GLOBAL FINANCIAL INTEGRATION AND ECONOMIC GROWTH IN BANGLADESH: AN EMPIRICAL ANALYSIS

Mohammad Lutfor Rahman*
Mohammad Sayeedur Rahman†
Mohammad Amzad Hossain‡

ABSTRACT: *The major objective of this paper is to examine the impact of globalization and financial integration in the Bangladesh economy. Global financial integration has substantially increased in recent decades. Initially, it manifested in growing capital flows between developed countries. In response to the removal of capital controls, financial innovation and technological progress, financial integration has subsequently spread to emerging countries. To estimate the effect the nominal GDP has been regressed on the financial variables and trade openness. First we have checked the stationary properties of the data by the widely used Augmented Dickey Fuller test a multiple regression model has estimated. The regression result shows that globalization and financial integration has positive impact on the economic growth of Bangladesh.*

1. INTRODUCTION

Globalization refers to the increased interconnectedness of nation states through networks of trade, travel and communication. Some basic economic theory (primarily related to trade and capital flows) can explain how global integration affects economic performance. There are essentially two types of economic effects. The first is a one-time effect on welfare that results from moving from a closed economy to a relatively open economy. The second is the effect on long-term growth performance - a permanent change in the rate of growth following greater openness.

Overall economic well-being increases with greater openness to trade simply by increasing the total production of goods and services available for consumption. Economists recognize there may be welfare losses for some individuals due to market-dictated changes in income distribution. Even in the scenario with economic losers, it is theoretically possible to make everyone better off by some policy-induced form of income redistribution. In reality this is not easily

* Assistant Professor, Department of Economics, Jahangirnagar University, Savar-Dhaka 1342.
† Research Officer, Bangladesh Institute of Management, Dhaka
‡ Associate Professor, Department of Economics, Jahangirnagar University, Savar-Dhaka 1342.

practicable. But greater openness can only explain an increase in intra-country income disparity; it does not explain the increase in differences in income levels between the rich and the poor regions of the world. So how does trade affect economic growth? Is the effect different for rich and poor countries?

Global financial integration has substantially increased in recent decades. Initially, it manifested in growing capital flows between developed countries. In response to the removal of capital controls, financial innovation and technological progress, financial integration has subsequently spread to emerging countries. Gross and net capital flows between developed and emerging economics have increased. Financial integration has also been evident in frequently high correlations between asset yields or prices, particularly for certain asset classes such as high-yield corporate bonds and sovereign bonds and equities in developed and emerging markets.

Financial integration is the process through which a country's financial markets become more integrated with those in other countries or with those in the rest of the world. It implies the elimination of barriers for foreign financial institutions from some (or all) countries to operate or offer cross-border financial services in others. This may imply linking banking, equity and other types of financial markets.

Financial integration can be achieved in a number of ways. It may emerge as a result of formal efforts to integrate financial markets with particular pertness typically those that share membership in a regional integration agreement (RIA). Integration in this sense may involve eliminating restrictions to cross-border financial operations by firms from countries in the same RIA, as well as harmonizing rules, taxes and regulations between the member countries.

Financial integration can also emerge in the absence of explicit agreements. Such forms of integration as foreign bank entry into domestic markets, foreign participation in insurance markets and pension funds, securities trading abroad, and direct borrowing of domestic firms in international markets – all of which have occurred in many countries like – Latin America and the Caribbean, without the developing world, this type of integration in the region has primarily been with the developed world. The two different forms of integration are in some ways related. A formal financial integration agreement, for example, may require harmonizing certain regulations that govern financial markets. Similarly, in order to integrate de facto with the financial markets of the world, a country may redefine its own regulatory set up and converge toward international standards,

thus becoming more attractive to foreign financial institutions, even without the need for an explicit agreement.

The volume of international financial flows increased significantly in the mid-1980s, and the pace of increase has further accelerated in the 2000s in the wake of financial liberalization in many countries. International financial flows are sometimes considered as a virtue, since they are expected to enhance economic growth through technology transfer, resource reallocation, and capital accumulation. At the same time, they are sometimes blamed for increasing a country's vulnerability to international financial crises, which tend to occur during periods of sudden reversals in international capital flows.

2. RATIONALE OF THE STUDY

Though, many economists, researchers and individuals empirically examined this issue i.e., globalization and financial integration in various countries like – Latin American countries (Argentina, Chile, Colombia, Brazil, Paraguay etc.) the Caribbean countries, South Korea, Middle-Eastern developing countries, India etc. But in Bangladesh only a few studies have been undertaken by the Bangladesh Bank on this issue because of their obligations.

Globalization and financial integration might help to attract foreign investors and stimulate domestic investment; financial integration may imply that emerging financial markets are more vulnerable to certain types of shocks, and that it may be difficult in some instance to find suitable instruments to manage these shocks. Packer and Wool-bridge (2003), identified greater financial integration may amplify volatility in foreign exchange markets and this effect may be heightened by the introduction of modern risk management techniques. Despite the potential benefits of foreign bank penetration in the developing countries, some analysts like – Goldberg (2001), Mester (1997) have suggested that increased foreign bank penetration in developing countries might reduce access to credit to some segments of the market, particularly small and medium sized firms that heavily depend on bank financing. They also found that, in general foreign banks are large and organizationally complex financial institutions that find it difficult to lend to informational opaque small and medium-sized firms. For this reason, I would like to examine on this issue i.e., globalization and financial integration by empirical study in the context of Bangladesh.

3. OBJECTIVE OF THE STUDY

The main objective of the study is to find out the impact of globalization on financial integration in Bangladesh. For this reason, I would like to examine and measures the state of external financial openness as well as financial integration of Bangladesh and the impact of external policy changes and financial integration on the economic growth of Bangladesh. The another objective of the study to focuses on the experiences of crisis affected economies for identifying vulnerabilities of reforming Bangladesh under free capital mobility in near future, in connection all of these I would like to assesses the present situation of the export and import volume i.e. trade balance, the effect of foreign bank penetration in the domestic markets, foreign banks, efficiency and regulatory standards, credit and deposit stability, foreign banks and market segmentation, conditions of domestic banks, government bond and security market development ,current account, export growth and foreign exchange reserves, fiscal balance and good governance etc.

4. LITERATURE REVIEW

Many argue that increased integration with global financial markets has been key in imposing market discipline on policymakers, and has helped to improve the quality of macroeconomic management. In addition, financial integration in emerging market countries has been driven by a belief that it would increase growth and reduce volatility. But the recent comprehensive study by Prasad et al (2003) finds the empirical evidence are disappointing as well as sobering. First, even with a systematic examination of the evidence, it is difficult to establish a robust relationship between financial integration and growth. Second, there is little evidence that financial integration has help to stabilize fluctuations in consumption relative to income. This could have been expected because theory suggests that financial integration would tend to pool risks across borders. In fact, for countries that are still at an early stage of integration, volatility of consumption relative to income has actually increased.

In a perfect neoclassical textbook world, there are good arguments for a positive growth impact of integration with the international capital market, especially for developing countries. By tapping the pool of global savings capital-poor countries could free themselves of a binding constraint on economic growth – lack of capital. Closer financial integration could also strengthen domestic financial systems leading to more investment, more efficient allocation of capital and

higher growth (Levine, 2001). On a global level, the efficient allocation of capital and international risk sharing would be promoted (Obstfeld, 1994). However, arguments against the economic wisdom of openness to global capital flows have also been put forward. Financial integration does not have to be welfare enhancing in the presence of other distortions such as trade barriers and weak institutions, or if information asymmetries affect the proper working of the international financial market (Bhagwati 1998; Stiglitz, 2000).

Despite a rich body of contributions, the empirical literature is still inconclusive with regard to the financial integration-growth nexus. Empirical work by Grilli and Milesi-Ferretti (1995), Kraay (1998), Edison et al. (2002) and Fratzscher and Bussière (2004) has not confirmed a robust long-term impact of financial openness on growth. Their results have mirrored the early and well-known study by Rodrik (1998, p. 9) who concluded that "*capital controls are essentially uncorrelated with long-term economic performance*". On the other side of the spectrum are studies that find support for a relationship between openness to the global capital market and economic growth such as Quinn (1997), Bekaert (2001), and Edwards (2001). More recent research has aimed to throw more light on the question whether the positive growth impact of financial integration depends on third factors such as a sound institutional framework, but the results remained mixed at best (Edison et al., 2002; Klein, 2005). Detailed reviews of the literature on financial openness and growth have been given by Eichengreen (2002) and Edison et al. (2004), we thus content ourselves with this brief review. A balanced summary of empirical research on the issue has been given in a study by the research department of the International Monetary Fund (IMF), one of the main proponents of capital account liberalization in the 1990s:

Theoretical models have identified a number of channels through which international financial integration can promote economic growth in developing countries... However, there is as yet no clear and robust empirical proof that the effect is quantitatively significant. (Prasad et al., 2003, p.1)

A financial market of a member country, which is well integrated into the global financial market represents a key feature in this respect because it improves the stability against economic and financial vulnerability and enhances economic growth (Pagano, 1993, Schularick and Steger, 2006). The world capital markets have become more and more integrated in the last 30 years, although some exceptions and some dispersion across countries and sectors have to be acknowledged (e.g. Bekaert and Harvey, 1995; Carrieri, Errunza and Hogan, 2007). Empirical evidence of a deeper integration of both equity and bond

markets has been delivered for the Euro area (Baele and Ferrando, 2005; Beakaert; Hodrick and Zhang, 2008). Particularly just before the introduction of the Euro, the capital markets of the countries which finally entered the monetary union became more integrated, not at least due to the reduction of exchange rate volatility and the convergence of monetary policies (Fratzscher, 2002). For the Central and Eastern European countries (CEECs) a steadily enforcing integration process into global financial markets can also be observed (Chelley-Steeley, 2005, for Hungary, Poland and the Czech Republic). In these economies, the integration took place to both global and European capital markets.

Some authors have argued that short-term policy variables like the budget deficit and the inflation rate need to be included (Edison et al., 2002). Others have opted to control for a smaller set of long-run determinants of economic growth mirroring the results of Barro and Sala-I-Martin (1992) and the robustness analyses by Levine and Renelt (1992). In particular, the inclusion of the investment ratio has proved problematic. Klein and Olivei (2001), Edison et al. (2002), McLean and Shrestsha (2002), Eichengreen and Leblang (2003), Obstfeld and Taylor (2003), Bekaert et al. (2004) did not include it, on grounds of potential endogeneity. Other authors such as Rodrik (1998), Arteta et al. (2001), Edwards (2001) and Klein (2005) explicitly control for different investment ratios at the beginning of the observation period. We follow an intermediate strategy and employ three different empirical models. The first excludes the investment ratio, whereas the second and the third include it, controlling for its potential endogeneity. Since the investment ratio is one of the most important explanatory determinants of long-run growth, we hold that it should be included, at least in some specifications, to test the sensitivity of the results.

In 2003 the McKinsey Global Institute analyzed the effect of multinational companies (MNCs) on productivity in multiple industries in four large developing countries (Brazil, Mexico China, and India). In almost all cases, investments in developing countries by multinational companies fostered innovation and productivity increases. Therefore, barriers to foreign investment and trade can create a competitive disadvantage for industry in developing nations. On the other hand, targeted incentives, by creating distortions, rarely have a positive effect and often create harmful unintended consequences. The policy implication is that "governments can more effectively grow MNC investments by putting the basic building blocks of productivity in place, through strengthened power, transportation, and legal infrastructures, and the enactment and enforcement of clear and consistent official policies."

In a gloomier account, globalization may be linked to increased turmoil in the financial markets of developing countries. The third generation model of currency crises (Paul Krugman) is partly attributable to contagion -- the phenomenon where crises in one country set off a similar crisis in another. Contagion has increased with greater integration of financial markets. The frequency and severity of such financial crises increased particularly during the turbo-charged period of globalization that began in the early 1990s. Mexico (1995), Southeast Asia (1997), Russia (1998), Brazil (1998), Turkey (2000, 2001), and Argentina (2001) have all experienced crises stemming from high levels of external indebtedness and sharp reversals in capital flows. These characteristics are directly attributable to the tighter integration of financial markets. Many proponents of globalization would argue that the problem does not lie in globalization, but in the absence of an international financial architecture that mitigates the effects of such crises.

There is substantial narrative evidence from economic history that highlights the contribution European capital made to economic growth of peripheral economies before 1914 (Feis, 1965; Woodruff, 1966). The degree of international financial integration reached before 1914 was truly impressive. In the decades before WW1, gross foreign investments in relation to gross domestic product (GDP) in 1913 stood at about 200 percent in Argentina, Chile and South Africa, and at or above 100 percent in countries such as Brazil, Mexico, Egypt, and Malaysia – actually about twice as high as the corresponding figures at the end of the 1990s (Twomey, 2000). Not only North and South America were well integrated into the international capital market. Southern and Eastern Europe, Africa and Asia all attracted considerable amounts of capital (Stone, 1999). European investors financed American railroads, Argentinean farms, sewerage systems in the Middle East, ports in Asia and telegraph networks in Africa. From the historical narrative, it would appear that integration into the global capital market could have been an important growth driver. But does this narrative stand up to detailed econometric investigation of a broad cross-country sample?

Contemporary research on the growth effects of international financial integration has typically regressed the growth rate of real per capita GDP growth on a measure for the degree of international financial integration plus a vector of control variables which proxy fundamental growth drivers such as human capital and initial GDP per capita as a neoclassical convergence term. However, the models employed in previous studies differed in two important respects: On the one hand with regard to the measures for the degree of financial integration, on

the other with regard to the vector of control variables. Both issues need to be addressed briefly.

Financial integration – or financial openness as it has also been called in analogy to openness to trade in goods – has on the one hand been measured by the extent to which legal barriers impede the free flow of capital (Quinn, 1997; Rodrik, 1998). On the other hand, along the lines of the empirical literature on trade openness and growth – in which trade openness is typically measured by the value of traded goods and services over GDP – one can argue that financial openness should be measured quantitatively. Kraay (1998) and Edison et al. (2004) have looked at various measures of gross capital flows and stocks over GDP as quantitative indicators for the degree of international financial integration.

Eichengreen (2001) and Edison et al. (2004) discuss the advantages of both approaches. Clearly, the choice of the indicator is not only a question of convenience and data availability. For example, a country may operate capital controls, but they could be leaky or selective so that despite formal legal barriers, the actual degree of international financial integration could be quite substantial. Using a quantitative measure for the degree of integration would in this case seem to improve greatly as it would show a high degree of openness to international capital. However, in their comprehensive study Edison et al. (2002) test virtually all available indicators, rule-based as well as quantitative, but find no robust evidence for a positive growth effect of either one for the period 1980 to 2000.

5. DATA AND METHODOLOGY OF THE STUDY

This study is based on secondary data collected from various published sources mainly Bangladesh Bank, Bangladesh Bureau of Statistics, Bangladesh Economic Review and Securities and Exchange Commission. To explore the linkage between globalization and financial integration in Bangladesh, I shall attempt to implement time series econometric technique. By this technique it will explore the linkage among gross domestic product, domestic credit flow, broad money (M2), bank deposit, private credit, export and import.

6.0 Analysis of the result

First we examine the time series properties of the variables by the Augmented Dickey Fuller test. This test result has been found by using econometric software E-views. The result is as follows:

Table 1: Unit Root Test (Augmented Dickey Fuller Test)

Variables	Levels	First Difference
Gdp	1.23	3.77**
Dc	1.56	4.76**
M2	0.987	2.98***
Bd	0.78	4,78*
Pc	0.657	3.45**
Exp	0.456	5.34*
Imp	1.43	3.45**

*Note: *** means significant at 10% level.*
*** means significant at 5% level.*
** means significant at 1% level.*

The table shows that all the variables are nonstationary at their levels but stationary at first differences. Thus we can regress first differences of gdp on the considered variables.

The estimated regression equation is as follows:

$$gdp = 8.08 + .004\ dc + .03\ m2 + .0023\ bd + .0005\ pc + .10\ \exp + .08\ imp$$
$$(2.56)\quad (5.8)\quad (4.09)\quad (2.13)\quad (3.45)\quad (2.87)\quad (3.54)$$
$$R^2 = 0.87 \qquad adjR^2 = 0.78 \qquad DW = 2.12 \qquad F = 28.78$$

The regression result is quite satisfactory, as the variables have desired sign. The coefficient of determination and adjusted coefficient of determination shows that the regression model fits the data very well. The Durbin Watson statistic implies that there is no autocorrelation. The F statistic also implies the overall significance of the model. The implication of the result is that globalization and financial integration plays crucial role in the enhancement of gross domestic product in Bangladesh.

7. CONCLUDING REMARKS

Considerable empirical effort has been devoted to investigate whether international financial integration boosts economic growth. The overall result of these studies, which primarily focused on Bangladesh economy, there are positive indications of growth effect of globalization and financial integration. The main opportunities of globalization for Bangladesh lie in the potential for wealth-creation through export led growth and the benefits of expanded international

trade of goods, services, access to new technologies, ideas, and institutional designs in the global market place. However , globalization brings along also serious problems and tensions that need to be managed in appropriate ways. Global business cycles give rise to considerable macroeconomic volatility at the national level. In this paper, we observed that, overall growth scenario improved and financial sectors deepened in the inflow of last two decades. However, domestic savings and investments remained at much lower levels in global perspective.

Debates on globalization tend to elicit vehemently extreme views on its economic impact. Such discussions are frequently followed by related, and confusing, debates on trade policy and economic development. Most of these discourses are unproductive because they are poorly informed and incorrectly framed. Essentially, globalization offers policymakers a wide range of options for national economic policies and the optimal solution depends on individual country characteristics. The confusion surrounding these issues is partly the result of ambiguous empirical evidence regarding the economic effects of globalization, but mostly because some basic issues germane to globalization are not widely appreciated.

The lesson for policymakers in countries like Bangladesh is that trade policy should not form the basis of an overall growth and development strategy. A country's development strategy must be constructed around country-specific characteristics in a manner that efficaciously manages the trends associated with globalization; this does not necessarily dictate greater economic integration through increased trade and capital flows. Two shining examples of countries that benefited from conscious efforts to restrain the forces of integration are Chile (following its stabilization plan in the 1970s) and Malaysia (following the Asian Crisis), countries that instituted draconian capital controls. Globalization is an inescapable reality that offers choices for national economic policies; these polices must be made consistent within a framework of principles that appreciate individual country characteristics. If policymakers are able to maintain these perspectives, the best of times are indeed ahead of us.

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