Introduction

INTRODUCTION

In recent years there has been a pervasive tendency towards an increase in global financial flows, which have surged in volume, in both the developed and the developing world, creating new opportunities for economic benefit and difficult challenges for policymakers, especially in the developing countries. It is generally believed that the upsurge in financial flows is a new phenomenon. But this is not true. In the fifty years before the First World War of 1914-1918, there was also a massive flow of private capital across borders. Much of it flowed into bonds financing railways, roads and other infrastructure projects. The global financial system, at that time, ran according to the rules of the classical gold standard. Thus, we can say that the present phase of globalization represents the re-emergence of finance capital on a global scale. The striking parallels between that era and the current era of globalization have been described in many recent studies (Taylor and Obstfeld, 2004), though there are also striking differences as well, relating to the nature, motivation and consequences of the capital flows. The parallels raise a number of questions about the evolution of the global economy in the nineteenth century, its collapse in 1914, and the rebirth of globalization at the end of the twentieth century.

International financial flows can be basically classified into two types - Foreign Direct Investment (FDI) and Foreign Institutional Investment (FII). The difference between the two revolves around whether or not the investor intends to take an active role in the management of the enterprise, the assets of which are being acquired. Bonds, debentures and the like are clearly portfolio investment insofar as they confer no management or voting rights on their owners. On the other hand, foreign branches, wholly owned subsidiaries and joint ventures are clearly direct investment. Although ownership of at least some voting stock is usually seen as a requirement for direct investment status, the distinction between the two however, becomes increasingly difficult to establish as the proportion of foreign ownership falls or is dispersed among various owners and economies.

There has been a rapid rise in trans-border capital mobility in the past few decades, especially to the developing countries. One of the major factors has been the deregulation and globalization of financial markets which has been complemented by the wave of the Capital Account Liberalization (CAL), as part of Structural Adjustment Programmes in the developing countries, supported by the Bretton Wood Twins, International Monetary Fund (IMF) and the World Bank. This is coupled with lower interest rates and institutionalization of savings in the developed countries.

In the wave of neo-liberal economic reform unleashed in developing countries during the 1980s and 1990s, there has been a relatively new and substantial emphasis on the liberalization of financial sector polices. Prior to the 1980s economic liberalization was primarily concerned with stabilizing the balance of payments through contractionary monetary and fiscal policies. It also involved structurally adjusting these economies by liberalizing trade and removing controls on domestic capacity creation, production and pricing by domestic and foreign firms. While retaining these features, neo-liberal reform in the 1990s has combined them with a range of policies liberalizing the operations of financial markets and encouraging regulatory forbearance in supervising their operations. Supervision and prudential regulation is intensified in the aftermath of financial failure, only to be diluted subsequently, subject to the adherence to a broad set of guidelines relating to capital adequacy, accounting practices and disclosure norms.

There are three broad effects that the process of financial liberalization has:

- it opens the country to new forms and larger volumes of international financial flows, in order to attract a part of the substantially increased flows of financial capital to the so-called "emerging markets" since the late-1970s;
- to facilitate these inflows it liberalizes to differing degree the terms governing outflows of foreign exchange in the form of current account investment income payments and in the form of capital account transfers for permitted transactions;
- it transforms the structure of the financial sector and the nature and operations of financial firms in a manner that makes the financial system resemble that in countries like the US and the UK (Chandrasekhar, 2005).

The key challenges for all the developing countries in transition or emerging market economies as they are generally known are to enhance financial stability and reduce the vulnerability of their financial systems in the wake of financial liberalization across the world. The importance of meeting this challenge is to be seen both from the point of view of savers, looking for a superior risk–return trade-off and from the point of view of domestic enterprises, looking for external sources of finance. The strengthening of the domestic financial sector, the main vehicle for the intermediation of both domestic and international financial flows now and for the foreseeable future, is essential if these countries are to gain the benefits and withstand the risks associated with large, and potentially volatile, gross and net cross-border capital flows.

The capital markets in the developing countries, and the Indian capital market, in particular, have witnessed a radical transformation over a period of just over a decade. Until the mid-1980s, the equity markets in the developing countries were characterized by limited means to meet the risk capital requirements, lack of liquidity, absence of foreign institutional investors, and lack of investor's confidence in the stock market. However, since 1986, the capital markets of the developing countries started developing with financial liberalization, together with the easing of legislative and administrative barriers and the adoption of tougher regulations to boost investor's confidence. Reforms to financial markets were high on the priorities of policy makers when the developing countries like India embarked on market-oriented reforms in the early 1990s. With the beginning of financial liberalization in the developing countries, the flow of private foreign capital from the developed to the developing countries has increased significantly and such inflows of foreign capital have been mainly in the form of FDI and FII (especially portfolio investment) (Agarwal, 1997).

In contrast to South-East Asia, the decade of 1980s saw comparatively little change in the financial sector policies in India. From the mid-1960s to the early 1990s, the Indian financial system was considered as an instrument of public finance. Though the capital market started showing signs of improvement since the mid-1980s with the partial liberalization of the industrial sector, introduction of a long-term fiscal policy, and the emergence of the debenture market as an alternative source of finance for the large corporate sector, the capital market in India was still in a nascent stage until 1992 (Agarwal, 1996).

Agarwal (1996) argues that the alternative of a domestic capital market is very important in a developing country like India, which has a large middle class where the savings from the households can be substantial. A well-developed capital market could be used to tap these large sources of capital for productive investment in a liberalized market. Singh (1997) has pointed out that the stock markets play a key role in the internal as well as external financial liberalization processes in the developing countries. Reforms in the capital market in India have been introduced since 1992-93. Financial liberalization is supposed to have a decisive impact on the domestic capital markets which would lead to economic development. This is ensured mainly in the following ways: firstly, development of the capital markets enables increasing savings and linking them directly with long-term economic activity and financial innovation with lower costs of capital and/or increased investment opportunities. Secondly, capital markets provide an important framework of reference for portfolio choices and corporate financial decisions and finally domestic capital markets integrate to the international capital markets and promote the mobilization of direct and indirect investments to the developing countries.

With these developments in the conduit our study is primarily based on the premise whether this huge influx of foreign investment has any persistent impact on increasing the stock market valuation in India, which further is able to render into an increase in the real investment and economic growth of India. Our study is organized into three parts. In Part I we undertake a review of the various studies that look at the impact of financial liberalization on the economic growth. Though there are various theories that have been propounded in this area, we specifically look at the Tobin's q theory of investment. In Part II, we have covered the empirical analysis of our study and the policy implications based on our study are presented in Part III.

In the *first chapter* we undertake a survey of the literature on the financial liberalization in general, and its impact on the economic growth, in particular. Though we have presented it from the perspective of developing countries, emphasis has been maintained keeping the Indian context in mind. Here we have found that economists hold quite contrasting views regarding the importance of the financial liberalization for economic growth; while some duly acknowledge the link, others oppose it vehemently.

The thesis that financial development can influence economic growth and structural change has received strong theoretical underpinnings from general equilibrium analyses that identify two distinct, yet complementary channels. The first, sometimes called the ***"total factor productivity" channel***, emphasizes the role of innovative financial technologies in ameliorating the informational asymmetries that hinder the efficient allocation of funds and the monitoring of the resulting projects (Townsend, 1979; Greenwood and Jovanovic, 1990; King and Levine, 1993b). The other channel, which is based on the ***"debt accumulation" hypothesis*** of Gurley and Shaw (1955) and formalized more recently by Bencivenga and Smith (1991) and Rousseau (1998), focuses on the spread of organized finance at the expense of self-finance and the former's ability to overcome indivisibilities through the mobilization of otherwise unproductive resources.

As far as the role that financial development can play in the growth process of developing countries, the literature distinguishes between four different possibilities (Jha, 2003). *One branch* of the literature argues that economic growth is largely the result of factors, such as savings and investment and technological progress emanating from the real sector of the economy. Hence they contend that financial development and economic growth are not causally related. A *second* view argues that financial development follows economic development. Economic growth, it is argued, induces changes in financial institutions and practices. Financial development is, thus, demand driven. A *third* view argues that financial development is a determinant of economic growth. This school of thought argues that financial development is one factor, but an important factor, influencing economic growth. One version of this hypothesis argues that financial development is a precondition for economic growth whereas a second version argues that sophisticated financial systems help invigorate the climate for rapid economic growth provided there are no impediments to economic development. A *final* point of view attributed to authors such as Diamond and Dybvig (1983) and Keynes (1936) states that financial development is an obstacle to economic growth. This is because of the inherent instability of the financial system. Thus this school would argue that there is a role for government intervention in the working of financial markets.

Though there are various theories propagating the role of financial liberalization in economic growth, we are going to specifically look at the Tobin's q theory of investment. It is often reiterated that once an economy embarks on the path of liberalization, the cost of capital falls, which is reflected in a higher value of Tobin's q. Stock market liberalization is a decision by a country's government to allow foreigners to purchase shares in that country's stock market. Standard models of international asset pricing predict that stock market liberalization may reduce the liberalizing country's cost of equity capital (Stulz, 1999). So in our *second chapter* we have dealt mainly with the discussion of the measure of Tobin's q in detail. While the concept of Tobin's q has been around for some time now, it has not been used in the finance literature. Despite that, over the years, economists, investors and market watchers have used Tobin's q for a variety of purposes. Here we have also discussed how this measure has evolved over time how the measure of Tobin's q bears a resemblance with Kaldor's valuation ratio "v", which he developed three years before Tobin in 1966. Further in this chapter, we have also discussed briefly about the usefulness of the measure of Tobin's q in various fields of economics, and how various researchers have used this measure in their studies over time.

In *Chapter Two* we also present a survey of the empirical work associated with the Tobin's q theory of investment for the developing countries (except for India, which we are going to discuss in Part II). Tobin's q theory of investment has a number of theoretical advantages over competing models of investment. Unlike most other models, it allows output to be endogenously determined as compared to the neoclassical models.

Apart from their role in domestic financial liberalization, the stock markets have also been important in external financial liberalization of the developing countries. They have emerged as a major channel for foreign capital flows to the developing countries, both FDI and FII, particularly the latter.

However, it is quite important to know both for the policy-makers as well as for academic research, the impact of these developments on industrialization and long term economic growth in the developing countries. The purpose of our study therefore is to basically look into this issue.

In Part II of our study we begin with a discussion of the capital market in India. Here we take a look at the impact of the influx of foreign investment on the stock markets of the developing countries, with particular emphasis on the stock markets of India. We are also going to look at the role of the stock markets in the liberalization process in the developing countries, particularly the stock markets in India. In the *third chapter* (first chapter of Part II) we have looked at the development of the stock markets in the developing countries, with special reference to India. Here we have basically looked at the impact of the financial liberalization on the stock market in India. Later in this chapter we have also done a study of the financing pattern of the Indian corporate sector, especially the pecking order pattern of finance. Here we have also looked at the composition of the foreign investment flows for the period 1990-91 to 2004-05 and have tried to find out whether the pattern of foreign investment in India is different from what has been followed in the other developing countries, especially the East Asian countries and the Latin American countries. We have argued here that if companies have to mobilize funds, in the wake of CAL, it has to be attractive in terms of a primary return in the form of dividend and a secondary return in terms of capital appreciation.

Reflecting developments in the capital markets along with economic reforms in other sectors of the Indian economy, the stock market boomed in the mid-1990s. These developments have altered the financing behaviour of the corporate sector changing their dependence from the bank-dominated loans to capital market-based equity capital. One of the objectives behind inviting foreign portfolio flows was to streamline and help develop the domestic stock market. The portfolio investment, particularly FII into an economy takes place mainly through the stock markets. Stock exchanges thus serve as an important source of funds for the corporate sector. The securities market constitutes a critical component of Indian financial markets.

As we have already mentioned our study mainly involves an empirical investigation of whether the huge influx of foreign investment has any persistent impact on increasing the stock market valuation in India, and further if it is able to turn it into an increase in the real investment and economic growth of India. Of all the models of investment, we have used the q theory of investment to estimate whether the increase in the stock market valuation in India (represented by the Tobin's q of the firms listed in the Bombay Stock Exchange) serves as an indiator for the firms' investment behaviour. To test whether financial liberalization had any perceptible impact in the stock market valuation in India, in *chapter four* we have used the Tobin's q measure of investment for this purpose. Put simply, Tobin's q is a measure of performance comparing two valuations of the same assets. Tobin's q is the ratio of the market value of a firm's assets as measured by the market value of its outstanding stock and debt (enterprise value) to the replacement cost of the firm's assets. If a company is worth more than its value based on what it would cost to rebuild it, then excess profits are being earned. "*It is common sense,*" wrote Tobin, "*that the incentive to make new capital investments is high when* *the securities giving title to their future earnings can be sold for more than the investment costs."*

For the purpose of our study we have undertaken an empirical investigation of the trend of Tobin's q in India for the period 1990-91 to 2004-05. The data for 9,600 firms was obtained from the PROWESS Database of the Centre for Monitoring of the Indian Economy (CMIE). To begin with, we have selected a sample of firms from the whole set that allows more than one per cent FII, which comes to 394 firms. Thereafter we undertake regression analysis to test whether the Tobin's q serves as an indicator of the firms' investment behaviour. We have used dummy variables for the each of the years for the period of our study. First we have done the regression analysis for all the 394 firms taken together. Then we have classified these firms into different industry groups and undertook separate regeression analysis for each industry group.

Previous research have indicated the difficulty in obtaining true values of Tobin's q. Thus various economists and policy makers have suggested modified version of the Tobin's q measure. Therefore we have incorporated the improvements in the measure of Tobin's q. One such measure is the modified Tobin's q by Chung and Pruitt, which we presented in our study in *Chapter Four.* We have calculated the Tobin's q using the Chung and Pruitt measure, which defines Tobin's q as the sum of the market value of equity (MVE) (product of a firm's share price and the number of common stock shares outstanding), the book value of the firm's long-term debt (LTD) and the value of the firm's current liabilities (CL), divided by the book value of the net fixed assets of the firm (NFA). This methodology is also similar to the one used by Salinger and Summers (1980). We have also calculated the Tobin's q for a selected number of firms among the 9,600 firms listed in the BSE. We did the same analysis for these two set of samples as we did for all the 9,600 firms. The first sample we selected was those 30 firms which are part of the BSE Sensitive Index (commonly known as the Sensex). The other sample that we have chosen is a set of Top 100 firms, based on their capital employed of the 9,600 firms listed in the BSE.

The *fifth chapter* begins with a brief discussion of the theory of investment decisions of firms, starting with the Keynesian theory and Kaleckian theory of investment. John Maynard Keynes and Michael Kalecki, the founding fathers of the theory of effective demand, were the first to emphasize within a coherent analytical framework the centrality of investment in determining aggregate demand and output and the course of the business cycle. In our study we have tried to empirically test whether an increase in stock market valuation has been associated with an increase in the level of investment in the economy (as predicted by the Tobin's 'q' theory of investment, which is the basis our regression analysis of our hypothesis) in the Indian context. Our objective is to study whether the Tobin's q ratio serves as an indicator to the firms to implement their investment decisions. In this regard, for our regression analysis we have taken the ratio of the Investment of the firms (in real terms) to the Gross Fixed Capital Stock (GFCS) of the firms as the dependent variable. In order to remove the aggregate effect from the panel data, we have also used time lags (up to three years) in our analysis.

In the course of our analysis we have observed that firms' profits are a better indicator of its investment behaviour as opposed to Tobin's q. We have dealt with this issue in *chapter six* where we have tried to analyze whether the

Real Profits (Profit after tax) as ratio of the GFCS explains the rise in real investment. For that we calculate the real profit after tax by deflating the profit after tax (PAT) of the firms by the price index of capital goods, which is our explanatory variable. The price index of capital goods is obtained as the ratio of capital formation of the private corporate sector at current prices to the same at constant prices.

In Part III, *Chapter Seven* we discuss some policy implications for the Indian economy based on our analysis. Given the fact that capital inflows, precisely FII (in the form of portfolio flows) are of short maturities, investments takes place in the stock market rather than in real capital formation. We have witnessed precisely this in the Indian context, where the rapid increase of the market capitalization of the BSE did not have any effect on the real capital formation. So here we argue whether there is really any need to project the stock market as a new engine of growth as has been done by some economists as well several governments in the developing countries. This issue is all the more relevant in the context of India as the government is in the process of establishing full Capital Account Convertibility (CAC). The issue of CAL, in addition to being of interest in its own right, is also significant for present multilateral discussions in international policy context on the New International Financial Architecture (NIFA). We are concerned to find the kind of global economic order in relation to capital flows which can best serve the interests of developing countries, in general and in particular, India.

In the course of *Chapter seven* we have also looked at the pros and cons of CAL, and how the India can undertake CAL in such a way that it is more beneficial than harmful. This is possible by looking at the experiences of some of the emerging countries, like the East Asian countries and the Latin American Countries, who had to bear financial crises. It is now widely accepted that involving liberalization of controls on inflows and outflows of capital respectively, have resulted in an increase in financial fragility in developing countries, making them prone to periodic financial and currency crises. Analyses of individual instances of crises have tended to conclude that the nature and timing of these crises had much to do with the shift to a more liberal and open financial regime. What is more, crises rarely lead to controls on capital inflows and reduced dependence on them. Rather adjustment strategies emphasize further financial liberalization, resulting in a history of periodic financial failure.

Given this actual experience, it is true that many of the expected positive outcomes of financial liberalization did not materialize in the developing countries. Rather than encouraging greater competition, there was a strengthening of oligopolistic power through the mergers of financial intermediaries or association of financial intermediaries and non-financial corporations. Financial intermediaries that were a part of these conglomerates allocated credit in favour of companies belonging to the group, which by no means was a more efficient means of allocation than could have occurred under directed-credit policies of the government. In the course of our study we will see what has been the experience in the context of India.