CHAPTER I
INTRODUCTION

The financial system of any country consists of specialized and non-specialized financial institutions, organized and unorganized financial markets, financial instruments and services which facilitate transfers of funds. Procedures and practices adopted in financial markets, and its interrelationships are also parts of the system. The word 'system' in the 'financial system' implies a set of complex and closely interlinked institutions, agents, practices, markets, transactions, claims, and liabilities in the economy.

Financial markets are arrangements that provide facilities for buying and selling of financial claims and services. The corporations, financial institutions, individuals and governments trade in financial products in these markets either directly or through brokers and dealers on organized exchanges or off exchanges. The participants on the demand and supply side of these markets are financial institutions, agents, brokers, dealers, borrowers, lenders, savers and others who are interlinked by the laws, contracts, covenant and communication networks.

The foreign exchange market and the stock market are the most important elements of a financial system. Foreign exchange market refers to the organizational setting within which individuals, business, governments, and banks buy and sell foreign currencies and other debt instruments. Only a
small fraction of daily transactions in foreign exchange actually involves trading of currency. Most foreign exchange transactions involve the transaction of bank deposits, whereas the stock markets by enabling the convertibility of ownerships in the product market into financial assets, namely shares, bring together buyers and sellers of fractional ownership of companies. It enables companies to raise essential long-term financing by issuing securities.

Trading of goods and services has evolved over thousands of years. Initially, barter functioned as the method of payment, and primitive as it was, it helped to achieve the basic objective of allowing exchanges of goods and services among the countries of the world. To meet the needs of the increase in international commerce, a form of international merchant banking evolved. The merchant banks opened branches and developed formal relationships with correspondent banks in other trading countries. Bills of exchanges, which are unconditional orders in writing directing the addressee to pay a third party a specific sum, became transferable. When the payee of the bill of exchange could transfer value to a third party, a new form of currency was created. This development gave the market enhanced flexibility and led to sizable increases in foreign exchange dealings. As travel became easier and faster, increased use of bank transfers further encouraged development of the markets. The market had now moved from a pure cash system to a combination of cash and credit. In the late 1800s, a cable was laid across the Atlantic, providing a great
improvement in communication between Europe and North America, and making perhaps the beginning of the global financial markets as we know them today.

During the twentieth century, the two World Wars disrupted the development of the market. Countries stopped dealing with the enemy, and market became fragmented and smaller. In the initial years after World War I, the foreign exchange markets were extremely volatile and subject to large-scale speculative interest. Commercial transactions requiring the purchase or sale of foreign currency involved considerable risk, and hedging using forward contracts became the norm. The suspension of the gold standard in 1931 combined with bank failures and problems of settlement with some currencies gave the foreign exchange markets a significant setback. It was very difficult to deal foreign exchange in the early 1930s, but as with other markets, conditions returned more or less to normalcy by the middle of the decade. London became the largest center of foreign exchange dealings in the period between the two world wars.

Britain lost much of its financial prominence during World War II. Following the war, the United States dollar became the dominant currency. Unlike the post World War I period, which witnessed wild fluctuations in currency markets, the 25 years following World War II was characterized by stabilities and light controls on currency values. The starting point for the post-World War II era actually began before the end of the War, with a United
Nations Conference held at Bretton Woods, New Hampshire. At the conference the intent was to develop a framework that would create stability, generate confidence, and thereby foster worldwide growth and prosperity. The Bretton Woods Agreement in 1944 did bring the desired stability and order to the foreign exchange markets. Exchange rates for the major trading currencies were pegged to the US dollar which, in turn, was pegged to gold at the rate of $35 per ounce. The pegged-exchange-rate system broke down in 1971, largely due to payment imbalances among countries and to the sharply increasing foreign holdings of United States dollars. After an attempt to reinstate the system in 1973, a period of primarily floating exchange rates began, which is still in effect.

As far as the stock market is concerned, because of the origin of today's stock exchanges usually was informal gatherings of merchants and others who traded securities, it is difficult to pinpoint when the first organised marketplace began operations. Beginning in 1611 merchants met in Amsterdam to trade shares in the Dutch East India Company and, thus may have formed the first stock exchange, or bourse, even though this exchange was not formally organized into the Association for Promoting Trading in Securities until 1785. The Paris Bourse was established in 1724, and in 1773 London brokers, who had been transacting business at Jonathan's (a coffee house), moved to a room in Sweeting's Alley and formally named it the Stock Exchange, the beginnings of what is today the second largest stock exchange in the world. The
Philadelphia Stock Exchange, began in 1790, was the first organised market place in the United States, followed two years later by that historic meeting on May 17, 1792, when 24 merchants agreed to meet everyday under an old buttonwood tree on Wall Street. The New York Stock Exchange (NYSE) traces its genesis to this agreement. Today, there are stock exchanges in virtually every industrial nation.

Indian Foreign Exchange Market and Stock Market

The rupee or rupiya which was introduced by Sher Shah in 1542, was a carefully minted coin weighing 175 grains of very pure silver (Taneja S.K., 1968). The rupee was historically linked to the British pound-sterling till 1946. At that time the rate of exchange of the rupee was 1 shilling 6 pence, and this rate was fixed as far back as 1927. Soon after the Second World War, the International Monetary Fund was set up and as a founding member of International Monetary Fund, India had to fix and maintain the external value of the rupee in terms of gold or the United States dollars. Initially, the Government had fixed the par value of the rupee at Rs 3.30 per United States dollars. The rupee’s link with the pound sterling, however, continued since 30 per cent of India’s foreign trade was designated in pound sterling.

The International Monetary Fund system of fixed exchange rates collapsed within a short period of 15 to 16 years. Since 1973, the pound sterling was floated by the British Government and the rupee too was floated as it continued to be linked to the pound sterling. In September 1975, the
Government of India delinked the rupee from pound sterling and directed Reserve Bank of India to determine the rate of exchange of the rupee with respect to the exchange rate movements of the basket of currencies, viz, the pound, United States dollars, Yen and Deutsche mark.

Soon after Independence, the Government of India enacted the Foreign Exchange Regulation Act, 1947 to regulate the operation of foreign controlled companies in India. The Act was amended comprehensively in 1973 and New Foreign Exchange Regulation Act, 1973 (FERA) came into force from January 1974. The major objectives of Foreign Exchange Regulation Act were the conservation of foreign exchange resources and the issue of guidelines to the foreign investors to divert their funds to the core sectors. Under Foreign Exchange Regulation Act, all transactions in foreign exchange and all transactions with non-residents were absolutely prohibited, except where specific relaxations were made. The Foreign Exchange Management Act (FEMA) was introduced in July 1998 in the Parliament to repeal Foreign Exchange Regulation Act, 1973 and simplify the law relating to foreign exchange with the objective of facilitating external trade and payments and for promoting the orderly development and maintenance of foreign exchange market in India. Under Foreign Exchange Regulation Act, the major focus is on transactions involving foreign exchange and foreign securities. Restrictions over dealings with non-residents in India have been substantially diluted.
The basket-peg system was replaced by the system of “Liberalized Exchange Rate Management” (LERM) or the Dual Exchange Rates in March 1992, which lasted till February 1993. In March 1992, the dollar replaced pound sterling as the intervention currency. During this period, both official and market determined exchange rates existed. Authorized dealers had to surrender 40 percent of all current exchange receipts to the RBI at the official exchange rate, and the remaining 60 percent could be traded at the market rate. This system was replaced by the “Unified Exchange Rate System” (UERS) or the market determined floating rate system in February 1993. During 1993 to 1998, the policy stance of ensuring orderly market condition and allowing the exchange rate to reflect the macro economic fundamentals has been subjected to altering phase of exchange market pressure, requiring the RBI to ‘lean against the wind’ against the speculative attacks and also to ‘lean with the wind,’ in order to ensure soft landing to exchange rate in the phase of perceived need for correcting overvaluation (Patra and Pattnaik, 1998).

The first organized stock exchange in India was established in Bombay when the Native Share Stock Brokers’ Association - known as the Bombay Stock Exchange - was formed by the brokers in Bombay in 1875. The stock exchanges of Calcutta and Chennai were started in 1908 and the Delhi stock exchange in 1947. The Second World War saw great speculative activity in the country and the number of stock exchanges rose from 7 in 1939 to 21 in 1947. In addition to these organized exchanges, there were a number of
unorganized and unrecognized exchanges known as kerb markets which functioned under a set of usages and conventions and did not have any set of rules which could be enforced in courts of law. Under the Securities Contract (Regulation) Act of 1956, the Government of India has so far recognized 23 stock exchanges. Bombay is the premier exchange in the country and nearly 70 per cent of all transactions in the country is done in that exchange. Bombay Stock Exchange (BSE) has been recognized permanently, while the recognition for other exchanges is renewed every five years.

Apart from the BSE, there are two others stock exchanges, in Mumbai namely, National Stock Exchange of India Ltd. (NSEI) and Over-the-Counter Exchange of India Ltd (OTCEI). Both these exchanges were set up in 1992, and they have certain unique features. The National Stock Exchange has a fully automated, electronic, screen-based trading system. It is sponsored by the Industrial Development Bank of India (IDBI) and co-sponsored by other term-lending institutions, Life Insurance Corporation (LIC), General Insurance Corporation (GIC), other insurance companies, commercial banks, and other financial institutions. The main objectives are ((Machiraju, 2002):

(i) to provide nationwide equal access and fair, efficient, completely transparent securities trading system to investors by using suitable communication network,

(ii) to provide shorter settlement cycles and book entry settlement system,
(iii) to bring the Indian stock market in line with international markets, and

(iv) to promote the secondary market in debt instruments such as government and corporate bonds.

Over-the-Counters Exchange of India was the first stock exchange in India to introduce screen-based automated ringless trading system. It is promoted by Unit Trust of India (UTI), Industrial Credit and Investment Corporation of India (ICICI), Industrial Development Bank of India (IDBI), Industrial Financial Corporation of India (IFCI), Life Insurance Corporation (LIC), General Insurance Corporation (GIC), State Bank of India (SBI) Caps and Canara Bank as a company under section 25 of The Companies Act 1956. The important objectives are (Machiraju, 2002):

(i) to help companies to raise capital from the market at the cheapest costs and on optimal terms,

(ii) to help investors to access capital market safely and conveniently,

(iii) to cater to the needs of the companies which cannot be listed on other official exchanges, and

(iv) to eliminate the problems of illiquid securities, delayed settlement, and unfair prices faced by the investors.

To regulate capital market, the Government of India set up the Securities and Exchanges Board of India (SEBI) in 1988. Initially, the Securities and Exchange Board of India was set up as a nonstatuatory body,
but in January 1992 it was made a statutory body. The Securities and Exchange Board of India has started the process of registration of intermediaries, such as the stock brokers and sub-brokers under the provisions of the Securities and Stock Exchange Board Act, 1992. Since 1992, it has constantly reviewed the traditional trading systems in Indian Stock Exchanges. It is simplifying procedures and prices at which consumers’ orders are executed, speeding up clearing and settlement, and finally transfer of shares in the names of buyers. To invest in the Indian capital market, the Government has allowed foreign institutional investors (FIIs) such as pension funds, mutual funds, investment trusts, asset and portfolio management companies etc. Till January 1995, as many as 286 Foreign Institutional Investments have been registered with Securities and Exchange Board of India - they were only 10 in January 1993 and 136 in January 1994. The cumulative net investments of foreign institutional investors have increased from $ 200 million in January 1993 to $ 3 billion in January 1995 and $ 11 billion in January 2004, showing the economic liberalization policy of the country and to some extent, the prevalence of low rates of interest abroad (Datt and Sundharam, 2004). The Government of India has now permitted joint venture stock broking companies to have non-Indian citizens on their Board of Directors. In addition to that, to prevent excessive speculation and volatility in the stock market, SEBI has introduced rolling settlements from July 2, 2001 under which settlement has to be made every day.
The above discussion shows the historical background of both the foreign exchange market and the stock market. The functions of the foreign exchange market and the stock market can be briefly as follows.

The foreign exchange market is by far the largest and most liquid market in the world. The estimated world-wide amount of foreign exchange transactions is around $1.5 trillion a day. It has been estimated that the world's most active exchange rates can change up to 18,000 times during a single day (Apte, 2002).

Unlike stock or commodity exchanges, the foreign exchange market is not an organized structure. It has no centralized meeting place and no formal requirements for participation. Nor is the foreign exchange market limited to any one country. For any currency, such as the United States dollar, foreign exchange market consists of all locations where dollar is exchanged for other national currencies.

Typical foreign exchange market functions at three levels:

(i) In transactions between commercial banks and their commercial customers, who are the ultimate demanders and suppliers of foreign exchange,

(ii) In the domestic inter-bank market conducted through brokers, and

(iii) In active trading in foreign exchange with banks overseas.

The stock markets are mainly involved in attracting new investible resources into the corporate sector and their allocation among alternative uses
and users. How fast the corporate industrial sector grows depends very much on the inflow of resources into it, apart from its own internal savings. The stock markets by enabling the convertibility of ownerships in the product market into financial assets, namely shares, bring together buyers and sellers of fractional ownership of companies. It enables companies to raise essential long-term financing by issuing securities (Raghunathan, 2001).

The primary functions of the stock market are:

(i) To enable companies to raise essential long-term financing by issuing securities, and

(ii) To provide a market in which these securities can be valued and easily traded.

Thus, the stock markets and the foreign exchange markets are playing a very important role as far as an economy is concerned. In this context, it is worth while to mention the fact that the utility or usefulness of these markets will increase if they are integrated and excess prices are transmitted automatically between the markets. Therefore, an examination of the validity of market integration hypothesis and inter-relationship between these two markets are important.

**Problem Stating**

There are different ways of defining "financial market integration" in the literature. To achieve financial market integration in the broader sense, it
will suffice if all the conditions for the undisrupted execution of financial market transactions and for the functioning of market are fulfilled. This definition includes all institutional factors such as the regulations of the domestic financial sectors, the existence of capital controls, accounting regulations or tax systems, and legal restrictions. However, uniform standards and the absence of artificial barriers alone are not enough to guarantee actual integration. Even in the largely liberalized environment, country specific risks and other factors can cause a lasting segmentation of financial markets (Herrmann and Jochem, 2003).

The pre-condition for market integration is the existence of an efficient or least segmented market. A market is said to be efficient if the current prices fully and instantaneously reflects all available information. If market is efficient, the current price would immediately ‘jump’, in view of the changes in expectations as new information arrives; if it did not, excess profit opportunities would arise.

A financial market is said to be efficient, if current prices of the market reflect all available relevant information. A stock market is efficient when security prices reflect all available public information about the economy, financial markets, and the specific company involved. The implication is that market prices of individual securities adjust very rapidly to new information. As a result, security prices are said to fluctuate randomly about their "intrinsic" value. The more the market participants and the more rapid the
release of information, the more efficient a market should be (Van Horne and Wanchowics Jr, 2001).

Similar to stock market, foreign currencies are also heavily influenced by the expectations regarding future price movements. Any new pertinent information alters trader's views regarding future course of prices, and is immediately reflected in the current prices.

Integration is also a process by which markets become open and unified so that participants in one market have an unimpeded access to other markets. Integrated financial markets would imply that, in the absence of administrative and informational barriers, risk adjusted returns on assets of the same tenor in each segment of the market should be comparable to one another.

On the other hand, if markets are inefficient, information regarding one market will not disseminate to the other market. Among such markets, market integration is not possible. During the absence of market integration, arbitragers can make use of the imperfections in the market and can make huge profit. This will adversely affect the interests of small investors and institutions. In this context, one of the issues of the present study is that how far stock market and foreign exchange market are integrated?

Now, if both the markets are efficient, information of one market may disseminate to the other market. It implies that information of stock market will disseminate to the foreign exchange market, and the information regarding the foreign exchange market will spread to the stock market also. In
this context, an examination of the theoretical debate pertaining to the inter-relationship between the stock market and the foreign exchange market will be immensely useful to identify the course of the study.

There are certain theoretical arguments for the interlinkages between stock prices and the foreign exchange rates. The important ones among them are ‘goods market approach’ (Dornbusch and Fisher, 1980) explaining the possible impact of exchange rate on stock prices. There are various exchange rate risk exposures such as transactions exposure, economic exposure, and translation exposure. These are showing different ways by which foreign exchange rate is causing a risk factor to the corporates. On the other hand the ‘portfolio balance approach’ (Branson et al, 1977) gives an account of the impact of stock prices on the foreign exchange rates.

The ‘goods market approaches’ show that when many companies borrow in foreign exchange for their operations, variations in exchange rates have an impact on the cost of funds and value of earnings. This in turn will affect the share prices. A depreciation of local currency will make goods cheap to the foreigners, and the foreign demand for goods will increase. This will push the share prices of the exporting firms upward. The opposite case will happen when an appreciation of the local currency takes place. This will lead to a depreciation of the value of the exporting firms and thus the share prices will decrease. The sensitivity of an exporting firm to a change in exchange rate is just opposite to that of an importing firm.
A firm can be affected by transactions exposure. This refers to a potential gain or loss arising from business transactions that are planned, are currently in progress or have already been completed. The transactions exposure involves the gain or loss that occurs when settling a specific foreign transaction.

The economic exposure gives thrust to the competitiveness of the firms. If another firm can sell the same product in the same market for a considerably less price, then the existing firms would be in trouble. A real change in the currency exchange rate may enable a competitor to do so (Adler and Barnard, 1984).

The firms can be affected by translation exposure also. Translation exposure comes out of the fluctuations in the value in the home currency of overseas assets and liabilities for one balance sheet date to the next. The value in the reporting currency of the firm is measured by using the rate of exchange at the balance sheet date. Therefore, even though the net worth of the subsidiary remained unchanged between balance sheet dates when denominated in the currency of the subsidiary, there would be a translation gain or loss in the reporting currency of the consolidated accounts.

The linkage in reverse direction can be justified by ‘portfolio balance approaches’ under the exchange rate to be determined by market mechanism. A booming stock market may attract capital inflows from foreign investors. This will lead to an increase in the demand for a country’s currency, and so the
local currency will appreciate. The reverse would happen in case the of a falling stock market, where the investors would try to sell their stocks to avoid further losses and would convert their money into foreign currency to take out of the country. On the basis of the above theoretical arguments, another issue of the present study is that if foreign exchange and stock markets are integrated, how far both the markets are inter-related with special reference to India?

Some of the studies like Solnik (1987) and Smith (1992) have reported a significant positive relationship between the stock prices and the exchange rates, while other studies such as Eur and Rensik (1988) have found a significant negative relationship. At the same time, studies like Franck and Young (1972) have revealed very weak association between stock prices and the exchange rates.

In addition to the above studies, some other studies examined the causation between the stock prices and the exchange rates. When studies such as Morley and Pentecost (1998) have reported causation from exchange rates to stock prices, other studies have found causation from stock prices to exchange rates [eg: Ajayi and Mougoue (1996)]. On the other hand, Bahmani-Oskooee and Sohrabian (1992) claimed bidirectional causation between stock prices and exchange rates in the short run.

From the methodological point of view, the majority of the studies were on the basis of one directional analysis, by employing ordinary least squares (OLS) and generalized least squares (GLS) methods. Besides, these methods are not suitable to examine the inter-linkages between stock market and foreign exchange market. This is because, the analysis based on these methods would be uni-directional. Therefore, they cannot substantiate the integration and interlinkages between the markets. Only very few studies have examined the market integration and interlinkages between the stock prices and the exchange rates. Not only that, for the above purposes most of the authors have
adopted methods such as Granges Causality test. But, Granges Causality test assumes that data series are stationary in level which is highly restrictive in its assumption. When the data is non-stationary with a unit root, the cointegration techniques, developed by Engle and Granger (1987) and later by Johansen (1988), should be used to test the presence of long run and short run relationships.

In India after the introduction of liberalization and globalization in the 1990s many changes have been taken place in these two markets. In 1992, the liberalized exchange rate system introduced the convertabilities of current account and, particularly since 1997, capital account kept open for international investment, the advent of floating exchange rates, the development of 24-hour screen based global trading, the increased use of national currency outside the country, innovation in internationally traded financial products, recent spurt in the Foreign Institutional Investments (FII), and the introduction of American Depository Receipts (ADR) and Global Depositors Receipts (GDRs). These changes are likely to have an impact on the validity of market integration hypothesis and inter-relationship between the foreign exchange market and the stock market. Therefore, another issue of the present study is that how far these changes will have an impact on the validity of market integration hypothesis with reference to the foreign exchange market and the stock market, and its inter-relationship between the two.
Objectives of the Study

On the basis of the above outlined theoretical background, literature gap and the present position of Indian economy, especially after the liberalization of 1990s, the main objectives of the present study are:

i) To sketch the earlier literature pertaining to the study area and to identify the gap of the study,

ii) To examine the economic fundamentals of selected companies, industries, and BSE Sensex to enable us to understand the nature of companies and industries selected for the analysis.

iii) To identify the validity of market integration hypothesis with special reference to the stock market and the foreign exchange market in India,

iv) To investigate the inter-relationship between the foreign exchange rate and the stock prices, and

v) To suggest the policy implications of the study.

Methodology

The Augment Dickey Fuller (ADF) proposed by Dickey and Fuller (1979) and Phillips-Perron (PP) (1988) tests are employed to examine the validity of market integration hypothesis with special reference to stock market and foreign exchange market in India. These tests will reveal whether the series are stationary or not. If the data series are stationary, it shows that they are individually integrated. Then, the question is whether the combination
of two series is integrated. Therefore, analysis is carried out within a
cointegration framework for identifying the inter-relationship between the
stock market and the foreign exchange market. For this purpose, Johansen’s
bivariate cointegration procedure has been adopted. This involves three steps.
They are:

Firstly, the order of integration of the variables is tested by using the
Augmented Dickey Fuller (ADF) and the Phillips-Perron (PP) tests.

Secondly, the cointegration test developed by Johansen (1988) and
Johansen and Juselius (1990) is employed to examine the existence of
relationship between the stock market prices and the exchange rate.

As the third step, if the variables are non-stationary and are
cointegrated, a Vector Error Correction Model (VECM) is employed to
capture both the short-run dynamic and the long-run equilibrium relationships
between the stock prices and the exchange rates.

In addition to the Vector Error Correction Model (VECM), a Vector
Autoregression (VAR) is also used wherever cointegration is not evident.

Besides, a correlation matrix also has been constructed for identifying
an association between different types of causality results and company
fundamentals*.

For the exchange rate, Indian Rupee (INR)/United States Dollar (USD)
exchange rate is adopted because of the importance of dollar in international

* For details of the correlation matrix see Chapter Five.
trade. In India, most of the international transactions are carried out in United States dollar. Moreover, the United States dollar is still playing a dominant role in the world market. This is because fixing of most prices in international trade is in terms of dollar. Not only that United States dollar is the world’s major resource currency and constitutes substantial portion of world foreign exchange reserves also. Due to the dominant role of United States dollar, rupee dollar exchange rate is considered for the analysis.

The number of firms adopted for the study is limited by their foreign exchange transactions and the period of the study. This is because of the idea that firms with substantial amount of foreign exchange rate exposure may be affected by the exchange rate fluctuations. Hence, analysis has been carried out with reference to 53 firms, 7 industries such as Health Care, Auto, Metal, Capital Goods, Oil and Gas, Frequently Moving Consumer Goods (FMCG) and Information Technology, and the BSE Sensex. These firms are selected on the basis of having more than 20 per cents of the total sales as foreign exchange transactions. Besides, these firms are taken from 7 industry backgrounds for the purpose of comparing firm level studies with that of the industry level. The BSE Sensex is adopted for a macro analysis of the problem, and for a meaningful comparison with that of the firm and the industry level analysis.

*List of firms and industries are presented in Appendix 1.1*
Data Source

The data on stock prices of 53 firms, 7 industry indices, and BSE Sensex are collected from the PROWESS online industry database maintained by the Centre for Monitoring Indian Economy (CMIE). The information is collected on the basis of daily data series, which covers the period from 1 January 1992 to 31 December 2004. All these 53 firms have been selected from the BSE 200, based on their foreign exchange transactions. The data pertaining to seven different industries are collected from the BSE industry indices. For the exchange rate, bilateral Indian Rupee (INR)/United States Dollar (USD) exchange rate is taken from the Pacific Basin Exchange rate Services maintained by the Columbia University, USA, and the OANDA database, USA. These two are online database provided by the respective sources.

Scheme of the Study

The present study consists of six chapters and it is presented below.

The first chapter introduces the problem, objectives, methodology and scheme of the study.

Earlier literature pertaining to the study area and the gap of the study are presented in the second chapter.

Critical evaluation of various theoretical models dealing with market integration hypothesis and inter-relationship between the stock prices and the foreign exchange rates are presented in chapter three.
Fourth chapter presents an account of the profile of various companies, industries, and BSE Sensex considered for the study.

Fifth chapter empirically examines the validity of market integration hypothesis and interlinkages between the stock prices and the foreign exchange rates at the firms and the industry levels. The market level analysis is also carried out by using the BSE Sensex.

Summary, conclusions and policy implications of the study are presented in Chapter six.