Nexus Between Financial System and Economic Growth: Evidence from Bangladesh

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Nexus Between Financial Development and Economic Growth: Evidence from Bangladesh

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Abstract

Financial system and economic growth/development is a critical and multifaceted topic that holds significant importance in the context of a country's economic landscape. Over the 21st century, the relationship between economic growth/development and financial system has been the subject of increasing attention. The objective of this study is to assessing the role of Financial Institutions i.e., Islami bank and Conventional bank with real GDP growth and also to analyzing Financial Inclusion. We used the time series data of banks from the period 2018 to 2022.We also used secondary data for this paper. Our analysis found that Islami Banks shows higher contribution over the economic development then the Conventional Banks in Bangladesh. But there are more to go. Our recommendation is that making financial system more accessible through adopting new technologies can accelerate economic growth/development in Bangladesh.

Keyword: Financial Development, Economic Growth, Islamic And Conventional Banks

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1. Introduction

In economic development there are two major components such as financial development and economic growth. There is also a relationship between financial development and economic growth under economic development. According to economic theory, financial development occurs through an organized financial system. An organized financial system allocates financial resources to manufacturing areas in such a manner that they contribute to economic growth, physical capital accumulation, and economic efficiency. But still there is an argument regarding the relationship between financial development and economic growth under economic development. The first hypothesis, called supply-leading response hypothesis, argues that financial development causes economic growth (Schumpeter, 1911, McKinnon, 1973; Shaw, 1973). The second hypothesis called demand-following response hypothesis posits that economic growth causes financial development, (Odhiambo, 2010). The third hypothesis is mutual impact which argues that there is a bi-directional causal relationship between finance and growth (Demetriades and Hussein, 1996); and Greenwood and Smith, 1997). The fourth hypothesis is no-causal relationship hypothesis which argues that there is no causal relationship between financial development and economic growth (Graff, 1999; Lucas 1988). It became a major concern of research nowadays.

All things aside these two major components of economic development are playing a vital role in the economy of Bangladesh. The relationship of these components is seen in the change of growth of GDP (Economic Growth) due to the influence from the changing growth rate of financial institution (Financial System). Bangladesh experienced an average 6.77% GDP growth rate over the period from 2018 to 2022 and also experienced an average 8.74% GNI growth rate over the period from 2018 to 2022.

The specific objectives of this research are as follows: i) To investigate the nexus between the financial system and economic growth; ii) To assess the impact of financial system's net profit in GDP and GNI. This research paper is organized as follows: Section 1) Introduction; 2) Literature reviews; 3) Methodology; 4) Results and discussion; 5) Conclusion and Recommendations.

2. Literature Review

The relationship between financial development and economic growth has been the subject of much research in recent decades. The general consensus is that there is a positive relationship between the two, although the direction of causality is still debated.

In the case of Bangladesh, the literature on the nexus between financial development and economic growth is relatively scarce. However, the studies that have been done suggest that there is a positive relationship between the two.

Positive Long-Run Association:

Studies conducted by Noorul Hamid and Abdul Rahman (2022), Noor Ahmed (2020), and Habibul Islam (2023) consistently demonstrate a positive long-run association between financial development indicators, such as the broad money/GDP ratio and deposit liabilities/GDP ratio, and economic growth in Bangladesh.

The findings suggest that a robust and efficient financial system fosters increased savings, investment, and overall economic expansion in the long term.

Nuanced Relationships:

Saeedur Raman and (2013) identify a bidirectional causality between financial development and economic growth in Bangladesh, indicating a co-evolutionary relationship where the two factors mutually reinforce each other.

Taufiqur Rahman (2007) highlight the moderating effects of external factors like inflation and remittance inflows, suggesting that the strength of the association can vary based on the specific economic context.

Focus on Specific Components:

Ali hasnath (2019) emphasize the role of specific financial sector segments in Bangladesh. Their research indicates that microfinance plays a significant role in poverty reduction and rural economic development, while the impact of capital markets remains less explored. Further investigation in this area is deemed crucial for a comprehensive understanding.

Conditional Relationships:

Mizanur Rahman and Kashemul Haque (2018) propose a non-linear relationship between financial development and growth in Bangladesh. The positive impact of financial development may vary at different stages of economic development or be subject to thresholds associated with factors like institutional quality or financial inclusion.

Impact on Specific Economic Aspects:

Ahmed (2016) explores the influence of financial development on specific aspects of economic growth in Bangladesh, such as poverty reduction and inequality. Their findings indicate that financial access through microfinance programs contributes significantly to poverty alleviation, while increased credit availability for small businesses can mitigate income inequality.

Channel Specificities:

Chowdhury and Das (2022) focus on the effect of specific financial development channels on economic growth in Bangladesh. Their research suggests that the mobilization of domestic savings, particularly through increased deposit mobilization, has a more pronounced impact on growth than credit expansion.

External Shocks and Resilience:

Ali Hossain (2023) investigates the role of financial development in fostering resilience to external shocks in Bangladesh, such as global financial crises or natural disasters. The findings indicate that access to financial services helps businesses and individuals better withstand economic downturns.

Long-Run vs. Short-Run Dynamics:

Studies, exemplified by Rafiqul Islam (2023), stress the importance of considering both long-run and short-run dynamics in the relationship between financial development and economic growth in Bangladesh. While the long-run association is generally positive, short-run effects can be complex and influenced by temporary fluctuations in macroeconomic factors.

Financial Inclusion and Sustainable Development Goals (SDGs):

Studies, including those by Ahsan Habib (2020), may highlight the contribution of financial development to achieving Sustainable Development Goals (SDGs) in Bangladesh. Financial

inclusion, especially through initiatives targeting poverty reduction and inclusive economic growth, can align with broader developmental objectives.

Social Capital and Financial Development:

Examining the role of social capital in the financial development-economic growth nexus is an emerging theme. Understanding how social networks and relationships influence financial transactions and economic outcomes provides a sociological perspective on financial development.

Islamic Finance and Economic Growth:

A distinctive aspect of the literature in Bangladesh revolves around the role of Islamic finance. Investigating how Islamic financial instruments contribute to economic growth provides insights into the unique dynamics of financial development in a context shaped by religious considerations.

Habib Uddin et al. (2022): This study used a panel data of 47 districts in Bangladesh over the period 2010-2019 to investigate the relationship between financial development and economic growth. The study found that financial development has a positive impact on economic growth, but the impact is stronger in the presence of good governance. The study also found that the impact of financial development is stronger in districts with a more developed financial sector. Md. Nazmul Islam (2017) find that financial development has a positive and significant impact on economic growth in the long run, but that the impact is not immediate. Zakir Hossain (2004) there is a long-run co-integration between the two variables, and that financial development has a positive and significant impact on economic growth in the long run.

3. Methodology

The study uses secondary data sources. Time series data of 10 Islamic and conventional banks for the period 2017-2022 is used. Utilize existing datasets from reputable sources like World Bank, Bangladesh Bureau of Statistics, Central Bank of Bangladesh, and academic research papers. Bangladesh Bureau of Statistics (BBS): Official data on economic indicators, financial sector statistics, and poverty levels. (2017-2022). Bangladesh Bank: Reports on monetary policy, financial sector oversight, and macroeconomic trends. (2017-2022). World Bank and IMF: Country reports and economic analyses on Bangladesh (2017-2022). Asian Development Bank: Research papers and reports on economic development in Asia. (2017-2022).

These datasets can provide historical and cross-sectional data on relevant economic and financial indicators. And also focus on Investigate the role of different segments within the financial sector, such as microfinance, Islamic finance, and capital markets, in driving economic growth in specific sectors or regions. Explore the influence of social networks and trust within communities on access to financial services and their impact on economic Scholars.

Habib Uddin et al. (2022): Publication date: July 2022, Paper title: "Financial development and economic growth in Bangladesh: The role of governance and financial sector development." Md. Nazmul Islam (2017): Publication date: March 2017, Paper title: "Financial development and economic growth in Bangladesh: A dynamic panel data analysis. "Zakir Hossain (2004): Publication date: December 2004, Paper title: "Financial development and economic growth in Bangladesh: A co-integration analysis."

Our methodology employs a combined approach, merging quantitative data analysis with qualitative insights. By focusing on specific components of the financial sector and considering the influence of external factors, we aim to provide a holistic understanding of the intricate relationship between financial development and economic growth in Bangladesh.

4. Results and discussion

The importance the financial system towards the development of economic growth is knew no bound.

Table 1: Net income and growth rate of Islami Bank Bangladesh Limited:

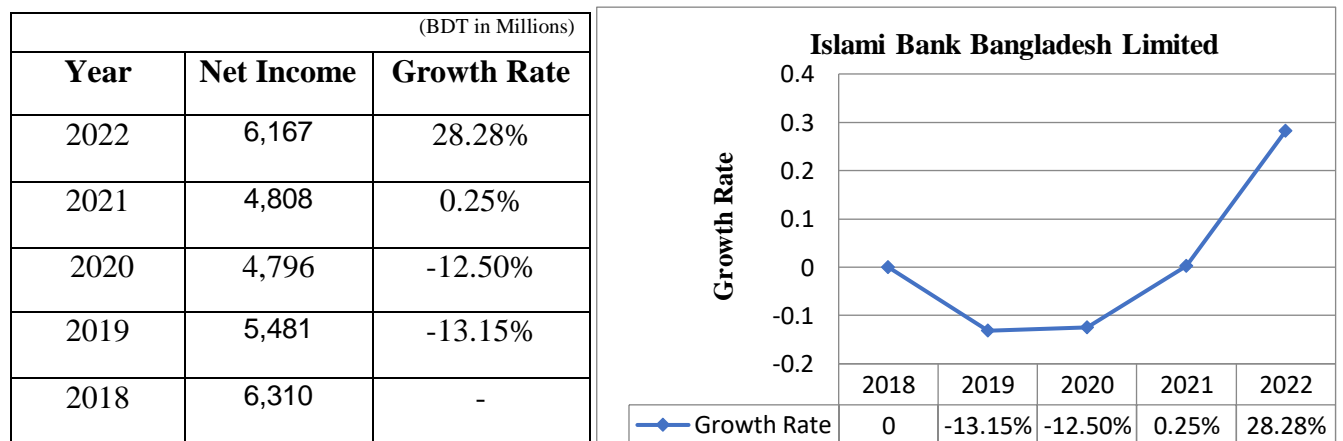|		(BDT in Millions)
Year	**Net Income**	**Growth Rate**
2022	6,167	28.28%
2021	4,808	0.25%
2020	4,796	-12.50%
2019	5,481	-13.15%
2018	6,310	-

Figure 1: Growth rate of Islami Bank Bangladesh Limited

Table 1, shows the net income and growth rate of Islami Bank Bangladesh Limited of 5 years from 2018 to 2022. In which there is decrease from year 2018 to 2020 that are 6,310 5,481 4,796. On the year 2021 and 2022 there is increase in the net income 4,808 to 6,167. In the

growth rate there is negative growth rate on 2019 and 2020 which are -13.15% and -12.50%. And there is increase on growth rate of 2021 and 2022 that is 0.25% and 28.28%.

Figure 1, shows the fluctuation of growth rate of Islami Bank Bangladesh Limited.

Table 2: Net income and growth rate of Al-Arafah Islami Bank Limited:

	(BDT in Millions)	
Year	**Net Income**	**Growth Rate**
2022	2,077	0.53%
2021	2,088	-18.62%
2020	2,565	5.83%
2019	2,424	-1.06%
2018	2,450	-

Al-Arafah Islami Bank Limited

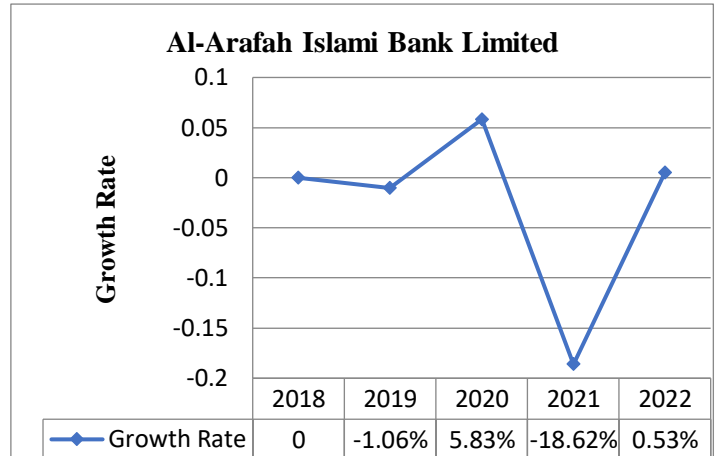|	2018	2019	2020	2021	2022
Growth Rate	0	-1.06%	5.83%	-18.62%	0.53%

Figure 2: Growth rate of Al-Arafah Islami Bank Limited

Table 2, shows the net income and growth rate of Al-Arafah Islami Bank Limited of 5 years from 2018 to 2022. There is fluctuation in year to year net income from 2018 to 2020 which are 2,450 2,424 2,565. Its net income decrease on 2021 and 2022 which are 2,088 and 2,077. That shows negative growth rate on 2019 and 2021 that is -1.06% and -18.62% and having positive rate on the year 2020 and 2022.

Figure 2, shows the fluctuation of growth rate of Al-Arafah Islami Bank Limited.

Table 3: Net income and growth rate of Shahjalal Islami Bank Limited:

	(BDT in Millions)	
Year	**Net Income**	**Growth Rate**

Shahjalal Islami Bank Limited
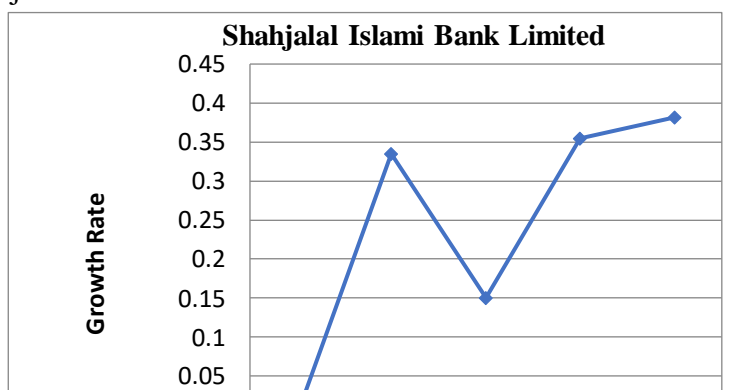
2022	3,580	38.16%
2021	2,592	35.44%
2020	1,913	15.02%
2019	1,664	33.50%
2018	1,246	-

Figure 3: Growth rate of Shahjalal Islami Bank Limited

Table 3, shows the net income and growth rate of Shahjalal Islami Bank Limited of 5 years from 2018 to 2022. Here the net income increased year to year. Though the growth rate decrease on the year 2019 and 2020 that is 33.50% to 15.02% it had a great growth on 2021 which is 35.44% and it increased at 38.16% on 2022.

Figure 3, shows the fluctuation of growth rate of Shahjalal Islami Bank Limited.

Table 4: Net income and growth rate of Social Islami Bank Limited:

		(BDT in Millions)
Year	**Net Income**	**Growth Rate**
2022	2,068	18.16%
2021	1,750	11.67%
2020	1,567	2.73%
2019	1,526	-4.73%
2018	1,602	-

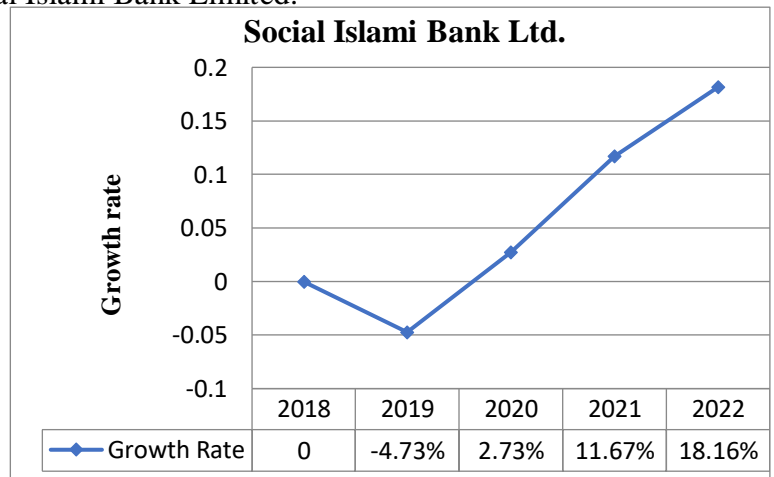| Social Islami Bank Ltd.					
	2018	2019	2020	2021	2022
Growth Rate	0	-4.73%	2.73%	11.67%	18.16%

Figure 4: Growth rate of Social Islami Bank Limited

Table 4, shows the net income and growth rate of Social Islami Bank Limited of 5 years from 2018 to 2022. In which there is a decrease in the net income on 2018 and 2019 that is 1,602 to 1,526. And its increased from 2020 to 2022 which are 1,567 1,750 and 2,068. There is a negative growth rate on 2019 that is -4.73% and its increased from 2020 to 2022.

Figure 4, shows the fluctuation of growth rate of Social Islami Bank Limited.

Table 5: Net income and growth rate of First Security Islami Bank Limited:

(BDT in Millions)		
Year	**Net Income**	**Growth Rate**
2022	2,943	-12.00%
2021	3,344	20.30%
2020	2,780	33.63%
2019	2,080	30.79%
2018	1,591	-

First Security Islami Bank Limited:

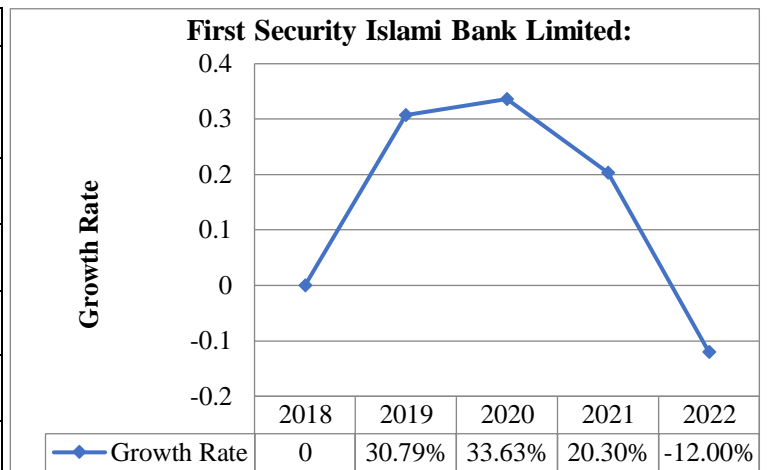|	2018	2019	2020	2021	2022
Growth Rate	0	30.79%	33.63%	20.30%	-12.00%

Figure 5: Growth rate of First Security Islami Bank Limited

Table 5, shows the net income and growth rate of First Security Islami Bank Limited of 5 years from 2018 to 2022. Here the net income increased on the year from 2018 to 2021 that is 1,591 to 3,344 and it decreased on 2022 which is 2,943. There is a fluctuation on the growth rate of the year 2019 to 2021 which are 30.79% 33.63% 20.30% and the rate turned to negative on 2022 which is -12.00%.

Figure 5, shows the fluctuation of growth rate of First Security Islami Bank Limited.

Table 6: Net income and growth rate of Eastern Bank Limited:

(BDT in Millions)		
Year	**Net Income**	**Growth Rate**
2022	5,121	6.67%
2021	4,800	14.83%
2020	4,180	4.76%
2019	3,990	28.28%
2018	3,111	-

Eastern Bank Limited

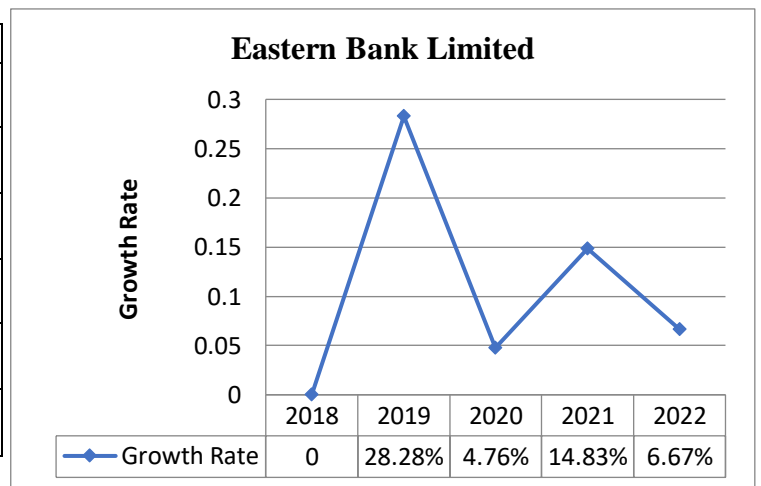|	2018	2019	2020	2021	2022
Growth Rate	0	28.28%	4.76%	14.83%	6.67%

Figure 6: Growth rate of Eastern Bank Limited

Table 6, shows the net income and growth rate of Eastern Bank Limited of 5 years from 2018 to 2022. In which there is an increase on the net income of Eastern Bank Limited of these 5 years from 3,111 to 5,121. But there is a fluctuation on the growth rate on these years and it decreased at 6.67% on 2022.

Figure 6, shows the fluctuation of growth rate of Eastern Bank Limited.

Table 7: Net income and growth rate of Brac Bank Limited:

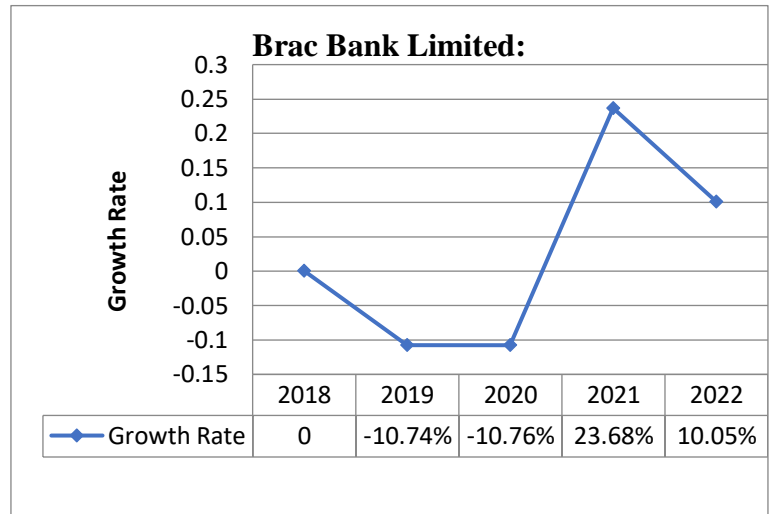|		(BDT in Millions)
Year	Net Income	Growth Rate
2022	6,014	10.05%
2021	5,465	23.68%
2020	4,418	-10.76%
2019	4,951	-10.74%
2018	5,546	-

Figure 7: Growth rate of Brac Bank Limited

Table 7, shows the net income and growth rate of Brac Bank Limited of 5 years from 2018 to 2022. Here the net income decreased from the year 2018 to 2020 that is 5,546 to 4,418 and increased in 2021 and 2022 which are 5,465 and 6,014. It has negative growth rate -10.74% and -10.76% on 2019 and 2020 and it increased at 23.68% on 2021 and again decreased at 10.05% on 2022.

Figure 7, shows the fluctuation of growth rate of Brac Bank Limited.

Table 8: Net income and growth rate of Prime Bank Limited:

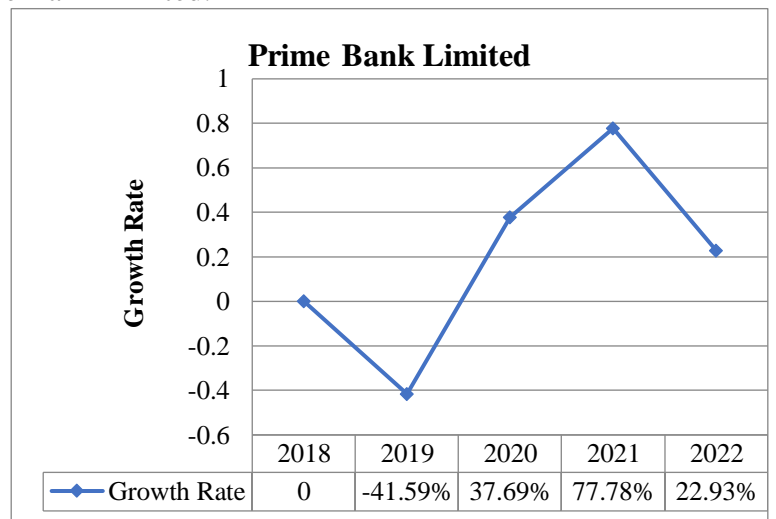|		(BDT in Millions)
Year	Net Income	Growth Rate
2022	3,995	22.93%
2021	3,250	77.78%
2020	1,828	37.69%
2019	1,328	-41.59%
2018	2,273	-

Figure 8: Growth rate of Prime Bank Limited

Table 8, shows the net income and growth rate of Prime Bank Limited of 5 years from 2018 to 2022. The net income decreased on 2018 to 2019 that is 2,273 to 1,328 but it increased from 2020 to 2022. Though it has a negative growth rate on 2019 that is -41.59% and it increased on 2020 to 2021 and decreased in 2022 which is 22.93%.

Figure 8, shows the fluctuation of growth rate of Prime Bank Limited.

Table 9: Net income and growth rate of City Bank Limited:

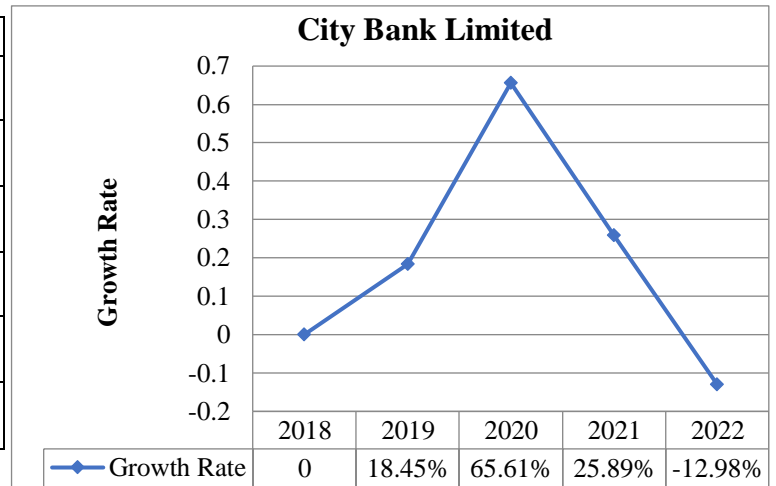|		(BDT in Millions)
Year	**Net Income**	**Growth Rate**
2022	4,781	-12.98%
2021	5,494	25.89%
2020	4,364	65.61%
2019	2,635	18.45%
2018	2,225	-

Figure 9: Growth rate of City Bank Limited

Table 9, shows the net income and growth rate of City Bank Limited of 5 years from 2018 to 2022. Here the net income increased from 2018 to 2021 that is 2,225 to 5,494 and decreased at 4,781 on 2022. There is fluctuation on the growth rate on these years and have a negative rate on 2022 which is -12.98%.

Figure 9, shows the fluctuation of growth rate of City Bank Limited.

Table 10: Net income and growth rate of Dhaka Bank Limited:

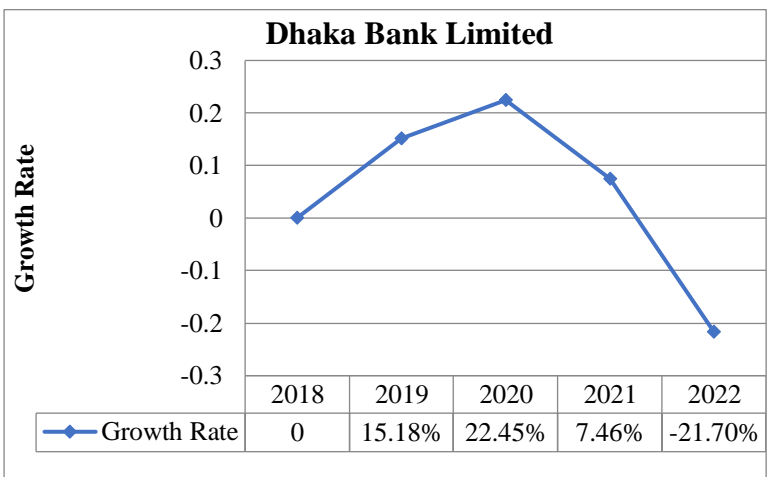|		(BDT in Millions)
Year	**Net Income**	**Growth Rate**
2022	1,673	-21.70%
2021	2,136	7.46%
2020	1,988	22.45%
2019	1,624	15.18%
2018	1,410	-

Figure 10: Growth rate of Dhaka Bank Limited

Table 10, shows the net income and growth rate of Dhaka Bank Limited of 5 years from 2018 to 2022. Here is an increase on the net income from 2018 to 2021 that is 1,410 to 2,136 and decreased on 2022 at 1,673. There is fluctuation on the growth rate on these years and having a negative rate -21.70% on 2022.

Figure 10, shows the fluctuation of growth rate of Dhaka Bank Limited.

Comparative analysis of Islami Bank and Conventional Bank:

Taking average value of growth rate of each bank for making comparison of their contribution on the economic development of Bangladesh between Islami Banks and Conventional Banks of Bangladesh:

Table 11: Average growth rate of Islami Bank and Conventional Bank:

Islami Bank's	Average growth rate	Conventional Bank's	Average Growth rate
Al-Arafah Islami Bank Limited	-2.66%	Brac Bank Limited	2.45%
Islami Bank Bangladesh Limited	0.58%	Dhaka Bank Limited	4.68%
Social Islami Bank Limited	5.57%	Eastern Bank Limited	10.91 %
First Security Islami Bank Limited	14.54%	Prime Bank Limited	19.36%
Shahjalal Islami Bank Limited	24.42%	City Bank Limited	19.39%

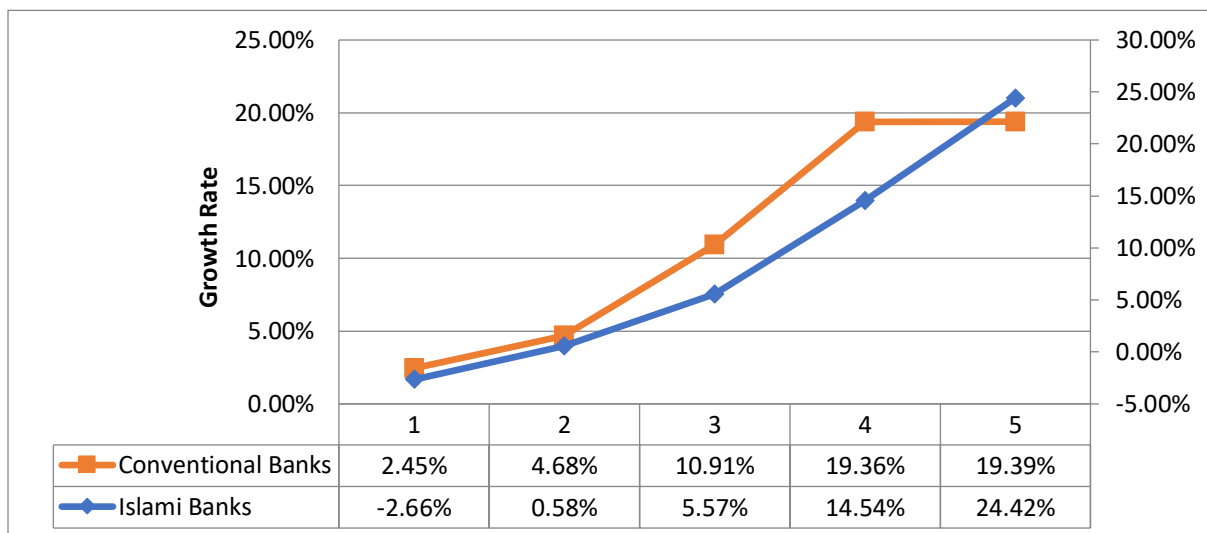|	1	2	3	4	5
Conventional Banks	2.45%	4.68%	10.91%	19.36%	19.39%
Islami Banks	-2.66%	0.58%	5.57%	14.54%	24.42%

Figure 11: Average growth rate of Islami Bank and Conventional Bank

Here, 5 Islami Banks has been taken as sample and 5 Conventional Banks also taken to see the contribution of them in the economic development of Bangladesh. From the average growth

rate of the year from 2018-2022. In the graphical representation that shows the Islami Banks has greater impact over the economic development of the country. In the Islami Bank line the Al-Arafah Islami Bank Limited shows negative average growth rate that is -2.66% and also the Islami Bank Bangladesh Limited shows very lower growth rate that is 0.58% on average on that years and it's a positive growth rate. But in the Conventional Bank there is no negative growth rate on that taken years. But the growth of Conventional Banks is not much rapidly then the Islami Banks. In the top 10 banks the top 5 Islami Banks are growing rapidly on these years that is because before investment they have to analyze is that halal or not this is their limitation the shariah authority draw attention of it. Conventional Banks don't think of halal and haram they take too much risk so that their growth is not much rapidly then the Islami Bank. That's why the Islami Banks shows higher contribution over the economic development then the Islami Banks of Bangladesh.

Table 12: The contribution of the Banks on the GDP and GNI of Bangladesh:

Years	Islami Banks	Conventional Banks	GDP	GNI
2022	14.63%	0.99%	10.56%	9.73%
2021	9.81%	29.93%	11.33%	11.74%
2020	8.94%	23.95%	6.45%	4.07%
2019	9.07%	1.92%	9.29%	9.41%
2018	-	-	-	-

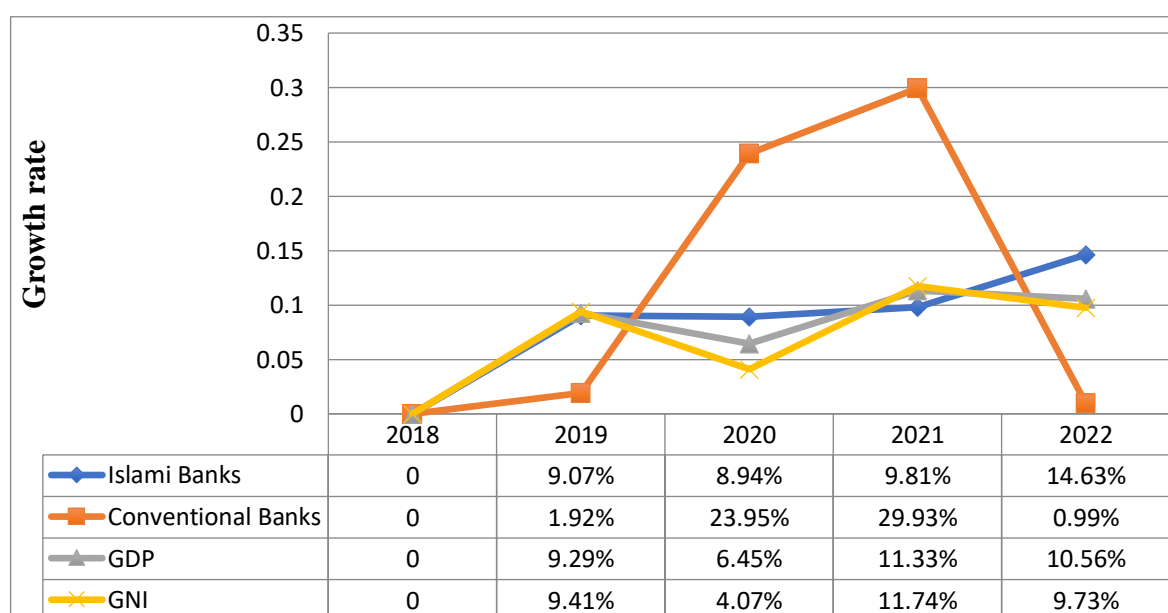|	2018	2019	2020	2021	2022
Islami Banks	0	9.07%	8.94%	9.81%	14.63%
Conventional Banks	0	1.92%	23.95%	29.93%	0.99%
GDP	0	9.29%	6.45%	11.33%	10.56%
GNI	0	9.41%	4.07%	11.74%	9.73%

Figure 12: Growth rate of the Banks on the GDP and GNI of Bangladesh

The table 12 and figure 12 shows the contribution of Islami Bank and Conventional Bank on GDP and GNI of the country for the year 2018-2022. There are fluctuations on every section. In the Conventional Banks there was a great increase in the growth rate but on the year 2022 its growth rate is very low which is 0.99%. The Islami Banks slightly fluctuate from 2019 to 2020 but it had well increase on 2022 which is 14.63%. Also in the GDP and GNI decreased on 2020 and increased on 2021 but they decrease again on 2022 the growth rate of decreasing of GNI is less than the GDP growth rate which is 9.73%.   Though the Islami Banks growth rate is higher than the Conventional Banks the GDP and GNI decreases on 2022 because of that lower growth rate of Conventional Banks which is 0.99%.

Here, Islami Banks and Conventional Banks represent a portion of the financial system of Bangladesh. A decrease in the growth rate of the Conventional Banks also decreases the economic growth. So, here exist a positive relationship between financial system and the economic growth of Bangladesh.

5. Conclusion & Recommendations

In this study, the relationship between financial system and economic growth/development in Bangladesh is analyzed using real GDP growth rate technique and the growth rate data of five conventional bank and five Islami bank from 2019 to 2022. The study suggests that financial system has a momentous effect on economic growth/development and vice versa in Bangladesh.

So, after analyzing the facts it may therefore recommended that proper policies should be formulated to establish a financial system that can accelerate improvements in the economic growth/development. Also, we should adopt new technologies to make financial system more accessible. In addition to financial system Conventional bank should follow the Islami bank credit and risk management structure in order to minimize non performing asset.

6. Limitation of the Study

While analyzing the nexus between financial development and economic growth in Bangladesh, it is essential to acknowledge certain limitations inherent in this study. Firstly, the study may face data limitations, as the availability and accuracy of economic and financial data in developing countries like Bangladesh can sometimes be constrained. Additionally, this study's scope and methodology may not capture all the intricacies of the dynamic relationship between financial development and economic growth, as it might overlook specific contextual

factors unique to Bangladesh. Moreover, we only analyze five to ten research paper for this kind of intricacies topic. Recognizing and addressing these limitations is crucial for interpreting the study's results and drawing meaningful conclusions. However, we are hopeful that further empirical research will enlighten the importance of this topic.

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