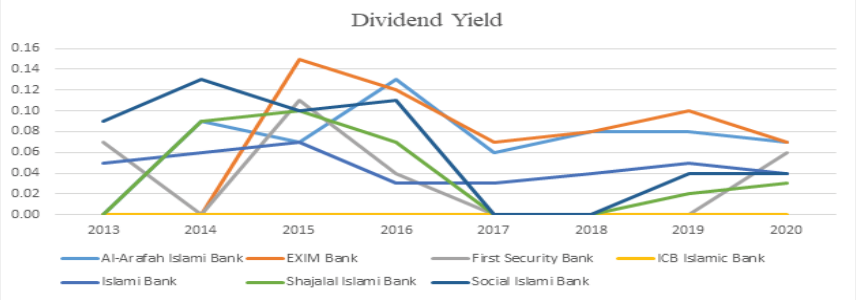
Table 5: Dividend Yield of the Selected Banks

Year	Al-Arafah Islami Bank	EXIM Bank	First Security Bank	ICB Islamic Bank	Islami Bank Bangladesh	Shajalal Islami Bank	Social Islami Bank
2013	0.00	0.00	0.07	0.00	0.05	0.00	0.09
2014	0.09	0.00	0.00	0.00	0.06	0.09	0.13
2015	0.07	0.15	0.11	0.00	0.07	0.10	0.10
2016	0.13	0.12	0.04	0.00	0.03	0.07	0.11
2017	0.06	0.07	0.00	0.00	0.03	0.00	0.00
2018	0.08	0.08	0.00	0.00	0.04	0.00	0.00
2019	0.08	0.10	0.00	0.00	0.05	0.02	0.04
2020	0.07	0.07	0.06	0.00	0.04	0.03	0.04
Average	**0.07**	**0.07**	**0.03**	**0.00**	**0.05**	**0.04**	**0.06**
Standard Deviation	**0.009**	**0.019**	**0.012**	**0.000**	**0.002**	**0.011**	**0.019**

Source: Authors' Construction from the Annual Reports.

Table-5 illustrates the dividend yield of all selected banks. The highest average dividend yields is 0.07 to the Al-Arafah Islami Bank and EXIM bank followed by Social Islami bank, First Security Islami bank, and so on. At the same time, the standard deviation of EXIM bank was the highest dividend yield which is 0.019. ICB Islami Bank had the lowest standard deviation with the lowest average dividend yield.

Figure 3: Trend of Dividend Yield of the Selected Banks



Source: Authors' Construction from the Annual Reports

The trend of dividend yield of all selected banks looks very volatile from 2013 to 2020. From 2017 to 2018 First Security Islami Bank, Shajalal Islami Bank, and Social Islami bank dividend yield were close to zero. In 2020, First Security Islami Bank and Social Islami bank's dividend yield had an upward trend.

4.3.1 One Way ANOVA of Dividend Yield

Table 6: ANOVA of Dividend Yield.

Source of Variation	SS	DF	MS	F	P-value	F crit.
Between Groups	0.032	6.000	0.005	3.669	0.004	2.290
Within Groups	0.072	49.000	0.001			
Total	0.105	55.000				

Source: Authors' Construction from the Annual Reports.

In Table-6 ANOVA of dividend yield assist in drawing the hypothesis.
With 5% level of significance, critical F value is 2.290 which is lower than F value (3.669). So, null hypothesis is rejected and here is a significant difference between the Dividend Yield of Sample banks.

4.4 Dividend Payout (D/P) Ratio

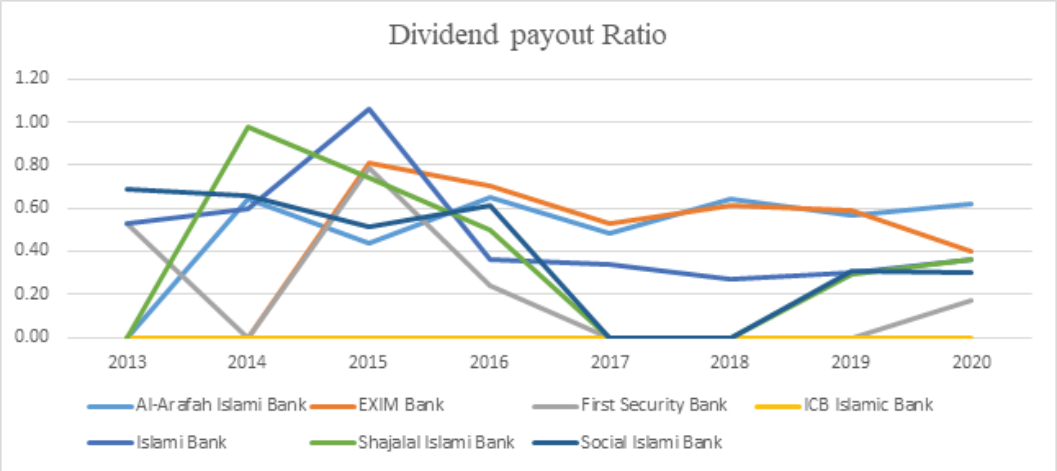
Table 7: Dividend Payout Ratio of the Selected Banks

Year	Al-Arafah Islami Bank	EXIM Bank	First Security Bank	ICB Islamic Bank	Islami Bank Bangladesh	Shajalal Islami Bank	Social Islami Bank
2013	0.00	0.00	0.53	0.00	0.53	0.00	0.69
2014	0.64	0.00	0.00	0.00	0.60	0.98	0.66
2015	0.44	0.81	0.79	0.00	1.06	0.74	0.51
2016	0.65	0.70	0.24	0.00	0.36	0.50	0.62
2017	0.48	0.53	0.00	0.00	0.34	0.00	0.00
2018	0.64	0.61	0.00	0.00	0.27	0.00	0.00
2019	0.57	0.59	0.00	0.00	0.30	0.29	0.31
2020	0.62	0.40	0.17	0.00	0.36	0.36	0.30
Average	**0.50**	**0.46**	**0.22**	**0.00**	**0.48**	**0.36**	**0.39**
Standard Deviation	**0.33**	**0.65**	**0.62**	**0.00**	**0.48**	**0.94**	**0.55**

Source: Authors' Construction from the Annual Reports.

The D/P ratio measures what percentage of net profit is given to equity holders. It indicates how much net profit is given back to stakeholders and how much net profit is retained for further investment for the growth of the firm. Table-7 illustrates the dividend payout (D/P) ratio of all selected banks. Al-Arafah Islami bank had the highest D/P ratio (0.50), followed by Islami Bank (0.48), EXIM bank (0.46). And ICB had the lowest D/P ratio (0.00). This shows that Al-Arafah Islami banks are returning more money to shareholders whereas ICB Islami banks retain their earnings for further growth. Al-Arafah Islami bank is more stable with respect of D/P ratio with least standard deviation.

Figure 4: Trend of Dividend Payout Ratio



Source: Authors' Construction from the Annual Reports.

The above figure exhibits the trend of the D/P ratio of all selected banks. D/P ratio for selected Islami banks fluctuates more frequently. From 2013 to 2017 the D/P ratio of most of the banks was quite unstable. After that it gets somewhat stability. But ICB Islami banks had significant consistency in terms of D/P ratio.

4.4.1 One Way ANOVA of Dividend Payout Ratio

Table 8: ANOVA of Dividend Payout Ratio

Source of Variation	SS	DF	MS	F	P-value	F crit.
Between Groups	1.542	6	0.257	3.512	0.005	2.290
Within Groups	3.581	49	0.073			
Total	5.123	55				

Source: Authors' Construction from the Annual Reports.

Where the critical F-value is 2.29, which is less than the calculated F value of 3.512. So, alternative hypothesis is accepted. Hence, there is a significant difference between the Dividend Payout ratios of chosen banks

4.5 Price to Book Ratio (P/B Ratio)

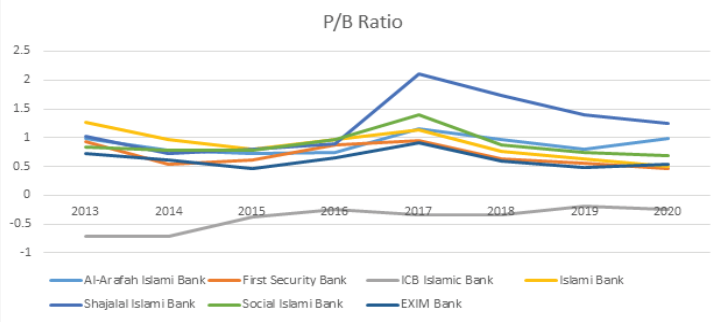
Table 9: P/B Ratio of the Selected Banks

Year	Al-Arafah Islami Bank	EXIM Bank	First Security Bank	ICB Islamic Bank	Islami Bank	Shajalal Islami Bank	Social Islami Bank
2013	0.99	0.72	0.94	-0.71	1.27	1.02	0.84
2014	0.78	0.62	0.54	-0.71	0.97	0.72	0.79
2015	0.72	0.46	0.62	-0.38	0.80	0.81	0.78
2016	0.74	0.65	0.88	-0.25	0.96	0.90	0.96
2017	1.15	0.91	0.95	-0.34	1.14	2.10	1.39
2018	0.96	0.59	0.64	-0.34	0.76	1.74	0.87
2019	0.81	0.49	0.56	-0.18	0.64	1.39	0.75
2020	0.99	0.54	0.47	-0.24	0.51	1.25	0.68
Average	**0.89**	**0.62**	**0.70**	**-0.39**	**0.88**	**1.24**	**0.88**
Standard Deviation	**0.16**	**0.14**	**0.26**	**0.30**	**0.44**	**1.64**	**0.35**

Source: Authors' Construction from the Annual Reports.

The above table expresses the P/B ratio of all selected banks where Shajalal Islami bank had the highest P/B ratio of 1.24 and ICB Islami bank reported the lowest P/B ratio of 0.039. And the P/B ratio of all other Islamic banks was under 1.00 which indicates the real investment. The lowest variability of P/B ratio is 0.16 for the Al-Arafah Islami bank and the Shajalal Islami bank has the highest variability of 1.64.

Figure 5: Trend of P/B Ratio



Source: Authors' Construction from the Annual Reports.

The above graph is the indication of the P/B ratio of all selected banks for the observing period. The graph shows that P/B ratio was very much stable for most of the banks. ICB Islami Bank reported a consistent negative P/B ratio with a little fluctuation. All other banks' P/B ratios fluctuate more from 2016 to 2018. But after 2018 all reported banks had a little fluctuation.

4.5.1 One Way ANOVA of P/B Ratio

Table 10: ANOVA of P/B Ratio

Source of Variation	SS	DF	MS	F	P-value	F crit.
Between Groups	12.765	6	2.128	31.669	0.000	2.290
Within Groups	3.292	49	0.067			
Total	16.057	55				

Source: Authors' Construction from the Annual Reports.

The P-value of this ANOVA is zero which is less than 5%. So it indicates rejection of the null hypothesis. Thus, there is a significant difference between the P/B ratios of all banks chosen for this study.

4.6 Earnings per Share (EPS)

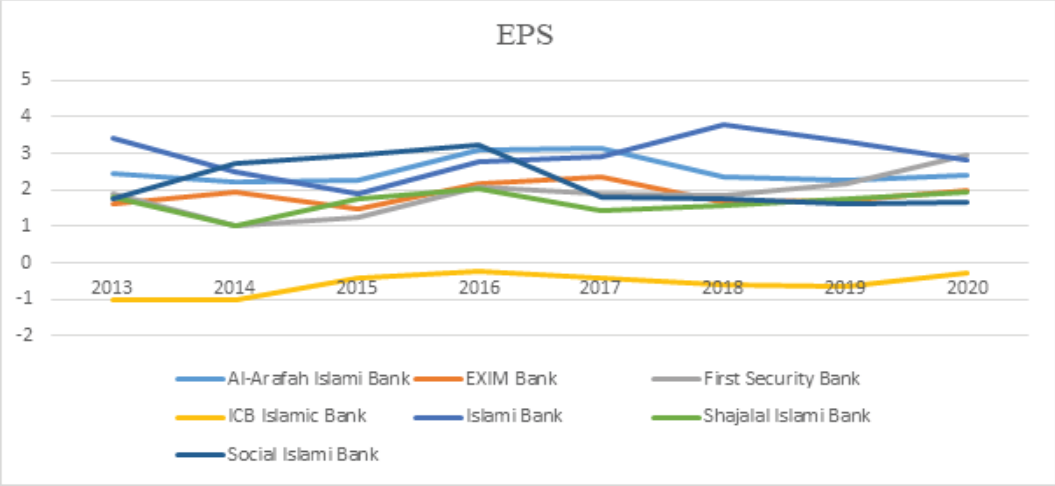
Table 11: EPS of the Selected Banks.

Year	Al-Arafah Islami Bank	EXIM Bank	First Security Bank	ICB Islamic Bank	Islami Bank Bangladesh	Shajalal Islami Bank	Social Islami Bank
2013	2.46	1.63	1.89	-1.02	3.40	1.78	1.74
2014	2.20	1.92	1.02	-1.02	2.49	1.02	2.71
2015	2.25	1.48	1.26	-0.43	1.88	1.76	2.95
2016	3.07	2.15	2.08	-0.21	2.77	2.02	3.21
2017	3.15	2.34	1.89	-0.41	2.91	1.41	1.79
2018	2.35	1.65	1.84	-0.61	3.77	1.58	1.77
2019	2.28	1.69	2.19	-0.64	3.31	1.75	1.62
2020	2.41	1.99	2.93	-0.28	2.81	1.95	1.65
Average	**2.52**	**1.86**	**1.89**	**-0.58**	**2.92**	**1.66**	**2.18**
Standard Deviation	**0.98**	**0.61**	**2.36**	**0.67**	**2.41**	**0.72**	**3.04**

Source: Authors' Construction from the Annual Reports.

EPS is determined by dividing the company's net profit by the number of outstanding common stock. Higher EPS means the company earns a higher profit against each share (Laing & Dunbar, 2015). The above table exhibits the EPS of all selected banks. Islami bank Bangladesh had highest EPS of 2.92 followed by Al-Arafah Islami Bank, Social Islami bank, and so on. It indicates that the earning ability of Islami bank Bangladesh is much better than that of others. And the Standard deviation of EPS of EXIM bank was the lowest which was 0.61 having an average EPS of 1.86 and Social Islami bank had the highest Standard deviation of 3.04 with an average EPS of 2.18.

Figure 6: Trend of EPS



Source: Authors' Construction from the Annual Reports.

Figure-6 shows the trend of EPS of all selected banks. The EPS of ICB Islami bank was the lowest. In 2013 Islami bank had the highest EPS followed by an abrupt fall in EPS in 2015. In 2020 First Security reported highest EPS followed by Islami bank Bangladesh. On an average EPS in all banks was unstable.

4.6.1 One Way ANOVA of EPS

Table 12: ANOVA of EPS

Source of Variation	SS	DF	MS	F	P-value	F crit.
Between Groups	60.75	6.00	10.12	45.98	0.00	2.29
Within Groups	10.79	49.00	0.22			
Total	71.54	55.00				

Source: Authors' Construction from the Annual Reports.

F-value of 45.98 which is greater than the critical F-value of 2.29. As P value is less than 0.05, null hypothesis is rejected and alternative hypothesis (H1.6) is accepted. Hence, there is a significant difference between the EPS of sample banks.

5. Conclusion

This study gives insights on the financial performance of the selected Islamic banks in Bangladesh. Al-Arafah Islami bank performs better in terms of ROE (12.52), Dividend yield (.07), dividend payout ratio (.50), and P/B ratio (.89) and EPS (2.52). In considering the variability First Security Islami Bank, EXIM bank and Shajalal Islami bank are performing efficiently. For showing better ROE, management of several firms may do window dressing over the profit much debt to exhibit low equity. A higher ROE indicates the good performance of the firms. In the case of the P/E ratio, Shajalal Islami bank and Islami bank had 12.36 and 9.78 respectively. The lower P/E ratio is better for creating investment opportunities for the investor. Lower P/E ratio is ideologically lower pricing (undervaluing). High P/E ratio is ideologically higher pricing (overvaluing) but it may happen for the companies having amazing performance that may enrich the investor's confidence to pay more.

EXIM Bank, Social Islami Bank, and Islami Bank reported an average dividend yield of .07, .06, and .05 respectively. A high dividend Yield is better for the investors. From investors' perspective, Al-Arafah Islami Bank, EXIM Bank, Social Islami bank are doing better though dividend yield fluctuates over the year. Consumer staple firms are likely to give higher dividend yields. But it does not indicate that higher dividend yielding comapnies are prospective candidate for investment as dividend yield may also rise for declining stock prices or higher dividends. D/P ratio is applicable for the dividend-paying banks. And high D/P sometimes attracts the investors but reduces the chance of reinvestment more. So, from that perspective, Al-Arafah Islami bank (.50), EXIM bank (.46), Shajalal Islami bank (.36) show better prospect. Price to Book ratio measures the value concerning book value. The high ratio indicates the high growth of the firm. Shajalal Islamic bank, Al-Arafah Islami Bank, Islami Bank, and Social Islami bank scored 1.24, .89, .88, and .88 respectively. Thus, Shajalal Islami bank has the highest growth than others, followed by Al-Arafah Islami Bank, Social Islami Bank, Islami bank. Lastly, Islami bank, Al-Arafah Islami Bank, and Social Islami bank showed average EPS of 2.92, 2.52 and 2.18 respectively, followed by EXIM bank, First Security Islami Bank. As EPS is the indicator of the earnings of the firm, Islami bank is earning more than others.

Alternative hypotheses (H1.1, H1.2, H1.3, H1.4, H1.5, and H1.6) have been accepted which reveal that there are momentous differences among selected variables for this study. So, all selected variables are significantly different from one another. The trend analysis of the selected variables of the banks exhibits volatility for selected timeframes.

Among all variables, ROE, dividend yield, D/P ratio fluctuated more frequently. But the trend of EPS, P/B ratio, and P/E ratio were significantly stable. This indicates that earnings and dividend payment of the banks were fluctuating more but the share price was a bit stable.

This study has some limitations. This study is based on the quantitative analysis of the fundamental elements of the selected DSE-listed Islamic banks in Bangladesh. Therefore, this study ignores the qualitative aspects of the performance. Besides, authors consider only secondary data from 2013 to 2020. The authors have analyzed only the fundamental variables of the selected banks.

For doing further research on this field, the researcher may consider the other conventional and non-conventional banks in Bangladesh along with technical analysis and qualitative analysis.

6. Recommendations

Faruque and Islam (2018) stated that due to changes in the competitive situation and technical advances in the banking industry. However, from the analysis authors can draw some recommendations for the banks and investors. They are as follows:

- For taking the investment decision, the investors should consider both systematic risk and unsystematic risk.
- The intrinsic value should be considered in making the decision.
- Both banks and investors should confirm that all kinds of analysis should be done based on comprehensive data of banks.
- For making rational decisions, both technical and fundamental analysis should be considered.
- Banking authority may improve their banking performance through reducing the discrepancies between the market price and the intrinsic value of the share.

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Appendix

NAME OF BANKS	YEAR
Islami Bank Bangladesh Ltd	1983
ICB Islamic Bank Limited	1987
Al-Arafah Islami Bank Limited	1995
Social Islami Bank Limited	1995
First Security Islami Bank:	1999
EXIM Bank	1999
Shahjalal Islami Bank Limited	2001
SELECTED VARIABLES	
Earnings Per Share (EPS)	
Price Earing Ratio (P/E Ratio)	
Return on Equity (ROE)	
Dividend Payout Ratio	
Dividend Yield	
Price to Book Ratio	