The Effects of Equity Market Liberalization on Economic Growth: Evidence from Bangladesh

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Abstract

Purpose of the study: This paper aims to shed light on how liberalizing the Bangladesh equity market has affected its GDP growth in the recent past.

Methodology: This study employs a multivariate time series regression to examine the empirical effects that equity market liberalization had on the economic growth of Bangladesh.

Findings: Empirical analysis done in this paper yielded results that proved that following liberalization of Bangladesh's equity market, there was a statistically significant structural break in the market capitalization of Dhaka Stock Exchange, signifying that the resulting inflow of new investment had positive growth effects on the market size and value. Additionally, the paper also tried to isolate the effect of liberalization on per Capita GDP growth and concluded that, on average, liberalization leads to a 1.2% rise in per capita growth rate which is in line with results put forth by other researchers in this topic.

Implications: Improved access to foreign equities allow for capital markets to become more internationally integrated leading to risk diversifications, better investment opportunities and, overall, increases in portfolio returns for the country.

Limitations and Future direction: The study could use a larger sample of data over a longer time span, but sourcing historical data for indicators of Bangladesh is extremely difficult and stands as a true obstacle to any great econometric study.
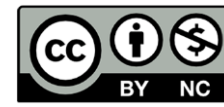
1. Introduction

Equity market liberalization was one of the most important national policies adopted by many developing countries in the past 30 years as mentioned by Bekaert, Harvey, and Lundblad (2003). This financial reform started taking place during the late 1980s and early 1990s in hopes of achieving a sound economic growth and rapid financial development. At its core, equity market liberalization refers to a country opening up its domestic stock market to foreign investors and also permits domestic investors to purchase stocks from the foreign equity market (Bekaert, Harvey and Lundblad, 2003).

There is no unanimity among academics on whether or not capital markets are better off when they are more internationally integrated, allowing foreign investors to invest in domestic securities and domestic investors trading in foreign equities. A multitude of literature, such as the work by Bekaert and Harvey and Lumsdaine (2002), mention how internationally integrated capital markets allow for assets with the same levels of risk to offer the same levels of expected returns, irrespective of which country it is in. This allows for portfolios to be diversified with equities from different countries as well as leading to decreases in the costs of capital. Han kim and Singal (2000) have also contended that opening up equity markets to foreign integration helps attract important foreign investment that may facilitate economic growth.

In 1991, Bangladesh also adopted a similar national policy and opened its domestic equity market to foreign investors in order to foster economic development. Exploration of previous studies have revealed that very less effort has been demonstrated to find out the effectiveness of the equity market liberalization policy to enhance economic development in Bangladesh. Mostly, the published literature have focused on analyzing the effects of economic growth of equity market liberalization of the South Asian region as a whole; but conducting a study particularly focusing on Bangladesh's equity market liberalization and its effect on the Bangladesh economy has largely been ignored. Therefore, the aim of this paper is to shed light on how liberalizing the Bangladesh equity market has affected its GDP growth over the past few decades Moreover, given the strong economic growth Bangladesh has experienced in the recent decades; this paper will also investigate what evidence an emerging economy like Bangladesh can provide regarding the growth effects of the international integration of capital markets.

2. Literature Review

Perhaps some of the most significant contributions in this area of research have been made by Geert Bekaert and Campbell R. Harvey who meticulously compiled a comprehensive chronology of important economic events, including an official date of equity market liberalization, for more than 40 countries classified as emerging markets. Bekaert and Harvey and Lumsdaine (2002) have highlighted how "the dating of market integration is notoriously difficult. The capital market liberalization process is a complex process and it is unlikely that 'dates' of capital market reforms will be informative of the true date of market integration.". However, they specified the significance of their complex methodology for dating the integration of world markets. Their information is largely sourced from the International Financial Corporation's Emerging Markets DataBase (EMDB) which is currently maintained by Standard and Poor's. This compilation of important dates and events are priceless to this research topic because almost all of the literature on this issue involves comparing different equity market indicators before and after an official date of liberalization[1].

As a start to our analysis, it would be wise for us to first review some of the noteworthy literature of the research already done on this issue. In their paper entitled *Equity Market Liberalization in Emerging Markets,* Bekaert and Harvey and Lundbald (2003) point out that when foreign investors are given the opportunity to invest in a country's securities and domestic investors the opportunity to invest abroad, this is called equity market liberalization. They then highlight that instruments such as American Depository Receipts (ADR) and Country Funds may have been used to invest in foreign securities even before markets were officially

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[1] A chronological list can be found in the country risk analysis section of the following internet link:
http://www.duke.edu/~charvey/Country_risk/counidex.htm

liberalized and, therefore, need to be factored into analysis as well. How they proceed with their research is that they take a sample of about 30 emerging market economies. Next, they identify official liberalization dates, dates of first ADR introduction and first Country Fund introduction. After that, in order to evaluate foreign presence in the domestic equity markets, they take U.S. equity portfolio holdings as a variable. On this variable, they perform a structural break test to see if there is a significant change in trend after the liberalization date.

Additionally, a cross-sectional, time series regression is analyzed with GDP growth as the dependent variable and a liberalization date dummy, Country Fund and ADR dates dummy, foreign presence variable and an intensity variable as independent variables. They concluded that Real GDP rises by around 0.84% after liberalization.

A related older research paper by Bekaert and Harvey (2000) entitled *Foreign Speculators and Emerging Equity Markets* carried out similar research where they looked at how the liberalization dates, Country Fund and ADR dates and foreign presence variables affected the Cost of Capital, Volatility of stock returns and risk coefficient of stocks for a sample of 20 different countries. There they also made an argument of whether to use dividend yields or average returns as indicators of cost of capital, citing dividend yields as superior. After also conducting structural break tests, they established that the cost of capital always dropped after liberalization, varying between 5 and 75 basis points.

Previous studies related to this topic conducted by Samitas (2006), Gilmore (2002), Neaime (2012), and Guyot (2014) have also found that the VAR model framework is also suitable for this study. Yola (2018) mentions that the VAR model framework is also one of the most popular econometric methods employed in this subject area.

Another significant publication is by Edison and Warnock (2001) entitled *A Simple Measure of the Intensity of Capital Controls.* There they proposed an innovative liberalization intensity measure which would help facilitate several empirical applications. The measure is based on two indices that the IMF publish in their Emerging Markets Database. One is the Global index which represents the overall market portfolio of a country and the other is the Investable index which represents the portion of the market portfolio available to foreign investors. The measure is constructed by taking a ratio of the market capitalization of equities in the Investable index to the Global index. The paper goes on to compare their measure with other measures of liberalization intensity to show how it is superior. They then put their measure into empirical applications such as showing why opened equity markets may still have a home bias and how capital flows and cost of capital are affected by liberalization.

Researchers Han Kim and Singal (2000) in their paper *Stock Market Openings: Experience of Emerging Economies* have also made impressive contributions. They have concentrated on studying the domestic stock market liberalization impacts of 20 sample emerging countries. They looked at the monthly market returns for domestic stock markets and for volatility of these returns used an Autoregressive Conditional Heteroscedasticity Model (ARCH) and its variants. In an attempt to also measure the efficiency of stock markets after liberalization, they wanted to see if stock returns became more random after liberalization.

Additionally, the effects on inflation and exchange rates of market liberalization were also studied. With significant results, it was concluded that the stock returns almost always increased after liberalization without any significant rise in volatility. Based on their random walk tests they also found the efficiency of stock markets to rise. They also found there to be no dramatic rises in inflation or appreciation of exchange rates to be worried about.

Further prominent scholarly work on the topic carried out by Levine and Zervos (1998) in the article *Capital Control Liberalization and Stock Market Development* showed how, for 16 countries, indicators for stock market size, liquidity, volatility and international integration changed post liberalization. Interestingly, models for international integration of stock markets such as the ICAPM and IAPM were used to evaluate integration. Having tested the indicators for unit roots and making them satisfactorily stationary, the researchers carried

out structural break tests around the liberalization policy dates and returned robust results to prove that the markets became larger, more liquid, more integrated and more volatile after liberalization.

Another indispensable publication is by Gupta and Yuan (2008) in the paper *On the Growth Effects of Stock Market Liberalization* where they developed praiseworthy regression specifications to analyze the effects of stock liberalizations on a range on economic factors, namely, External dependence, growth opportunities, allocative efficiency, concentration of industries and privatization. Controlling for a wide selection of other economic explanatory variables, they show, with robust significance, that markets having competition enhancing reforms and lower barriers to entry gain better growth opportunities and grow faster following liberalization at the cost of becoming more externally dependent.

Finally, perhaps one of the benchmark publications on the topic done by Bekaert and Harvey and Lundbald (2000) is *Emerging Equity Markets and Economic Development* where, with great robustness tests, and controlling for a comprehensive list of explanatory variables divided into three categories, namely, macroeconomic influences, banking sector development and equity market development, complex regression specifications yielded the result that on average, real GDP growth rate rises by 1 to 2% per annum following capital market liberalization.

So, as a short summary, we can see that almost all of the papers centered their research around a liberalization date. Next, for whatever indicator of market development that was chosen, a structural break test was a popular tool for assessing post liberalization status. After that, several of the papers employed regressions to identify the contribution of different liberalization variables on economic growth.

3. Hypothesis

The multitude of literature that exists on the topic, concentrates on making cross sectional analysis of a sample of different countries. However, the focus of this paper will only be targeted towards the country of Bangladesh. Directors of the Bangladesh bank Wahab and Faruq (2012) have pointed out that in the context of Bangladesh "though foreign portfolio investments are not substantial, the recent withdrawal and repatriation of a large volume of funds have raised some signs of concern." Thus, we are interested to see how the opening up of the Bangladesh stock market to foreign investment has, empirically, affected the country's GDP growth. In light of the evidence provided by the work of other researchers, we hypothesize that GDP growth will have risen as a result of capital market liberalization.

The rest of the paper will be organized as follows: In the following section, we will highlight the Methodology used and variables employed in this research. Next, there will be a section explaining the Findings and results of the research and, before concluding, we will examine a few Policy implications of the results.

4. Methodology

In our research paper, we intend to look solely at Bangladesh's experience of stock market liberalization and how it has affected economic performance. We borrow extensively from the methodologies employed by other researchers in this subject and will try to examine the empirical effects that liberalization had on growth in an attempt to highlight policy implications of this matter.

Firstly, as mentioned before what is meant by "Equity Market Liberalization" is best explained by Bekaert and Harvey and Lundbald (2003) when they say "Equity market liberalizations give foreign investors the opportunity to invest in domestic equity securities and domestic investors the right to transact in foreign equity securities."

A majority of the papers done on this topic, then set out to identify a stock market liberalization year which "refers to the official year of policy change announced by the government" (Gupta & Yuan, 2008). Both Gupta and Yuan (2008) and Bekaert and Harvey and Lundbald (2003) contend that the year of liberalization of Bangladesh's stock market is 1991.

Next, borrowing from Levine and Zervos (1998) and Han Kim and Singal (2000) we will look at the yearend Market capitalization divided by GDP as a means of assessing market size. The variable is calculated for 19 years; From 1985 to 2004. The next step involves carrying out a unit root test on the data and then taking steps to make the time series stationary. Once stationary, the time series is tested for a structural break around the liberalization year 1991 using the "Chow test". Although other researchers have employed more sophisticated structural break tests in their papers, we will adhere to a simple Chow test to avoid complicacy. Due to the lack of availability of data on historical stock returns, we will be unable to evaluate efficiency and volatility changes after liberalization.

In the next section of the paper, we will borrow from Gupta and Yuan (2009), Beaert and Harvey and Lundbald (2005), (2001) and establish a multivariate time series regression specification as follows:

$$Growth_t = \beta_1.Liberalization_t + \beta_i.X_{i,t-1} + \varepsilon_t$$

Where Growth is the change in natural log of per Capita GDP, Liberalization is a dummy variable that takes the value of 1 for all years including and after the year of liberalization and 0 otherwise, Xi represents lagged values of some control variables that may influence growth and ε is a random, white noise error constant. Although they also included variables for contemporaneous shocks and industry specific fixed effects, we have omitted that in order to simplify my analysis. All values are calculated for the years 1985 to 2010.

The control variables will be used according to the availability of data and are justified by Bekaert and Harvey and Lundbald (2005), (2001) and are as follows:

Government expenditure divided by GDP: This captures the yearly expenditure of the government on goods and services as well as expenditure for infrastructure and defense. The value is calculated as a percentage of GDP. Source: World Bank Development Indicators.

Rate of inflation: This shows the annual change in CPI to capture fluctuations of the country's price level. Source: World Bank Development Indicators.

Population growth: This is the growth rate of the country's urban population. Source: World Bank Development Indicators.

Log life expectancy: Life expectancy at birth indicates how many years a newborn would survive given that the conditions during its birth remained same throughout its life. Source: World Bank Development Indicators.

Private credit as a percentage of GDP: Intended to capture the development of the banking sector of the country as proposed by King and Levine (1993), this variable is the amount of credit offered to the private sector in terms of loans, non-equity securities, etc. divided by GDP.

Based on the p values of the variable coefficients we will conclude what kind of an effect Liberalization had on Growth and, thus, assess what policy implications this may suggest for Bangladesh.

5. Results and Discussion

The data on Market Capitalization has been sourced from the CEIC Data website which houses a large database of country wide indicators. The market capitalization figure is supposed to be an indicator of the size of the stock market. Its value can help identify how much the whole market is valued at in any point of time. The purpose of our analysis of the market capitalization of the Dhaka stock exchange of Bangladesh will be to look for a structural break in trends that occur in the year of market liberalization which is 1991.

 Before we proceed, however, our data needs to be checked for stationarity. Figure 1 tells us that the raw data on Market Capitalization exhibits trends and seasonality factors that render it non-stationary. If we were to use this raw data it would, necessarily, yield spurious results.
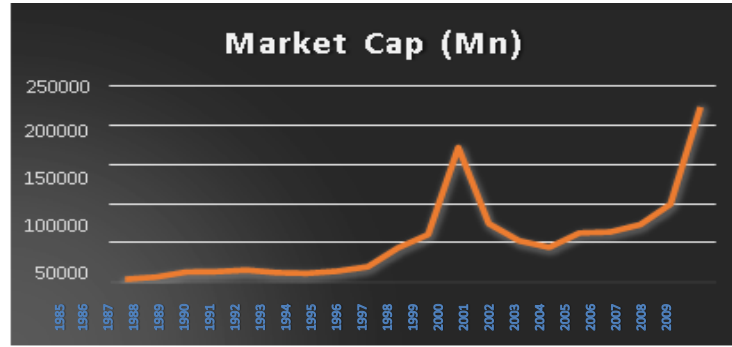
Figure 1: Market Capitalization of Dhaka Stock Exchange, Bangladesh [Source: CEIC Data]

Thus, as a means of transforming the data into a more stationary series, we can apply a natural log operator on it, and take the first difference of that natural log. These manipulations turn the data into one that revolves, more or less, around a constant mean and having a controlled variance as can be seen by the following figure 2.

Figure 2: Natural Log of Market Capitalization of Dhaka Stock Exchange, Bangladesh [Source: CEIC Data]

However, in order for us to be able to definitively call this new data stationary, it needs to be tested for a unit root. We employ an Augmented Dicky Fuller test on the data, suppressing the trend term and looking instead at a drift variable.

The following is a statistics table showing results of the test:

Table 1: Augmented Dicky Fuller Test

Variable	Level	First Difference
Ln GDP per Capita Growth	-3.019	-5.785*
Ln Government Expenditure	-2.904	-4.248**

Ln Inflation Rate	-3.784**	-6.913*
Ln Population Growth	-4.870*	-5.136*
Ln Life Expectancy	-1.880**	-
Ln Private Credit	-1.753	-4.129**
Ln Foreign Direct Investment	-2.152	-5.403*
Ln Market Cap	-	-2.443**

*, ** and *** imply 1%, 5% and 10% levels of significance respectively

As we can see from table 1, except for Ln Life Expectancy the absolute value of our test statistic for all the variables at the first difference does not display signs of having a unit root. Ln Life Expectancy is already stationary at level.

Essentially, now that our data is stationary, we may carry on our test for a structural break in the time series at year 1991. The Chow test is the simplest way to ascertain the existence of a break in trend in a time series. The model is developed as follows:

The Restricted Autoregressive model:

$$MktCap_t = a + \beta.MktCap_{t-1} + \varepsilon$$

Where, Mktcap is our stationary 'change in ln Market Cap' series, and it is regressed on its own lagged term with ε being a random error. To incorporate the effects of the break date, we employ a dummy variable Z, which takes the value of 1 during and after 1991 and 0 otherwise, and write an unrestricted AR model as such:

The Unrestricted Model:

$$MktCap_t = a + \beta.MktCap_{t-1} + \lambda.Z + \gamma.Z.MktCap_{t-1} + \varepsilon$$

Whichever model shows a higher and statistically significant R squared value is the more appropriate model. Running the two regressions, we get the following results:

Table 2: Restricted Auto-Regressive Model

R-Squared	0.0128	Adjusted R-Squared	-0.0489
Sum Squared Residual	3.6421	Sum Squared Model	0.0471

Table 3: Unrestricted Auto-Regressive Model

R-Squared	0.8563	Adjusted R-Squared	0.8255
Sum Squared	0.5302	Sum Squared Model	3.159

Residual			

Table 4: Structural Break Hypothesis Test Results

R²F	0.0128	R²R	0.8563
F* Critical Value$_{(0.05,2,n-k-1)}$	3.7388	F statistic	40.988

The first table shows the results of the restricted model while the second table shows the results of the unrestricted model containing the dummy for structural break. As we can see, the R squared is significantly higher when we account for the dummy at 1991. We can test the two R squared values using the following F Statistic: F= ((R2F – R2R)/2) ÷ ((1-R2F)/(n-k-1)), where R2F is the R squared value of the unrestricted model, R2R is the R squared value of the restricted model, n is the number of terms and k is the number of coefficients. We can compare it to an F critical value of F*$_{(0.05,2,n-k-1)}$= 3.7388 in our case.

We develop the hypothesis test as follows:

H_o = *There is no structural break.*
H_1 = *A structural break exists at the specified year.*

The conditions being: Reject null hypothesis if the F statistic is greater than F critical.

The value of our F statistic comes to 40.988. We can say, therefore, that we reject the null hypothesis in favor of the alternative hypothesis that the data breaks at the year 1991. As an interpretation, we can surmise the fact that after opening up the equity market to foreign investors in 1991, Dhaka stock exchange may have attracted much foreign investment driving prices and resulting in suddenly higher market capitalization values since then. This would appear as a break in the time series data.

5.1. Liberalization and Economic Growth:
As mentioned earlier, to isolate the effect of liberalization on economic growth, we employ a regression with a dummy variable "D" taking the value 1 for all years including and after 1991 and 0 otherwise. We will regress change in Ln per Capita GDP against this dummy variable as well as the lagged values of five control variables that may impact GDP growth which are Government expenditure divided by GDP, Urban population growth, and Private credit divided by GDP, Inflation rate and Log life expectancy.

The results of our regression are summarized in the following table:

Table 5: Regression Results

Variable	Co-efficient	Std. Error	t-Statistic	Prob.
LagGov	.0200257	.0142948	1.40	0.180
LagPop	.0119037	.0061636	1.93	0.071
LagPvt	.0011523	.0013972	0.82	0.422
Laginf	-.0002392	0009907	-0.24	0.812

LagLnLife	-.0274429	.2117473	-0.13	0.898
D	.0123312	.0086133	1.43	0.171
Constant	-.0386446	.8018194	-0.05	0.962

R- Squared	0.7403	Adjusted R-Squared		0.6429
Sum Square Residual	0.0012	Root MSE		0.0087
Dependent Variable: Change in Ln GDP Per Capita				

What it reveals is that, as told by the R squared value, around 74% of the changes in ln per Capita GDP growth can be explained by our regression specification. Moreover, our variable of interest, which is the liberalization dummy, bears a coefficient of approximately 0.012. This in line with Bekaert and Harvey and Lundbald's (2000) conclusion that on average liberalization leads to around a 1% positive growth in per Capita GDP.

However, the regression could use a larger sample of data over a longer time span, but sourcing historical data for indicators of Bangladesh is extremely difficult and stands as a true obstacle to any great econometric study.

6. Policy Implications and Government Intervention

One hardly needs to contemplate too much to figure out the advantages linked to capital market liberalization. Improved access to foreign equities allow for capital markets to become more internationally integrated leading to risk diversifications, better investment opportunities and, overall, increases in portfolio returns. Arguments for capital market liberalization also borrow from Adam Smith's efficiency arguments about trade liberalization stating that mutually reducing barriers to trade is beneficial for both countries.

However, it is crucial for countries to be cautious about the inflows and outflows of capital when they open up their markets to foreign investors. Perhaps, the biggest and most significant vice that may result from capital market liberalization is instability of a country's financial system.

Directors of the Bangladesh Bank, Wahab and Faruq (2012) relate how following an unfortunate stock market bubble crash in 1996 and the resulting economic pessimism, there was a capital outflow of an estimated taka 6.3 million which was repatriated out of the country. Episodes such as this help bring to light how opening up capital markets to foreigners equally pose a risk of sudden capital outflows resulting in unexpected financial deficits and resulting in instability.

Essentially, these are the areas where people who oppose equity market liberalization build their arguments. One thing to keep in mind is that capital and financial markets are not like the markets of ordinary goods. Instead, these financial and capital markets are ones that are highly dependent on information and money only flows into securities which are deemed to pose the lowest risk and provide the highest reward. Thus, the argument that equity market liberalization is comparable to trade liberalization falls flat. If, for any reason, investors' perceptions about the riskiness of a countries assets change, they would not hesitate to pull back their funds leading to massive outflows of money from the country.

Stiglitz (2000) proposes empirical evidence that is counterintuitive to our regular opinions on how liberalization is beneficial to capital markets. He points out how China, who has been one of the most successful in drawing in Foreign Direct Investment, imposes high restrictions on short term capital flows. They have provided substantial proof that restrictions on short term flows of capital do not necessarily

hamper long run flows but actually helps maintain stability in the financial market. Moreover, more stability, and consequent less risk draws in more investment.

In this regard our argument of equity market liberalization leading to higher economic growth also falls short. Seeing how opening up of equity market to foreign countries help facilitate capital flight, it may leave a country with a shortage of funds resulting in a slower growth opportunity. Additionally, any resulting financial instability is only likely to have adverse impacts on the country's growth potential deterring further investment as a result of pessimism regarding the future.

Therefore, alongside the liberalization of capital markets it is imperative for governments to intervene and bring about policy reforms that put into place stringent regulations on capital flowing in and out of the country. Stiglitz (2000) says it best when he puts forth an analogy of how government intervention and regulations on capital flows is like a dam. The same way a dam protects settlements downstream from sudden flash floods and, in fact, regulates the flow of water for them, regulations on capital flows is equally important.

He identifies three basic areas of regulatory interventions by the government: Regulations on capital inflows, Regulations on capital outflows and Authority to regulatory bodies.Regulations on inflows, such as taxes, can, inadvertently, also affect outflows by deterring investors who look forward to quick short term investments, repatriating any profits quickly back to their own countries.Restrictions on outflows, for example like the ones implemented by Malaysia in the form of flexible taxes that can easily be removed, can give the country some time to make internal development before capital slowly flows out.

Finally, policies like the Asian Development Bank's Capital Market Development Program (CMDP) which seek, among other things, to "…[strengthen] market stability by enhancing the role of BSEC" (Shah, 2016, p.2) are the kind of forward looking policies that Stiglitz (2000) suggests will eventually lead to greater stability by granting more authority to the large regulatory bodies of the stock market

7. Conclusion

Having assumed that capital market liberalization will have positive impacts on the growth rates of a country's per Capita GDP as well as lead to increases in the size of the equity market; our econometric analysis produces results that, to a certain degree, confirm our hypothesis. However, we have also looked at the risks associated with the opening up of capital markets to foreign investors which may threaten the stability of the domestic country's financial system.

Overall, it is always difficult to single out what specific effects a particular economic policy had on a particular economic indicator but, thankfully, we can draw lessons from history and with regards to this topic, empirical historical trends suggest that a general level of government involvement in the regulation of an internationally open equity market is always a good way to avoid sudden economic disasters resulting from volatile capital flows.

References

Bekaert, G., Harvey, C. R., & Lundblad, C. (2001). Emerging equity markets and economic development. *Journal of development Economics*, *66*(2), 465-504.

Bekaert, G., Harvey, C. R., & Lumsdaine, R. L. (2002). Dating the integration of world equity markets. *Journal of Financial Economics*, *65*(2), 203-247.

Bekaert, G., Harvey, C. R., & Lundblad, C. T. (2003). Equity market liberalization in emerging markets. *Journal of Financial Research*, *26*(3), 275-299.

Bekaert, G., & Harvey, C. R. (2000). Foreign speculators and emerging equity markets. *Journal of Finance, 55,* 565-614.

Bekaert, G., Harvey, C. R., & Lundblad, C. (2005). Does financial liberalization spur growth?. *Journal of Financial economics*, *77*(1), 3-55.

Edison, H. J., & Warnock, F. E. (2003). A simple measure of the intensity of capital controls. *Journal of Empirical Finance*, *10*(1-2), 81-103.

Gupta, N., & Yuan, K. (2009). On the growth effect of stock market liberalizations. *The Review of Financial Studies*, *22*(11), 4715-4752.

Han Kim, E., & Singal, V. (2000). Stock market openings: Experience of emerging economies. *The Journal of Business*, *73*(1), 25-66.

King, R. G., & Levine, R. (1993). Finance, entrepreneurship and growth. *Journal of Monetary economics*, *32*(3), 513-542.

Krugman, P. (1998). Saving Asia: It's time to get radical. *Fortune*, *138*(5), 74-80.

Levine, R., & Zervos, S. (1998). Capital control liberalization and stock market development. *World Development*, *26*(7), 1169-1183.

Shah, S. A. M. H. (2016). Capital Market Development in Bangladesh: A Sector Reform Perspective.
Stiglitz, J. E. (2000). Capital market liberalization, economic growth, and instability. *World development*, *28*(6), 1075-1086.

Wahab, M. A., Faruq, M. O., & Bank, B. (2012). *A comprehensive study on capital market developments in Bangladesh* (pp. 1-42). Working Paper Series WP1203, Research Department, Bangladesh Bank.