Global Capital Flows and the Indian Stock Market

A Report prepared under the

Indo-Dutch Programme on Alternatives in Development

Project Directors

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Preface

The increased magnitude and the change in composition of international capital flows during the 'nineties have important implications for the global economic system in general and for the developing countries in particular. In view of the importance of the subject, the Economic and Social Institute (ESI), Free University, Amsterdam and the Institute for Studies in Industrial Development (ISID), New Delhi took up the project "Global Capital Flows and the Indian Stock Market" with the support of the Indo-Dutch Programme on Alternatives in Development (IDPAD). A number of discussion papers were prepared under the project. These studies brought out several observations of policy significance. Eight of the core papers are included in this report. These papers were discussed in two Workshops held in New Delhi (April 5-6, 1999) and Amsterdam (September 30, 1999). Further, the papers have been circulated widely among scholars, administrators, policy makers and practitioners in India and the Netherlands.

During the course of the project, a number of scholars, officials and organisations have extended their support in various ways. Originally, Mr. Sameer Goyal was to be the principal researcher for the project but due to delays in the initiation of the project, he could not be associated with the project. He, however, maintained his interest in the subject and continued to lend a helping hand. A number of functionaries of the Ministry of Finance, Reserve Bank of India, Securities and Exchange Board of India and the Bombay Stock Exchange shared with us their views and insights. The participating researchers also benefited from the observations and critical remarks of the participants of the two Workshops. We are thankful to all of these individuals and institutions.

Dr. Jan ter Wengel of ESI and Professor K.S. Chalapati Rao of ISID are the principal researchers of this project. Dr. M.R. Murthy, Dr. K.V.K. Ranganathan and Mr. Bhupesh Garg of ISID were also closely associated with the project. A number of other researchers worked at various stages of the project and deserve a mention. These scholars are Dr. Sandip Sarkar, Mr. K.R. Tripathi and Mr. B.P. Sarkar. Mr. Umesh Kumar Singh and Ms. Usha Joshi of ISID were responsible for data entry and text processing as also for final formatting of the report.

We also acknowledge the support extended by IDPAD personnel especially Dr. R Burman Chandra and Dr. Shrikant Khandewale of ICSSR and Mr. Mark Verhagen of IDPAD. Thanks are also due to the secretariats of ESI and ISID headed respectively by Ms. Ria de Swart-van Doornewaard and Mr. Yash Pal Yadav for providing the administrative support.

The project has been conducted in a spirit of cooperation and understanding essential for an international project. We hope the cordial relationship between the participating institutions and scholars will continue.

November 29, 1999

S.K. Goyal, ISID
Hans Visser, VU
(Project Directors)

CONTENTS

Preface

Chapter 1 Introduction

Chapter 2 Stock Markets and International Capital Flows
- Hans Visser and Jan ter Wengel

Chapter 3 Financial Crises, International Banking and the IMF
- Jan ter Wengel, Hans Visser and K.S. Chalapati Rao

Chapter 4 Stock Market Prices, the Exchange Rate, Technical Trading and the Boom Bust Cycle of the Emerging Market Countries
- Jan ter Wengel, Ben Vogelvang and Hans Visser

Chapter 5 Stock Market Returns, the CAPM and Individual Firm Characteristics in the Mexican Crisis
- Jan ter Wengel

Chapter 6 Indian Stock Market in the Post-liberalisation Period: Some Insights
- K.S. Chalapati Rao, M.R. Murthy and K.V.K. Ranganathan

Chapter 7 Foreign Institutional Investments and the Indian Stock Market
- K.S. Chalapati Rao, K.V.K. Ranganathan and M.R. Murthy

Chapter 8 An Overview of FDI in the Post-liberalisation Period in India with Emphasis on Implications for Stock Market
- K.S. Chalapati Rao, M.R. Murthy and K.V.K. Ranganathan

Chapter 9 Indian Company Law and Protection of Shareholders' Interest
- K.S. Chalapati Rao, K.V.K. Ranganathan and M.R. Murthy

Chapter 10 Summary and Conclusions

Chapter 1

Introduction

Foreign capital has often played a key role in development. That is true of the present day developed countries as well as the current developing ones. It is important because of the relative absence of institutions for resource mobilisation and the need to meet the foreign exchange component of developmental expenditures. Over time, the composition of global capital flows has undergone extensive changes. The substantial increase in capital flows to the developing countries during the 'nineties was entirely due to the sharp rise in the flows under private account as the official development assistance declined in relative and absolute terms. These flows on private account are mainly in the form of foreign direct investment (FDI) and portfolio investment (FPI) in the emerging stock markets of the developing countries. Among these two, portfolio capital flows increased at a faster rate than direct investments. This study aims to analyse the capital flows to developing countries on private account especially portfolio capital and its interface with the stock markets. The Mexican crisis of December 1994 and the East Asian crisis of 1997 enhanced the context in which the project was conceived.

Moreover, there are theoretical and empirical arguments for the proposition that financial development is important to economic development. The services provided by the financial system enable an economy to introduce new technologies. Financial development not only makes possible a higher level of productivity, but also a higher growth rate. It has typically been difficult for countries to start a development process because they were stuck in a situation where new technologies required sizeable investments and investors were not willing to put their money in such projects without the opportunity to diversify risks. Business firms have several options as regards financing. External finance can be obtained from the informal financial market, organised or formal financial markets and financial intermediaries. The stock market presents itself as a substitute for borrowing from financial intermediaries, especially the banks. What one is concerned with are the relative advantages of stock markets vis-à-vis other sources of business finance and whether they do a better job in the area of corporate governance than banks, especially in less

developed countries. This aspect assumes greater significance in the context of increasing capital flows and the associated periodic crises in these countries.

The report contains eight chapters which are closely related to the central theme of the project. The chapter "Stock Markets and International Capital Flows" provides a theoretical framework of the project. It reviews the role of stock markets and banks in providing finance and influencing corporate managements on the one hand and the role of global capital flows in development of the stock markets, on the other. Stock markets facilitate enterprises to raise resources from investors and for the investors they offer liquidity. Enterprises with a poor performance, as reflected in their periodic reports on financial performance and stock prices, become vulnerable to hostile take-overs The managements of the stock market quoted corporations are constantly under pressure to demonstrate good results. This leads to better utilisation of capital resources and encourages management to contribute their best to the country's process of economic development.

Stock markets are not the main sources of finance for business enterprises in industrially advanced economies. The capital market plays an important role as a corporate monitoring institution. In most of the developing countries, capital markets are not yet fully developed. Their growth, however, is gaining momentum. Monitoring and disciplining by the stock market can only work if information on firms is extensive and reliable and stock pricing is based on the long-term expectations of well-informed market participants. In emerging markets these conditions generally do not prevail. Often, trading on the stock markets is concentrated in a few hands and it is confined to a few stocks. There are extremely inadequate accounting standards and investor protection laws. These conditions are a serious constraint on speedy and proper development of stock markets.

Financial liberalisation includes liberalisation of domestic financial markets and liberalisation of global capital flows. In principle, allowing financial capital to flow so as to find the best risk-return profile would result in an optimal allocation of global capital and thus to the highest global growth. Seen from the point of view of the host country, financial liberalisation can imply higher price-earning ratios of equity and lower capital costs for investing enterprises with the possibility of higher investment. Foreign portfolio investments may deepen the capital market and contribute to greater stability, especially in case of investments made by foreign portfolio investors that specialise in emerging markets. In order to attract foreign

investors, enterprises have to raise their accounting and reporting standards, which would help improve functioning of the capital market.

Free global capital flows are not an unmixed blessing. A potential problem in permitting unrestricted capital flows is the increased volatility in share prices. Share prices are driven up if investors engage in a 'speculative bubble' because there are expectations of a bullish market, not because of basic fundamentals of the economy or the enterprise. Share prices could also be volatile if the participants' perception of the market fundamentals changes relatively quickly. Dangers from large international capital flows also include vulnerability of the emerging market economies to sudden reversals in the flows from host countries. The next chapter, "Financial Crises, International Banking and the IMF," reviews the risks from the sudden discontinuation or reversal of the capital flows associated with international banking loans. In most financial crises attention gets drawn to domestic factors. The policy recommendations by multilateral bodies often limit their proposals to fiscal, monetary, labour and foreign trade policy to the neglect of international financial relations which are often the cause of the crisis. The chapter examines the Mexico and Korea crises and seeks to explain the 1991 Indian crisis in the context of this experience.

Global capital flows have the potential to lead to the macroeconomic destabilisation of the recipient countries. The purpose of the chapter "Stock Market Prices, The Exchange Rate, Technical Trading and the Boom Bust Cycle of the Emerging Market Countries" is to investigate under what circumstances capital flows might be destabilising and to examine whether capital flows to Mexico might be shown to have had a perverse effect. The evidence suggests the overshooting of capital inflows and the development of unsustainable current account deficits followed by abrupt devaluations or the adoption of stringent deflationary measures to restore equilibrium. The experience of Mexico does not support the expectation of rapidly equilibrating markets and market efficiency.

This chapter develops and tests a model to explain portfolio capital flows and their effect on stock prices and the exchange rate in the context of investment decisions based primarily on technical analysis. A technical analysis trading strategy can, in brief, be defined as an approach to investments that relies on the forecasting of prices on the basis of historical price trends and the changes in these trends. The general idea is to study price movements on the stock exchanges and anticipate in

which direction stock prices will move in the short run. The assumption of 'technical trading' appears to be reasonable in view of the accumulating evidence suggesting this phenomenon. In the past few years there has been an increased interest in technical analysis as major business journals such as The Economist and Business Week have documented the fact that money managers have come to rely increasingly on the services of 'technicians' rather than economists to design their strategies for stock, currency and commodity markets. In this chapter a model is designed that captures the feedback process between stock market prices and capital flows. The model consists of two parts. The first establishes the effect that capital inflows have on stock market prices. The second specifies the technical mechanism whereby rising equity prices and currency overvaluation encourage further capital inflows.

To judge the usefulness of the 'technical trading' model its performance is judged against a simple efficient markets model.

Global capital flows can lead to an overvaluation of the exchange rate, increased imports, reduced exports and an eventual devaluation. Investors in developing countries are faced with the questions (i) whether investment in equities can serve as an adequate hedge against devaluation and (ii) which types of stock could provide a better hedge against devaluation. These are important questions for policy makers seeking to strengthen the financial sector. The purpose of the chapter "Stock Market Returns, the CAPM and Individual Firm Characteristics in the Mexican Crisis" is to examine whether some stocks perform better than others in the event of devaluation. Further, if stocks with specific characteristics make a better hedge against devaluation, it would be relevant to examine if the Capital Asset Pricing Model (CAPM) incorporates these risk/return characteristics in the valuation of the stocks. This study employs a number of firm-specific characteristics such as exports, imports, foreign indebtedness, bank debt and industry category in the estimation of the CAPM model.

Stock markets function in the country's social, economic and political environment. A critical factor in this context is the content and seriousness of the regulatory system. Much depends on the manner in which the regulations are administered and how far are these honoured. In the context of the weaknesses of stock markets in less developed countries and the expectations from global capital flows, the remaining chapters present the Indian stock market's response to liberalisation.

Stock market development in India was aided by public policy in the form of the promotion of joint sector enterprises, the direct and indirect influence of the development financial institutions, both at the central and state levels, the establishment of Unit Trust of India and the nationalisation of the insurance business. Besides being major investors on the stock market, these institutions facilitated the raising of capital by companies from the public through underwriting operations. The industrial licensing system, the close involvement of public financial institutions and the Capital Issues Control Act, 1947 (CICA) meant a high degree of assurance to the investors of the viability of the projects on the one hand and of lesser scope for unscrupulous elements to indulge in malpractices on the stock market at the entry stage on the other. Further, equity dilution under the Foreign Exchange Regulation Act, 1973 (FERA) gave a boost to the market as many long-established profit-making subsidiaries of foreign companies offered shares to the Indian public. The regulatory system, in spite of its weakness on a number of counts, prevented major upheavals in the stock market. The policies for liberalising the stock market during the mid-eighties, however, led to a mushroom growth of the listed companies. A good number of these had doubtful origin.

While the structural adjustment programme (SAP) was initiated in India in the early 'eighties, the pursuance of SAP policies received the real thrust in 1991. Through quick and successive measures the industrial regulatory system was dismantled with the expectation that it would enable Indian and foreign private sectors to invest in a sizeable manner. Specifically, it was envisaged that the development of the stock market would enable the corporate sector to raise resources directly from the market on an increasing scale as well as help attract a significant amount of foreign capital.

Stock market development in developing countries helps private corporations meet their financial requirements. Did the Indian stock market respond to the liberalisation process and enabled companies to raise large financial resources? Did the financing pattern of companies change during the post-liberalisation period? Has the stock trading pattern in India changed to provide higher liquidity to investors? The chapter "Indian Stock Market in the Post-liberalisation Period: Some Insights", seeks to address these and related questions. It makes a detailed analysis of market turnover and share price movements at a leading stock exchange of India. Share price indices are constructed taking a comparatively large set of companies to

identify long term price trends at industry and company category levels. The price indices cover the period 1994 to early 1999. When combined with an earlier exercise for the period 1991 to 1993, these indices make possible the examination of the changes in the post-liberalisation period.

While the expectations with respect to the benefits from global capital flows through the stock market were high, as enumerated in the first chapter, empirical evidence on their actual impact is somewhat limited. There is also the need to ascertain the distortions that might be introduced by foreign portfolio investors due to the pressure on them to secure capital gains. Besides allowing foreign institutional investors (FIIs) to trade directly on its stock markets, India permitted its companies to raise capital abroad in the form of Global Depository Receipts. How do these two sources of capital flows compare in India's case? What has been the influence of global capital flows on the Indian stock market? While addressing these questions, the chapter "Foreign Institutional Investments and the Indian Stock Market" seeks to relate the pattern of investment of the FIIs to the trading patterns and share price movements in the Indian stock market identified in the preceding chapter. Deviating from the usual practice of relating FII investments to share prices, it is sought to analyse the investment portfolios of five India-specific US-based investment funds as it provides a more direct way of relating the behaviour of FIIs to stock prices.

While there is considerable discussion on the effects of portfolio capital flows on developing country stock markets, the role of FDI in these same markets has received little attention. In India, stock markets received a boost when most foreign affiliates and subsidiaries got listed on the stock exchanges. FERA required the foreign subsidiaries and branches to limit foreign equity holdings to 40 per cent. The equity dilution by the existing FERA companies was carried out through the stock market during the late 1970s and early 1980s. With the entry of long established affiliates of transnational corporations (TNCs) to the capital market, the stock market expanded in a significant manner. As the restrictions on foreign shares were eased in the post-liberalisation period, it is relevant to examine the impact of the relaxation of entry restrictions for new FDI companies on the Indian stock market. The chapter "An Overview of FDI in the Post-liberalisation Period in India with Emphasis on Implications for the Stock Market" seeks to throw light on these aspects. It also provides the broad characteristics of the FDI approvals.

A process of extensive review of Company law which plays a crucial role in corporate governance was initiated soon after changes in a number of other economic legislations were effected. The process of framing a new company law, however, has stalled. Nonetheless, the government introduced a number of significant changes in the Companies Act, 1956 as interim measures. It is well known that managements of most Indian large companies rely on the support of the public financial institutions (FIs) to retain their hold on their companies. In the new regime, controlling interests have started increasing their stakes in these corporations to face take-over threats and possible changes in FIs' perception of their role. This could lead to changes in the shareholding pattern of the large corporate sector. In the smaller companies, however, one would expect larger stakes by the controlling interests. The next chapter "Indian Company Law and Protection of Shareholders' Interest" seeks to study whether the emerging shareholding pattern promotes monitoring by investors and whether the changes in company law are in line with enhancing such a possibility.

The present report empirically examines a variety of issues and assumptions relating to stock market development in emerging economies and the role of global capital flows in this process. This is an area of major policy concern. It is expected that the studies presented here would improve understanding of the issues involved and aid better policy formulation.

Chapter 2

Stock Markets and International Capital Flows

A prominent characteristic of the world economic scene over the past few decades has been the rising tide of financial liberalisation. Many members of the formerly amorphous group of what were called 'less-developed countries' have opened up their financial markets along with their goods markets and now proudly carry the much more positive sounding 'emerging markets' moniker. Huge financial flows cross the world, flows which are increasingly beyond the control of national monetary authorities. Western investors have discovered the stock exchanges of these emerging markets and have rosy dreams of double digit capital gains year after year. However, the international capital flows have proved to be something of a mixed blessing. They may bring in much-needed foreign exchange, but they also carry the danger of real-exchange rate overvaluation, followed by foreign exchange crises. For another thing, they are rather volatile.

Our research aims at assessing the contribution that the opening up of stock markets in emerging markets to foreign investors can make to the economic develop-

Table 2.1
Aggregate net long-term resource flows to developing countries, 1990-95.

Type of flow	1990	1991	1992	1993	1994	1995
Aggregate net resource flows	101.9	127.1	155.3	207.2	207.4	231.3
Official development finance	57.9	65.5	55.0	53.0	48.6	64.2
Total private flows	44.0	61.6	100.3	154.2	158.8	167.1
Private debt flows	15.3	19.0	39.6	40.3	43.8	54.8
Commercial banks	1.7	2.5	13.8	- 4.9	9.2	17.1
Bonds	3.0	12.8	13.2	38.3	32.2	33.7
Others	10.6	3.7	12.6	6.9	2.4	4.0
Foreign direct investment	25.0	35.0	46.6	68.3	80.1	90.3
Portfolio equity flows	3.7	7.6	14.1	45.6	34.9	22.0

Source: World Debt Tables 1996, Vol. 1, Washington: World Bank 1996.
Figures for 1995 are provisional in billions of US dollars

ment of the country in question, with special reference to India. To this end, in Section I we first review the literature on the relationship between financial

development and economic development, paying special attention to stock markets. In Section II we discuss the internationalisation of capital markets and in Section III the measures that a country can take to get the best advantage from international portfolio investment.

Section I
Financial Development and Economic Development

The Contribution of Financial Development to Economic Development

At a high level of abstraction, economic theory has difficulty in finding a place for financial magnitudes. This is probably because it is difficult to find a place for financial instruments in the microeconomic general-equilibrium models that implicitly or explicitly underlie much economic theorising. With full information on every agent's demand and supply schedules and frictionless markets there is no need for money. The Walrasian auctioneer is in control, and he is not easy to get rid of (cf Visser 1991 Ch. 4). For another thing, such models do not easily describe economic development processes. True, financial instruments may figure in Arrow-Debreu models, the multi-period version of the Walrasian model, but they only serve to uncouple the time path of expenditure from the time path of income. Models in which financial instruments allow new production technologies to be introduced are thin on the ground. Even aggregated (macro-economic) general equilibrium models with a financial sector do not allow for an influence of financial factors on the production function (cf the recent model by Montiel, Agénor and Ul Haque, 1993 Ch. 4), let alone microeconomic general equilibrium models, where the technical difficulties of introducing such an influence must be even higher (cf Morishima 1991, who notes the virtual absence of entrepreneurs and bankers in general equilibrium theory; and Pesendorfer 1995 who introduces financial innovations but does not link these to the real sector of the economy, see for a further discussion Visser 1995b).

On a lower level of abstraction, however, much attention has been paid to the contribution that financial markets and financial instruments can make to economic development, at least since Schumpeter's 1911 classic *The Theory of Economic Development*. Schumpeter devotes a whole chapter to the role of financial instruments in "enabling the entrepreneur to withdraw the producers' goods which he needs from their previous employments, by exercising a demand for them, and thereby to force the economic system into new channels" (Schumpeter 1961 Ch. III, in particular

p. 106). At the time of writing it was, according to Schumpeter, pure heresy not to see financial transactions as mere "reflexes of processes in terms of goods" (Schumpeter 1961 p. 95).

Empirical research on the relationship between financial development and economic development seriously started in the late 1960s with R.W. Goldsmith's epoch-making *Financial Structures and Development* (Goldsmith 1969) and the country studies by Cameron and his associates (Cameron et al. 1967; Cameron, ed., 1972). Goldsmith's study contains a wealth of empirical information on 35 countries over a period stretching back to 1861. Without being able to establish a causal relationship, Goldsmith showed convincingly that in the course of a country's economic development the financial interrelations ratio - the quotient of the aggregate market value of all financial instruments to the value of a country's tangible net national wealth - tends to increase. The case studies by Cameron and his associates are of a narrower scope, concentrating as they do on the role of banking, but their findings point in the same direction.

New impulses to the theoretical underpinnings of the importance of financial development for economic development were given in 1973 by McKinnon (1973) and Shaw (1973). In the same vein as Schumpeter, they emphasised the importance of financial development for the financing of investments embodying new technologies. The studies by McKinnon and Shaw were followed by a barrage of research (see for an authoritative survey Fry 1988). A particularly wide-ranging theoretical and empirical study was done by King and Levine (1993a, 1993b). They distinguish between four services of the financial system (King and Levine 1993b p. 516):

(i) The evaluation of investment projects, in order to identify promising ones.
(ii) The pooling of funds.
(iii) The provision of a means to diversify risks.
(iv) The valuing of expected profits from innovative activities.

The first three services are provided by financial intermediaries, whereas the fourth service is the province of stock markets, which of course also perform the second and third functions. Both financial intermediaries and stock markets perform an additional function, sc. providing liquidity to wealth owners (Pagano 1993 p. 616). It is much easier and cheaper to dispose of financial assets than to dispose of real assets.

The services provided by the financial system enable an economy to introduce new technologies, as both Schumpeter and McKinnon pointed out. People

such as King and Levine stress that financial development not only makes possible a higher level of productivity, but also a higher growth rate (see also Pagano 1993). On the side of the demand for investment funds, the pooling of funds make large-scale investments possible. On the side of the supply of funds, the opportunity to diversify risks, the provision of liquidity and the better risk-return profile provided by the evaluation and valuing functions of the financial system make for a shift of funds supplied to higher-return investments (cf on stock markets also Levine 1991). Indeed, Acemoglu and Zilibotti (1997) found that it has typically been difficult for countries to start a development process because they were stuck in a situation were new technologies required sizeable investments and investors were not willing to put their money in such projects without the opportunity to diversify risks.

The savings and investments ratios in an economy may or may not change as a result of the development of the financial system. Both the provision of liquidity by the financial system and the availability of consumer credit and mortgage credit may well depress savings rates. Still, the financial system must be doing a very poor job if the average rate of return to investments does not rise. Apart from the fact that more risky, but potentially more productive projects can be financed, growth may increase as a result of investment in human capital made possible by the financial system.

The very extensive empirical research by King and Levine, using data for about 80 countries for the 1960-1989 period, points to a strong correlation between financial development and economic growth. If this in itself says little about causality, their finding that a relatively high level of financial development is a good predictor of future economic growth (10 to 30 years) certainly does (King and Levine 1993b p. 730-733). They also found a very strong association between growth and various indicators of financial development which in their view are predictable or even predetermined, so that causation runs +from these variables to growth:

- the ratio of liquid liabilities to GDP, as an indicator of financial depth;
- the ratio of deposit bank domestic credit divided by deposit bank domestic credit plus central bank domestic credit, as an indicator of the relative importance of banks as opposed to central banks;
- the ratio of claims on the non-financial private sector to domestic credit;
- the ratio of gross claims on the private sector to GDP (King and Levine 1993a p. 533).

It was also found, bij Levine and Zervos (1995, cited in Levine and Zervis 1996) that stock market liquidity (as measured by the turnover ratio, i.e., the total

value of shares traded divided by market capitalisation) is a robust predictor of long-run real per capita GDP growth.

There are thus theoretical and empirical arguments for the proposition that financial development is important to economic development. It should kept in mind, however, that conclusions drawn from cross-section studies such as those by King and Levine are a bit suspect. The averaging out involved in these studies presupposes that the various economies follow a similar and stable growth path with similar patterns of causality (Arestis and Demetriades 1997). This is not warranted, as is shown in a time-series study by Demetriades and Hussein (1996). As for the various claims that financial indicators are good predictors of future growth, they note that financial development indicators in any country are correlated across time, so that a correlation between financial indicators at time *t* and real growth at time *t+1* doesn't say anything about causality. Demetriades and Hussein indeed find that causality patterns are far from similar across countries. Moreover, causality generally appears to be bi-directional. This should not come as a surprise really, because it is easy to imagine that causality runs both ways, if only because income growth enables the financial institutions to set up increasingly sophisticated intermediation systems (Berthélemy and Varoudakis 1996). It seems safe to conclude that financial development in itself is not sufficient to engender economic growth (a conclusion which suggested itself already from the studies by Cameron and associates), but that to all appearances it is a necessary condition for sustained economic growth.

Business Finance and the Role of Stock Markets

In King and Levine's listing, the role of the stock market is not in the first place to help channel funds from surplus units to deficit units. Its function rather is, in their words, to reveal the expected discounted value of profits from engaging in innovative activities (King and Levine 1993b p. 516). That is, they reveal the value of firms as determined by the analysis of rational investors (King and Levine 1993a p. 520). Secondly, stock markets provide a vehicle for pooling the risks of holding claims on established firms. As noted above, they also provide liquidity to investors.

One may wonder what are the relative advantages of stock markets vis-à-vis other sources of business finance. Business firms have several options as regards financ-

Table 2.2
Gross sources of finance, 1970-1989

percentages

	Germany	Japan	UK	US
Internal	62.4	40.0	60.4	62.7
Bank finance	18.0	34.5	23.3	14.7
Bonds	0.9	3.9	2.3	12.8
New equity	2.3	3.9	7.0	-4.9
Trade credit	1.8	15.6	1.9	8.8
Other	14.6	2.1	5.2	5.9

Source: Corbett and Jenkinson 1994 p. 9.

Table 2.3
Net Sources of Finance

percentages

		Retentions	Banks	Bonds	New Equity	Trade Credit	Other
France	(1970-85)	66.3	61.5	0.7	- 0.4	- 0.7	- 20.0
Germany (FRG)	1970-89	80.6	11.0	- 0.6	0.9	- 1.9	10.0
Japan	1970-89	69.3	30.5	4.7	3.7	- 8.1	- 0.1
United Kingdom	1970-89	97.3	19.5	3.5	- 10.4	- 1.4	- 8.4
United States	1970-89	91.3	16.6	17.1	- 8.8	- 3.7	12.5
Malaysia	1986-91	61.00	34.00	-	2.0	-	3.0
South Korea	1970-79	27.60	52.50	4.75	14.75	-	-
	1980-84	36.40	37.15	12.79	13.62	-	-
	1985-89	40.20	27.66	14.35	17.63	-	-
Taiwan	1965-80	37.70	34.31	1.72	24.11	8.63	- 6.20
	1981-85	36.35	27.91	8.59	25.42	0.32	2.34
	1986-90	23.59	38.11	3.87	31.92	0.95	1.32
Thailand	1970-76	51.41	31.94	12.59	9.25	- 1.74	- 3.34
	1977-80	52.80	30.12	11.28	12.40	- 2.32	- 4.31
	1980-83	50.40	32.80	12.65	8.62	- 2.42	- 2.25

Source: Germany, Japan, UK and US Corbett and Jenkinson 1994 p. 11, others Stiglitz 1994 p. 22.

ing. The main source of funds generally is own funds, including ploughed-back profits. Own funds other than ploughed-back profits can be provided by the owner-manager and relatives, friends and acquaintances, but as a firm grows recourse is usually taken to the organised capital market where shares can be issued. Business firms also rely on borrowed funds. These can be provided through the informal financial markets, i.e. by the relatives, friends and acquaintances just mentioned and also by other firms, in particular suppliers and customers. Furthermore, funds can be borrowed from banks or, more generally, financial intermediaries, and from the organised capital market. We thus have external finance from the informal financial market, organised or formal financial markets and financial intermediaries. The stock market presents itself as a substitute for borrowing from banks. The next subsection is devoted to a discussion of the various pros and cons of stock markets and banks as sources of business finance.

Banks, Stock Markets and Disciplining

It should be emphasised that stock markets play a subordinate role in providing finance to business firms. Business firms rely to a large extent on retained earnings, which of course is internal finance, on bank credit or on venture capital firms. In the '70s and '80s, roughly 10 per cent of finance for investment in physical assets was raised from external sources in Germany, the UK and the US (Corbett and Jenkinson 1994, see Table 2.3[1] They provide figures derived from national accounts flows of funds statistics, both on a gross and on a net basis (see Tables 2.2 and 2.3; similar even if not identical figures were calculated by Borio 1990 for Japan and five Western countries). The difference is that in the net figures the accumulation of financial assets is subtracted from the change in financial liabilities. Internally generated funds are retained profits and depreciation. The negative figures for new equity in the net sources overview point to mergers and acquisitions which are not paid for by the issue of new equity.). Singh (1995) has found, however, that large corporations in developing countries during the 1980s relied heavily on external finance in general and on share issues in particular: e.g., in five out of nine countries with the relevant data, over 40 per cent of the growth of net assets was financed by

[1] Corbett and Jenkinson provide figures derived from national accounts flows of funds statistics, both on a gross and on a net basis (see Tables 2.2 and 2.3; similar even if not identical figures were calculated by Borio 1990 for Japan and five Western countries). The difference is that in the net figures the accumulation of financial assets is subtracted from the change in financial liabilities. Internally generated funds are retained profits and depreciation. The negative figures for new equity in the net sources overview point to mergers and acquisitions which are not paid for by the issue of new equity.

new share issues. This was so, according to Singh (1995, 1997), because (i) there were large privatisation programmes, with governments selling off companies (see also Mullin 1993) , (ii) share financing was relatively cheap relative to debt finance, as price-earning ratios (the ratio between the price of a share and a firms earnings per share, earnings being a firm's revenues less its expenses) had risen. Nevertheless, stock exchanges are secondary markets in the first place, providing *liquidity* to wealth owners. Liquidity means that they can sell assets in large volume at short notice without undue loss. This of course is very useful, as high liquidity makes it that much more attractive to wealth holders to hold some asset. But there is more: stock exchange valuations serve as a *disciplining mechanism*. The question arises whether they do a better job in this area of corporate governance than banks.

In big firms the ownership of the firm and its management are separated. The managers cannot always be trusted to act in the interest of the owners of the firm, i.e., to maximise the long-run net value of the firm. This moral hazard is readily apparent if we look at what has been happening over the past few years in Eastern Europe: managers of state-owned firms purchase subsidiaries of the firm at low prices on their own account and sell the services of their newly acquired business to the firm at high prices (Caprio and Levine 1994 p.5). The owners of big firms are often mere shareholders, not playing an active part in the running of the firm. They lack the means to effectively monitor the management. If we see the owners of a firm as principals, the management is the agent. Agents act on behalf of principals, but principals must be sure that the agents act in their, i.e. the principals', interest. So with the division between ownership and management there arises a principal-agent problem, which in this case of financiers as principals and managers as agents is also known as the problem of corporate governance. A moment's pause will make it clear that this problem is made up of an information problem and a moral hazard problem: financiers have to know what managers are doing with their money and they must prevent actions by managers that are not in their, the financiers, interest. The managers must, if needs, be disciplined. If no satisfactory solution is found for this principal-agent problem, wealth holders may be reluctant to invest in firms and economic growth will suffer in that case. Without sufficient monitoring and disciplining, management may become sloppy, take it easy and produce inferior products and offer clients poor service.

In a well-functioning market economy share prices give an indication of the success of a firm's management. In other words, the stock exchange fulfils the monitoring task. If the market takes a dim view of a firm's performance or its prospects, it will value its shares low relatively to the shares of other firms. The managers then have a lot to explain and if they fail to come up with a plausible and satisfactory explanation, it is curtains for them. This disciplining of the managers only works if (i) information on the firm is plentiful and reliable, and (ii) if pricing on stock markets is based on long-term expectations of well-informed actors. This is usually not the case in fledgling stock markets, but in older, established markets as well investors may be driven by short-term expectations of making a profit without having any idea of the long-term profit making ability of a firm. In the words of Keynes, "The social object of skilled investment should be to defeat the dark forces of time and ignorance which envelop our future. The actual, private object of the most skilled investment to-day is 'to beat the gun', as the Americans so well express it, to outwit the crowd, and to pass the bad, or depreciating, half-crown to the other fellow" (Keynes [1936] 1961 p. 155). Still, to the extent that stock markets develop, this kind of monitoring takes on more importance.

Financial intermediaries often are in a position to provide the monitoring that shareholders find impossible to do. Banks in particular can do useful work in this area. Being creditors, it is in their interest to make sure that interest and amortization payment are made on time. Banks will amass much information on many firms and therefore are better able than most shareholders to form a well-based opinion on how a firm is run. Their actions also serve as a sign to other financiers. If a bank fails to change the ways of a substandard management and is unable to force them out, it will pull out of the firm and the firm will have a tough job convincing other financial institutions to step in. Now it may be objected that the activity of banks only shifts the problem, but does not really solve it. After all, banks themselves are mere agents for their own principals, their shareholders and creditors. That is correct, and it is the reason for prudential supervision on banks, but for banks the stock exchange acts as a disciplining device too (again, this device cannot always be trusted to be reliable).

Apart from banks, other financial intermediaries may have such a stake in a firm that it is worth their while to spend resources on monitoring. Pension funds and insurance companies who have invested in shares of other companies, do not always

sit back and wait till the dividends become available, they may also take a more active interest in the goings of these firms.

The debate on these issues has not yet been settled. It is for example argued by some that developed capital markets, particularly stock exchanges, provide for constant monitoring of listed companies. This monitoring implies that firms showing a poor performance are threatened by hostile take-overs which could replace the current management. Managers are constantly under pressure to produce good results. Efficient use is thus made of capital resources and management skills (Feldman and Kumar 1994 p. 14). In this way the problem of moral hazard associated with asymmetric information between investors and management could be addressed effectively. On the other hand, it appears that monitoring activity by small investors is limited because of the time and resources involved. Large investors are needed for effective monitoring and disciplining (Jensen 1993 p. 867, Shleifer and Vishny 1997 p. 755). The empirical evidence is somewhat conflicting. Denis and Denis (1995) report that in the United States in 1985-1988 extended periods of poor operating performance led to the forced resignation of top managers. Large improvements of performance usually followed. On the other hand, Franks and Mayer (1996) could find little evidence of managerial failure before hostile takeovers followed by resignation of board members in the United Kingdom in 1985 and 1986. They conclude that hostile takeovers did not perform a disciplining function. Others note that disciplining through spectacular hostile takeovers and leveraged buy-outs as in the1980s tends to be replaced in the 1990s by more diplomatic action on the part of large shareholders, particularly institutional investors (Miller 1994 p. 38, Moerland 1997 p. 83). This may be as well for other stakeholders in a firm, in particular employees and suppliers, as new owners and managers after a takeover may feel free to break implicit contracts and transfer wealth from those stakeholders to themselves (Levine 1997 p. 698). Where there are no large shareholders, and monitoring by shareholders is thus weaker, boards are not quick in taking action against managers after poor performance (Shleifer and Vishny 1997 pp. 751, 755).

It has been argued that banks with extensive financial exposure to a particular firm, possibly represented in its Board of Directors, will take monitoring much more seriously than the stock market (Benston 1994 p. 129). Thakor (1993 p. 115) maintained that other shareholders consider a close involvement of banks with other firms, to the extent that they do not only provide credit but are shareholders as

well, as beneficiary. Such so-called universal banks have positive externalities because they monitor firms to the benefit of other shareholders. This well-known German/Japanese model requires large banks that are able to spread their risks even with sizeable individual investments or credits. One wonders, however, whether there is really such a difference between the involvement of banks and the involvement of large shareholders such as the institutional investors just mentioned.

Banks in different countries may act differently, partly as a result of differing legal systems. In Germany and Japan, for instance, banks tend to develop a long-term commitment and relationship with companies. They will therefore be inclined to assist the reorganisation of a company in the event of difficulties or failure. In the United Kingdom and the United States by contrast, banks do their monitoring more from a distance and tend to have a more short-term relationship. They can be expected to prefer the liquidation of troubled firms or a takeover by another firm (Mayer 1988, Hellwig 1991 p. 52, Allen 1993, Deloof 1995 p. 304). There are also arguments in favour of the Anglo-Saxon system. The privileged position of German/Japanese style universal banks with regard to access to information on a company could inhibit the levelling of the playing field between suppliers of funds. Moreover, the particular shareholding of a bank may contradict the interests of depositors. Furthermore, insider trading could become an important problem in these cases (Goodhart 1995 [1993], Benston 1994, Steinherr and Huveneers 1994, Moerland 1995 p. 250).

Stock Markets and Corporate Governance in Emerging Markets

It has been remarked that monitoring and disciplining by the stock market only work if information on firms is plentiful and reliable and if pricing on stock markets is based on long-term expectations of well-informed actors. In emerging markets these conditions often are not fulfilled. If a family concern goes public, for instance, it is quite usual for the former owners to keep a dominant share themselves and thus remain the owners for all practical purposes. Minority shareholders do not have access to the same information as the dominant shareholder and pricing on the stock exchange cannot reflect well-based expectations. Moreover, the market for the stock in question is likely to remain thin, which also impairs the pricing process. It is easy for the dominant shareholder to rob minority shareholders. The may grant themselves, for instance, high fees for consultancy services, or may sell companies

they control for low prices to other firms within their empire, or may withhold information. If government firms are partly privatised, things may go the same way.

In developed market economies banks can, as argued above, play an important role in monitoring and disciplining business firms. However, when those banks themselves are part of a bigger conglomerate this role is undermined. In that case banks could be required to serve the interest of the non-financial firms in the conglomerate as opposed to their own. Small, outside shareholders in the bank are in this way robbed by the main shareholder, as are taxpayers if such banks fail and the central bank has to come to the rescue. This was evident in Chile around 1980 and we have seen instances in the recent past in Indonesia as well (Le-Fort 1994, Wardhana 1995).

Obviously, the legal system in a country can make a difference here (cf Shleifer and Vishny 1997). Lax laws as to accounting standards, disclosure of information to minority shareholders and the right for such shareholders to call the management to account in shareholder meetings, or lax law enforcement, make it unattractive for outsiders to buy shares in a firm, either financial or non-financial. The function of banks in the allocation of investment funds and in the monitoring and disciplining of business firms likewise is dependent on legislation. Strict prudential supervision that, *inter alia*, limit the credit any bank can give to one firm or group of firms and forces them to spread their risks, is essential.

The upshot of the analysis seems to be that stock markets can fulfil a useful role in the economic development of a country, but that this role is heavily dependent on the distribution of shareownership and on the solutions found for corporate governance, in particular the protection of the right of minority shareowners.

Section II
The Internationalization of Capital Markets

Capital Market Integration: The Phenomenon, the Implications

The last two decades or so we have been witnessing an increasing liberalisation of financial markets, leading to highly integrated international capital markets. If we speak about integrated capital markets, we need a criterion for the degree of integration. The discussion on these criteria was sparked off by Feldstein

and Horioka (1980). Feldstein and Horioka posit that in the case of perfect capital mobility domestic saving and domestic investment should not be correlated: "saving in each country responds to the worldwide opportunities for investment while investment in that country is financed by the worldwide pool of capital" (Feldstein and Horioka 1980 p. 317). If saving and investment become uncoupled, this simply implies that international capital flows make imbalances in the current account of the balance of payments possible.

It has been argued that the Feldstein-Horioka criterion is extremely strict, because it is premised on a number of very restrictive conditions. Its validity requires that domestic saving and investment are a function of the world real interest rate so that the domestic real rate of interest must equal the world real rate of interest or real interest parity holds. Also, apart from the interest rate, all determinants of a country's rate of investment should be uncorrelated with its level of savings. This is a strong condition. It is possible to think of shocks that produce a positive correlation between savings and investment even if international capital mobility is perfect:

- A persistent but not permanent productivity shock would increase savings because wages are temporarily high (provided income earners' spending on consumption is a function of permanent income), while it also would lead to increased investment because of higher capital productivity (Frankel 1992, Ghosh 1995 p. 107);
- It is easily conceivable that both investment and savings are positively correlated with economic growth;
- With underemployment the Keynesian view that investment creates its own savings might hold good, implying a positive correlation between savings and investment independent of the international mobility of capital;
- Governments could follow a policy of reducing current-account imbalances, increasing budget deficits in the case of a surplus and decreasing budget deficits in the case of a deficit. An increasing discrepancy between investment and savings in the private sector thus goes hand in hand with a decreasing discrepancy in the government sector and the other way round and a positive correlation between total savings and investment is created by government policy.

Real interest rate parity in its turn presupposes purchasing power parity and uncovered interest rate parity (cf Visser 1995a p. 13). A weaker condition is the covered interest parity condition, which says that capital markets are perfectly integrated if nominal interest rates on comparable debt (same time to maturity, same debtor risk) are equal across countries if exchange rate risk is excluded (either through contracting debt in one given currency or through seeking cover in the forward market for foreign exchange).

The Feldstein-Horioka criterion is extremely restrictive. Still, it provides a useful yardstick, it surely gives an impression of the direction of the integration movement. Feldstein and Horioka did not find a high degree of integration, but their research covered the 1960-1974 period and that the liberalisation of capital movements still had a long way to go in 1974. During the period studied by Feldstein and Horioka the US current account imbalance for instance only once exceeded 1 per cent of GDP (a surplus of 1.05 per cent in 1964, see *Economic Report of the President*, 1987, tables B-1 and B-99). Between 1988 and 1995 the U.S. by contrast ran deficits that fluctuated between .2 and 2.5 per cent of GDP (*World Economic Outlook* 1996 p. 204). Countries such as Germany, the United Kingdom, Canada, Finland, Switzerland and Australia had current account imbalances at times exceeding 4 per cent of GDP (loc. cit.). Also, some developing countries have been able recently, i.e., until the financial crisis in South Asia broke out in 1997, to finance substantial current account deficits, e.g., Malaysia 9 per cent of GDP in 1995 and Thailand over 8 per cent (*World Economic Outlook* 1996 p. 61).

If we judge capital market integration by the covered interest parity criterion, integration has reached very high levels indeed. There is ample empirical evidence that covered interest differentials for comparable financial assets have become very narrow indeed between the main industrialised countries, which points to the absence of capital controls and to well-functioning markets with low transactions costs (see for empirical data and a discussion Frankel 1993). This of course mainly relates to short-term capital, as forward cover is only available for a maximum of 12 months, in some cases 24 months. It might be useful not to lump all kinds of capital together when investigating the mobility of capital. It stands to reason that short-term portfolio capital is more mobile that direct foreign investment.

Whatever criterion we choose, it is abundantly clear that capital markets have become increasingly integrated since the liberalisation of capital movements started in the late 1950s. Apart from the Feldstein-Horioka and various interest parity criteria, the volume of foreign exchange traded every day surely points to integrated international financial markets as well: the estimated global daily turnover in foreign exchange markets was 1,190 billion U.S. dollars in 1995 *(International Capital Markets* 1996 p. 31). One week of foreign exchange trading sees an amount of money change hands nearly equal to the value of aggregate annual global exports of goods and services ($ 6,226 billion in 1995, see *World Economic Outlook* 1996 p. 196). Other

pointers are that, according to a survey in *The Economist* (quoted in Moosa 1997 p. 453), global cross-border transactions in equities increased from US $120 billion in 1986 to US $1400 billion in 1990 and international bank lending from US $324 billion in 1980 to US $7500 billion in 1991, or from 4 per cent to 44 per cent of the GDP of the OECD countries. We note that:

- capital markets enable countries to run up substantial current account imbalances;
- gross daily capital flows have become extremely high by any standard.

Capital market integration thus means that substantial net flows may occur, but also that substantial gross flows may go hand in hand with negligible net flows. This phenomenon, not important in the Feldstein-Horioka approach, but highlighted in the interest-parity approaches, is important in the sense that capital market integration allows portfolio diversification between wealth holders in different countries. On the other hand, capital market integration may severely tie the hands of the authorities and may confront them with unintended consequences as far as the domestic money supply or the exchange rate are concerned. Before elaborating on these issues, we first ask ourselves if high capital market integration is really something new.

International Capital Flows: Is the Present Unique?

International capital flows are not something new in the history of mankind. Italian bankers were already providing loans to the English crown in the 1270s (Prestwich 1979). Amsterdam developed into the financial centre of Europe in the 17th century and in the 18th century the Dutch over a long period held about one quarter of the English national debt (Brezis 1995 p. 54) and they were also active in the field of bank acceptances. After the Napoleontic wars the British took to providing international loans and in the 1870-1914 period world capital markets became very integrated indeed. Capital exporting countries, Britain first of all, sent sums abroad amounting to quite a few per cent of national income. It has been estimated that net capital exports from Britain averaged some 5 per cent of national income between 1870 and 1913, and even roughly 10 per cent in 1912-1914, whereas France and Germany exported capital at a rate of two to three per cent of GNP (Pringle 1989 p. 368). On the import side, a country such as Canada financed 30 to 50 per cent of its investment with foreign capital in the 1870-1900 period, experiencing

capital inflows to the tune of 7.5 per cent of GNP on average. The situation in Australia was similar and the Scandinavian countries were not far behind (Pringle 1989 p. 376). Seen against this background, the net private capital flows to developing countries amounting to 2.9 per cent of their GDP over the 1990-1995 period were nothing special (World Economic Outlook 1996 p. 58). Figures of outstanding debt or total foreign investments tell a similar story. Lewis (1978 p. 59) notes that the liabilities of developing countries (debt plus equity) in 1972, just before the outbreak of the first oil crisis, amounted to 1.8 times annual exports. For more recent years the ratio for debt alone was 1.09 in 1970, 0.8 in 1974, 1.51 in 1988 and 1.11 in 1995 (World Development Report 1985 p. 24; World Economic Outlook 1996 p. 227). In 1913, by contrast, the ratio for debt plus equity varied from about 2¼ for India, Japan and China to 4.8 for Australia, 5.2. for Latin America and 8.6 for Canada.

Presumably pre-World War I flows were largely concentrated in longer-term loans, whereas present flows are made up, apart from official flows, of direct investment and longer-term portfolio investment, but also of short-term bank deposits and investment in short-term Treasury paper, which means that capital-importing countries face a higher risk of volatility of capital flows. Of course before the First World War there was quite a lot of short-term finance, provided by British merchant banks in particular, but that was mainly made up of trade finance (North 1962 p. 13), and therefore not prone to such volatility as late-20th century short-term capital sloshing around the world in search of high yields, as reflected in the daily volume of foreign exchange transactions. True, there are indications that 19th century, and even 18th century, capital markets were also highly integrated if we look at differences in yields or share prices for the same stock between Amsterdam and London in the 18th century and between Paris and London in the 19th century (Neal 1985). This approximation of interest rate parity means that transactions costs between the leading European financial centres were low, and become lower with the advent of the telegraph in the 19th century, but it does not point to great volatility. That would require high amounts of money available for short-term investment plus unstable expectations as to future yields.

Two Functions of Capital Flows

Capital flows fulfil different roles. As has been argued already, international capital flows enable wealth holders to diversify their portfolios and spread their

risks, making all parties concerned better off: provided there is no complete positive correlation between the possible outcomes of an investment decision, diversification reduces risk (in terms of the variance of the possible outcomes of an investment decision) for any given expected return. International capital flows thus make for a better risk-return profile.

If there is a net flow one way, this could finance a surplus or deficit on the current account of the balance of payments (of course, such a disequilibrium could also be financed by a shift in the net foreign asset position of the central bank or the commercial banks, but only to some extent). A deficit on the current account is tantamount to a surplus of a country's residents' expenditure over their earnings and a current-account surplus reflects spending at a lower level than earnings, as will be immediately apparent from the following macroeconomic identity:

$$Y = C + I + G + X - M$$

where Y = national income, C = consumption, I = investment, G = government expenditure, X = exports, or more precisely receipts on the current account of the balance of payments and M = imports or expenditure on the current account. If we denote domestic spending, C + I + G, by A (for domestic absorption), we find:

$$Y = A + X - M$$

or

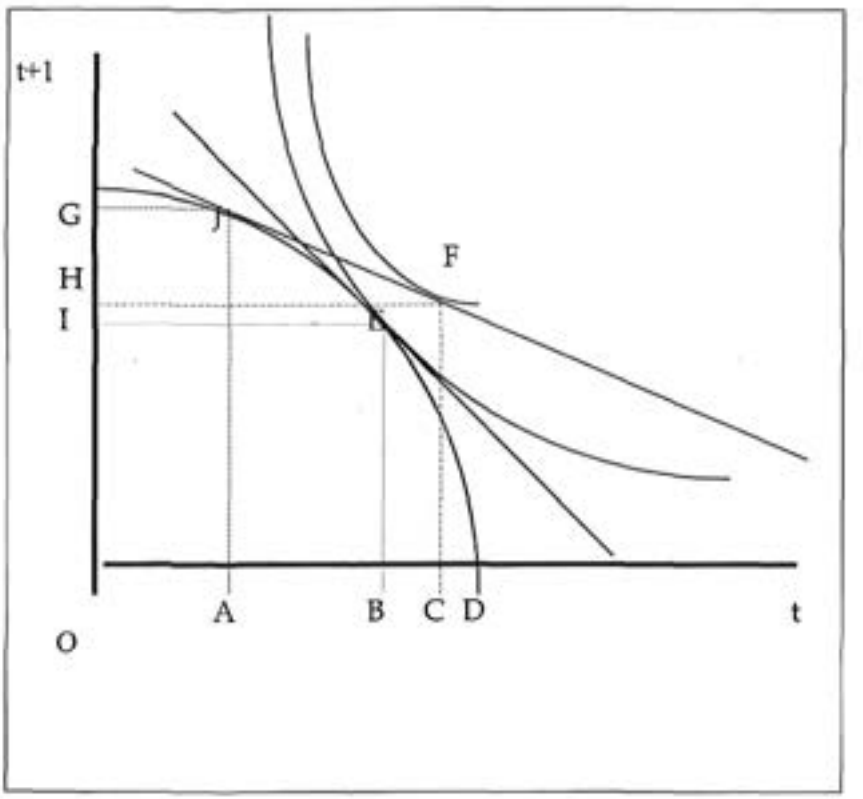
$$Y - A = X - M$$

which says that there is a current-account surplus if domestic absorption is less than national income and a deficit if domestic absorption exceeds national income

If a country's residents spend less than they earn, they build up a claim vis-à-vis foreign residents. This enables them to increase spending later at the cost of spending less now. In other words, current-account imbalances mean inter-temporal substitution in spending. One could discern two kinds of such substitution. The first one concerns the case of consumption smoothing. If consumption is related to permanent income and current income fluctuates, people will spend more than they earn one year, running a deficit on the current account, and spend less than they earn another year, running a surplus on the current account.

Figure 2.1

Inter-temporal Substitution



People can also decide to spend less than they earn and invest abroad or spend more than they earn and rely on funds from abroad for a protracted period of time. For instance, a country with a relatively young population, little capital per worker and the ability to catch up on technology can afford to spend more than it earns. By importing capital it can both invest in its productive capacity and increase consumption now, with the higher productive capacity in the future providing enough goods to service the debt. Conversely, for a country with a relatively high proportion of its population in the labour force and a relatively high level of technology, with little prospect of a quantum jump in technology by increasing its investment level, a surplus on the current account and external lending and investment may be attractive. External lending and investment provide income at the time today's labour force is retired.

In a two-period model this reasoning can be illustrated as follows. On the horizontal axis we measure quantities of goods in period t, on the vertical axis we

measure quantities of goods in period t+1. The inter-temporal production possibility curve shows that the less is consumed in period t, the higher production in period t+1 will be. Available resources in period t are OD. If total resources OD are consumed in period t, nothing is left for investment and available resources in period t+1 are measured on the vertical axis at point O (from Origin, not necessarily zero). If we move up along the curve, consumption is reduced and the resources not consumed are invested, with the result that more goods will be available in period t+1. In a closed economy, or an economy constrained to current-account equilibrium, an optimum is found at point E, where the highest attainable indifference curve is reached. Consumption in period t is OB, investment is BD and in period t+1 an amount OI will be produced. The marginal productivity of investment is relatively high: giving up one unit of consumption now, i.e., investing one additional good, results in a relatively high increase in future production. This is represented by a relatively steeply sloped tangent to the inter-temporal production possibility curve in point E. Given perfect markets, this slope also represents the rate of interest, for the rate of interest equals the marginal productivity of investment in perfect markets (note that at a slope of minus 45o the rate of interest is zero, i.e., one unit given up now will give one unit extra at time t+1). If now the rate of interest in world capital markets is lower than the domestic interest rate in the closed economy, it pays to borrow funds abroad and run a current-account deficit. At a lower rate of interest consumption can be in F and production in J. Consumption in period t becomes OC, whereas only OA consumption goods are produced. Imports amount to AC and investment to AD (total resources minus domestic production of consumption goods). In period t+1 consumption is OH and HG is available for interest payments and amortization on the debt concluded in period t (note that this is a two-period model, with time ending in period t+1 and therefore no investment activity in period t+1). Borrowing at a rate below the closed-economy domestic rate offers the opportunity to consume more both in period t and in period t+1.

In older, more mature economies it is the other way round. Their production possibility curves will be relatively lower and more stretched to the right. They will start out with a relatively low marginal productivity of investment and will increase their consumption by lending out sums instead of investing themselves. Normally, a country engages in capital imports when it starts its take-off into economic growth, to become a capital exporter in a later period, when it has become relatively rich and

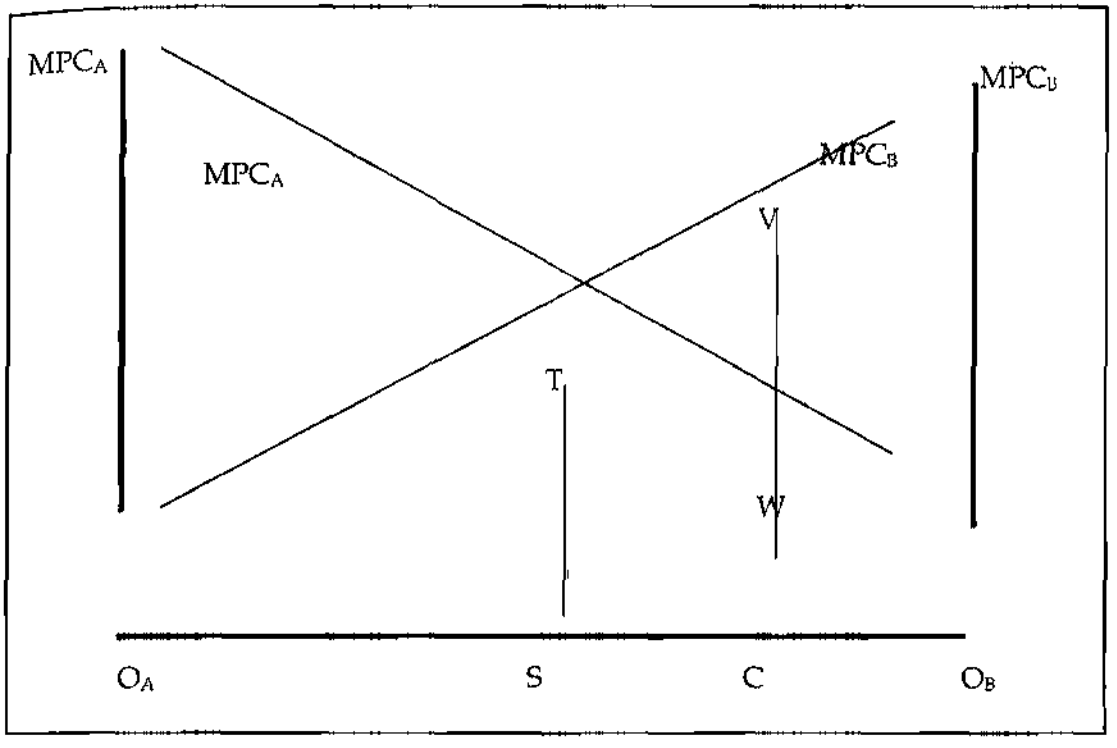
other countries start growing. This happened in Britain, a capital importer in the 18th century but a capital exporter in the 19th century, and we have seen the same sequence a century later in the United States. In the Netherlands it used to be one of the norms for economic policy in the 1970s to run a surplus on the current account of the balance of payments in order to be able to export capital for development assistance. There is, however, no mechanical rule in this respect, witness the American deficits since the early 1980s.

It can be shown that, even if no net investment occurs, international reallocations of existing capital can make world production increase. We study a simple neoclassical world where capital transfers take place from countries with a low marginal productivity of capital to countries with a high marginal productivity of capital. If the horizontal axis in Figure 2.2 measures total capital in a two-country world, OA-C is the amount employed by country A and the remainder by country B. The MPC-curves depict the marginal efficiency of capital. We start with a situation where the marginal productivity of capital in B exceeds the marginal productivity of capital in A. Total production in A is represented by the area under the MPCA curve between OA and C and total production in B by the area under the MPCB curve between OB and C. If now SC of capital migrates from A to B, total production in A falls by SCWT, whereas total production in B rises by CSTV. World production increases by TVW. Of course this analysis does not represent what really happens in the world, if only because the real world is more messy than a neoclassical model, being full of market imperfections. Nevertheless, it serves to underline that capital exports ideally help to increase total world production.

Historical research suggests that the model is useful in interpreting history, with one modification: as far as pre-World War I capital exports to North- and South-America and Australia are concerned, it was not a question of capital flows from regions with a high capital-labour ratio to regions with a low capital-labour ratio, but of movements of both labour and capital from relatively labour-and-capital-rich but resource-poor regions to regions with an abundance of natural resources with respect to labour and capital (Taylor and Williamson 1994). Present-day flows to South-America and Asia seem to fit the standard two-factor approach better. Of course, it not only capital that moves. If capital flows take the form of direct investment, technologies and skills migrate as well.

Figure 2.2

A Two-Country World



The above analysis paints a very rosy picture of the good that capital flows do. The picture is not incorrect, but probably it is one-sided. First of all, there are indications that capital imports in some cases, such as Mexico during the run-up to the 1994 peso crisis, replace rather than supplement domestic savings and thus finance consumption instead of investment (Singh 1997). Further, it can be said that capital flows these days are potentially much larger than would be necessary for enabling inter-temporal substitution. Capital in search of high yields with the minimum of risk, and invested in liquid assets, is much more prevalent now than it was before the First World War. The Interbellum of course was also plagued by so-called hot money, which was instrumental in bringing about the bank crises that spread the Great Depression to Europe in 1931. This brings us to the question what to do about the negative effects of free capital flows. But we will first see what the authorities cannot do when capital markets are highly integrated.

Capital Account Liberalisation and Stock Markets

Financial liberalisation includes both liberalisation of domestic financial markets and liberalisation of international capital flows. A case can be made for

letting financial capital flow where wealth holders find the best risk-return profile. In principle this would result in an optimal allocation of capital and thus to the highest global growth, taking due account of risk factors. Seen from the point of view of the host country, financial liberalisation can imply lower capital costs for investing firms and generally the possibility of higher investment. Lower capital costs should be reflected in higher price-earnings ratios of equity. According to figures from the IFC and Bloomberg Inc. (Feldman and Kumar 1994 p. 20), from 1989 to 1993 (end of period) price-earnings ratios for Chile, Colombia, Venezuela and Pakistan increased from roughly half the values normal in France, Germany, the UK and the US to the levels attained in those countries. Similar results have been found by Hargis (1996). For countries such as Korea and Taiwan, however, the movement was in the opposite direction (starting from much higher figures than in the Western countries). As for share capital, this carries with it the additional advantage that, unlike debt, foreign capital cost payments move procyclically. With a large share of equity capital in total capital inflows, a country will become less easily subject to balance of payments problems during a cyclical downswing. As an additional benefit, in order to attract foreign investors, business firms will have to improve accounting and reporting standards, which helps to improve the functioning of the capital market.

The recent history of liberalised capital flows has not, however, been an entirely happy one. Net capital inflows are fine if they are a concomitant of capital goods imports and contribute to the building up of productive capacity in a country. All too often, however, capital inflows are governed by considerations of short-term portfolio investment. In a fixed-exchange rate system they make the money supply balloon and result in inflation, in a floating-rate system they cause overvaluation of the currency. In both cases the real exchange rate falls. Net capital inflows, if they are sizeable, go hand in hand with a booming nontradeables sector (in particular construction) and squeeze the tradeables sector. Sooner or later the market will come to expect a devaluation or depreciation and capital will flow outward until a sizeable rise in the exchange rate (fall in the external value of the domestic currency) becomes inevitable. The nontradeables sector collapses and factors of production go unemployed. The tradeables sector may have become more competitive, but generally is not able to expand fast enough to employ the factors of production made redundant in the nontradeables sector. A glaring example of the harm that capital inflows can do is Chile, where they reached no less than 25 per cent of GDP in the

first half of 1981 (Corbo 1985 p. 903; see for a comparison between the 1978-1981 period and the 1989-1992 period, when capital inflows were more successfully restricted Labán and Larraín 1994). Similar problems beset the Korean financial liberalisation process in the late 1960s (McKinnon 1993 Ch. 10). Relatively low world interest rates have contributed to sizeable capital flows to Asian and Latin American countries in the 1990s (Corbo and Hernández 1996, see for figures Fernández-Arias and Montiel 1996).

Another potential problem is the increased volatility in share prices that could result from capital market liberalisation. Investors need not always be driven by market fundamentals, they can also engage in a speculative bubble. Share prices are driven up in such a bubble because people expect other people to be bullish about the market, not because of market fundamentals. Alternatively, share prices will be volatile if agents' perception of market fundamentals change relatively quickly.

Does this mean that countries which are liberalising their financial markets should try to restrict capital inflows? Not necessarily. According to McKinnon (1993 pp. 115-9) capital market imperfections that could easily be avoided are to a large part to blame for the over borrowing that plagued a number of liberalising countries. It is not only myopia by individual lenders or a herd instinct among bankers that is at the root of the too large capital flows, but also government guarantees in both borrowing and lending countries, plus often a large wedge between lending and borrowing rates with banks in the liberalising countries which made it attractive for firms to borrow abroad. Lending by commercial banks has been encouraged in this way, and also by a lack of prudential supervision on lending to LDCs. If lenders had had to take due account of the risks involved in lending, the capital flows would have been much more modest in size. There can be little objection against international capital flows resulting from individual lenders in industrial countries buying bonds and equities from individual borrowers in poorer countries without governments distorting the market by providing guarantees. This would be a kind of return to the situation in the 19th century, which in McKinnon's eyes would be highly commendable.

However reassuring McKinnon's argument, though, the exploding volume of capital flows which the world has been experiencing during the 1990s does confront the authorities with a number of problems. A liberalisation process clearly is not all sweetness and light. The question is what could be done to mitigate these problems, if indeed anything can be done at all. This is the subject of the next section.

Macroeconomic Policy and Capital Flows

A high degree of capital mobility severely restricts the freedom of the policy makers, depending on the exchange-rate mechanism. In a fixed-peg or fixed-but-adjustable peg system monetary policy becomes powerless as an instrument to control the rate of interest or national income if capital flows are fully interest-elastic. This is because any change in the money supply that tends to make the rate of interest differ from the world market rate, brings about a capital flow that will make the rate of interest equal to the world market rate, and the more mobile capital flows are, the faster this happens. Fiscal policy on the other hand becomes more effective with higher capital mobility. An expansionary fiscal policy for instance tends to drive interest rates up, inducing capital inflows that push interest rates back to the international level and preventing crowding-out of private investments (see for a diagrammatic and mathematical explanation Visser 1995a Ch. 2). However, investors base their decisions on the expected yield of investments, *including* exchange rate changes. If they expect the fiscal expansion to result in a devaluation, e.g. because of the impact on the current account of the balance of payments, or because they expect an increase in inflation, they will stampede out of the country, bringing about the devaluation they expect. So even here high capital mobility ties the hands of the authorities.

In a fully flexible system high capital mobility tends to nullify the effects of fiscal policy. A positive fiscal impulse for instance will drive the interest rate up, inducing capital inflows. With fully flexible exchange rates an increased supply of foreign exchange will not increase the money supply, as with fixed rates, but will make the domestic currency appreciate. Exports suffer and imports increase, counteracting the positive effect from the fiscal impulse. Monetary policy on the other hand becomes more effective, as a monetary expansion will tend to depress interest rates, inducing capital outflows and a depreciation, increasing exports and diminishing imports. Monetary policy is successful (given sticky prices), but at the cost of possibly high exchange rate variability.

Would it be possible to restore domestic macroeconomic autonomy by imposing restrictions on capital flows? To some extent yes, but at a price. Let the central bank for instance impose reserve requirements or a ceiling on foreign borrowing by banks. This may work for some time, but as intermediation by the commercial banks becomes more expensive as a result of such measures, non-bank financial institutions will spring up to circumvent them. These and other restrictions

on foreign borrowing, such as a permit system for foreign borrowing by firms, will furthermore lead to red tape, misinvoicing and black markets. Indeed, the reason why Indonesia started liberalising the capital account of the balance of payments already in 1970, ahead of current-account liberalisation, seems to have been the realisation by the authorities that monitoring and controlling capital flows would be an uphill struggle (Cole and Slade 1992). Also, formal liberalisation in the European Community was hastened by the increasing awareness of the authorities that control of capital flows was well-nigh impossible (Bakker 1996).

A central bank may also try to mop up the extra liquidity provided by capital imports if it does not allow these to drive the rate of exchange down. Such sterilisation will be executed by open-market policies, i.e., by selling government bonds. That may help to some extent, but if it is done on any large scale, it will send bond prices down, i.e., interest rates up and induce further capital imports. Again, a high interest elasticity of capital flows makes monetary policy in a fixed-rate system a hopeless task. Moreover, such policies can be expensive for the central bank, as it is quite normal for the interest rate paid on the debt instruments that the central bank sells to be higher than the interest the central bank receives on the foreign exchange it buys from the market (Bianchi 1993 p. 158). Estimates of the associated costs to Latin American central banks range from 0.25 to 0.80 per cent of GDP (Calvo, Leiderman and Reinhart 1996 p. 134). Central banks sometimes implicitly subsidize capital imports. One way to do so is to provide a *de facto* free deposit guarantee to banks, as happened in Chile during the runup to the 1981-1983 financial crisis (Visser and van Herpt 1996). Another way is to provide swap facilities at the central bank, with the central bank shouldering the currency risk. This also was the case in Chile until 1990 (Corbo and Hernández 1996 p. 67).

Fiscal policy may offer a way out, but is politically difficult. If a government reduces its expenditure and with it government borrowing, aggregate demand in the economy will fall. As this reduces the demand for credit, the rate of interest will fall too, making it less attractive for foreign lenders to supply credit (Calvo, Leiderman and Reinhart 1994; Titelman and Uthoff 1994). A reduction in government expenditure can also go hand in hand with an expansion in private expenditure, especially if taxes are reduced in step with government expenditure. This could help prevent a fall in RER insofar as private spending is to a larger degree directed to tradeables, or imports, than government spending.

Removing restrictions on capital exports may help too. In this respect institutional changes such as the growth of private pension funds and insurance companies that are free to invest part of their assets abroad can be extremely useful, but if such institutions do not yet exist or are still small, substantial effects are not possible overnight. There is of course also a role for prudential supervision, including restrictions on open positions of banks and non-financial corporations in foreign currency and reserve requirements on foreign deposits (Fischer 1997 p. 8). A country such as Chile, e.g., in the late 1980s and early 1990s succeeded in limiting the damage of capital inflows on the real exchange rate not only by liberalising capital outflows, but also imposing reserve requirements on foreign credits and introducing a stamp tax on foreign credits (Labaín and Larraín 1994). Then, some flexibility in exchange rates, such as widening of a band around some parity, may increase the exchange rate risk and discourage short-term capital inflows (Corbo and Hernández 1996 p. 69).

There was some hope that, even if restrictions in general appear not to be too effective, restrictions on short-term capital inflows might at least serve to lengthen the maturity of contracted foreign debt (Quirk, Evans et al. 1995 p. 43). This would make sudden reversals of capital flows and currency crises less likely. However, it has been found that long-term flows often are as volatile as short-term flows (Claessens, Dooley and Warner 1995). Still, it stands to reason that some forms of long-term capital, first of all foreign direct investment, should be less volatile than short-term credit. Anyhow, abundant capital inflows which carry the danger of sudden reversals remain a problem that is difficult to deal with (see on the experiences of a number of Latin American and Asian countries *International Capital Markets* 1995, pp. 80-108).

It has been argued by some, first of all James Tobin (1974 pp. 88-9), that a generally applied tax on international financial transactions would be helpful in preserving some national monetary autonomy. If foreign exchange transactions carry a tax of, say, a half per cent, that would translate into 4 % for a three month foreign exchange investment (Eichengreen, Tobin and Wyplosz 1995). The impact of the tax would be higher the shorter the investment period and in that way national monetary authorities would have some leeway for conducting a national monetary policy that would not immediately be frustrated by international capital flows, as this so-called *Tobin tax* would enable short-term interest rates to differ between countries. By the same token, a Tobin tax would hinder speculative activity.

It is, however, doubtful if the Tobin-tax would serve a useful purpose. If market participants expect a substantial change in a currency's parity, a one-half per cent tax only increases the costs of speculation marginally and will not be sufficient to deter such speculation (cf Davidson 1997). On the negative side, if a government has built up enough credibility, high capital mobility makes stabilising speculation possible, inducing capital flows compensating current account imbalances. This would be hindered by a Tobin tax. Also, one wonders whether, and if so, how, covering foreign exchange risk in forward and futures markets could be made exempt. The perfectly respectable activity of hedging foreign-exchange risk would be punished under a Tobin tax, it seems, even if forwards would be made exempt, as the banks that provide forward cover themselves hedge their risks by a spot transaction. A tax on all foreign exchange transactions would of course also directly be felt in any payment on the current account of the balance of payments. The unintended consequence of a Tobin tax thus might well be that international trade rather than speculative activity is hindered.

Furthermore, a Tobin tax would be difficult to put into practice. First of all, it would require all financial centres in the world to participate; secondly, if the Tobin-tax is levied on foreign-exchange transactions, close substitutes for money will be exchanged, in particular, people might engage in Treasury bill swaps (Garber and Taylor 1995). If such swaps and other derivatives would be made subject to a Tobin tax as well, they might kill the derivatives markets patient while (in the best of cases) curing the speculative disease (cf Spahn 1996).

It may be noted in passing that a Tobin tax has also been advocated as a means of bringing in funds for financing global developmental or ecological programmes by the United Nations (see Arestis and Sawyer 1997). This is not our subject here and we will not discuss the merits and demerits of the Tobin tax in this application, but it should be remarked that the use of a Tobin tax as a source of funds presupposes that it is not too successful as a means to reduce the volume of international capital flows (see for further analyses of the Tobin tax ul Haq, Kaul and Grunberg 1996 and the review of that collection in Grieve Smith 1997).

It will not always be possible to prevent foreign exchange crises. Like in a domestic financial system, a severe deflation could develop if no lender of last resort steps in. The IMF has shown itself willing to take up this role on a world scale, not only in the 1994 Mexican peso crisis and its *tequila effect* aftermath in Argentina, but

also in the series of South Asian crises in 1997. This in itself is an excellent thing, but, as in a domestic financial system, there is the danger of moral hazard. Foreign investors may become complacent if they feel that the IMF will bail out a country experiencing foreign exchange difficulties. The classic solution would be to leave the market in uncertainty about the circumstances under which the lender of last resorts would be willing to step in and for what amounts. It goes without saying that creditors need up-to-date information on the foreign exchange and debt positions of a country. This has not always been the case and the IMF has taken the initiative to set up a Dissemination Standards Bulletin Board on the Internet. Given reliable information, in principle creditors should be able to curb their herd instinct and stop increasing their capital flows before it is too late. If not, there seems to be less reason to prevent defaults on the part of at least some borrowers.

Preliminary Conclusions

It was shown that the stock market plays only a modest role in the financing of (non-financial) business enterprises in the rich Western countries and Japan, but is potentially very useful in valuing firms and disciplining management. In emerging markets, however, its role in financing is gaining momentum, even if its role in disciplining management leaves much to be desired. For another thing, it appears that liberalisation of the capital account may lead to serious overvaluation of the currency, which is naturally followed by a sharp depreciation or devaluation. In other words, high capital mobility carries with it the danger of a high volatility of exchange rates, both nominal and real. Against this, foreign investments may deepen the market and contribute to greater stability, especially investment done by investment funds that specialise in emerging markets. In this sense foreign stock market investment could help stock markets to better fulfil their role as a valuing mechanism. If, however, there would be signs of huge incoming investment simply in order to make a fast buck, there would be a good reason to try and restrict those inflows in order to prevent volatility, especially if those inflows would be large enough to either appreciably increase the money supply or appreciably reduce the exchange rate. Nonetheless, to throw sand in the wheels of international capital movements looks like turning the clock back. High capital mobility is something we have to live with. Its susceptibility to speculative moods could even be a blessing in disguise, as it forces governments to stick to credible policies (credible as to their

exchange rate commitments), as any policy measure that is seen as wavering, is immediately punished. High capital mobility functions as a disciplining device for governments. Capital flows to successful developing countries would not be stemmed by a Tobin-tax, and other measures generally are only partially successful at best and can be costly as well. That is something we may have to live with: the opportunity costs of attempts to restrict capital inflows would be too high, if these attempts are to be effective. Restrictive fiscal policies may offer some relief, though.

Section III
Policy with Regard to Capital Flows and Stock Markets

How to Ensure that Stock Markets Fulfil a Useful Function

Opening up the domestic stock markets may contribute to volatile capital flows. On the other hand, foreign capital may contribute to higher price-earnings ratios and thus to lower capital costs for investing firms. Therefore, opening up a country's capital markets should be timed such that volatility is least likely. Volatility is a result of investors suddenly revising their forecasts of net returns on an investment. One contributing factor to such changes of heart is a lack of direction in the government's economic policy. A prerequisite for opening up a country's capital markets should therefore be that a stable, credible economic policy is in place, aiming at a stable and low rate of inflation. Also, stock market crises should be avoided as much as possible, through disclosure and accounting standards. If and when such things are in place, the link of the domestic capital market with world capital markets can be strengthened by listings such as American Depository Receipts (see for a wealth of empirical data Hargis 1997).

Stock markets can only play a useful role in a country's economic development if the issue of corporate government is handled in a satisfactory way. This requires, at the minimum, good accounting standards and effective protection of the rights of minority shareholders. Also, shareholdership should not be too concentrated.

It must be kept in mind that international investment through stock markets only benefits large firms. If they lead to net capital imports, though, more domestic savings are available for investment through the financial institutions in smaller firms. One cannot be sure that this will happen and, again, stable and credible economic policies that contribute to positive profit expectations are of the essence.

Appendix
Stock Market Financing as a Substitute for Bank Financing

In an effort to estimate the contribution of financial development, and especially stock market development, to the level and growth rate of economic activity, Atje and Jovanovich (1993) developed a model which allows improvements in the financial structure to cause a permanent increase in the growth rate. Financial development was measured by the ratio of credit extended by private and government banks to GDP and by the ratio of the annual value of all stock market trades to GNP (trade was preferred over value outstanding because there are countries where the aggregate value of stock is high but where little trade takes place; consequently, the stock market plays no important role in allocating funds or valuing expected returns). In an estimate for 94 countries over the 1970-1988 period, the bank credit ratio did not seem to have an effect on raising the return on investment, and with it on GNP growth, whereas runs with stock market trade as the financial variable (for only 40 countries over the 1980-1988 period, because of data problems) showed a statistically significant and quite large positive influence on GNP growth. Now of course there is simultaneity in the sense that high prospective growth makes for a high value of stock market turnover. Correcting for this phenomenon by including the lagged growth rate of per capita output, however, left the results essentially unchanged. A word of caution is in order, though. The question of causality was not convincingly solved,, and reruns of the same model by Harris (1997) using current investment instead of lagged investment, and employing 2SLS to circumvent the possible endogeneity of current investment, failed to corroborate Atje and Jovanovic's findings. As for the lack of a contribution of the bank credit ratio, this is probably too rough a measure. For one thing, if banks are forced to grant credit to governments or government firms, there is no guarantee that the risk-return profile is the decisive factor in credit-granting; secondly, credit will also be granted to consumers and lastly as an economy develops, other financial instruments spring up and bank credit takes up a diminishing part of financial intermediation. No surprise King and Levine's ratio of credit to private enterprise to GDP performed better.

If stock markets are simply a substitute for bank finance, it should come as no surprise that an overall positive relationship between stock market development and economic growth is hard to discern empirically. Nonetheless, stock markets can play an important role in an economy. If there is a large supply of stocks, the stock market can fulfil its valuation, risk diversification and liquidity provision roles,, even without a large growth in the supply of stocks.. As for the good that stock markets can do in less developed countries, there is every reason to believe that they *can* play an important role, but it should not be assumed that they automatically will *do* so. Often, trading is concentrated in a few stocks only and if no adequate accounting standards and investor protection laws have been adopted, not much development of stock markets is to be expected (Levine and Zervos (1995) p. 20). And then, stock market financing indeed at times appears to involve no more than a shift from bank finance to shares, without any perceptible increase in aggregate national savings taking place (Singh 1997 p. 778).

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Chapter 3

Financial Crises, International Banking and the IMF

In most financial crises attention seems to be drawn to domestic factors and the policy recommendations often concentrate on such issues as fiscal, monetary, labour and foreign trade policy and neglect the international financial relations that are often close to the heart of the financial crisis. The purpose of this essay is to examine a number of cases where the financial crisis has a clear relationship to the interruption of international bank lending and where the efforts of the IMF delayed the economic recovery rather than promoted it. Two of the crises analysed are well known major crises: that of Mexico in 1982 and Korea in 1997. The third crisis may not have made as many headlines although it clearly represents highlights, even more than in the two other cases, the vulnerability of a developing country to the vagaries of the international financial system. Here we are of course referring to the Indian crisis of 1991.

The analysis of these crises yield a number of recommendations:

1. The IMF should not become a mediator between the debtor countries and the lending banks.
2. Through the implementation of austerity programs the IMF may in certain cases exacerbate the impact of the initial financial crisis.
3. It would be advisable to adopt a dept-equity conversion mechanism that allows private debt to be converted to equity.

Section I
From Financial Distress to Crisis

The purpose of this section is to develop a model of financial crises in developing countries that have their origin in the sudden cut-off of short-term credit by international banks. A key element of this model is that the value of the principal is held intact. That is, the banks do not negotiate the value of their claims in contradiction to the recent literature that compares the resolution of financial distress problems given bank or portfolio debt (Bolton and Scharfstein, 1996; Diamond, 1993 and 1993a; Berlin and Mester, 1992; Rajan, 1992; Gilson, John and

Lang, 1990). This literature holds that banks in comparison to bond holders will be ready to negotiate with firms in financial distress.

The reluctance of international banks to negotiate may be the result of the efforts of the IMF to prevent a free rider problem among the creditor banks and to prevent the transfer of funds provided by the IMF to the commercial creditors. During the Latin American debt crisis "the IMF became the enforcer of 'involuntary lending', or, in the subsequent and sanitised official language, concerted lending"[1] in order to prevent the free-rider incentive for each bank to get out while the others were to continue or roll-over their lending. To the extent that the IMF continues to pursue this policy in its mediation efforts it precludes banks from settling their claims independently.

The second preoccupation of the IMF during the Latin American debt crisis was that the funds it provided could go to pay the commercial creditors. In order to avoid the transfer of funds the IMF resorted to the mechanism of requiring countries to come to terms with the international banks. This not only led to the socialization of private debt in countries like Argentina and Chile but also eliminated the incentive of banks to negotiate the value of their claims. Eichengreen and Portes state:

> "... the Fund has been intimately if not always directly involved in debt negotiations. The banks typically require that countries reach an agreement with the Fund as a precondition for rescheduling. For its part, the Fund, before extending assistance, normally requires that countries come to terms with their commercial creditors to prevent the proceeds of the IMF loan from simply going to the debt service. With a Fund loan hanging in the balance, the creditors have added leverage in their efforts to extract favourable rescheduling terms."[2]

The self-reinforcing conditions described by Eichengreen and Portes make it virtually impossible for individual banks to negotiate the value of their claims. Thus, in contradiction to the literature cited above, at the international level the settlement of bank debt is much more difficult than the solution of distress situations involving bond debt. First, the price of bonds will change in response to both bond and country ratings. Second, the long run nature of most bonds makes financial panics less likely.

Sachs (1984) presented a model of "bank panics" where international banks

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1 Cline (1995), p. 206.

2 Eichengreen and Portes (1989), p. 13.

would suddenly cease lending to sovereign lenders. A slightly different model with the additional assumption that bank lending is evenly spread across firms may be employed to explain the Korea crisis because the principal reason for the bank panic remains country risk. The difference between the Sachs model and the one presented below hinges on the reasoning for the supply schedule for bank loans. Whereas Sachs justifies an upward sloping schedule by the risk of concentration of bank assets in a particular country we argue that banks require greater returns if they perceive their involvement in a country to be greater than that for other banks. This twist of the model highlights an element of moral hazard to which international banking is subject: as presented in the next section in the mediation between debtor countries and creditor banks the IMF has pursued a policy of maintaining the lending by all the banks involved in order to avoid the free rider problem. The inverse of the supply schedule may be formulated as:

1) $$E(r_i^s)=\rho+f\left(\frac{\sum_j l_{ij}^s}{L_i}\right)$$

$$f(0)=0$$

$$f(\cdot)>0$$

Where $E(r_i^s)$ is the expected return by representative bank s on loans l_{ij}^s made to enterprises j in country i, ρ stands for an international rate of return and L_i stands for the total bank loans to all enterprises in country i.

The gist of the supply schedule is that it presents the advantages of loan diversification over a large number of banks. Thus, if there were a large number of banks making loans to firms in country i the ratio in brackets in equation 1 would approach zero and the expected return would be ρ.

On the other hand if the number of banks doing the lending were to decline the remaining banks would perceive an increase in the risk of their credits, the term in brackets would go up and the expected return would be larger than ρ.

The supply curve thus implies that lending to enterprises j in i would be forthcoming if all banks were ready to lend. The same finance would not be

available if all banks thought that the other banks would refuse to lend. Thus, from one period to the next - in effect a two period model - the j firms in country i with roll-over credits D_{ij} would be considered solvent if their total income were to satisfy the following inequality in the case that all banks were lending:

$$\sum_j Q_{ij} > (1+\rho)\sum_j D_{ij} \qquad 2)$$

While solvent, the firms of country i might not receive the required rollover loans if some banks were to expect the other banks to stop lending. Toward the limit where only a few representative banks s were left to do the lending the following might very well be the case:

$$\sum_j Q_{ij} < (1+\rho+f\left(\frac{\sum_j l^s_{ij}}{L_i}\right))\sum_j D_{ij} \qquad 3)$$

Thus, the combined income of the firms would not be sufficient to repay the loan plus the interest in the period in question. The result is that if a bank were to expect other banks to stop lending, it might be rational for the bank to refuse to rollover. If each bank were to stop lending on the basis of this expectation, the expectation would become self-fulfilling, and one might speak of a "banking panic".

In lending to the private sector international banks must be satisfied that in the period under consideration the country can generate a sufficiently large surplus on the balance of payments to provide the borrowing firms the foreign exchange necessary to repay the loans. If it should appear that the generation of this surplus might prove impossible, then the banks might anticipate an exchange rate correction that would lead them to stop rolling over their loans. The ensuing "bank panic" would make the exchange rate correction unavoidable.

Section II
The Crisis in Mexico in 1982

The August 1982 declaration by the Mexican government that it could no longer service the debt ushered in an almost intractable international financial problem that came to be known as the debt crisis. The debt crisis spread rapidly to the other Latin American countries and to a large number of developing countries in

Asia and Africa. The possibility of default by so many countries threatened the existence of many industrialized country banks and led to concern about the repercussions to the international financial system itself.

Although the dangers to the international banks and the financial system were quickly defused, the problems of the indebted countries were not resolved with the same celerity. This left the developing countries, especially those in Latin America, struggling with a problem that determined their economic contraction and stagnation for a decade.[3]

The recovery from the debt crisis in the early 1990s was shaken again by Mexico in December 1994. At that point Mexico faced a foreign exchange crisis that led it to devalue the peso. The Mexico financial crisis reverberated across Latin America where it came to be known as the "Tequila effect". Although this latest financial crisis caused an economic contraction in Mexico and many countries in Latin America in 1995, by 1996 there were renewed signs of growth.

The purpose of this section is to compare these two episodes in order to determine the factors that led to a decade of contraction and stagnation in the 1982 instance and a one-year contraction in the 1995 case. In order to conduct this exercise we concentrate on Mexico for reasons of brevity. Further, we also limit our analysis to the foreign accounts. Although we do not want to slight the importance of the internal policies pursued, we believe that these policies are adequately reflected in the external accounts.

With the data of the International Monetary Fund's *International Financial Statistics* (IFS) it is possible to follow the evolution of the Mexican external account aggregates since 1979. Table 3.1 shows that from 1979 through 1981 the financial account amply covered the deficit on the current account. The table also shows that the situation turned drastically between 1981 and 1982: the capital inflow declined from 26 to 3 billion US dollars. Following Jorgensen and Sachs (1989) in their description of the crisis in the thirties it may be argued that the sharp reduction in the capital inflows prompted the crisis and the suspension of external debt services.

Given that the cut-off in financial flows led to the financial crisis, the next question is whether any of the components of the financial account can be singled out as pivotal for the change in the aggregate account. The financial account is the sum of

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[3] It must be noted that the debt problem has not been resolved in many African countries that continue to experience economic stagnation.

the following accounts: direct investment, portfolio investment and other investments. Each of these accounts has two sides: assets and liabilities. Therefore there are six accounts that need to be examined for their influence on the financial account.

Table - 3.1
The Mexican Debt Crisis

(millions of US dollars)

Year	Current Account	Financial Account	Direct Investment	Portfolio Investment		Other Investments					
						Assets			Liabilities		
			Liabilities	Assets	Liabilities	Total	Banks	Other Sectors	Total	Banks	Other Sectors
1979	-5409	5120	1332	-51	-342	-1751	0	-1751	5932	2324	3788
1980	-10422	11508	2090	-17	60	-1229	-179	-1050	10604	3778	6058
1981	-16240	26601	3078	165	996	-4425	-1204	-3221	26787	13141	11765
1982	-5889	2923	1901	275	645	-1101	1228	-2329	1203	-813	-1520
1983	5866	-3275	2192	-134	-519	-3551	-1091	-2460	-1263	1769	-14066
1984	4183	81	1542	-320	-435	-1580	95	-1675	874	658	-8584
1985	800	-612	1984	-389	-595	-989	-57	-932	-623	123	-12332

Source: IMF International Financial Statistics database (CD-Rom September 1998).

Looking through the diverse accounts the first thing to note is that Direct Foreign Investment (DFI) did not lead to a sharp change in the financial account. With respect to DFI assets, these are not important and were not reported in the IFS. The DFI into Mexico declined from three to two billion between 1981 and 1982. However, this one billion does not go far in explaining the 23 billion decline in the financial account.

The portfolio investment accounts - assets and liabilities - were rather modest in the early 1980s. Although they show great variation between 1979 and 1985, between 1981 and 1982 they accounted for a reduction of the financial account of 241 million dollar: a small item compared with the US$ 23 billion that have to be accounted for.

The asset side of other investments presented a decline of 3 billion in the amount of capital exported as deposits, loans and trade credits. Thus this account ameliorated the fall in the financial account which otherwise would have been 3 billion more. Within this account the Mexican banks stopped making deposits or loans abroad and repatriated 1.2 billion in 1982. The other sectors of the economy -- excluding the monetary authorities, the government and the banks - reduced their credits abroad by 0.9 billion.

The liabilities side of the other investments account goes a long way in explaining the financial crisis of Mexico in 1982. After registering an inflow of capital of nearly 27 billion in 1981, in 1982 the corresponding figure was 1.2 billion. The accounts responsible for the fall were banks and other sectors (the other sectors of the economy excluding the monetary authorities, the government and the banks).

The inflow of capital in the form of deposits and loans to the banks fell from 13 billion in 1981 to the requirement for a repayment of 0.8 billion in 1982. The other sectors ceased receiving nearly 12 billions in 1982 to make a payment of 1.5 billion in 1982. The repayment made by the other sectors climbed to 14 billion in 1983.

The financial crisis led the economy to stagnate in 1982 and contract in real terms in 1983. Gross domestic product per capita declined by 9 per cent between 1981 and 1983 and remained stagnant. In fact, as shown in Table 3.2, real GDP per capita had not even recovered to its 1981 level in 1994, when a new financial crisis made its appearance.

Table - 3.2
The decline in GDP per capita in Mexico Following 1982

Year	Per Capita GDP (New Pesos, 1990 prices)	Annual Growth Rate (%)
1981	8,782	5.97
1982	8,533	-2.83
1983	8,056	-5.60
1984	8,152	1.19
1985	8,157	0.07
1986	7,741	-5.10
1987	7,717	-0.31
1988	7,662	-0.72
1989	7,848	2.43
1990	8,066	2.78
1991	8,245	2.22
1992	8,382	1.66
1993	8,389	0.08
1994	8,593	2.44

Source: IMF International Financial Statistics database (CD-Rom September 1998).

Note: The figures for 1995 and 1996 are not presented because of a change in the series for population.

Section III
The Korea Crisis of 1997

Until 1997 Korea was known as an economic miracle that showed:

1. An average annual growth rate of 8 percent for the past 28 years.
2. A fiscal surplus since 1980;
3. A relatively small public sector with: a public spending rate of 25 percent of GDP and a public sector debt of only 3 percent of GDP;
4. An unemployment rate of 2 percent;
5. An inflation rate of about five percent in the last few years.

The weak spot presented by the Korean economy was the rapidly growing deficit on the current account balance in the three years to 1996. Towards the end of 1997 Korea was embroiled in a crisis with plummeting stock market prices, a steep devaluation of the Won, widespread near bank failures and financial distress if not outright bankruptcy by a substantial number of firms. The question that naturally arises is what could have caused this very rapid change in South Korea's outlook.

The Mexican experience of 1982 demonstrated that bank credit obtained on a roll-over basis could dry up very quickly. In order to get an idea of the fragility of the Korean economy due to its indebtedness to foreign banks, in Table 3.3 we present the consolidated debt of Korea to banks in the Bank of International Settlements reporting area.[4] This table shows two salient facts: first, of the total debt of 103 billion registered at the end of June 1997, 70 billion had been contracted with a short term maturity. At the same time, Korea held reserves of 34 billion, just about half of its short term debt. Thus, abstracting from the fact that most of the debts had been contracted by the private sector, the essence of the problem was that if one or more banks should delay the roll-over of their loans, Korea would inevitably face a currency crisis. The second, that during the second semester of 1997 the banks had already begun their run by collecting 11 billion or 15 percent of their short term loans. The total claims were reduced by slightly more than 9 billion or 9 percent.

Table - 3.3
Consolidated Cross-border Claims in All Currencies: Claims vis-à-vis Korea

(million US dollars)

Period Ending	Total	Short Term	Share of Short Term	Public Sector	Banks	Other Private	Share in Total (%)

[4] Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Luxembourg, Netherlands, Norway, Spain, Sweden, United Kingdom, and United States.

		Claims*	Claims (%) In Total				Public Sector	Bank	Other Private
Jun-94	48132	34908	72.53	3770	31979	12372	7.83	66.44	25.70
Dec-94	56599	40143	70.93	4931	37027	14624	8.71	65.42	25.84
Jun-95	71430	51439	72.01	5518	47583	18308	7.73	66.61	25.63
Dec-95	77392	54130	69.94	5167	52209	19921	6.68	67.46	25.74
Jun-96	88027	62332	70.81	5940	57852	24141	6.75	65.72	27.42
Dec-96	99953	67506	67.54	5677	65896	28310	5.68	65.93	28.32
Jun-97	103432	70182	67.85	4390	67290	31680	4.24	65.06	3063
Dec-97	94180	59444	63.11	3923	55951	34229	4.16	59.40	36.34

* Up to and including one year maturities.

Source: Bank for International Settlements, *The Maturity, Sectoral and nationality Distribution of International Bank Lending*, May 1998 Press Release, First Half of June 1997, and Second half of 1996.

Moreover, there was a concentration of the foreign bank loans, principally to Japanese banks, banks that could not afford to book any loses at this point in time (See Table 3.4). Miller (1998) states that "a potential source of further instability in South East Asia ... stems from Japan's ailing banking system."[5]

Finally, it should be noted that foreign bank loans formed a significant and increasing portion of the bank loans to the private sector. While the BIS reported the claims of foreign banks to be 103 billion, the claims by deposit money banks on the private sector were 263,903 bn won at the end of June 1997 equivalent to 297 bn US$ at the then prevailing exchange rate of 888 won per US dollar (See Table 3.5).

It is not surprising that the IMF data of September 1998 confirm the fact that a bank panic may well be the cause of the financial crisis in Korea as presented in Table 3.6. In contrast to a net inflow of capital of $24 billion in 1996, in 1997 the IMF recorded a net outflow of $9 billion. That means a change of $33 billion in the financial account. This turn around can not be explained on the basis of the direct and portfolio investment flows. The problem does not originate in the account "other investments: assets" either.

Table - 3.4
Claims of Banks of Different Countries on Korea: June 1997

Lending Country	Claim (US$ mn.)	Share in Total (%)
Japan	23732	22.94

5 Miller (1998), p. 441.

Germany	10794	10.44
France	10070	9.74
United States	9964	9.63
United Kingdom	6064	5.86
Belgium	3899	3.77
Netherlands	1736	1.68
Italy	1369	1.32
Canada	1325	1.28
Austria	1212	1.17
Spain	546	0.53
Luxembourg	528	0.51
Finland	106	0.10
Others	32087	31.02
Grand Total	103432	100.00

Source: Bank for International Settlements, *The Maturity, Sectoral and Nationality Distribution of International Bank Lending*, First Half of June 1997.

Table - 3.5
Importance of Foreign Loans in Deposit Money Banks Claim on Private Sector

Period Ending	Deposit Money Bank Claims on Private Sector		Debt to Foreign Banks	Share of Foreign Bank Debt in Claims on Private Sector
	Bn. Won	Bn. US$*	Nm/ IS$	%
(1)	(2)	(3)	(4)	(5)
Jun-95	187947	247.9	71.4	28.8
Dec-95	200769	259.2	77.4	29.8
Jun-96	216795	267.4	88.0	32.9
Dec-96	240936	285.4	99.9	35.0
Jun-97	263903	297.1	103.4	34.8

* Based on end of period exchange rates.
Source: Col. 2 International Financial Statistics CD March 1998; and Col. (4) BIS.

The total of other investment liabilities coincidentally explains the reduction of $33 billion in the financial account. But this is mere coincidence because the loans by foreign banks to Korean banks and firms declined by $20 billion and $18 billion respectively. The government, that had never made use of foreign credit in the recent past, all of a sudden increased its indebtedness by $5 billion. It may safely be concluded that the Korean crisis was caused by the withdrawal of international bank loans.

Table –3.6
Korea: Current Account Deficits and Major Items of Financial Account during 1990 – 1997

(million US dollars)

Year	Current Account	Financial Account	Direct Investment Abroad	Direct Investment in Korea	Portfolio Investments		Other Investment		Other Investment Liabilities			
					Assets	Liabilities	Total	Of which Banks	Total	Govt.	Banks	Others
1990	-2003	2896	-1052	789	-134	218	-2425	-2244	5500	-795	1942	4353
1991	-8317	6741	-1489	1180	717	2338	-3006	-1810	7001	-703	4247	3458
1992	-3944	6994	-1162	728	849	4953	-3299	-3291	4924	-693	1820	3798
1993	990	3216	-1340	588	-538	10553	-4592	-3993	-1455	-1827	7	-348
											20	
1994	-3867	10732	-2461	809	-2028	8149	-7369	-5061	13632	-336	7368	6600
1995	-8507	17273	-3552	1776	-2284	13875	-13991	-9199	21450	-603	11389	10664
1996	-23006	23924	-4670	2325	-5998	21183	-13487	-8173	24571	-522	9952	15142
1997	-8167	-9195	-4449	2844	2008	12287	-13568	-8336	-8317	4694	-9785	-3226
Cum. 1990-1997	-56821	62581	-20174	11039	-7409	73555	-61736	-42106	67307	-786	27652	40441

Source: IMF, International Financial Statistics database (CD-Rom September 1998).

Section IV
India's Crisis of 1991

Although very moderate in comparison to the Mexican and Korean crises the Indian crisis of 1991 is again an example of a "bank panic". As a matter of fact it is probably a better example than the other two cases because of the small amounts involved and because of the relative unimportance of the external sector to the Indian economy.

Table 3.7 shows that between 1990 and 1991 the inflow of capital under the heading "other investment liabilities" declined by two million. Given the unimportance of the other balance of payments accounts at the beginning of the 1990s it may well be assumed that these 2,000 million contributed to the financial crisis of 1991. Although 2,000 million may not sound like much in the present (1999) circumstances of India, that sum represented almost twice the reserves of India, which in June 1991 touched a low point of 1,187 million. The evolution of the reserves in India during 1991 is depicted in Figure 3.1.

Figure - 3.1
The exchange rate: Rupees per dollar

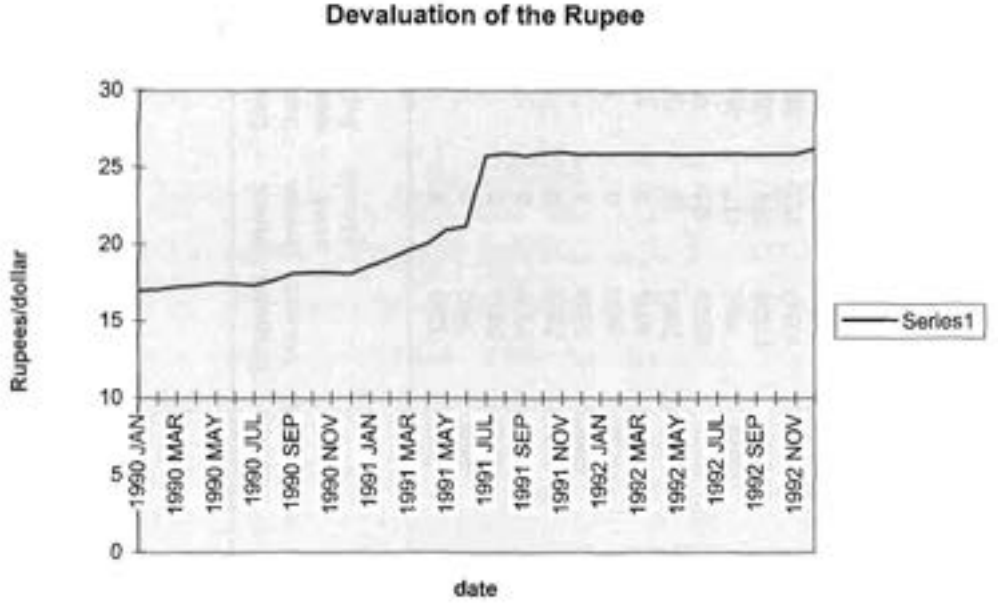


Table – 3.7

India: Current Account Deficits and Major Items of Financial Account during 1985 -- 1997

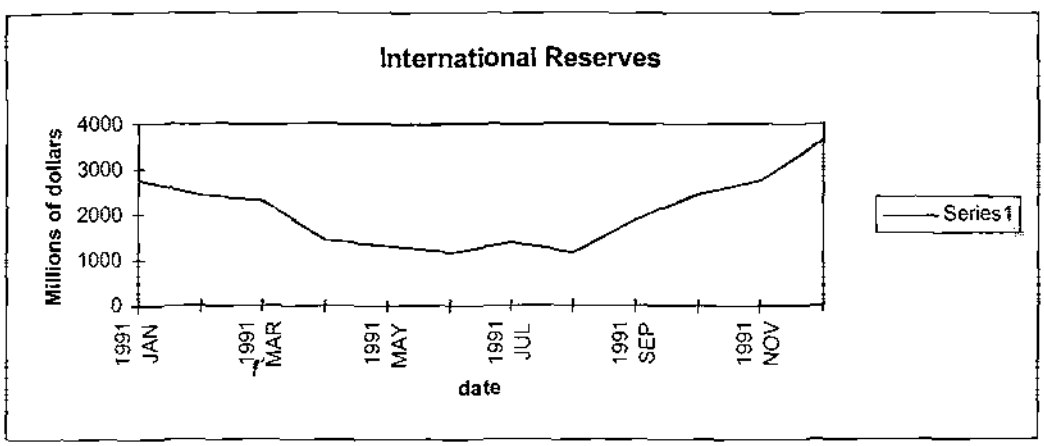
(million US dollars)
(million US dollars)

Year	Current Account	Financial Account	Direct Investment Abroad	Direct Investment in India	Portfolio Investments		Other Investment		Other Investment Liabilities			
					Assets	Liabilities	Total	Of which Banks	Total	Govt.	Banks	Others
1985	-4177	3281	0	0	0	0	53	52	3228	1689	19	1519
1986	-4598	3992	0	0	0	0	-250	-37	4242	2457	-51	1836
1987	-5192	5734	0	0	0	0	125	31	5609	4118	-76	1566
1988	-7172	7175	0	0	0	0	276	240	6899	5173	-297	2023
1989	-6826	7212	0	0	0	0	114	310	7099	4949	-281	2431
1990	-7037	5528	0	0	0	0	-611	333	6139	4866	-450	1723
1991	-4292	3450	0	74	0	5	-808	-1003	4180	1022	69	3090
1992	-4485	4075	0	277	0	284	929	1732	2587	-938	1947	1578
1993	-1876	7074	0	550	0	1369	1830	-148	3325	221	2045	1058
1994	-1676	10576	-83	973	0	5491	1170	-1029	3024	234	1307	1483
1995	-5563	3861	-117	2144	0	1590	-1179	-92	1423	1418	266	-261
1996	-5956	11848	-239	2426	0	3958	-4710	-1642	10413	1744	2989	5680
1997	-3532	10317	-113	3351	0	2543	-4743	-2156	9278	631	1098	7550
CUM 91-97	-27381	51201	-552	9794	0	15241	-7511	-4338	34230	4332	9720	20177
CUM 85-97	-62382	84123	-552	9794	0	15241	-7804	-3410	67444	27585	8584	31275

Source: IMF, International Financial Statistics database (CD-Rom September 1998).

A more detailed analysis by quarters reveals that the financial account capital inflows decreased from 1,894 million in the first quarter of 1991 to 574 million in the second quarter and to only 34 million in the third quarter (See Table 3.8). As noted above the principal account responsible for this decline in capital inflows was the "other investment liabilities" account. Thus, from the first to the second quarter of 1991 this account declined from a positive inflow of 2,303 million to an outflow of 173 million. All the sub-accounts of "other investment liabilities" contributed to this decline with the exception of the sub-account concerned with bank loans to "other sectors". Bank loans to the monetary authorities, the general government and the banks declined leading to the crisis which led to the devaluation of the Rupee depicted in Figure 3.2.

Figure – 3.2
India: total reserves minus gold



The inferences derived from the analysis of the IMF data can be corroborated by looking at the Bank for International Settlements statistics with respect to "The Maturity and Sectoral Distribution of International Bank Lending". The BIS statistics do not coincide with those of the IMF because the coverage is different. The BIS figures only refer to loans made by banks from the BIS reporting area. The figures presented in Table 3.9 reveal that BIS reporting area banks reduced their loans to India by 1,528 million between December 1990 and June 1991. Two thirds of this reduction, 1,125 million, was achieved by the failure to extend or roll-over short term debts. The decomposition according to sectors reveals that between December 1990 and June 1991 the Government repaid 456 million, the banks in India repaid 608 million and the non-banking sector 378 million.

Table – 3.8
Various Components of Financial Account India: 1990-94

	Financial account	Other Inv. Liabilities	Monetary Authorities	General Govt.	Banks	Other Sectors
1990 Q1	1170	1435	150	1121	-84	247
1990 Q2	1057	653	423	22	-217	425
1990 Q3	1547	2146	635	693	-25	843
1990 Q4	1754	1904	659	1163	-124	207
1991 Q1	1894	2303	41	1331	381	550
1991 Q2	574	-173	-70	-247	-512	655
1991 Q3	34	1140	102	357	-88	769
1991 Q4	948	910	-370	-123	287	1115
1992 Q1	2351	1249	-639	-202	223	1868
1992 Q2	2392	1724	106	14	1370	234
1992 Q3	-272	-850	75	-1257	741	-409
1992 Q4	-395	464	865	101	-386	-115
1993 Q1	2749	2257	49	1748	430	31
1993 Q2	793	212	-54	-858	996	128
1993 Q3	1177	323	298	-653	443	235
1993 Q4	2354	533	-211	-97	177	665
1994 Q1	4571	2129	-45	169	886	1118
1994 Q2	1097	-58	444	-292	113	-323
1994 Q3	2591	854	-59	289	417	208
1994 Q4	2317	99	-197	-74	-109	479

Table 3.9
Claims by BIS area Banks: India

	Total loans	Shorter than 1 yr.	Public Sector	Banks	Non-bank private sector.
Dec. 1990	12,149	4,086	4,840	3,044	4,122
June 1991	10,621	2,961	4,384	2,436	3,744
Dec. 1991	11,088	3,185	4,711	2,184	4,142

* Up to and including one year maturities.
Source: Bank for International Settlements, The Maturity, Sectoral and nationality distribution of International Bank Lending.

With the intervention of the IMF the foreign exchange crisis of 1991 was rapidly solved and the external sector picture of India improved in the subsequent years. However, it is not entirely clear what concessions India had to make on its development model - good or bad - in order to gain access to the IMF financing. This will have to be a topic of further yet immediate research.

Section V
Conclusions and Policy Recommendations

The discussion presented above makes clear that one of the big threats to the financial stability of developing countries is the stock of short term debt to banks. Thus, although a lot has been said about the dangers of short term capital flows of a speculative nature, we find that the main danger of these flows is that derived from bank credit. The speculative herds of small investors have not really materialized and what we find are small herds of very powerful banks.

The surprising fact is that these 'bank panics' occur even when the amounts of money involved are relatively small with respect to the size and resources of the economies in question. The deciding variable appears to be international reserves. Thus the first policy recommendation that may be derived from the above is that countries should very carefully monitor both state and private indebtedness in relation to reserves.

Secondly, since the danger does not appear to come from the speculation of small investors it appears reasonable to relax the regulations on portfolio and direct investment in order to attain the same or increased capital inflows together with a smaller exposure to international banks.

As a matter of fact, India has proceeded on exactly this course. After the 1991 crisis there was a shift in the finance of the Indian current account deficit from foreign bank borrowing toward direct and portfolio investment. Thus for the period 1991-1997, after the reforms of 1991, we note that the cumulative current account deficit amounts to $27 million and was more than amply covered by the capital inflow of $51 billion registered on the financial account. As shown in table 7, foreign direct investment and portfolio investment increased from zero in 1990 to $3.3 and $2.5 billion respectively in 1997. For the period 1991-1997 the cumulative figures for foreign direct investment and portfolio investment were 10 and 15 billion respectively and together account for half of the capital inflow recorded on the capital account. The total of other investment liabilities relative to the financial account declines in importance from 80 percent to 67 percent. However, with respect to the other investment liabilities account we find that the foreign indebtedness of the Indian private sector, including banks, is gaining importance with respect to government debt. Thus, for the period 1991-1997, almost 90 percent

of the foreign debts were incurred by the private corporations (60 percent) and by Indian banks (20 percent).

At the same time, it must be noted, the private sector undertook important investments abroad. Thus, during the period 1991-1997 the other investment assets account increased by $7.5 billion. The amount of capital exported by banks was $4.3 billion.

In spite of the increased direct investment and portfolio capital flows recorded in the period 1991-1997, in 1997 foreign bank loans to the Indian corporate sector were equivalent to 75 percent of the financial account. Therefore, although the general message from the analysis of the 1991-1997 period is that the foreign debt to banks does not provide a cause for worry like it should have done in the Mexican and Korean cases, the data for the last year do not lead to the conclusion that these accounts should be neglected.

A second conclusion that may be drawn from the analysis above is that the IMF should not intervene either to avoid the 'free rider' behaviour of banks nor to make sure that the IMF money does not get used to pay the banks. These two concerns of the IMF have boosted the negotiating capacity of banks and have precluded them from negotiating the value of their claims. Thus a second recommendation to developing countries involves the rejection of the IMF's role as mediator between the countries and the banks.

A third recommendation, along the lines of the second and particularly relevant for the case of private debt is that of striving for a debt-equity conversion mechanism that does away with the 'seniority' of the banks. Such a mechanism would lead to the prompt restructuring of firms in trouble as a result of their own actions as well as those that may encounter financial difficulties because of economy-wide changes like a modification of the exchange rate. The removal of the 'seniority' qualification for bank loans would make these more expensive for the borrowing countries and less attractive to the banks. The short-fall in the flow of short-term bank finance should be made up by the promotion of long-term capital flows that is built in to measure removing the 'seniority' status of bank loans. This topic is obviously one that calls for much more research.

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Chapter 4

Stock Market Prices, the Exchange Rate, Technical Trading and the Boom Bust Cycle of the Emerging Market Countries

Introduction

A great obstacle to uninterrupted growth in many developing countries has been the erratic behaviour of their external sector. The swings from boom to bust have been much larger than could be explained by conventional models of the overshooting of the exchange rate. The evidence points to the overshooting of capital inflows and the development of unsustainable current account deficits followed by abrupt devaluations or the adoption of stringent deflationary measures to restore equilibrium. The recent Mexican experience illustrates this behaviour well.

The experience of Mexico and other Latin American countries does not call to mind the economics of rapidly equilibrating markets and "market efficiency." Therefore, the purpose of this study is to develop and test a model to explain portfolio capital flows and their repercussions on stock prices and the exchange rate in the context of investment decisions based primarily on technical analysis.

Background

The purpose of this study is to show that a policy of trade liberalization that leads to an increase in the relative price of non-tradables in one country can lead to short term feedback circle if an important group of foreign investors adopt a technical trading strategy. A technical trading strategy — a general heading for a myriad of trading techniques — can somewhat summarily be defined as an approach to investing that relies on the forecasting of prices on the basis of historical price trends and the changes in these trends. Thus, the general idea is to study price movements and anticipate whether the prices of stocks will be going up or down.

The assumption of technical trading does not appear to be unrealistic in view of the accumulating weight of evidence that documents this phenomenon. Andrea Terzi (1994) points out that the history of chartism goes back to the 19th century and gained popularity through the pages of the Wall Street Journal: Charles Dow, who developed the Dow Jones Index, presented his technical theory of markets in a series of editorials in that renowned newspaper.

In the past few years there has been an increased interest in technical analysis as major journals such as The Economist and Business Week have documented the fact that money managers have come to rely increasingly on the services of "technicians" rather than economists to design their strategies for stock, currency and commodity markets. Mark Taylor and Helen Allen (1992) report a survey by the Bank of England that corroborates the fact that technical analysis is an important tool for foreign exchange dealers. Taylor (1995) reviews a slowly growing literature that rejects the efficient market hypothesis for the epitome itself of an efficient market: the foreign exchange market. Pilbeam (1995) concludes: "future exchange rate research might usefully combine Chartist techniques and Fundamental analysis."[1] Paget-Blanc (1994) concludes that new econometric methods have led to improved analyses of time series that provide support for the technical approach.

Thus, the proposition that stock market investors buy when prices are going up and sell when they decline does not appear overly unrealistic. However, the technical trading hypothesis does not accord well with the efficient market hypothesis (EMH) economists have paid precious little attention to the technical analysis approach: "If markets are efficient, the (technical) analysis of past price patterns to predict the future will be useless because any information from such an analysis will already have been impounded in current market prices."[2] Terzi concluded that the apparent consensus among economists is that "technical analysis would apply to inefficient markets only."[3]

Another aspect of technical trading is that it allows for the emergence of bubbles, a phenomenon that stands in stark contrast with the implications of the EMH. Bubbles have been the subject of much interest and controversy in economics.

Until the early eighties the identification of speculative bubbles was mostly restricted to the examination of the coefficients of autocorrelation: if these were not statistically different from zero it was concluded that price variations were independent over time.[4] Other early researchers (Shiller, 1981) used variance bound tests as an indirect test for bubbles. The problem with these tests is that they tested a joint hypothesis since they implicitly assumed the correctness of the dividend model.

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1 Pilbeam, p. 450.

2 Malkiel (1987): 127-128.

3 Tarzi, p. 205.

4 These type of tests are generally associated with Fama (1970).

The same problem also came up in the next test to gain general acceptance: the misspecification test suggested by West (1987). The problem with this test, as noted by Flood and Hodrik (1990), is that it defines a test for a joint hypothesis: that the underlying fundamental model is correctly specified and that there exists a bubble. Because of this shortcoming this method has fallen out of favour.

Among the most popular tests used today are those by Diba and Grossman (1984, 1988) and Hamilton and Whiteman (1985), who "recommended the alternative strategy of testing for rational bubbles by investigating the stationarity properties of asset prices and observable fundamentals."[5] Recent examples of unit root tests include Craine (1993) and Pittis (1993). However, in Monte Carlo simulations by Evans (1991) the tests for stationarity, unit roots and cointegration frequently rejected the presence of bubbles even when such bubbles were present by construction. Since Evans' note, the newest test for speculative bubbles rely on regime switching and were proposed by van Norden (1993) and van Norden and Schaler (1993).

In addition to the econometric literature reviewed above another approach to the examination of bubbles that has blossomed in the past few years has centered on the simulation of the profitability of having followed technical trading rules. Examining the profitability of trading on the foreign exchange market Pilbeam (1995) concluded "that at the three-month investment horizon there seems to be very little reason either in terms of yield or risk to prefer the advice of Chartists over Fundamentalists or *vice-versa*."[6] Applying more sophisticated trading rules to nearly a century of stock market data Brock, Lakonishok and LeBaron (1992) provide strong support for the notion that technical strategies cannot be dismissed as useless. The general shortcoming of the profitability tests of technical trading strategies is that, as Brock et al. are quick to point out, the time series of stock prices may easily lend themselves to data mining.

However, in spite of the new developments in the testing for the existence of bubbles, bubbles remain limited to being the errors around a fundamental model. Thus, they do not seem to capture the phenomenon so aptly described by Keynes (1936): "Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of

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5 Evans (1991), p.1.

6 Pilbeam (1995), p. 449.

speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done."[7]

The Model

In the last section two shortcomings of the tests for bubbles were described. First, the testing problem, that the test involves a joint hypothesis with respect to the correct specification of the model and the existence of a bubble. Second, the phenomenon suggested by Keynes, that the problem does not appear to be that of speculation around fundamentally correct values but rather, the determination through speculation of a number of key prices for an economy: this appears to be specially relevant to Latin America.

The purpose of this section is to specify a model that captures the feedback process between stock market prices and capital flows. The model will consist of two parts. The first establishes the effect that capital inflows have on stock market prices. The second specifies the technical mechanism whereby rising equity prices and currency overvaluation encourage further capital inflows.

The bubble test implicit in the specification of the model and its empirical application differ from the tests described in the previous section: rather than concentrating on the behaviour of price series it explicitly focuses on the capital flows that feed the bubble. That is, rather than building a bubble into a model we test the technical trading hypothesis against the EMH. However, it must be noted that in a way the empirical test of the model shares the frequent shortcoming identified in the previous section: the choice and specification of the alternative model. We are however confident of our specification of the EMH as will be made clear further on.

The model employed to derive the first part of the feedback mechanism is the Salter (1959) dependent economy model. This model posits a small open economy for which the terms of trade are exogenous: the distinction between import and export prices becomes immaterial and imports and exports can be aggregated into a composite good called 'tradables'. The model further assumes full employment so that the economy is always on the production possibility frontier that depicts the technical substitution possibilities between 'traded' and 'non-traded' goods. Non-traded goods are those goods or services that can not be traded because of their nature, transport costs or commercial policy.

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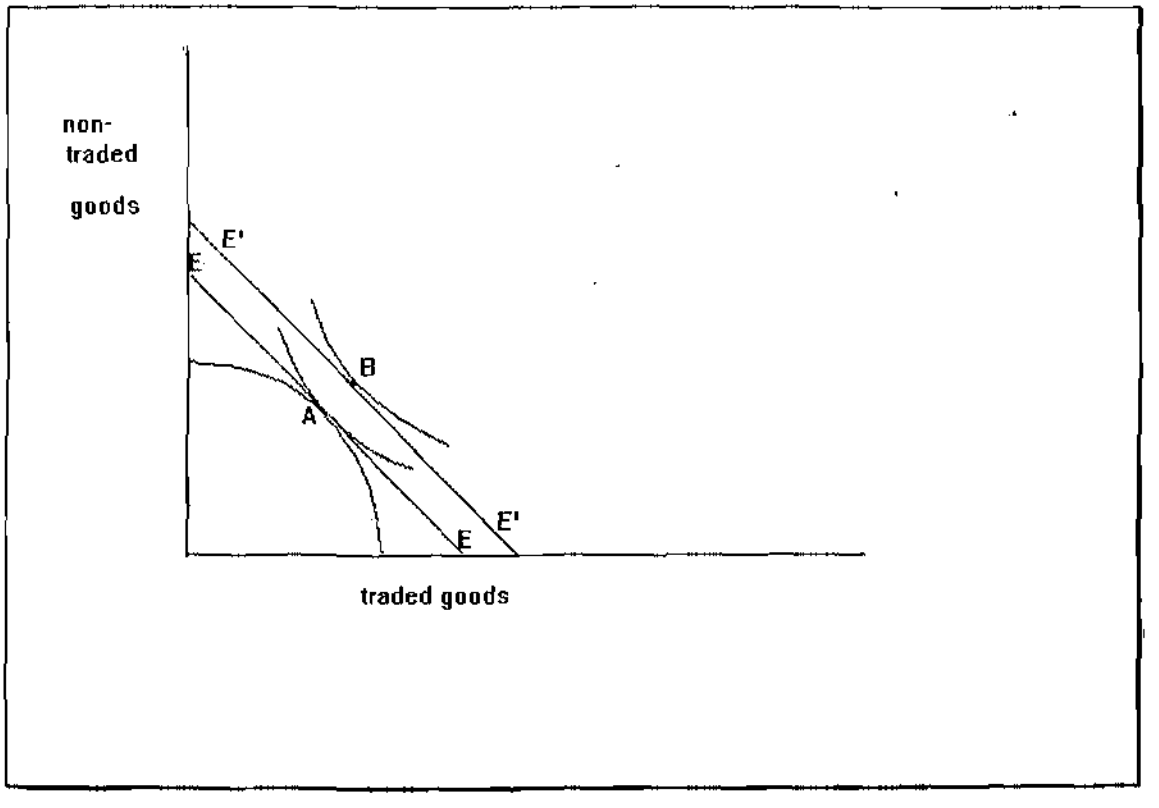
[7] Keynes p. 159.

In the context of the feedback mechanism we are particularly interested in a distinct class of non-tradables: land, houses and equity shares. Although the classification of stock-market shares as non-tradable might appear paradoxical in view of their booming trade it must be remembered that all that is exchanged are titles to domestic income streams. In order to clarify the notion that equities are not tradable it is useful to draw their parallel to houses: the ownership and right to the rent of a house in a foreign country does not make houses tradable.

Adding the assumption of balance on the current account to the two other assumptions - full employment and the exogeneity of the terms of trade - permits the presentation of the equilibrium position of the economy as point A in figure 4.1. At point A the production of importables less the consumption of importables equals the production of exportables less the consumption of exportables.

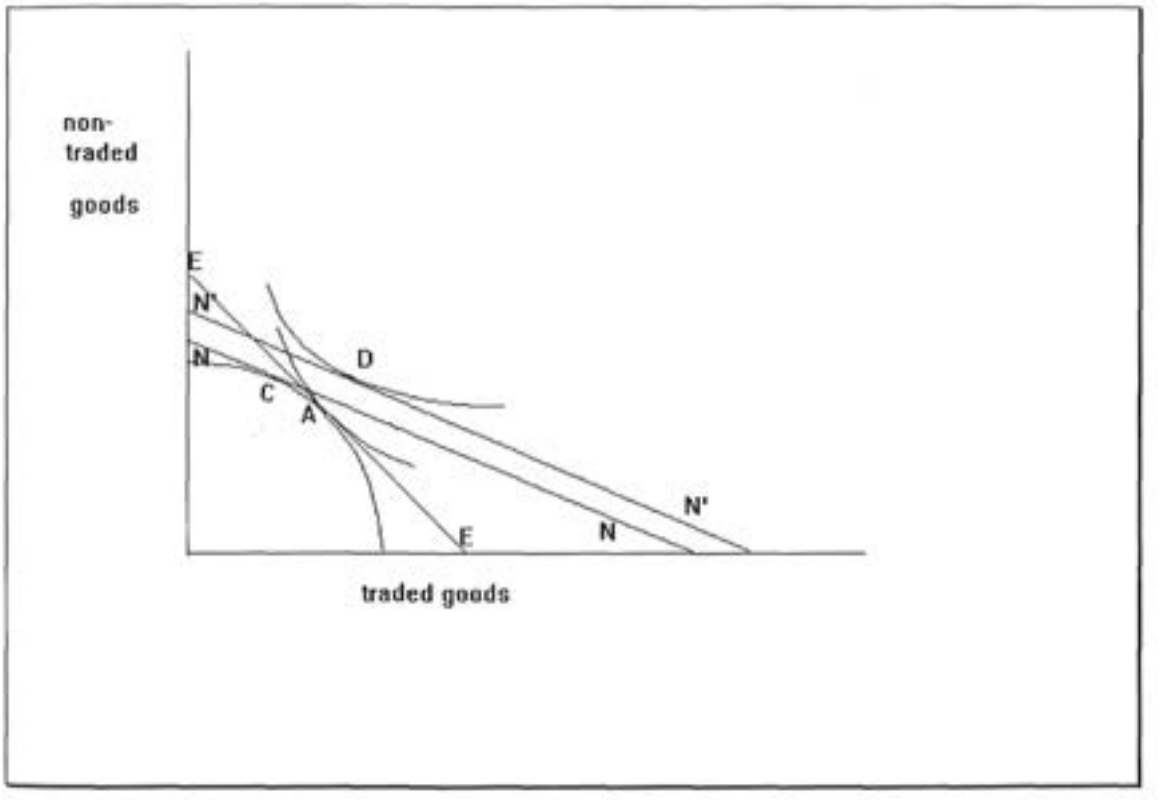
Figure 4.1
Equilibrium without capital inflows and excess demand for tradables and non-tradables with assumed capital inflows



The consequences of the introduction of a foreign capital inflow are presented as the relaxation of the expenditure constraint from EE to E'E' and the shift away from the equilibrium point A to an impossible point B. At B the consumption of both

tradables and non-tradables would be greater than their production. Although the excess of consumption of tradables can be accommodated by imports or a reduction of exports, equilibrium in the non-tradable goods sector requires either an increase in the domestic relative price of non-tradables or an exchange rate appreciation. Either of these changes or a combination of both will lead to an increase in the relative price of non-traded goods as depicted by the lines NN and N'N' in figure 4.2. With the capital inflow and the new set of prices production and consumption can take place at C and D tangent to the new price lines. The consumption of non-tradables equals their production. The difference between the production and consumption of tradables is equivalent to the capital inflow.

Figure 4.2
Equilibrium with capital inflow and higher prices for non-traded goods.



Thus the Salter model shows that a capital inflow can only be accommodated by an increase in the relative price of non-traded goods with respect to traded goods. What we have is that relative prices of tradable and non-tradable goods as announced by a Walrasian auctioneer would adjust until the quantity of non-tradables produced would equal the quantity demanded and so that the excess consumption of tradables

would equal the capital inflow. Without a Walrasian auctioneer and a fully developed general equilibrium model we can suggest that for a given capital inflow the extent to which the relative prices of non-tradables have to increase depends on the marginal rates of substitution and transformation: these determine the amount of production that has to be shifted from the tradables sector to the non-tradables sector. Thus, we might venture to write:

3.1 $$\left[\frac{\hat{P}_N}{\hat{P}_T}\right] = a \cdot \hat{Q}_T$$

Where the carets " ^ " indicate percentage rates of change.

P_N - the domestic price of non-tradables;

P_T - the domestic price of tradables; and,

Q_T - the volume of production of tradable goods.

Because the change in relative price of non-tradables can be obtained through a combination of a change in the domestic relative prices and an appreciation of the exchange rate it appears that the left hand side of equation 3.1 might best be modified to include the exchange rate. At the same time because of the small economy assumption the price of tradables can be assumed fixed and excluded from the equation.

The percentage change in the production of tradable goods can be replaced by a weighted sum of the percentage changes in the production of importables and exportables. This sum can be proxied by the sum of the percentage change in imports and the percentage change in exports: the coefficients of these terms will no longer represent weights adding to one, however.

Equation 3.1 is thus rewritten as:

3.2 $$\left[\frac{\hat{P}_N}{\hat{e}}\right]_t = b_1 \hat{M}_t + b_2 \hat{X}_t$$

Where, as before, the carets " ^ " indicate rates of percentage change;

P_N - the price of non-tradables;

e - the exchange rate in terms of units of domestic currency per unit of foreign currency;

M - the volume of imports; and,

X - the volume of exports.

$b_1 > 0, b_2 < 0$

The Salter model that shows that an assumed capital inflow will result in an increase of the relative price of non-tradables or an exchange rate appreciation can be 'closed' by specifying the foundation for such a flow. The most uncomplicated technical trading formulation that can be thought of may be: buy when prices are going up and sell when they are going down. Thus it might be hypothesized that capital flows are determined by technical traders on the basis of the behavior of the international prices: domestic share prices corrected for the rate of exchange.

3.3. $$CF_t = \left[\frac{\bar{P}_N}{\bar{e}}\right]_t$$

In order to judge the usefulness of the technical trading model described by equations 3.2 and 3.3 above, its performance will be judged against a simple efficient markets model. According to the efficient markets model, the real price of a share at the beginning of a period t is given by:

$$P_t = \sum_{s=t+1}^{\infty} \left(\frac{1}{1+r}\right)^{s-t} d_s \qquad (3.4)$$

Where we assume a constant real discount rate r and the d_s represent the projected values of dividends at time t. Since the expected value of future dividends cannot be observed we simplify equation 3.4 by assuming that dividends grow at a constant rate g. Thus,

$$P_t = \sum_{s=t+1}^{\infty} \left(\frac{1+g}{1+r}\right)^{s-t} D_t \qquad (3.5)$$

The rate of growth of dividends will depend on the rate of earnings that are plowed back into investment and the return on equity of the firm. In general it is expected that the firms that have potential high rates of return on earnings should exhibit high rates of retained earnings.[8] Thus, in fact, the ratio of retained earnings

[8] See Bodie, Kane and Marcus, p. 530.

could be used as an indicator of the return on equity and would also be a factor in the determination of the growth of earnings. Thus, we might write:

$$g=\left(\frac{E-D}{E}\right)^{\gamma} \quad where\ \gamma \quad >1 \tag{3.6}$$

If we let (E-D)/E=k, then equation 3.5 simplifies to:

$$P_0=\frac{(1+k^{\gamma})D_0}{r-k^{\gamma}} \tag{3.7}$$

From equation 3.7 we note that the growth rate $g=k^{\gamma}$ must be less than the discount rate if the equation is to yield a positive and non-infinite price.

Taking the derivatives of 3.7 with respect to k, r and D_0 we may posit that the price is an increasing function of k and D_0 and a decreasing function of r. Thus we propose to examine the usefulness of the efficient markets model by estimating the following function:

$$P_t=f\left(D_t,k_t,r_t\right) \tag{3.8}$$

In the technical trading feedback model we proposed that capital flows might be determined by equity prices and the exchange rate. The alternative against which we propose to test this formulation is a standard capital flow equation like that formulated by Frankel and Okongwu (1996). Thus,

$$CF_t=A+B\left(i_{mex}-i_{us}-\&_t\right) \tag{3.9}$$

where: i_{mex} - nominal interest rate in Mexico

i_{us} - nominal interest rate in the US

$\&$ - the expected rate of devaluation of the peso.

During the period under analysis the government first froze the exchange rate and then moved to a crawling peg mechanism until the market forced it to abandon its exchange rate policy. Under these circumstances it does not appear necessary to formulate any specific mechanism for the formation of expectations with respect to the exchange rate.

Estimation Results

The purpose of this Section is to estimate and compare the technical hypothesis model given by equations 3.2 and 3.3 with the EMH model specified in equations 3.8 and 3.9. The models are both tested for the period comprised between the first quarter of 1989 and the first quarter of 1995. Since the data relate to an extreme economic situation it was not judged relevant to test the variables for cointegration: it might be anticipated that economic behaviour during this period would not necessarily coincide with that during a more stable period. The variables were not subjected to a logarithmic transformation because of the occurrence of negative values for a number of variables. Unit-root tests were conducted in order to ensure the correct specification of the dynamic models. The results, which are not reported here, indicate that all variables are integrated of degree one. Each of the equations is estimated as a dynamic model following the principle of 'general to specific modelling.' The general specification adopted was that of an equation with four lags for each of the variables, This specification was narrowed down by the introduction of restrictions. The general specification adopted was that of an equation with four lags for each of the variables. In order to obtain a more specific dynamic formulation with variables that show significant explanatory power a number of restrictions were tested.

The models (3.2) - (3.8) and (3.3) - (3.9) are non-nested models. To test which set of explanatory variables is relevant in explaining the dependent variable, we apply the J-test of Davidson and MacKinnon; see e.g. Maddala (1992) p. 515 ff.

Model (3.2)

The basic specification of model (3.2) is:

$$\left(\frac{\hat{P}_N}{\hat{e}}\right)_t = f\,(M_t,\, X_t)$$

with '^' indicating percentage changes. A plot of the untransformed data is presented in figure 4.3[9]:

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[9] All the data presented here and in subsequent figures was obtained from International Monetary Fund International Financial Statistics and International Finance Corporation Emerging Markets Data Base.

Figure 4.3

Raw data on the dollar price of stocks, dollar imports and exports

Although the theoretical model is written in percentage changes, the model is estimated in levels to make it possible to compare model (3.2) with model (3.8). After a general dynamic specification has been estimated, the following resticted specification was found to fit the data the best according to residual autocorrelation tests and the Akaike Information Criterion (AIC).

$$\left(\frac{P_N}{e}\right)_t = \underset{}{-19.040} + \underset{(0.995)}{} + \underset{(3.447)}{0.009}\ \nabla M_t + \underset{(2.168)}{0.009}\ \nabla M_{t-2} + \underset{(1.279)}{0.005}\ M_{t-4} + \underset{(2.465)}{0.008}\ M_{t-5}$$

$$- \underset{(2.305)}{0.007}\ \nabla X_t - \underset{(2.195)}{0.008}\ \nabla X_{t-2} - \underset{(1.640)}{0.007}\ X_{t-4}$$

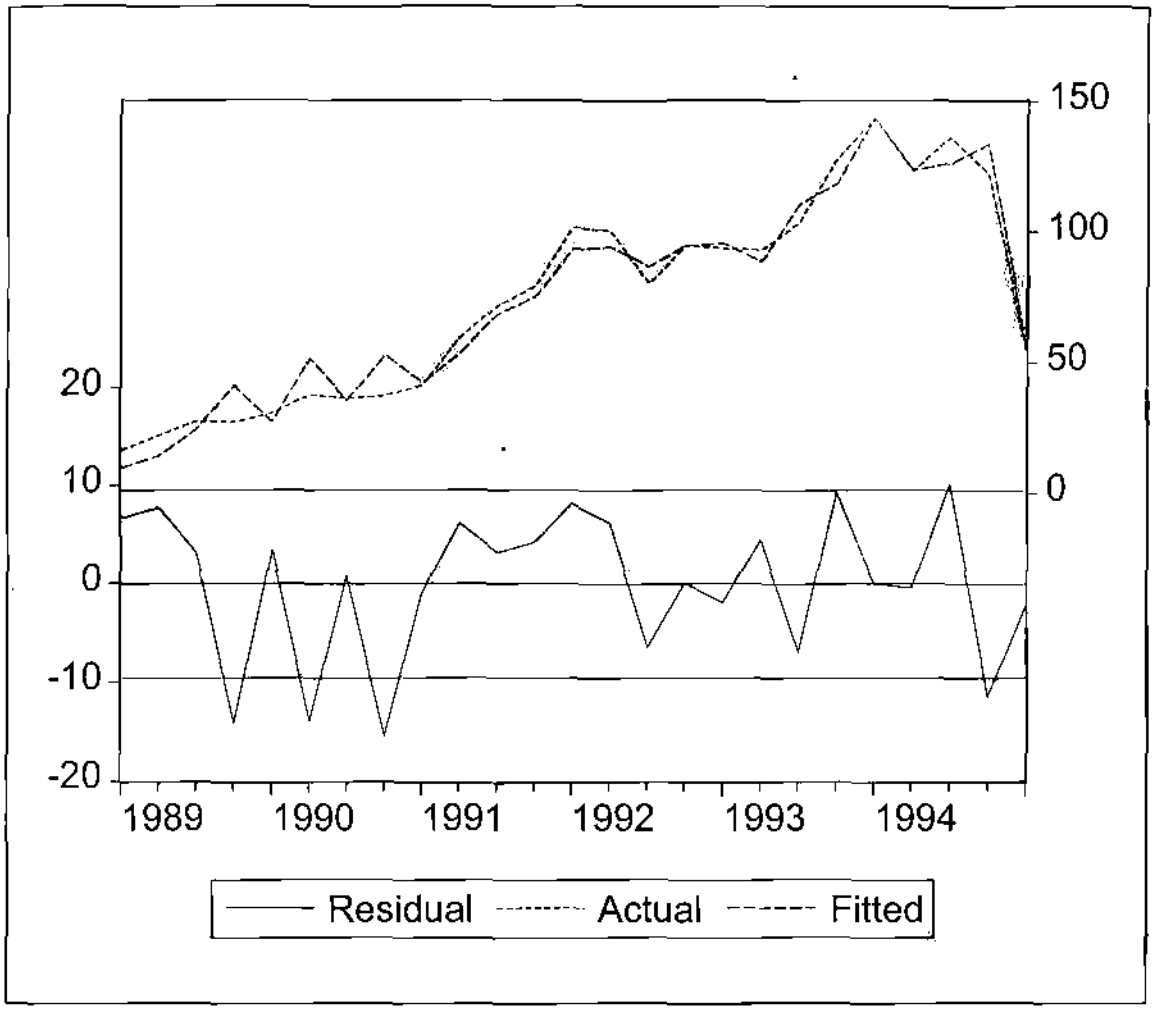
$$+ \underset{(2.754)}{0.634}\ \nabla\left(\frac{P_N}{e}\right)_{t-1} + \underset{(2.250)}{0.626}\ \nabla\left(\frac{P_N}{e}\right)_{t-3}$$

$$R^2 = 0.96;\ BG(4) = 4.33(0.36);\ LB(4) = 2.62(0.62);\ JB = 2.49(0.28)$$

Where $\nabla x_t = x_t - x_{t-1}$, asymptotic t-values are given between parentheses, $BG(4)$ and $LB(4)$ are the Breusch-Godfrey and the Ljung-Box serial correlation tests up to 4th order autocorrelation, and JB is the Jarque-Bera normality test, all with p-values in parentheses. The graph with actual and fitted observations is given in figure 4.4.

Figure 4.4

Actual and fitted observations of the estimation equation for model 3.2



Model (3.3)

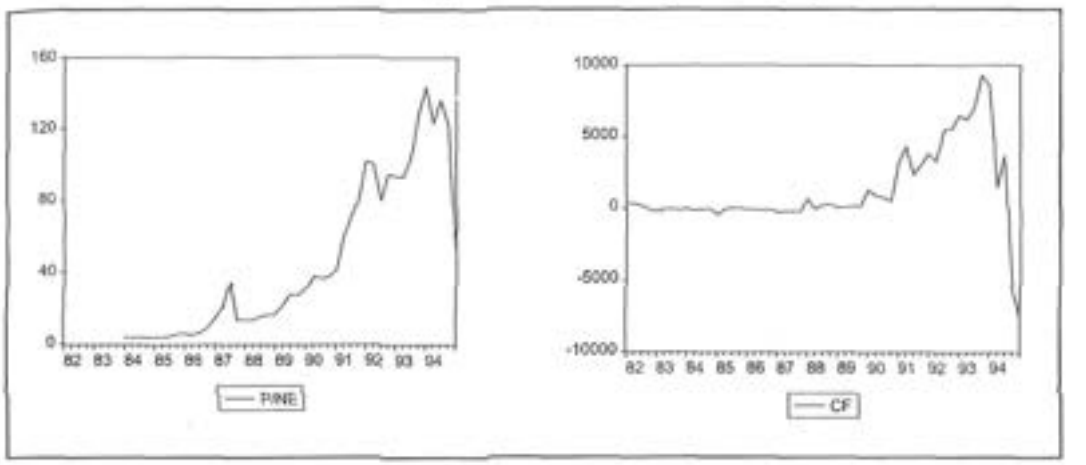
The basic specification of model (3.3) is:

$$CF_t = f\left(\frac{P_N}{e}\right)_t$$

and the plot of the data prestented in figure 4.5

Figure 4.5

Data on dollar stock prices and dollar portfolio capital flows



Following the same principle as above the following estimation result has been achieved for model (3.3).

$$CF_t = \underset{(0.05)}{-39.84} + \underset{(2.47)}{0.56}\ CF_{t-1} + \underset{(3.62)}{0.77}\ \nabla CF_{t-2}$$

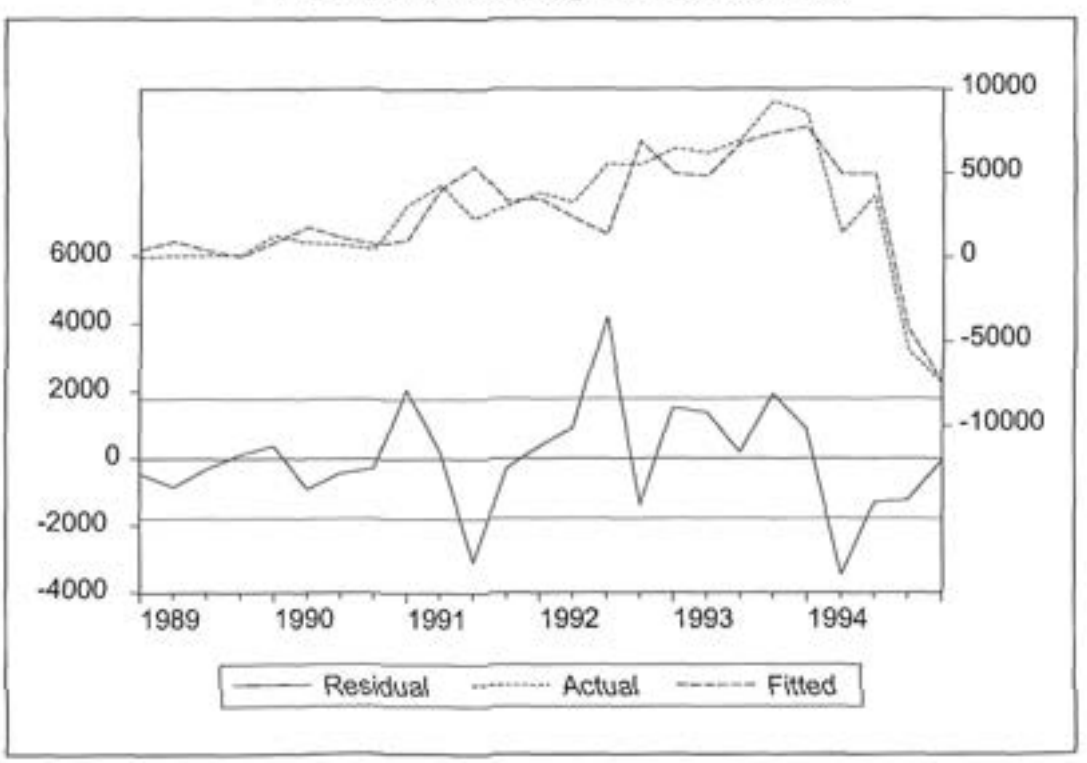
$$+ \underset{(3.69)}{123.87}\left(\frac{P_N}{e}\right)_t - \underset{(4.18)}{178.67}\left(\frac{P_N}{e}\right)_{t-1} + \underset{(1.83)}{68.53}\left(\frac{P_N}{e}\right)_{t-2}$$

$R^2 = 0.83$; $BG(4) = 3.76(0.44)$; $LB(4) = 2.36(0.67)$; $JB = 1.01(0.60)$

Again, the graph with actual and fitted observations is given presented in figure 4.6.

Figure 4.6

Fit of the estimation equation for model 3.3



Although the estimation result suggests the specification of the restriction $\nabla\left(\frac{P_N}{e}\right)_t$, instead of $\left(\frac{P_N}{e}\right)_t$ and $\left(\frac{P_N}{e}\right)_{t-1}$, the restricted result was not better because of more autocorrelation in the residuals.

Model (3.8)

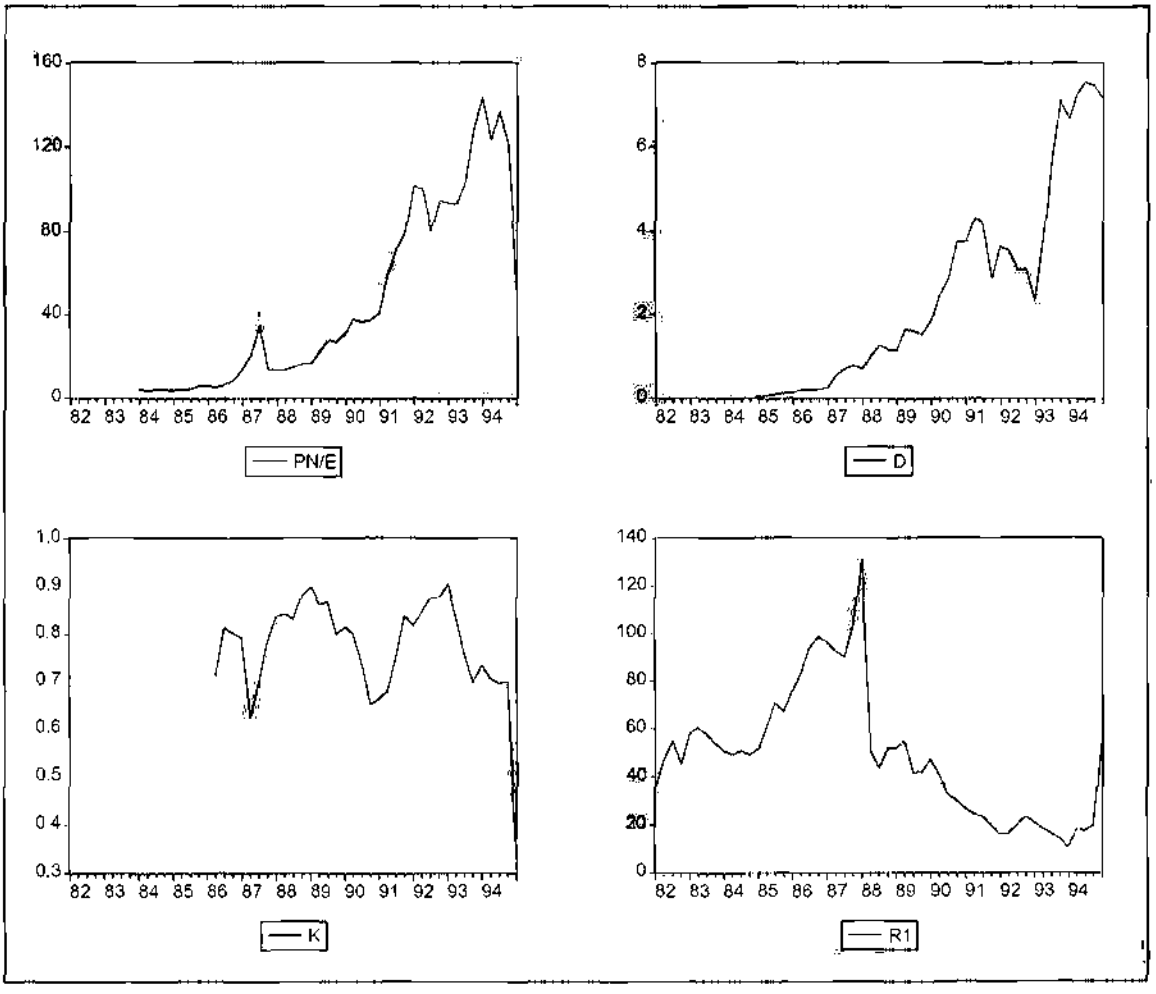
The basic equation for model (3.8) is:

$$\left(\frac{P_N}{e}\right)_t = f\,(D_t, k_t, r_t)$$

and the observed data are presented in figure 4.7:

Figure 4.7

Data on dollar stock market prices, dollar dividends, retained earnings and the Mexican interest rate (average cost of funds)



The estimation result is:

$$\left(\frac{P_N}{e}\right)_t = \underset{(2.28)}{-89.34} + \underset{(3.28)}{10.31}\ D_t + \underset{(1.35)}{4.50}\ D_{t-1} + \underset{(1.61)}{70.35}\ k_t + \underset{(2.58)}{117.90}\ k_{t-1}$$

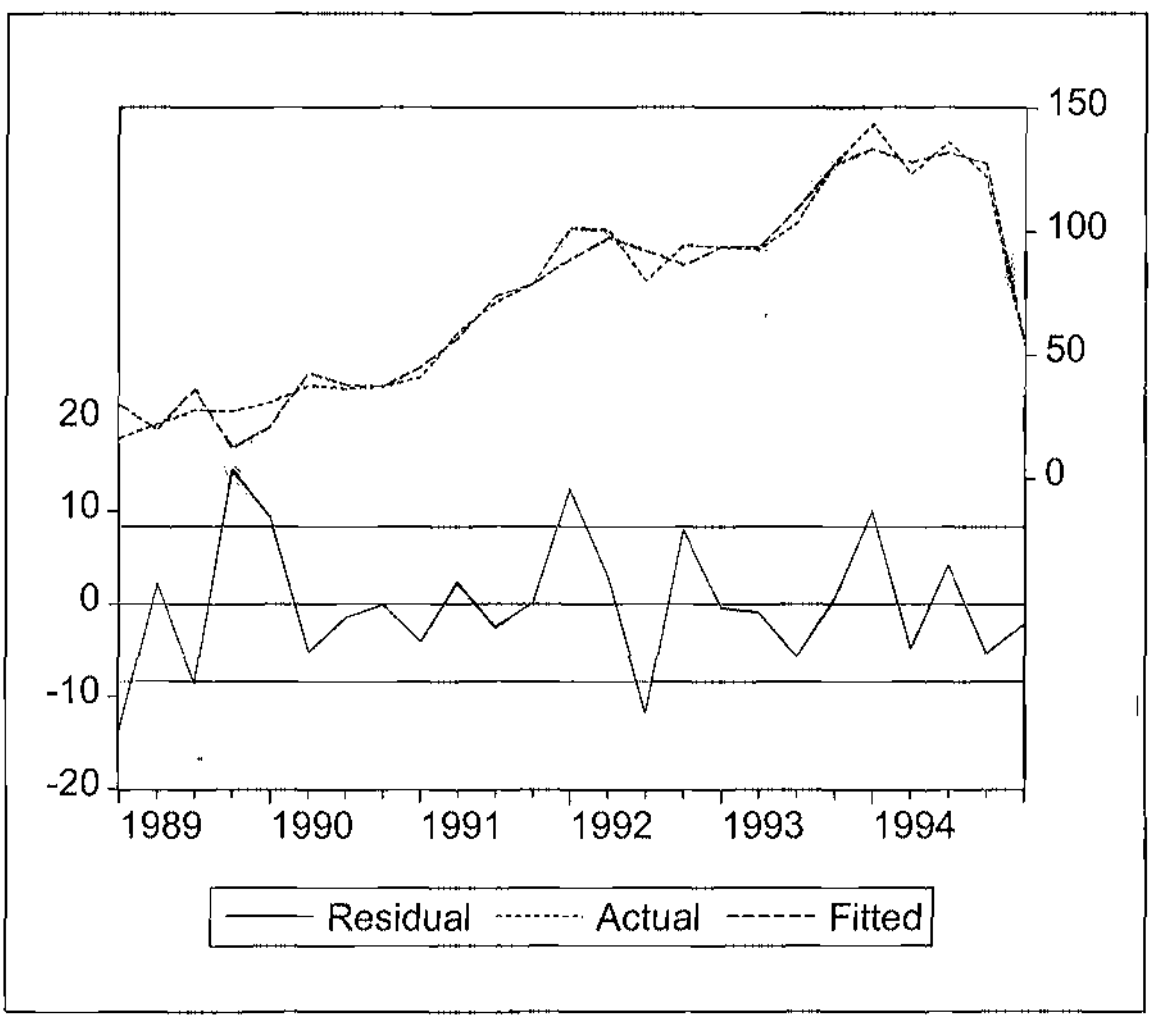
$$- \underset{(2.67)}{1.02}\ \nabla r_t - \underset{(5.58)}{1.48}\ r_{t-2} + \underset{(1.95)}{0.35}\ \nabla\left(\frac{P_N}{e}\right)_{t-1}$$

$R^2 = 0.97$; $BG(4) = 2.57(0.28)$; $LB(4) = 2.64(0.62)$; $JB = 0.42(0.81)$

The plot of actual and predicted observations presented in figure 4.8:

Figure 4.8

Actual and predicted observations for the estimation equation for model 3.8



Model (3.9)

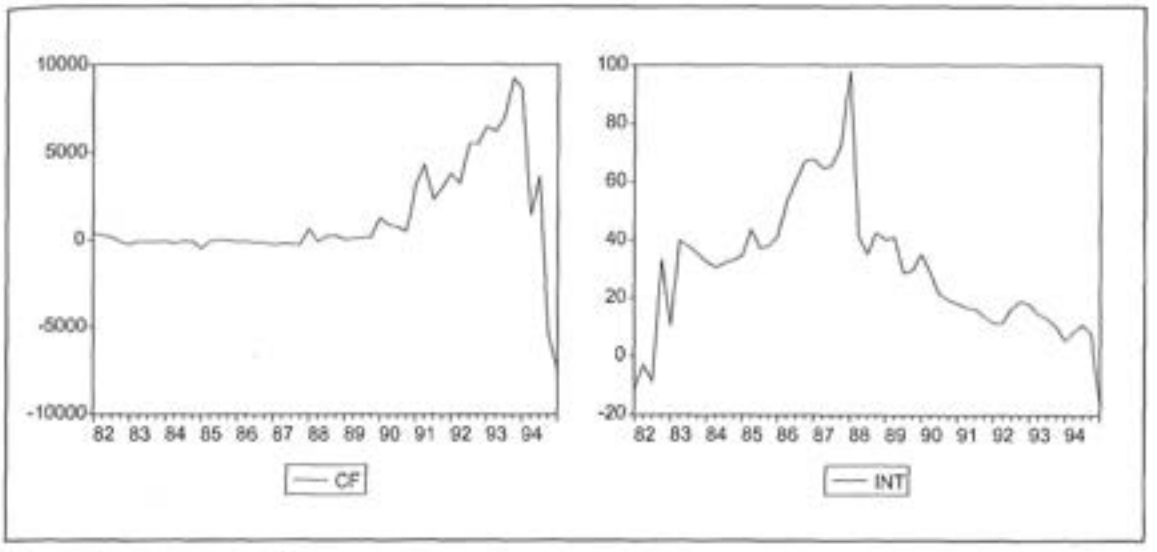
The basic model and the data are as follows

$$CF_t = f(i_{mex} - i_{usa} - \dot{e})_t$$

Define $\text{int}_t = (i_{mex} - i_{usa} - \dot{e})_t$

Figure 4.9

Data on dollar capital flows and the US-Mexico interest rate differential adjusted for changes in the exchange rate



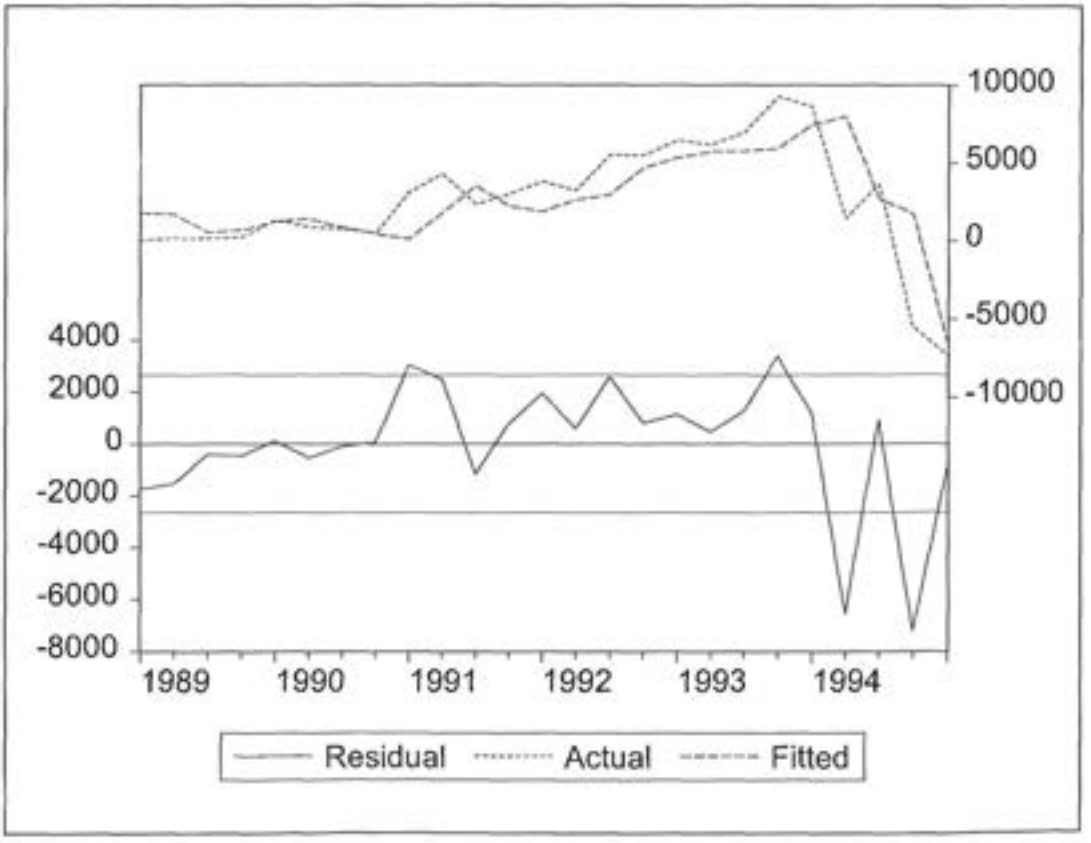
The estimation result is:

$$\widehat{CF}_t = \underset{(1.31)}{-2179.23} + \underset{(1.54)}{90.42}\ \text{int}_t + \underset{(3.28)}{0.74}\ CF_{t-1} + \underset{(1.04)}{0.33}\ CF_{t-2}$$

$$R^2 = 0.59;\ BG(4) = 4.56(0.10);\ LB = 2.31(0.68);\ JB = 16.02(0.00)$$

Figure 4.10

The estimated and actual results of the equation for model 3.9



The high value of the JB-statistic has been caused by the two outliers in the residuals at the end of the sample period.

4.5 ***The Davidson and MacKinnon J-test***

Suppose we have two non-tested hypotheses:

(1) $H_0 : Yt = \beta x_t + u_{t1}, u_{t1} \sim NID(0, \sigma^2_{u_1})$

(2) $H_1 : Yt = \gamma z_t + u_{t2}, \; u_{t2} \sim NID(0, \sigma^2_{u_2})$

The Davidson and macKinnon procedure to test these non-nested hypotheses is to include the predicted values of the model under H_1 in the model under H_0 and test its significance, and also for H_0 and H_1 reversed. So estimate model (2): $\hat{y}_t = \hat{\gamma} z_t$ and estimate the regression equation:

$y_t = \beta x_t + \alpha \hat{y}_t + u_t$

and test the hypothesis $\alpha = 0$. The usual t-ratio is asymptotically distributed as standard normal. So four situations are possible: H_0 and H_1 are both accepted or rejected, or H_0 is rejected in favour of H_1, or the other way around.

The following results have been obtained for the present data.

The price equations

H_0 : model (3.2), H_1: model (3.8); t-ratio = 3.43;

H_0 : model (3.8), H_1: model (3.2); t-ratio = 4.25;

so neither of the models is rejected.

The capital flow equations

H_0: model (3.8), H_1: model 3.9); t-ratio = 5.46;

H_0: model (3.9), H_1: model (3.3); t-ratio = -0.35;

so model (3.9) is clearly rejected in favour of model (3.3).

Conclusions

The preceding section presented the results of the estimation of four dynamic models stemming from economic theory, which fit the data very well, without violating the standard econometric assumptions. Furthermore, through the use of the J-test of Davidson and MacKinnon it was possible to reject model 3.9 in favor of model 3.3 in spite of the fact that it was not possible to discriminate between models 3.2 and 3.8.

The results presented in the last section are remarkable for two reasons. First, it is striking that the dollar prices of stock market paper can be explained by either the required adjustments in the goods market or by the financial results of the companies listed on the stock exchange and the economy wide cost of funds. This implies that the inflow of capital and the adjustment of the economy from tradables to non-tradables goes hand in hand with greater dividends and retained earnings for the stock exchange listed companies. This is not surprising in view of the fact that roughly three quarters of the output of listed companies is destined to the domestic market.[10]

Second, the rejection of the standard capital flow equation 3.9 in favour of the technical flow equation 3.3 suggests that there may be a positive feedback mechanism that may drive the economy away from equilibrium. Thus, the dynamic specification of 3.3 together with the dynamic specification of either 3.2 or 3.8 would lead to a bubble in prices and an overshooting of capital inflows.

Although the model does not help to identify when such a bubble will form or when it will burst, it does alert to the unsettling fact that capital imports may not lead to the necessary expansion of the export capacity of developing countries.

[10] Please see: Bolsa Mexicana de Valores, Indicadores Financieros: Tercer Trimestre 1996, pp. 40-41.

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Chapter 5

Stock Returns, the CAPM and Individual Firm Characteristics in the Mexican Crisis

A relevant question facing savers in developing countries is whether investment in equities will serve as an adequate hedge against inflation. A further question in a liberal capital flows economy is which types of stock will provide a better hedge against devaluation. These are also relevant questions for policy makers seeking to strengthen the financial sector to serve as an engine for growth.

The purpose of this study is to examine whether some stocks perform better than others in the event of a devaluation. Further, since the characteristics that might make a stock a better hedge in the case of a devaluation are known, we examine whether the Capital Asset Pricing Model (CAPM) incorporates these risk/return characteristics in the valuation of the stocks.

Event studies have typically been used to asses the impact of firm specific events such as mergers and acquisitions, earnings announcements and issues of new debt or equity. Although it is claimed that such studies are also applicable for the study of economy-wide events, MacKinlay (1997), Campbell, Lo and MacKinlay (1997) and Bodie, Kane and Marcus (1996) all refer to McQueen and Roley (1993) as an illustration of the use of an event study designed to measure the impact of unanticipated changes in the magnitude of announced macroeconomic variables.

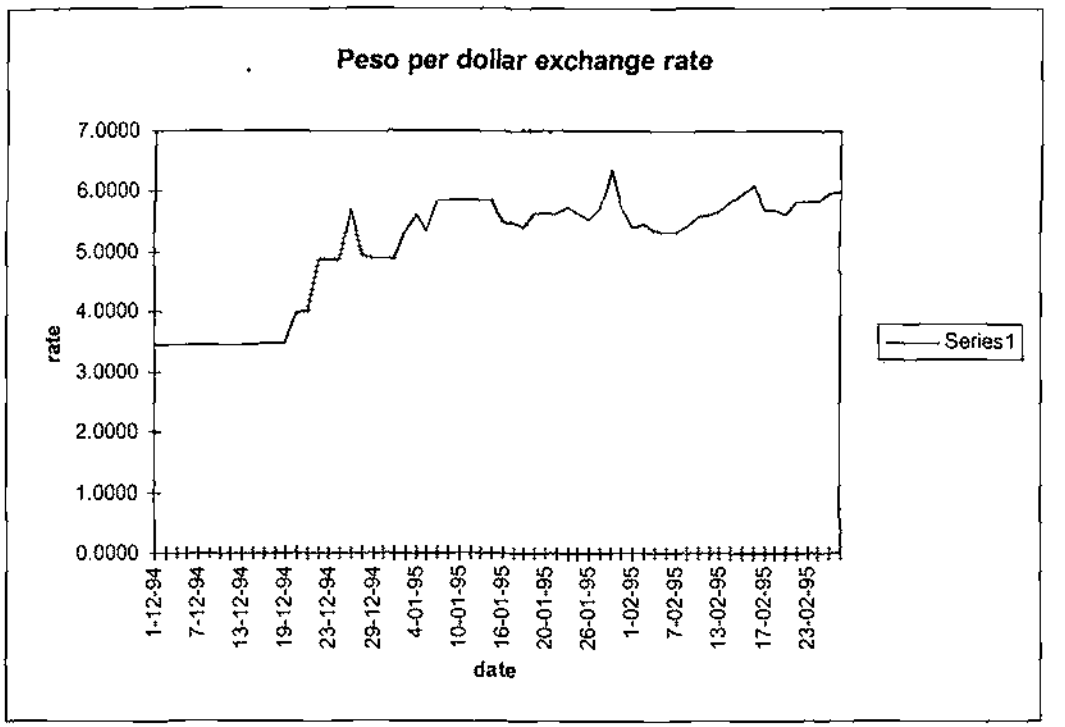
McQueen and Roley study repeated events such as the announcement of changes in US industrial production or the magnitude of the US trade deficit. For such repeated events it might be construed that the impact on different stock prices might be estimated in order to construct a Markowitz portfolio.

The purpose of this chapter is to examine an event that is rarely repeated in emerging markets, a large scale devaluation. The objective of this analysis is to establish the predictive power of the CAPM and whether the CAPM disregards public information that may be relevant.

In order to accomplish the above stated objective I will analyze stock returns in Mexico between November 1994 and January 1995. The Mexican crisis became apparent on December 20, 1994 when the government stopped supporting the Peso. The evolution of the exchange rate is depicted in figure 5.1 and constitutes the main

reason for our definition of the event window. The crisis also determined a drop of 6.1 percent in real GDP in 1995 after Mexico had exhibited an average rate of growth of 3.5 percent between 1990 and 1994.

Figure 5.1



Section I
The Model

The standard way of conducting an event study as presented by Bodie, Kane and Marcus (1996) is to use the index or market model as a proxy for the CAPM and estimate:

1. $R_{it} = a_i + b_i R_{Mt} + e_i$

Where R_{it} is the difference between the return of company i and the risk free rate: $R_{it} = r_{it} - rf$. Similarly R_{Mt} represents the market return less the risk free rate: $R_{Mt} = r_{Mt} - rf$. The a_i and b_i are estimated for the number of enterprises in the sample and used to calculate the abnormal return over the event window as:

2. $AR_{iT} = R_{iT} - ER_{iT}$

Where ER_{iT} is the estimated net return at time T.

The last step in the event study methodology is to explain the abnormal return:

3. $AR_i = a_i + \mathbf{b_i'X_i}$

Since this approach does not tell us anything about the contribution of the CAPM model to the explanation of the abnormal returns, I prefer to derive the model to be tested from the models developed to validate the CAPM. Thus, as explained by Bodie, Kane and Marcus, the CAPM would be validated if the estimation of:

4. $R_i = d_0 + d_1 b_i$

Where b_i is the beta estimated in equation 1, should yield the following results:

$d_0 = 0$

$d_1 = R_M$

where $R_M = r_M - rf$, the market return less the risk free rate.

Thus, in essence the validation test is an alternate specification of the CAPM that we may use to calculate the effect of individual firm characteristics and the explanatory power of the CAPM by writing:

5. $R_i = d_0 + \mathbf{a_i'X_i} + d_1 b_i$

If the CAPM should dominate in the explanation of the individual firm returns we would find:

$d_0 = 0$

$d_1 = R_M$

$a_i = 0$

That is, if the CAPM proves valid then the other factors will have little explanatory power. In practice we expect the CAPM to contribute to the explanation but expect the other factors to be relevant too.[1]

For the case of Mexico, whose financial crisis was marked by a devaluation of the exchange rate and clear indications of an ensuing recession, the firm specific variables taken up in the regression are:

1. the ratio of exports to total sales;
2. the ratio of imports to total input costs;
3. the ratio of foreign indebtedness to total indebtedness.

The anticipated recession would be expected to affect those sectors most sensitive to the business cycle: construction and commerce. Furthermore the

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[1] Since the risk-free rate is the same for all enterprises in the estimation of equation 5 we use r_{it} instead of $R_{it} = r_{it} - rf$.

expected increase in inflation and interest rates as a consequence of the devaluation would be expected to hurt companies with a high ratio of bank to total debt because bank debt is usually of a short-term nature and interest rates are adjusted at the roll-over dates. Finally, as suggested by Bodie, Kane and Marcus (1996) a slowdown of economic activity could differentially affect firms according to their stage in the industry life cycle - proxied by the rate of growth of sales - and by the ratio of variable to fixed costs: "Firms with greater amounts of variable as opposed to fixed costs will be less sensitive to business conditions."[2]

The model to examine the importance of these individual firm characteristics and the CAPM in the explanation of stock returns across a financial crisis is the following:

6. $r_i = d_0 + a_1 * EXPSHR_i + a_2 * IMPSHR_i + a_3 * FORDBTASS_i +$
$a_4 * PCTBKDBT_i + a_5 * SHTLNASS_i + a_6 * GRSALES_i +$
$a_7 * COMMERCE + a_8 * CONSTRUCT + d_1 * Eb_i$
$+ d_2 * PCTXR + e_i$

Where:

r_i - the return for i.

$EXPSHR_i$ - the share of exports in the sales of company i.

$FORDBTASS_i$ - the foreign debt to asset ratio for company i.

$PCTBKDBT_i$ - the ratio of bank to total debt for company i.

$SHTLNASS_i$ - the ratio of short-term assets to long-term assets.

$GRSALES_i$ - measure of the growth of sales of company i.

COMMERCE - dichotomous variable to indicate whether a company belongs to this sector.

CONSTRUCT - dichotomous variable indicating whether a company belongs to the construction sector.

Eb_i - the estimated betas from the first pass regressions of the index or market model.

With the model described above we would expect the coefficients for export share, the ratio of short- to long-term assets and the growth of sales to be positive. The other coefficients, for import share, foreign debt, bank debt and the construction and commerce sectors would be anticipated to be negative. The coefficient for the CAPM betas is expected to be negative in line with the negative $R_{Mt}=r_{Mt}$ -rf for the period in question.

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2 Bodie, Kane and Marcus (1996): 509.

Section II
The Data

The data to estimate the model were obtained from the price and the industrial, commercial and services accounts data bases of the Bolsa Mexicana de Valores (BMV). The data with respect to the sector to which companies belong was obtained from the ***Anuario Bursatil*** of the BMV. The ***Anuario*** divides industries into the following sectors: mining, industrial, construction, commerce or retail trade, services (other than financial), and holding companies.

Among the approximately 200 companies listed on the BMV in November 1994, the last month before the onset of the crisis, the analysis was limited to companies that showed more than five days of trading out of the possible twenty trading days in November 1994. For the resulting 57 companies the series of stock showing the greatest volume of trade was chosen as representative for the stock price of the enterprise. This decision was necessary because "the Mexican equity market is characterized by the existence of multiple classes (or series) of shares that differentiate between national and foreign investors, individual and institutional investors, and general and financial issuers."[3] Although in a limited number of cases it is possible to identify the characteristics of the different series, in most cases that proves impossible because of "the fact that companies routinely change series designations after corporate actions, although the underlying changes have no effects on ownership or voting rights."[4] It is anticipated that the series selected will correspond to the B series of stocks because of the "greater liquidity in these shares relative to the often inactively traded restricted A series."[5]

Data was available on a daily basis for the 57 companies starting in 1991. For the 45 months between January 1991 and November 1994, the estimation window, the stock prices of the individual companies were calculated as the average price during the last five trading days of each month in order to minimize the loss of company entries during the period in question.

On the basis of the monthly price information for the 57 enterprises a market index was constructed for the period utilizing the company value traded of

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[3] Domowitz, Glen and Madhavan (1997): 1062.

[4] Domowitz, Glen and Madhavan (1997): 1064.

[5] Domowitz, Glen and Madhavan (1997): 1066.

November 1994 as weights. For the calculation of this index if a particular company price was missing for a particular month then the data from the previous month was used.

The monthly return per company was calculated as the percentage price change plus the ratio of the dividend divided by the price less the risk free rate. The risk free rate for any one month was taken to be the rate on 28 day peso denominated treasury certificates (CETES) at the first emission for the month in question.

The market return was calculated as the percentage change in the market index less the risk free rate defined above.

The export share of a company was calculated on the basis of the data provided by companies to the BMV for the third quarter of 1994. We may safely assume that the company export and sales data are not influenced by the financial crisis that was to ensue. Unfortunately the data set does not contain data for the share of imports in production costs. The use of the import data for 1996 as a proxy for the 1994 figures was avoided because these figures would obviously reflect the effects of the financial crisis.

The third quarter 1994 data were also used to compute the variables relating: foreign debt to assets: bank debt to total debt; and short-term assets to long-term assets. The data employed reflect the stocks of debts outstanding and assets held. The growth of sales was calculated by comparing the third quarter sales of 1994 to similar figures for 1993.

Section III
Empirical Results

Figure 5.1 presents the evolution of the Mexican exchange rate during the period December 1994 to February 1995. Because the plunge in the exchange rate took place in the last days of December, when financial markets are not as active and are closed for Christmas, we look at both the December and January event windows. In the analysis of the January window we take the cumulated return on both enterprises and the markets from the end of November 1994. The results of the index or market model for the 57 enterprises selected are presented in the appendix.

The results of the estimation of equation 6 for both the December 1994 and January 1995 windows are presented in Table 5.1 which confirms our initial

suspicion that the December 1994 window would not yield very significant results because the financial turmoil only took place toward the end of the month when financial markets are not as active as usual. Nonetheless the coefficients for export share and foreign debt to assets present the anticipated signs and are significant at the 5 percent level. The coefficient for construction also presents the expected negative sign at the 10 percent significance level. The CAPM beta coefficient showed the correct negative sign since R_{MT} was equal to -0.30 for December 1994. However the coefficient was not significant. The coefficients for import share and the percent exchange rate change did not prove to be significantly different from zero. The explanatory power of the regression as judged by the R-square is low in accordance with the above mentioned suspicion.

Table 5.1
Stock returns, CAPM and firm characteristics

	December 1994			January 1995		
	parameter estimate	standard error	sign. level	parameter estimate	standard error	sign. level
Intercept	0.018	0.053		0.044	0.054	
Export share	0.369	0.158	**	0.416	0.159	***
Import share	0.991	0.600		-0.012	0.604	
Foreign debt to assets	-0.378	0.153	**	-0.410	0.154	***
Percent bank debt	-0.140	0.125		-0.282	0.125	**
Short to long term Assets	0.017	0.015		-0.008	0.015	
Growth of sales	0.076	0.049		0.167	0.049	***
Commerce	-0.044	0.064		-0.111	0.064	**
Construction	-0.092	0.069	*	-0.260	0.070	***
CAPM Beta	-0.032	0.031		-0.088	0.031	***
Adj. R-square	0.180			0.474		

Significance levels: ***, 1 percent; **, 5 percent; *, 10 percent.

The results for January 1995 indicate that the CAPM contributes significantly to the explanation of the divergence in stock returns across the economic crisis. Nevertheless, it must be emphasized that the CAPM betas are only one among several factors that explain the individual firm returns. Thus it appears that the CAPM does not seem to take into account the variance due to exchange rate fluctuations and macroeconomic changes that are not infrequent in emerging markets. The export share of firms has a positive coefficient significant at the 1

percent level. As anticipated, the coefficient for the variable foreign debt to assets is negative at the 1 percent level. The coefficients for growth of sales and the construction dummy also showed the expected signs at the 1 percent level. The coefficients for percentage of bank debt and the commerce dummy present the expected signs at the 5 percent level. The coefficients for import share and percentage change in the exchange rate were not significantly different from zero. The explanatory power of the regression as judged by the adjusted R-square is good.

The results presented in the January 1995 window indicate that the CAPM does not take into account a substantial amount of information that is relevant in situations of financial distress and macro-economic change. Whether the CAPM estimated over a longer period - to include the 1976, 1982 and 1988 crises for example - might make better use of this information remains an empirical question that is not addressed here.

Section IV
Conclusions

The results presented in the previous sections are interesting because they show that some stocks prove to be a better hedge against devaluation than others. The results also show that the CAPM does not take into account information that is very relevant when economic circumstances change. Thus, while the proportion of exports of a company or the degree of foreign indebtedness may not be relevant for the composition of a portfolio in normal times, they may prove to be very important when the economic situation changes radically.

This study also suggests a clear research agenda. First, it would be worth while to examine whether the Mexico results can be replicated in the case of Thailand, Indonesia, Korea and Brazil. Second, it should be possible to discriminate among the returns of companies in the developed countries on the basis of the importance of their foreign investments in view of the changes in the dollar-euro-yen exchange rates. This research should have immediate practical relevance for the composition of portfolios.

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Appendix I

Market Model Regressions

OBS	EMISORA	INTERCEP	STE_IN	X	STE_X	PCXR	STE_PCXR	_ADJRSQ_
1	AATENSA	-0.34	0.31	-0.62	1.31	1.51	6.48	-0.08
2	AEROMEX	-0.01	0.07	1.13	0.29	-0.05	1.70	0.28
3	ALFA	0.00	0.06	0.95	0.23	0.85	1.33	0.25
4	APASCO	0.07	0.04	1.17	0.15	-1.71	0.89	0.62
5	ARGOS	0.44	0.08	2.65	0.31	-0.26	1.79	0.68
6	ATY	0.18	0.12	1.48	0.48	-0.27	1.95	0.44
7	AUTLAN	0.27	1.49	1.37	7.89	0.04	84.21	-0.58
8	BEVIDES	-0.02	0.07	0.90	0.31	1.13	1.45	0.26
9	BIMBO	0.07	0.08	1.19	0.31	0.21	1.81	0.22
10	BUFETE	-0.02	0.30	0.49	1.20	-3.09	5.69	-0.15
11	CELANES	-0.18	0.15	0.18	0.59	8.21	3.42	0.08
12	CEMEX	0.23	0.08	1.82	0.32	-0.69	1.87	0.41
13	CIFRA	0.04	0.04	1.02	0.18	-0.18	1.04	0.41
14	COMERCI	0.01	0.06	0.94	0.23	-0.77	1.34	0.28
15	CONTAL	0.13	0.14	1.24	0.58	-5.46	2.93	0.27
16	CYDSASA	0.11	0.10	1.44	0.40	1.60	2.33	0.20
17	DESC	0.10	0.09	1.35	0.35	0.53	2.07	0.22
18	DINA	0.07	0.10	1.32	0.41	-0.02	1.96	0.31
19	ELEKTRA	0.14	0.06	1.71	0.28	17.69	3.14	0.92
20	EMPAQ	0.35	1.20	1.05	4.84	1.37	28.26	-0.05
21	FEMSA	0.11	0.06	1.44	0.22	0.23	1.30	0.47
22	GCARSO	0.20	0.07	1.69	0.29	-0.89	1.66	0.44
23	GCC	0.10	0.07	1.27	0.29	-0.59	1.65	0.36
24	GEO	0.16	.	1.48	.	0.00	.	.
25	GEUPEC	-0.09	0.18	0.26	0.70	-1.70	3.72	-0.04
26	GFESA	0.07	0.18	0.36	0.94	-32.90	10.95	0.89
27	GIGANTE	0.05	0.09	1.19	0.36	-0.56	2.11	0.19
28	GISSA	-0.02	0.05	0.83	0.21	0.66	1.04	0.41
29	GMEXICO	1.41	.	6.35	.	32.14	.	.
30	GMODELO	-0.11	0.04	0.50	0.16	0.58	0.69	0.48
31	GRUMA	-0.13	0.36	0.01	1.89	-13.38	19.22	0.13
32	HERDEZ	-0.14	0.14	0.40	0.55	4.18	3.17	0.00
33	ICA	0.00	0.05	0.94	0.18	0.25	1.00	0.47
34	JDEERE	-0.23	0.13	-0.15	0.53	-8.08	2.94	0.13
35	KIMBER	0.10	0.05	1.38	0.21	0.39	1.21	0.49
36	KOF	0.07	0.05	1.19	0.21	-0.65	1.00	0.71
37	LIVEPOL	0.07	0.11	1.22	0.45	-1.47	2.35	0.18
38	MASECA	0.15	0.10	1.58	0.39	-0.11	2.26	0.25
39	MODERNA	-0.09	0.10	0.44	0.42	0.89	2.45	-0.02
40	NADRO	-0.06	0.31	0.57	1.21	1.37	6.52	-0.06
41	PEPSIGX	-0.08	0.09	0.79	0.32	1.87	2.12	0.37
42	POSADAS	0.10	0.11	1.31	0.45	-0.29	2.24	0.24
43	SANBORN	-0.06	0.20	0.61	0.80	6.64	4.52	0.02
44	SANLUIS	0.69	0.41	3.41	1.66	7.21	9.34	0.06
45	SEARS	0.29	0.14	2.00	0.56	-0.88	3.15	0.27
46	SIDEK	0.12	0.09	1.27	0.35	1.35	2.03	0.20
47	SITUR	0.13	0.06	1.39	0.23	0.63	1.37	0.50
48	SORIANA	0.14	0.09	1.58	0.38	0.19	2.22	0.26
49	TABLEX	0.18	0.16	1.48	0.63	4.99	3.42	0.10
50	TAMSA	-0.19	0.11	0.30	0.45	3.83	2.59	0.01
51	TELMEX	0.02	0.04	1.05	0.15	0.35	0.86	0.54
52	TEXEL	0.42	0.34	2.50	1.35	4.26	7.61	0.04
53	TLEVISA	-0.05	0.09	0.86	0.35	-0.10	1.44	0.29
54	TMM	0.00	0.09	0.98	0.35	1.24	2.03	0.13
55	TRIBASA	0.29	0.11	1.92	0.46	-1.22	2.14	0.57
56	TTOLMEX	0.20	0.06	1.67	0.23	1.04	1.34	0.53
57	VITRO	0.00	0.08	0.90	0.29	-0.04	1.12	0.47

CHAPTER 6

SOME ASPECTS OF THE INDIAN STOCK MARKET IN THE POST-LIBERALISATION PERIOD

K.S. Chalapati Rao, M.R. Murthy and K.V.K. Ranganathan

As a part of the process of economic liberalisation, the stock market has been assigned an important place in financing the Indian corporate sector. Besides enabling mobilising resources for investment, directly from the investors, providing liquidity for the investors and monitoring and disciplining company management company managements are the principal functions of the stock markets. This paper examines the developments in the Indian stock market during the 'nineties in terms of these three roles. Share price indices have been constructed for the years 1994 to 1999 at select company category and industry levels to bring out the investor preferences and their implications for the resources mobilising capacity of different segments of the corporate sector.

Introduction

Under the structural adjustment programme many developing countries made substantial policy changes to pull down the administrative barriers to free flow of foreign capital and international trade. In the same vein, restrictions and regulations on new investments in reserved areas for public sector witnessed radical change. Strengthening of capital markets was advocated for successful implementation of the privatisation programmes and attracting external capital flows [World Bank, 1996, p. 106; UN, 1996, p. 4].[1] The main attraction of the capital markets is that they provide for entrepreneurs and governments a means of mobilising resources directly from the investors, and to the investors they offer liquidity [*India*, 1986, p. 6]. It has also been suggested that liquid markets improve the allocation of resources and enhance prospects of long term economic growth [Demirguc-Kunt and Levine, 1996, Pp. 291-321]. Stock markets are also expected to play a major role in disciplining company managements.

In India, stock market development received emphasis since the very first phase of liberalisation in the early 'eighties. Additional emphasis followed after the liberalisation process got deepened and widened in 1991 as development of capital markets was made an integral part of the restructuring strategy. After 1991, as a part of the de-regulation measures, the *Capital Issues Control Act, 1947* that required all corporate proposals for going public to be examined and approved by the Government, was dispensed with [Narasimham Committee Report, 1991, p. 120].[2] The Securities and Exchange Board of India (SEBI) which was set up in early 1988 was given statutory recognition in January 1992 to frame rules and guidelines for various operations of the Stock Exchanges in India. The Over the Counter Exchange of India (OTCEI) established earlier for serving the smaller companies became operational in September 1992 and the National Stock Exchange was set up in Mumbai in 1994. India's official *Economic Survey 1992-93*, observed that the process of reforms in the capital market

> ... needs to be deepened to bring about speedier conclusion of transactions, greater transparency in operations, improved services to investors, and greater investor protection while at the same time *encouraging corporate sector to raise resources directly from the*

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market on an increasing scale. Major modernisation of the stock exchanges to bring them in line with world standards in terms of *transparency and reliability is also necessary if foreign capital is to be attracted on any significant scale* (emphasis added) [*Economic Survey*, 1992, p. 67].

This paper seeks to examine the developments in the Indian stock market in the post-liberalisation period in respect of the main functions of resource mobilisation and providing liquidity. The detailed exercises cover 1996 to 1999 and are based on the daily trade data at The Stock Exchange, Mumbai (BSE).[3] A further attempt has been made to examine the share price movements during 1994 to 1999 at certain company category and industry levels. An attempt has also been made to study the implications of the prevailing shareholding pattern of listed companies for monitoring the managements. Another important aspect, relating to foreign portfolio investments on the Indian stock exchanges, forms the subject matter of the accompanying paper 'Foreign Institutional Investments and the Indian Stock Market'.

Growth of the Indian Stock Market

Stock exchanges have a long presence in India. The BSE, the oldest one, was established in 1875. At the time of Independence there were seven stock exchanges functioning in different parts of the country. The 'eighties witnessed impressive expansion in the number of listed companies, amount of capital listed, market capitalisation and value of shares sold and purchased on the exchanges (Table 1). Eleven stock exchanges were given recognition during this period. The number increased further to 22 (excluding the National Stock Exchange) by 1995. The overall number of exchanges continues to be the same. The expansion during the 'eighties was probably the after-effect of the acceptance of the recommendations of the Study Group on Financing of the Private Corporate Sector in the Sixth Five Year Plan (1980-81 to 1984-85). The Study Group suggested measures (i) to improve attraction of various investment instruments for small savers; and (ii) strengthen the infrastructure of the capital markets [*India*, 1982, Pp. 117-121; Nagaraj, 1996, Pp. 2,553-63].

Table 1. Select Indicators of Stock Market Growth

(Amount in Rs Crore)

Year	Number of Stock Exchanges#	Number of Listed Cos.	Market Value of Capital of Listed Cos.	GDP at Current Prices	Market Capitalisation as % of GDP [(4)/(5) x 100]
(1)	(2)	(3)	(4)	(5)	(6)
1980	9	2,265	6,750	1,22,772	5.50
1985	14	4,344	25,302	2,32,370	10.89
1991	20	6,229	1,10,279	5,52,768	19.95
1995	22	9,077	6,39,575	9,92,802	64.42

Note: Market capitalisation and GDP correspond to calendar and financial years, respectively.
Excluding the National Stock Exchange (NSE).
Source: Based on: (i) Bombay Stock Exchange Official Directory, 'Organisation of the Stock Market in India', Vol. 9(II), 1997 and (ii) Bombay Stock Exchange, *The Stock Market Today*, 1992. GDP data are taken from *Economic Survey*: 1997-98.

Dilution of foreign equity by FERA (*Foreign Exchange Regulation Act*, 1973) companies[4] during the latter half of the 'seventies and early 'eighties also helped in popularising stock market as a means of investment by individual investors. Due to the relatively higher return on the shares of FERA companies, it was considered safer and more profitable by the general Indian public to subscribe to public issues by FERA companies [Goyal, 1979].[5] The attraction of FERA companies for the Indian shareholders can be gauged from the fact that a number of issues were oversubscribed multiple times [Chaudhuri, 1979, Pp. 734-44].[6]

The growth in numbers and paid-up capital

(PUC) may not fully reflect the importance of the stock market in the economy. The market capitalisation ratio which is arrived at by dividing the value of listed shares by the GDP is regarded as a measure of the size of stock market in a country. The ratio increased from about 1:5 in 1991 to almost 2:3 by 1995 [Kunt and Levine, 1996].[7] Another indicator of the relative importance of stock market could be the share of equity capital of listed companies in the paid-up capital (PUC) of Indian corporate sector. The value of PUC of companies listed on the stock exchanges of India is, however, not available in a longer time perspective. Since the BSE is the oldest exchange and it has been the most significant one, operations of the BSE can be taken to reflect the growth in size and pattern of stock market in India.[8] At the beginning of the 'nineties, the equity capital of BSE listed companies accounted for a little more than 30 per cent of the paid-up capital of all public limited companies (Tables 2a and 2b). Their share rose sharply thereafter and by 1995-96 almost trebled to 93 per cent. Though this appears to be an over estimate, it does indicate the relatively important place attained by the stock market for the Indian corporate sector [*CMIE, Capital Markets*, 1997].[9]

Resource Mobilisation

With the repealing of the *Capital Issues Control Act, 1947* (CICA) in May 1992 it is no more necessary to obtain prior government approval for access to the capital market. The rapid increase in the number of companies listed on the BSE during the early part of the liberalisation period, has to be seen in this background. The number of companies listed on BSE more than doubled between 1991-92 and 1995-96 and the equity capital increased by more than five times. The number of issues increased from 455 in 1991-92 to nearly 1,700 each in 1994-95 and 1995-96 (Table 3).[10]

Table 2a. Importance of Listed Companies in the Corporate Sector

(Amount in Rs Crore)

Year end #	Number of Public Ltd. Cos.	Number of Cos. Listed on all the Stock Exchanges	No. of Cos. Listed on BSE	Paid-up Capital of all Public Ltd. Cos.	Equity Capital of Cos. Listed on BSE
(1)	(2)	(3)	(4)	(5)	(6)
1990-91	27,358	6,229	2,471	38,567.7	12,205
1991-92	29,792	6,480	2,601	50,809.0	16,128
1992-93	34,112	6,925	2,861	57,929.7	24,527
1993-94	38,000	7,811	3,585	71,836.2	48,809
1994-95	46,662	9,077	4,702	92,422.9	61,514
1995-96	57,402	9,100	5,603	1,13,042.2	1,05,284

Year ending 31st March.

Source: Based on BSE publications and Ministry of Law, Justice & Company Affairs, *Annual Report of the Working and Administration of the Companies Act*, 1956 for various years.

Table 2b. Relative Importance of Listed Companies in the Corporate Sector

Year-end	Number of Listed Cos. As Percentage of All Public Limited Cos.	Number/ PUC of BSE Listed Cos. as Percentage of	
		All Public Limited Cos.	PUC of all Public Limited Cos.
(1)	(2)	(3)	(4)
1990-91	22.77	9.03	31.65
1991-92	21.75	8.73	31.74
1992-93	20.30	8.39	42.34
1993-94	20.56	9.43	67.94
1994-95	19.45	10.08	66.56
1995-96	15.85	9.76	93.13

Source: See Table 2a.

Thereafter, the issues declined steeply and reached 156 in 1997-98, which is about one-third of the 1991-92 level. In terms of the amounts raised the decline was sharper in case of non-government companies [SEBI, 1998-99].[11] Besides the repealing of CICA, a few major factors seem to be responsible for the initial increase in the number of issues. *First* is the stock scam.[12] Share prices increased rapidly within a span of three months (Jan-Mar 1992) during which time the BSE Sensitive Index (Sensex) more than doubled from about 2,000 to 4,400. This seems to have given the investing public an idea of the windfall gains that can be had from the stock market and created a 'herd' mentality. During the boom period, shares of even loss-making companies commanded high premium [India, 1948, p. 5].[13] In such a situation, it would

Table 3. Capital Issues through the Stock Market#: 1991-92 to 1997-98

Year	Number of Issues			Amount Raised (Rs Crore)		
	Government	Non-Govt.	Total	Government	Non-Govt.	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1991-92	31	424	455	4,080	5,361	9,441
1992-93	31	964	995	7,162	18,597	25,759
1993-94	30	1,115	1,145	11,458	20,236	31,694
1994-95	43	1,643	1,686	10,868	26,460	37,328
1995-96	37	1,651	1,688	9,721	14,624	24,345
1996-97	25	863	888	8,340	8,227	16,567
1997-98	38	118	156	8,623	3,236	11,859

Public and Rights issues.

Source: CMIE, *Capital Markets*, October 1998.

not be difficult to raise money from the market. The *second* factor is the optimism generated among entrepreneurs by the virtual demolition of the industrial licensing system. *Third* is the entry of small companies (especially financial companies) with the main aim of making quick money through price manipulations [SEBI, 1995; CMIE, 1997]. *Last*, is the issues of government companies including banks and public financial institutions which added significantly to the amounts issued.

Apart from the doubtful quality of many of the new issues, an important case which shook the markets in early 1995 was the Rs 350 crore fully Convertible Debentures issue in February 1995 of M.S. Shoes. The company was accused of inadequate disclosures. Taking advantage of free pricing of issues, many companies charged high premium. But the post-listing returns proved to be disappointing. One major case cited in this regard is the post-listing price of Industrial Development Bank of India, which in July 1995 raised about Rs 2,400 crore at a premium of Rs 120 for a Rs 10 share.[14] Contrary to the expectations, the initial listing price was much lower than the issue price [*Business Standard*, 1995]. The price fell gradually to reached Rs 94 within a few days. During the pre-liberalisation period, proposal for raising capital through public issues were generally for manufacturing companies and involved public financial institutions, which provided assistance (equity or term loans) to the project after appraising the projects.[15] In the post-liberalisation period a good number of companies were not only non-manufacturing ones but the purpose of issue also varied from project finance to working capital. A number of public issues have been made without any critical scrutiny (Table 4). In terms of number, about one-third of the issues were by financial companies with a preponderance of non-banking financial companies (NBFCs) [CMIE, 1998].

Apart from the loss of interest of the general investor due to these developments, the decline in number of issues is attributed to the strengthening of the criteria for public issue by the SEBI. Two main criteria in this regard are: (i) issuing companies should have paid dividend for at least three years out of preceding five years; and (ii) a manufacturing company without the three year track record of dividend payment can access the securities market if its project has been appraised by a public financial institution or a scheduled commercial bank and the appraising agency participates in the project by way of loan or equity to the extent of minimum 10 per cent of the project

Table 4. Distribution of Public Issues According to the Appraisal Status

(Number of Issues)

Year	Issues Appraised By FIs/Banks/MFs	Issues not Appraised by such Agencies	Total	Percentage of Unappraised Issues (3)/(4) x 100
(1)	(2)	(3)	(4)	(5)
1994-95	891	452	1,343	33.66
1995-96	582	846	1,428	59.24
1996-97	210	543	753	72.11
1997-98	34	77	111	69.36
1998-99	15	43	58	74.13

Source: (i) 1994-95 to 1996-97: Praxis Consulting & Information Services Pvt. Ltd. *Prime Annual Reports, Part-I: Public Issues, various years.* (ii) 1997-98 and 1998-99: SEBI, *Annual Report: 1998-99.*

Table 5. Proportion of Shares and Debentures in the Financial Assets of Household Sector

(Amount in Rs Cr.)

Year	Total Financial Assets	Of which, Investment in Shares and Debentures	
		Amount	Percentage in Total
(1)	(2)	(3)	(4)
1990-91	56,858	8,412	14.79
1991-92	70,851	15,704	22.16
1992-93	72,099	12,943	17.95
1993-94	1,09,597	14,772	13.48
1994-95	1,45,503	17,381	11.95
1995-96	1,24,871	9,047	7.25
1996-97	1,56,726	10,472	6.68
1997-98	1,80,724	3,637	2.01

Source: Based on India, Central Statistical Organisation, *National Accounts Statistics*, 1995 and 1999.

cost. Subsequently, these norms were made applicable to all types of companies.[16] Regarding these changes, SEBI explained:

> With the rapid expansion in the primary market, there were concerns raised about the quality of some of the issuers who were able to raise funds from the market in the period after the repeal of the Capital Issues (Control) Act, 1947. In response to these concerns, SEBI had strengthened norms for public issues, raised the standards of disclosure in public issues to enhance the level of investor protection without seeking to control the freedom of eligible issuers to enter the market and freely price their issues. This was done in 1995-96... [SEBI, 1996-97; *Economic Times*, 1999].[17]

It appears from Table 4 that the while the changes did make much impact in terms of making more companies get their projects appraised, the stipulation of paying dividends did prevent new companies from entering the market [RBI, 1999,

p. 950; CMIE, 1998, Pp. 16-20].[18]

Thus within a few years of repealing the *Capital Issue Control Act*, restrictions on capital issues had to be introduced, albeit in a different manner, to safeguard investor money and protect the institution of stock market itself. Even in the 'eighties, taking advantage of the boom in the stock market and increase in the exemption limit for capital issue, many non-manufacturing companies issued shares to the public. The rapid growth in the number of listed companies during this period was in part due to the entry of companies promoted by unscrupulous persons who included stock brokers, auditors, and those associated with business houses [Rao, 1997, Pp. 3-12; Rao, 1996-97]. It does appear that while liberalising issue norms after repeal of CICA, this experience was not taken into account. Some of those involved in floating such issues later on became merchant bankers and mutual fund promoters.[19] According to a former President of the BSE, among the 'anti-investor steps taken by SEBI or the Government' during the post-liberalisation period, were:

- Abolition of CCI and allowing free pricing of shares - which led to fleecing of investors;
- Licensing of hundreds of Merchant Bankers without ascertaining their credentials and antecedents CRB being the classic example of the same. In the free for all, the only consideration seemed to be collecting money; and
- Clearing all kinds of undesirable issues by fly-by-night operators by issuing them authorisation cards [Damani, 1997, Pp. 5-18].

The fall in new issues is also reflected in the steep decline in the importance of shares and debentures in household savings (Table 5) [CMIE, 1999, p. 101].[20] Further evidence to the decline in the importance of stock market for mobilising resources is reflected in the falling share of new equity capital raised from outside sources in the sources of funds for the large private corporate sector. The share declined sharply from about 33 per cent in 1993-94 to 7.7 per cent in 1997-98 (Table 6). On the other hand, the share of borrowings from banks and financial Institutions recovered from a low of 7.3 in 1993-94 and exceeded the 'early' nineties levels by 1995-96.

Table 6. Changing Importance of Select Sources of Funds for the Indian Private Sector

(Percentages)

Year	Percentage Share in Total Sources of Funds		
	Total External# Finance	Fresh Share Issues (incl. premium)	Borrowings from Banks & Institutions (excl. Fixed Deposits and Debentures)
(1)	(2)	(3)	(4)
1991-92	72.0	7.9	24.7
1992-93	74.9	24.7	25.7
1993-94	76.4	33.4	7.3
1994-95	76.9	32.6	21.6
1995-96	71.7	15.1	27.8
1996-97	72.1	8.2	29.4
1997-98	69.4	7.7	28.4

Col. (2) is inclusive of Cols. (3) and (4).
Source: Based on CMIE, Corporate Sector, May 1999.

Liquidity

The aggregate market turnover is an important component in the measurement of the stock market size and liquidity [Kunt and Levine, 1996, p. 295; Gupta, 1992].[21] While the overall turnover at BSE increased significantly during the post-liberalisation period, the increase has been more substantial after 1995-96. The fall in turnover in 1992-93 following the exposure of scam was more than recovered in 1993-94. This is also the year when FIIs made their presence felt. This was,

however, followed by decline in trading turnover in 1994-95 and 1995-96 which was attributed to the ban on *badla* [Gupta, 1992, Pp. 85-90; 1996, Pp. 20-28].[22] Following the re-introduction of *badla* in a revised form, turnover more than doubled from about Rs 50,000 crore in 1995-96 to Rs 1,24,000 crore in 1996-97 and further to Rs 2,07,600 crore in 1997-98. 1997 was an important year for the BSE as it was allowed to expand its on-line trading network to locations outside Mumbai. The increase continued in 1998-99 as the turnover at BSE increased by about 50 per cent compared to the previous year (Table 7). These increases appear to contradict the general sentiment reflected in the primary market and may be disguising some of the more serious problems facing the stock market. In this context, it is significant to note that in the face of the growing market turnover, the average number of companies traded (daily) on the BSE declined from June 1996 onwards. The decline appears to be steeper and steadier in case of the number of companies traded relative to those listed. The situation did improve in 1999 as towards the end of the year about two-fifths of the companies were being traded (Annexure and Graph-A).[23]

Table 7. Market Turnover at the Bombay Stock Exchange

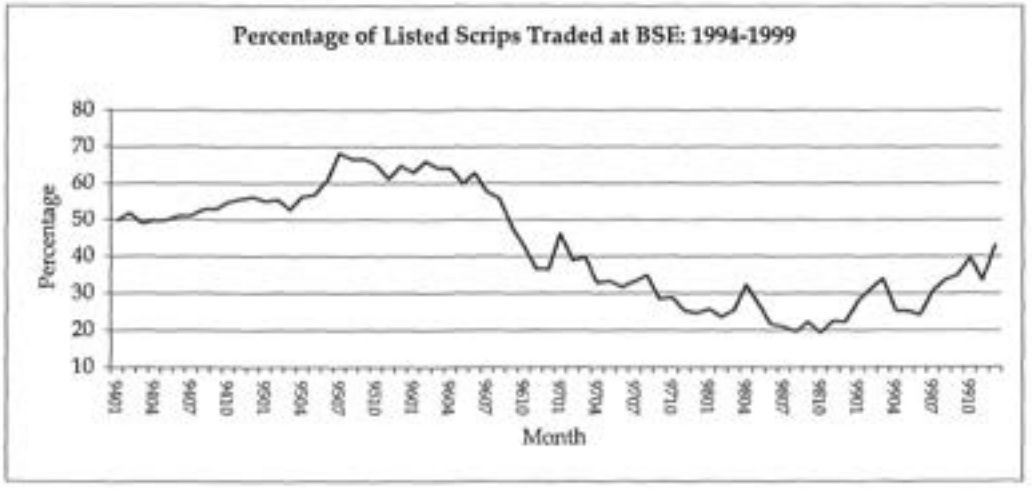
(Amount in Rs Crore)

Year	Total Turnover	Turnover at BSE	Average Daily Turnover at BSE
(1)	(2)	(3)	(4)
1990-91	N.A.	36,012	188.54
1991-92	N.A.	71,777	332.33
1992-93	N.A.	45,696	238.00
1993-94	2,03,705	84,536	387.78
1994-95	1,64,057	67,749	292.02
1995-96	2,27,368	50,064	215.79
1996-97	6,46,116	1,24,284	517.85
1997-98	9,08,691	2,07,644	851.00
1998-99	10,23,381	3,11,999	1,283.95

N.A.: Not Available.

Source: Bombay Stock Exchange, *Facts & Figures, 1997* and BSE, *Stock Exchange Review*, various issues, BSE, website and SEBI, *Annual Report: 1998-99*

Graph - A



Source; Based on CMIE, *Capital Markets*, October 1998. BSE Stock Exchange Review, various issues and the daily trade data obtained from Asian CERC.

In 1997, out of the total number of 5,843 companies listed, 831 were not traded at all. In addition, for more than 2,800 companies, the last traded price was less than Rs 5 per share against the par value of Rs 10.[24] In the following year, the number of non-traded companies more than doubled to 1,800 (Table 8). If the fact that many companies issued shares at heavy premium, the erosion in issue prices will be far more than that reflected from the face values.[25] It thus emerges that out of the nearly six thousand companies listed on the BSE, about 30 per cent were not traded at all during 1998. It appears that a good number of companies whose last traded price was less than Rs 5 ceased to be traded in 1998. Of the total number of companies traded, shares of nearly two-thirds were traded below par. If all those companies which were not traded during the period had their last quotes below par value, the number of below-the-par value cases would be three-fifths of the total listed ones! This could be a reflection of the extent of sickness and crisis in the listed corporate sector and the quality of new public issues.

Table 8. Incidence of Below-par Trading at BSE: 1997 and 1998

Last Traded Price per Share	Number of Companies		Share in Total (%)	
	1997	1998	1997	1998
(1)	(2)	(3)	(4)	(5)
Not Traded#	831	1,805	14.22	30.84
Below Rs 5	2,853	2,041	48.83	34.88
Rs 5 - 10	673	644	11.52	11.00
Sub-Total (below par) (including 'not traded')	*4,357*	*4,490*	*74.57*	*76.73*
Rs 10 and above	1,486	1,362	25.43	23.27
Total	5,843	5,852	100.00	100.00

Difference between the number of companies traded and the number of listed companies reported by the BSE.
Source: Generated from BSE company-wise daily trading data.

Concentration in Trading

Heavy concentration in turnover has been an important characteristic of the Indian stock market. While the overall turnover witnessed an impressive increase, the number of companies responsible for the expanded turnover continued to be a few. For instance, out of the turnover of 2,400 companies listed on BSE in 1989-90, the share of top 50 was nearly 82 per cent [Gupta, 1992]; and it stood at nearly 86 per cent in 1996 (Table 9).[26] The concentration remained high in the subsequent years. Shares of different sets of top companies in turnover at the National Stock Exchange (NSE) also reflect high levels of concentration. In case of BSE the share of the top one hundred companies was 96.36 and for NSE it was 97 per cent (Table 10).[27] The increase in concentration is more apparent in the case of the number of share transactions. The top 50 companies accounted for 44.03 per cent of the value of the overall transactions in 1996. This increased to 72.0 per cent in 1998. On a closer examination of the values traded of the top 20 companies, it is observed that there is greater dispersal among the top. Compared to the experience of 1996 to 1998, as we shall see in the following, 1999 presents a somewhat different picture as share prices experienced a general recovery. This was accompanied by a somewhat better distribution among the top companies both in terms of turnover and number of transactions. However, partially at the 100 company level and more so at the 500 company level, the situation in 1999 was similar to that existing in the earlier years.

Table 9. Value Traded and Number of Transactions in Different Groups

(Percentages)

Share of Top$ Companies	Value Traded				No. Of Transactions			
(1)	1996 (2)	1997 (3)	1998 (4)	1999 (5)	1996 (6)	1997 (7)	1998 (8)	1999 (9)
Top: 5	67.24	71.36	49.96	37.66	26.57	41.98	25.75	17.47
10	74.57	82.14	67.20	54.70	32.42	54.45	39.25	29.99
20	80.55	89.28	80.18	72.68	37.02	65.02	53.97	44.51
25	81.92	90.74	83.43	76.70	38.60	67.89	58.90	49.41
50	85.76	94.45	90.71	87.11	44.03	75.36	72.07	63.93
100	89.14	97.05	96.36	93.48	50.85	81.35	84.77	76.26
500	96.15	99.59	99.82	99.58	71.78	92.07	96.95	94.36
All	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Traded Cos.	5,612	5,012	4,047	3,929	5,612	5,012	4,047	3,929
No. of Cos. Listed#	5,999	5,843	5,860	5,863	5,999	5,843	5,860	5,863

$ According to annual market turnover.
# At the end of the year.
Source: Generated from BSE company-wise daily trading data.

Table 10. Comparison of Turnover Concentration in BSE and National Stock Exchange: 1998

Top Companies*	Percentage Share	
(1)	BSE (2)	NSE (3)
10	67.20	70
25	83.43	86
50	90.71	93
100	96.36	97
500	99.82	N.A.
All	100.00	100
No. of Companies	4,047	N.A.

* Classified according to the trading values.
Source: Col (2): Table 9 above, and Col (3): NSE *Newsletter*, December 1998.

Not only the value of trading, which might depend upon the price of a share, but also the number of transactions is confined to a few companies. Companies in which 1 lakh or more transactions take place increased and such companies accounted for over 89 per cent of the total turnover in 1998. On the other hand, that trading is only nominal in quite a large number of companies is reflected from the fact that companies in which less than 10 trades took place constituted 22 per cent of the total number of companies traded during the year. Indeed, for half of the companies the number of trades were less than 100! This represented a substantial worsening from the 1996 position (Table 11). The situation appears to have improved relatively in 1999 as companies with less than 10 trades formed only 13.85 per cent of the total possibly due to the improvement in the over all sentiment. In terms of turnover, however, companies with 1,00,000 and more transactions accounted for more than 90 per cent of the total.

Table 11. Distribution of Traded Companies According to the Intensity of Trade

No. of Transactions	Percentage of Companies				Percentage of Turnover	
	1996	1997	1998	1999	1998	1999
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Less than 10	5.54	13.29	23.46	13.85	negl.	negl.
10 - 100	12.18	27.13	27.60	17.51	0.01	negl.
100 - 1,000	45.15	41.64	31.53	32.30	0.22	0.05
1,000 - 10,000	33.52	15.25	13.20	25.71	0.98	0.94
10,000 - 1,00,000	3.43	2.25	3.88	8.32	9.22	7.46
1,00,000 & above	0.18	0.44	1.33	2.32	89.57	91.55
All Traded Companies	100.00	100.00	100.00	100.00	100.00	100.00
No. of Companies	5,612	5,012	4,047	3,929		

Source: Generated from BSE company-wise daily trading data.

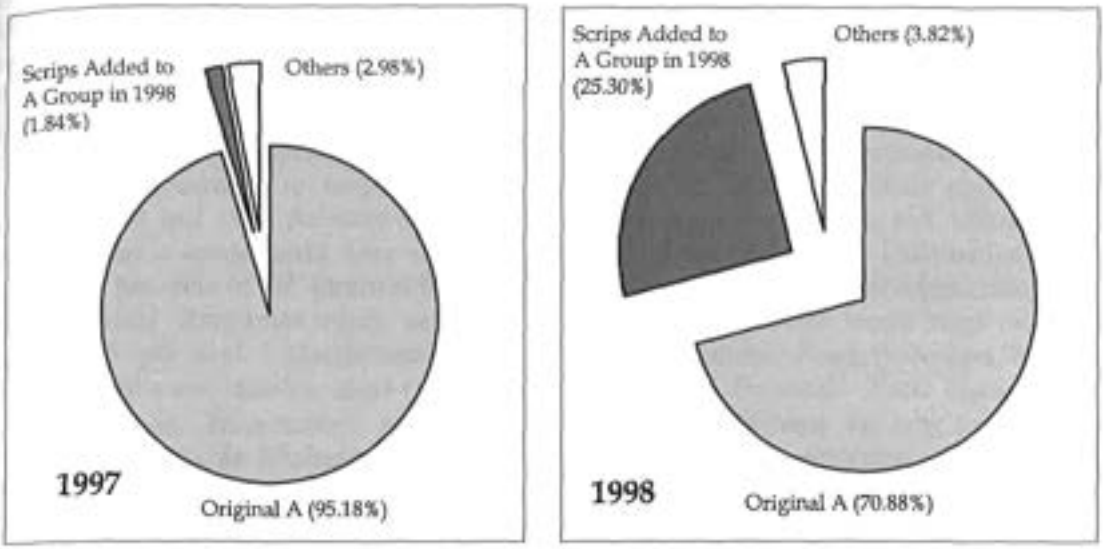
Large turnover companies are only a few and most of them belong to the A Group, or the Specified Group. Under the BSE rules the facility to carry forward the deals without actually taking delivery of shares is permitted only for A Group companies. Because of the carry forward facility, trade in A Group companies is quite often speculative in nature. The size of A Group turnover could be quite related to the number of companies in the Group in which speculative trading is possible. Interestingly, the Group was expanded in early 1998 with the addition of 50 more companies to the existing 100. This seems to have had an immediate impact on the trading values. From Rs 16,419 crore in February 1998 the net turnover of BSE increased to Rs 23,310 crore in March 1998. The turnover of A Group companies increased from Rs 15,717 crore to Rs 22,492 crore [BSE, 1998]. The pattern of the turnover data for different groups of companies shows that the newly included companies accounted for 1.84 per cent of the turnover in 1997. But by 1998 their share increased 25.30 per cent (Table 12 and Graph B). Thus, an overwhelming part of the increased turnover in 1998 was due to the 50 newly added companies. It is important to note that the new entrants included 18 FCCs, six pharmaceutical companies (including FCCs), five banks and four computer software companies. It thus appears that but for the expansion of the specified group, the turnover in 1998 would probably not have been as high as it turned out to be. As we shall see later, the expansion of A Group seems to have had a significant impact on the distribution of turnover at the industry and company category levels. The composition of the A Group underwent another change in September 1999. Interestingly, out of the 17 new entrants as many as 6 are computer software/hardware companies [BSE, 1999].[28] Two each are in pharmaceuticals, telecommu-nication equipment manufacture, and oil refinery.

Table 12. Impact of Enlargement of the Specified Group in February 1998 on Market Turnover

Scrip Category	Net Turnover (Rs Cr.)		Share in Net Turnover (%)	
	1997	1998	1997	1998
(1)	(2)	(3)	(4)	(5)
Original A Group Scrips (100)	1,83,384	1,87,463	95.18	70.88
50 Scrips added to the A Group in February 1998	3,553	66,920	1.84	25.30
Other Scrips	5,736	10,095	2.98	3.82
Total	1,92,673	2,64,479	100.00	100.00

Source: Generated from BSE company-wise daily trading data.

Graph – B
Impact of Enlargement of Specified Group in 1998 in BSE Turnover



The importance of speculative trade is also reflected in the low percentage of actual deliveries. For BSE the delivery ratio in 1997-98 was 12.73 per cent, and for NSE it was 15.97 per cent. While the ratio improved in 1998-99 at BSE to 20.34 per cent, it continued to be low for NSE at 15.15 per cent. At the national level the figures were 9.96 per cent and 12.88 per cent for 1997-98 and 1998-99, respectively [SEBI, 1998-99, Table 2.19]. Thus, an overwhelming part of trade in the Indian stock market may be termed as speculative. This position would worsen if the transactions of the Foreign Institutional Investors (FIIs) are deducted from the total deliveries.[29]

A few top companies may be accounting for substantial turnover due to their large size. Share in aggregate turnover may not, therefore, adequately reflect the trading activity in smaller companies. In spite of the fact that they do not have a high share in aggregate turnover, if the smaller companies have turnover comparable to their respective market capitalisation, their shares could be termed liquid. This, however, does not seem to be the case. In 1996, the turnover to market capitalisation ratio fell progressively sharply from 1.47 for the top five companies to just 1.05 when the top 10 companies are considered. For all the companies for which data on both turnover and market capitalisation are available, the ratio was 0.25. For companies other than the top 500, the ratio was only 0.03 (Table 13). A test check revealed that in 1988 also the picture was similar.

Table 13. Turnover Size-wise Turnover Ratios for BSE Listed Companies: 1996

Top Companies$ (1)	Turnover Ratio (Turnover/Market Capitalisation#) (2)
5	1.47
10	1.05
20	0.64
25	0.61
50	0.48
100	0.37
500	0.29
Remaining Cos.	0.03
All Companies@	0.25

$ Based on market turnover.
# Based on the last traded price during 1996 and amount of equity capital at any time during March 1996 to March 1997.
@ Total number of companies for which we could get information both on equity and share prices were 3,109.

Industry-wise Distribution of Turnover

The annual turnover data can be tabulated to bring out the relative importance of different industries in the changes noticed at the aggregate

level. This may indicate the type of industries that are attracting investor attention and resource mobilising potential of different industries. The exercise will have certain limitations in view of (i) heavy concentration in trading and (ii) only a few large companies being engaged in one industry or product. The results based on the industry classification[30] of top 500 companies (according to turnover) in the years 1996, 1998 and 1999 are shown in Table 14. In 1996, public sector banks were at the top with nearly 28 per cent of the turnover followed by the diversified companies which accounted for another 25 per cent. Metals and metal products also had a considerable share (13.59 per cent). Next in importance was Food, Beverages and Tobacco products. In the top ten categories also figured Cement, Power Generation & Distribution, Non-Electrical Machinery, Telecommunications and Textiles. By 1998, the situation changed significantly. The fourth placed Food, Beverages and Tobacco products climbing to the top with a little more than one-fourth of the turnover. An important new entrant is the second placed Computer Software Development and Training group. Entertainment/Electronic Media, Auto Ancillaries and Allied Products, Personal Care products and Pharmaceuticals also entered the top ten displacing Metals and Metal Products, Power Generation and Distribution, Non-Electrical Machinery, Telecommunications and Textiles. Public sector banks were relegated to the fourth position. Food, Beverages & Tobacco Products and Personal Care Products, which form the core of what are now being termed as the 'fast moving consumer goods' (FMCG), together accounted for 29.5 per cent of the turnover in 1998.

Table 14. Shares of Top 10 Industries in Turnover: 1996,1998 and 1999

	1996		1998		Change in Share between 1996 and 1998	1999	
(1)	Industry (2)	% in Total (3)	Industry (4)	% in Total (5)	(6)	Industry (7)	% in Total (8)
1.	Public Sector Banks	27.88	Food, Beverage & Tobacco Prod.	25.98	19.42	Computer Software & Training	29.28
2.	Diversified Companies	25.16	Computer Software & Training	18.32	18.13	Diversified Companies	10.32
3.	Metals & Metal Products	13.59	Diversified Companies	10.23	-14.93	Pharmaceuticals	9.73
4.	Food, Beverages & Tobacco Products	6.56	Public Sector Banks	7.67	-20.21	Food, Beverages & Tobacco Prod.	7.64
5.	Automobiles	3.46	Automobiles	4.96	1.50	Entertainment/ Electronic Media	6.72
6.	Power Gen. & Distn.	2.69	Entertainment/ Electronic Media	4.32	4.27	Computer Hardware	5.09
7.	Cement	2.69	Auto Ancillaries & Allied	3.92	3.10	Telecommu-nication Equipment	4.11
8.	Non-Electrical Match.	1.75	Personal Care Products	3.52	2.72	Public Sector Banks	4.09
9.	Telecommunications	1.72	Pharmaceuticals	3.17	1.97	Automobiles	3.79
10.	Textiles	1.39	Cement	2.59	-0.10	Cement	2.41
	Total of the above	86.89		84.68			83.18

Based on total turnover of top 500 companies in respective years.

By 1999, the relative positions changed further with the Computer Software segment reaching the top with about 29 per cent of the turnover. While the diversified companies retained their share, Pharmaceuticals improved substantially and reached the third position with an almost 10 per cent share. The two new entrants are Computer Hardware and Telecommunication Equipment. These displaced Personal Care Products and Auto Ancillaries and Allied Products. The share of public sector banks fell further to 4.09 per cent. Higher consideration for Computer related companies, pharmaceuticals, consumer products (especially FMCG) and television channels/programming does indicate the possible advantages not available to other industries for raising resources from the public.

The somewhat better distribution of turnover and number of transactions in 1999 could be due to the preference for these sectors shown by the investors cutting across the different groups of companies. The composition of A, B1 and B2 groups was changed again during 1999 [CMIE, 1997, p. 141].[31] During the last quarter (October-December), when the group composition was somewhat stable, computer software/hardware companies and pharmaceutical dominated the B1 Group to such an extent that out of the top 10 turnover companies, eight belonged to the first category and the remaining two the second.[32] The ten companies accounted for half of the turnover of the group. Similarly, in case of the B2 Group, among the top ten, nine belonged to the former category [*Dalal Street Investment Journal*, 2000, Pp. 9-16].[33] The tenth was a company owning a television channel. The combined share of the ten was more than half of the group's total turnover. This sectoral preference may thus have contributed to the decline in concentration in trading values among the top companies in 1999 compared to 1998. The sectoral preference was also reflected in the capital raised and number of issues. Leaving aside the banking sector and public financial institutions, information technology companies mobilised the largest amount of Rs 480 crore (35.5 per cent of the total after excluding Banks and FIs) during April-October 1999. In terms of number of issues also they were far ahead of the rest with 13 out of the 32 issues [SEBI, 1999, Table 9]. Interestingly, the issue of Hughes Software during October 1999 is reported to have attracted subscriptions worth Rs 6,000 crore. A far more impressive response was reported in case of HCL Technologies whose offer through the book-building route attracted bids worth Rs 20,000 crore [CMIE, 1999, p. 73]. In contrast, the Rs 200 crore bond issue of West Bengal Infrastructure Development Corp. received poor response and the closing date was extended by one month [CMIE, 1999, p. 78].

Another aspect of the trading at the BSE could be in viewing the market turnover in terms of foreign-controlled companies (FCCs), public and private sector constituents. We have grouped BSE listed companies under three heads:

(i) **Public Sector:** companies belonging to Central and State public sector including public financial institutions and companies promoted by them (excluding companies promoted with private parties in the joint sector);

(ii) **Indian Large Houses:** those belonging to Large Industrial Houses registered under the MRTP Act and companies promoted or taken-over by the Houses later on and excluding (a) those over which they lost control and (b) those classified as foreign controlled; and

(iii) **FCCs:** companies having 25 per cent or more of foreign equity excluding those in which the foreign equity has been divested) and companies promoted by them.

Classification of the companies was limited to the top 500 companies identified on the basis of the size of their market turnover. The results are presented in Table 15. The exercise could not be extended to 1999 due to the non-availability of shareholding pattern of a large number of companies.

Table 15. Distribution of BSE Turnover According to Major Company Categories: 1996 and 1998

(Amount in Rs Crore)

Category	No. of Companies		Market Turnover		Share in Turnover (%)	
	1996	1998	1996	1998	1996	1998
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Indian Large House Cos.	56	68	40,248	58,659	45.25	22.22
Public Sector Cos.	26	34	29,397	32,418	33.05	12.28
Foreign Controlled Cos.	82	114	7,703	80,886	8.66	30.64
Others	336	284	11,599	92,097	13.04	34.86
All Companies	500	500	88,947	2,63,990	100.00	100.00

Note: Based on turnover data of top 500 companies identified on the basis of their annual market turnover in the respective years.

Source: Generated from BSE company-wise daily trading data.

In 1996, the Indian Large Houses accounted for about 45 per cent of the turnover but by 1998 their share came down to less than half *i.e.*, 22 per cent. The share of public sector companies also recorded a substantial decline from 33 per cent to about 12 per cent.[34] On the other hand, the share of foreign controlled companies increased from 8.66 per cent to about 30 per cent. The number of FCCs in the top 500 of the BSE increased from 82 in 1996 to 114 in 1998. There has been a marked change in the significance of FCCs. Shares of FCCs were obviously at a premium. A noteworthy feature of the period is the substantial increase during 1998 in the share of 'Other' companies. To a large extent this is due to the emergence of computer software and pharmaceutical companies in 1998. The important position attained by FCCs is also reflected from the fact that their combined weight in the revised BSE Sensex was 39.58 per cent at the time of revision.35 In all, FCCs in personal care products, foods, beverages and tobacco products had a combined weight of 34.49 per cent in the Sensex [BSE, 1998].

Share Price Changes of BSE Listed Companies

In spite of the increasing availability of a number of indices representing the movement of share prices, the 30-share BSE Sensitive index (Sensex) continues to be the best known and most often referred index [*Economic Survey*, 1998-99, Pp. 56-57].[36] The Sensex is based on market capitalisation. Just before the process of liberalisation began in July 1991, the Sensex having its base as 1978-79 = 100, was in the vicinity of 1,300. Thereafter, it rose quickly to reach a high of 4,467 in April 1992. After the stock market scam broke out, the index fell sharply and by early June 1992, it reached 2,530. After some fluctuations it fell further to 2,037 by April 1993. Following the entry of foreign institutional investors (FIIs), the index started rising again from mid-1993, and by February 1994 it recovered much of the lost ground and reached 4,286. By December 1994, the index reached the post-scam high of 4,631.[37] The slide that followed brought the index down to 3,117 by mid-May 1995. Thereafter till early 1999, the index generally remained in the 3,000 - 4,000 range. Thus, the Sensex remained in a band for about four years. This period happens to be the one in which the turnover at the Bombay Stock Exchange recorded significant increase. In other words, the increases in turnover occurred when the index was oscillating in a band, the primary market was sluggish, shares and debentures as a proportion of household savings were falling and contribution of equity from new issues to company expansion was diminishing. The year 1999,

however, presented a different picture. Share prices recovered significantly during the year. From mid-July onwards the index was generally above 4,500, which was the position during September 1994. By the middle of October the Sensex crossed 5,000 for the first time. Among the important policy measures introduced at the beginning of 1999 were (i) amending the *Companies Act, 1956* to allow share buy-backs and free inter-corporate investments from governmental approvals, (ii) reducing the long term capital gains tax from 20 per cent to 10 per cent for resident investors, and (iii) fully exempting the income received from investments in UTI and other mutual funds from income tax. Consequent to the relaxation given for mutual funds, the resources mobilised by the funds increased substantially during the year. During April-December 1999 the funds raised, in gross terms, Rs. 35,915 crore against Rs 16,288 crore during the corresponding months of 1998. Their performance in 1999 turns out to be more spectacular when looked in net terms: Rs 12,194 crore against Rs 950 crore. Another important development in 1999 was the better performance of private sector mutual funds in resource mobilisation [*India*, 1999-2000, p. 67].[38]

Short-term business sentiment is reflected in the daily share price movements. In the long term, however, divergences can occur between different sets of companies. To examine these in detail, we constructed indexes of share prices of companies belonging to different industry/activity groups and ownership categories. For this exercise, we have adopted the Reserve Bank of India (RBI) 'Use-Based Classification' of industries [RBI, 1993, Pp. 129-130]. Financial, software and other service sector companies were treated separately. The companies were initially selected in 1998. The main criteria for selection were that the companies should have been traded on at least half of the total number of days traded in 1998 and that there should be wide industry/activity representation. The 500 companies represent 75 industry/activity groups. While extending the exercise to 1999, the same set of companies was maintained. Closing price data was separated for different fortnights starting from January 13, 1994 and ending on December 27, 1999. Wherever prices for a selected day were not available, the closing quotation for the immediately following/preceding days was taken. Changes in each company's equity during 1994 to 1999 were traced. As in the case of analysis of market turnover, for purposes of this exercise, companies having 25 per cent or more of foreign equity by foreign collaborators are classified as foreign controlled companies (FCCs). Also included in this category are companies promoted by FCCs. The 500 companies selected for this exercise covered 92.48 per cent of the market turnover of BSE (excluding turnover of public sector) in 1998. Public sector companies have been kept deliberately outside to enable broad comparison with the earlier study of Institute for Studies in Industrial Development (ISID) which covered the period mid-1991 to the beginning of 1994 [Goyal et al]. The present study covers the six-year period 1994-1999. The two studies have a large number of companies (394) in common. Share price indices for different categories of companies were calculated for each fortnight. The share price index of the 500 companies will be referred to in the following as ISID Index (Sidex).

The methodology for constructing the Sidex is the same as followed by the BSE in constructing its Sensex and National Indices [BSE, 1993, Pp. 2-4]. The price of each component share in the index is weighted by the number of shares outstanding so that it will influence the index in proportion to its respective market capitalisation. The index for a day (fortnight ending) is calculated as the percentage of aggregate market value of the equity shares of all the companies on the day to the average market value of the equity shares of the same set of companies during the base period. This method of compilation has the

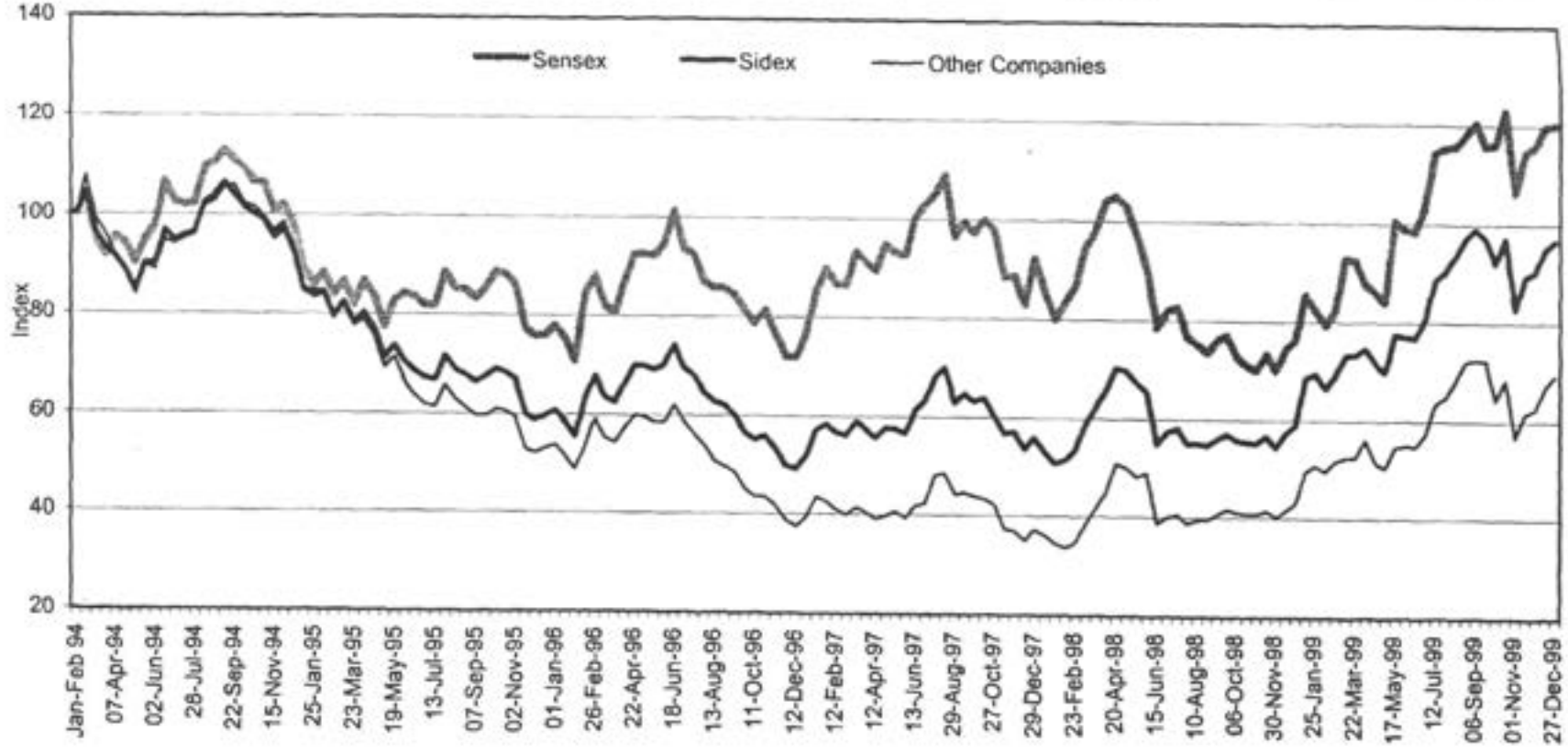
advantage that it has the necessary flexibility to adjust for price changes caused by the issue of right and bonus shares. In case a company, included in the compilation of the index, issues 'bonus shares' the new weighing factor will be the number of equity shares outstanding after the bonus issue has become effective. This new weighing factor will be used while computing the index from the day the change becomes effective. If a company issues 'right shares', the weighing factor for this share gets increased by the number of additional shares issued. An offsetting or proportionate adjustment is then made to the Base Year Average. Weighing factors are also revised when new shares are issued by way of conversion of debentures, of loans into equity by financial institutions, mergers, etc. The base year average is also suitably adjusted to offset the change in the market value thus added. The formula for changing the base year average is as follows:

New Base Year Average = Old Base Year Average x (New Market Value/Old Market Value)

In line with Sidex, Sensex has been reworked taking the average of the figures for the three corresponding fortnightly days as the base. The results of the exercise are presented in the following. It can be seen from Graph-C that in the over all, Sensex remain higher than the Sidex and the two started diverging from each other from the beginning of 1995. The divergence between the two grew wider from the middle of 1996. It was only from early 1999 that the two started coming closer once again. It is relevant here to note that the composition of Sensex was revised by the BSE in mid-1996 by replacing half of the 30 companies with new ones. Those brought in included large public sector companies, namely, Bharat Heavy Electricals (BHEL), Steel Authority of India (SAIL), Hindustan Petroleum Corp (HPCL), Indian Petrochemical Corp (IPCL) and Mahanagar Telephone Nigam (MTNL). Public financial institutions -- Industrial Credit & Investment Corp of India (ICICI), Industrial Development Bank of India (IDBI) and the State Bank of India (SBI) -- were also brought in [BSE, 1996, Pp. 5-14]. The latest revision effected in November 1998 removed IPCL and SAIL from the Sensex. Such changes might reflect the prevailing market sentiment better. However, these will not help in understanding the developments in individual sectors. The Graph-C also features index of 'Other' companies after excluding the 24 companies common to the latest revised Sensex and the 500. This index is expected to represent the share price movement of companies other than those covered by Sensex. While there is a high degree of similarity in the direction of change in all the three indices, 'Others' index remained far lower. At the end of 1999 it was only about 70 per cent of the initial value (beginning of 1994). On the other hand, Sensex was higher by 20 per cent over the corresponding figure. The over all index, namely, Sidex barely managed to reach the 1994 level. Sensex whose composition underwent major changes during the period may thus be projecting a more optimistic picture than what the reality is.

It can be seen from Table 16 that while during the first two and half years, (following liberalisation) the share price index increased by about one and a half times, consumer non-durables showed a distinct pattern as increase in their case was the highest at 2.4 times. Relatively speaking, index of basic goods grew the least followed by capital goods. Having already started from a low level, basic goods suffered the worst again in the following period. The decline in intermediate goods was also substantial. While the poor performance of basic and intermediate goods continued in 1999, capital goods fared somewhat better. This may be due to the classification of computer hardware under this category and presence of a large number of FCCs in the capital goods sector.[39]

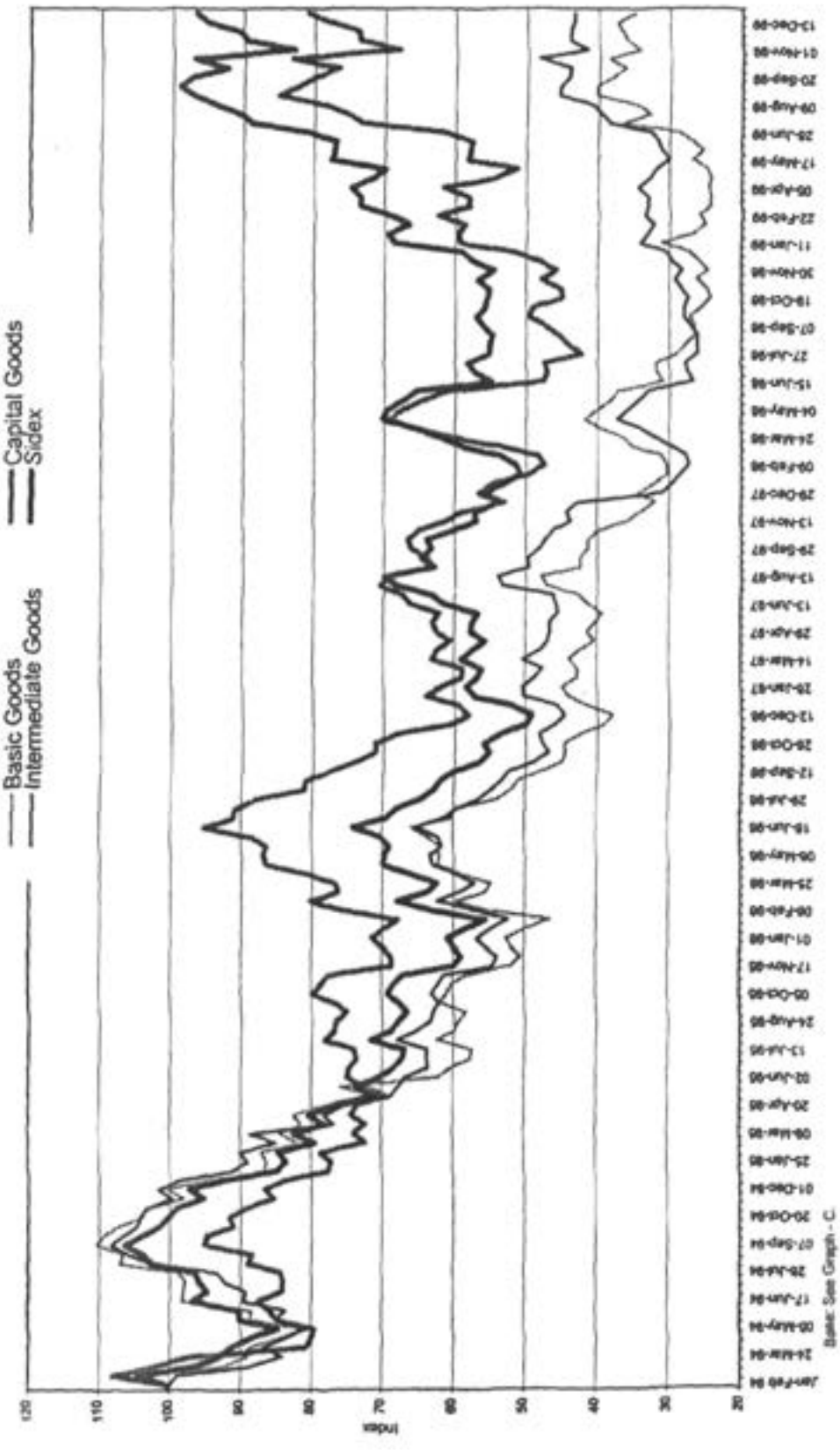
Graph C
BSE Sensex and ISID 500 Companies Share Price Index

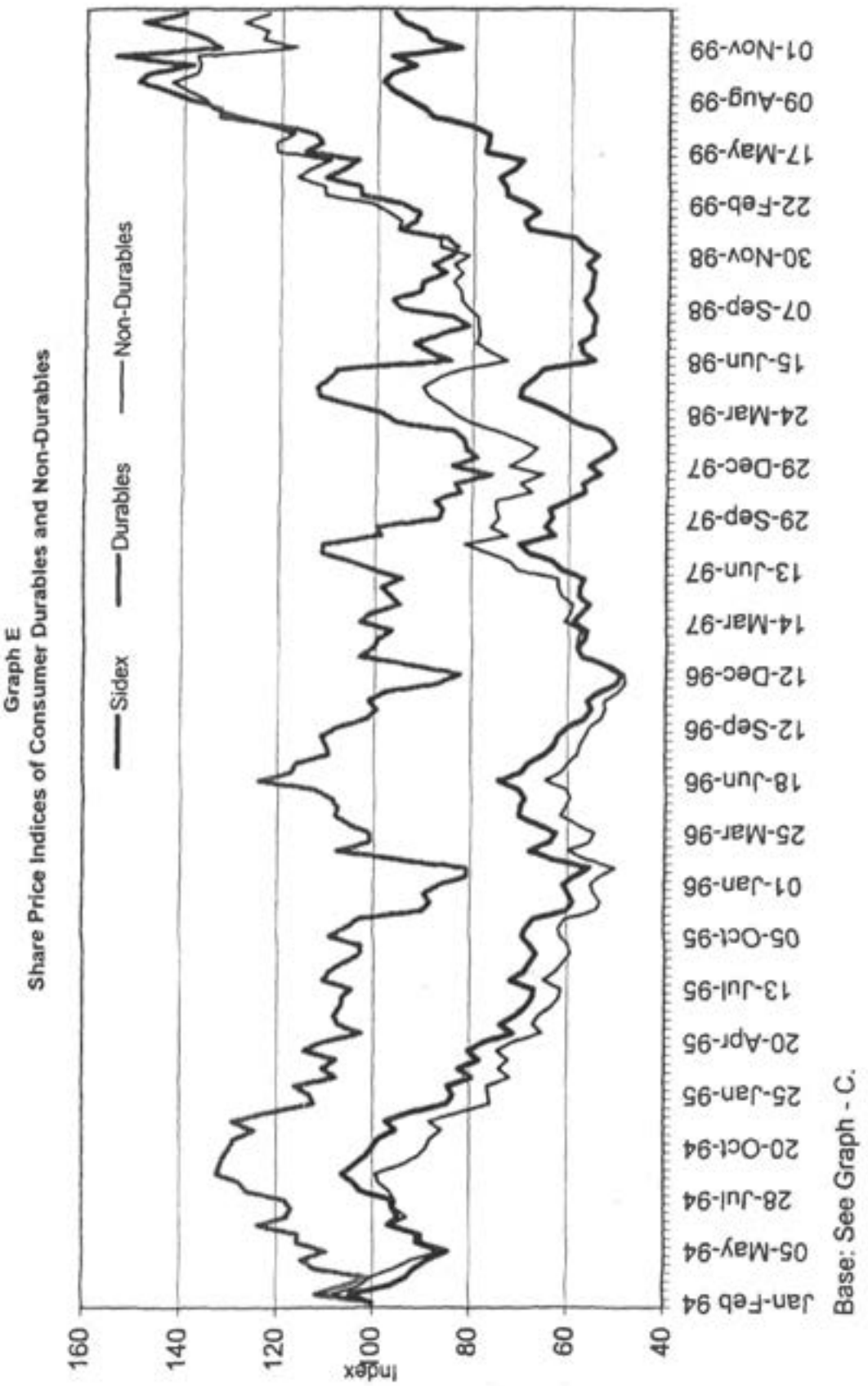


Base: Average market capitalisation in the first three fortnightly points of 1994.
Original base of the Sensex is 1978-79=100.

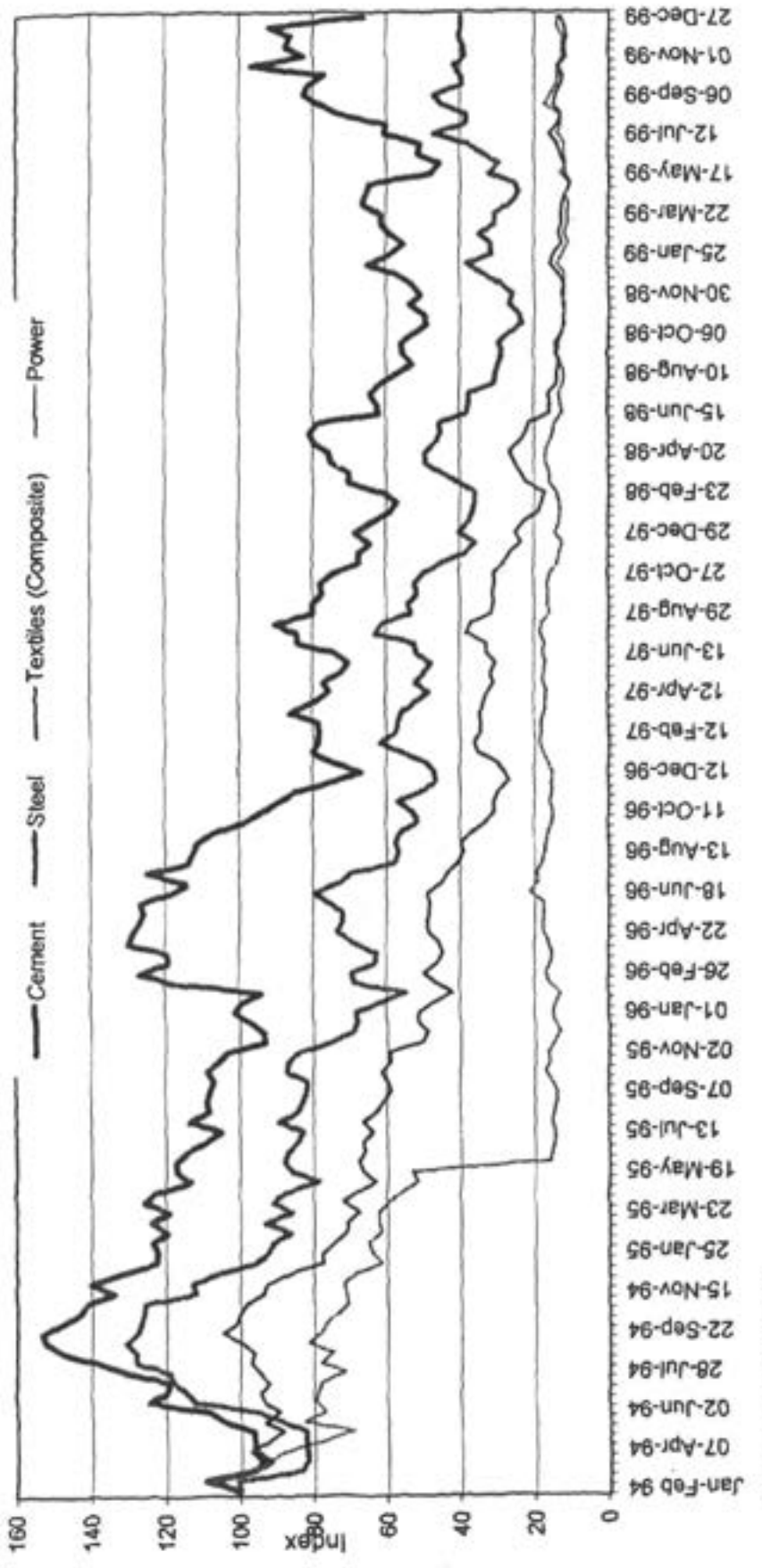
Graph D

Share Price Indices of Basic, Capital and Intermediate Goods Companies




Graph E
Share Price Indices of Consumer Durables and Non-Durables
Sidex
Durables
Non-Durables
Index
160
140
120
100
80
60
40
Jan-Feb 94
05-May-94
28-Jul-94
20-Oct-94
25-Jan-95
20-Apr-95
13-Jul-95
05-Oct-95
01-Jan-96
25-Mar-96
18-Jun-96
12-Sep-96
12-Dec-96
14-Mar-97
13-Jun-97
29-Sep-97
29-Dec-97
24-Mar-98
15-Jun-98
07-Sep-98
30-Nov-98
22-Feb-99
17-May-99
09-Aug-99
01-Nov-99
Base: See Graph - C.

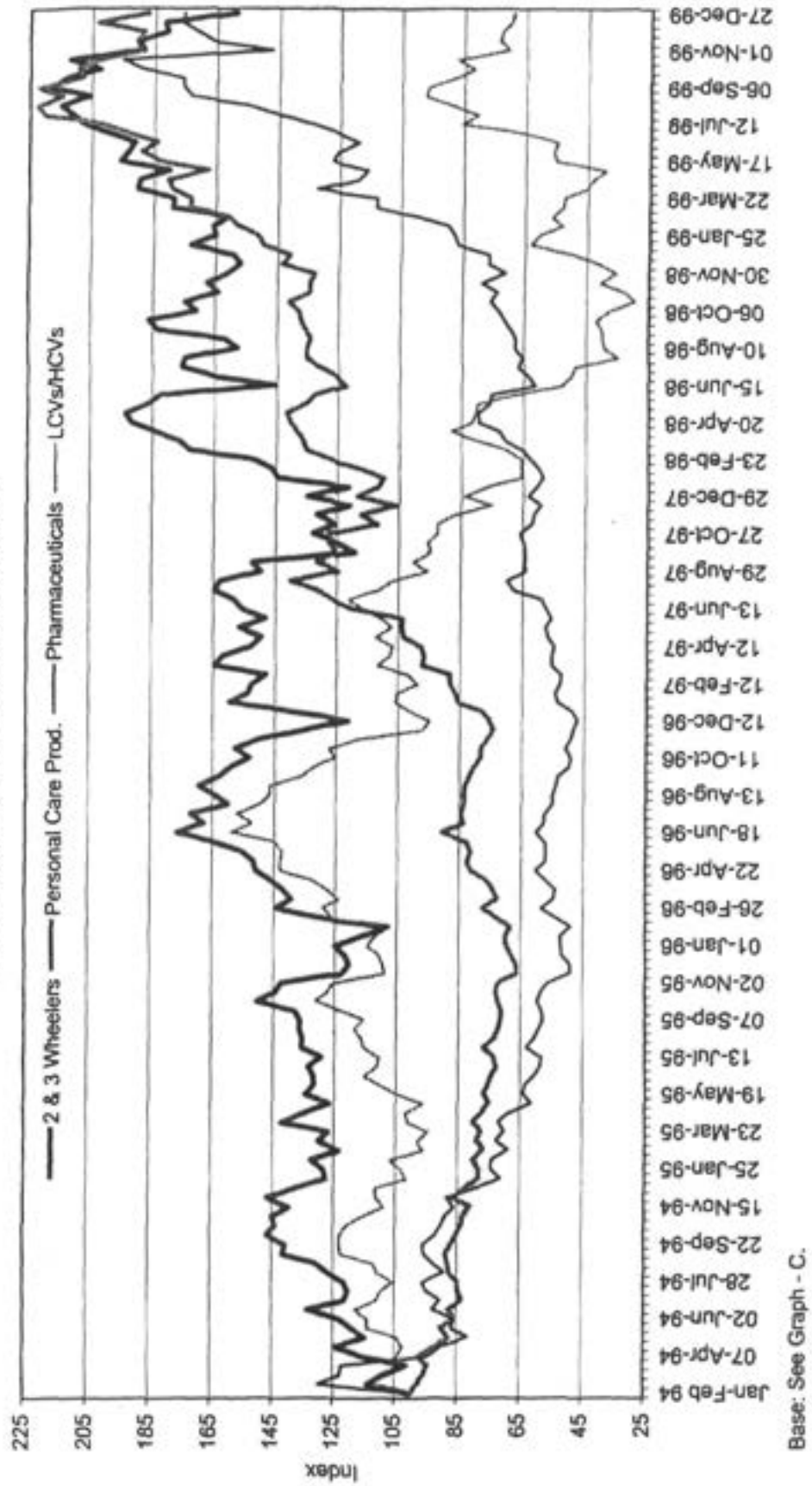
Graph F
Share Price Indices of Select Industries - I



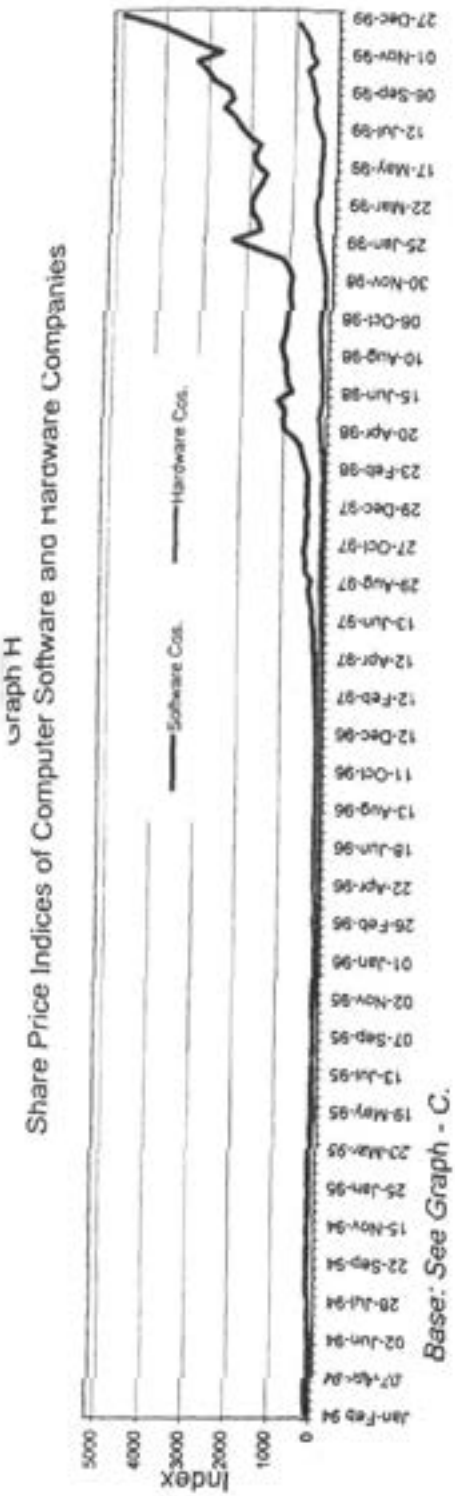
Base: See Graph - C.

Graph G

Share Price Indices of Select Industries - II



Base: See Graph - C.


Graph H
Share Price Indices of Computer Software and Hardware Companies
Software Cos.
Hardware Cos.
Index
Base: See Graph - C.

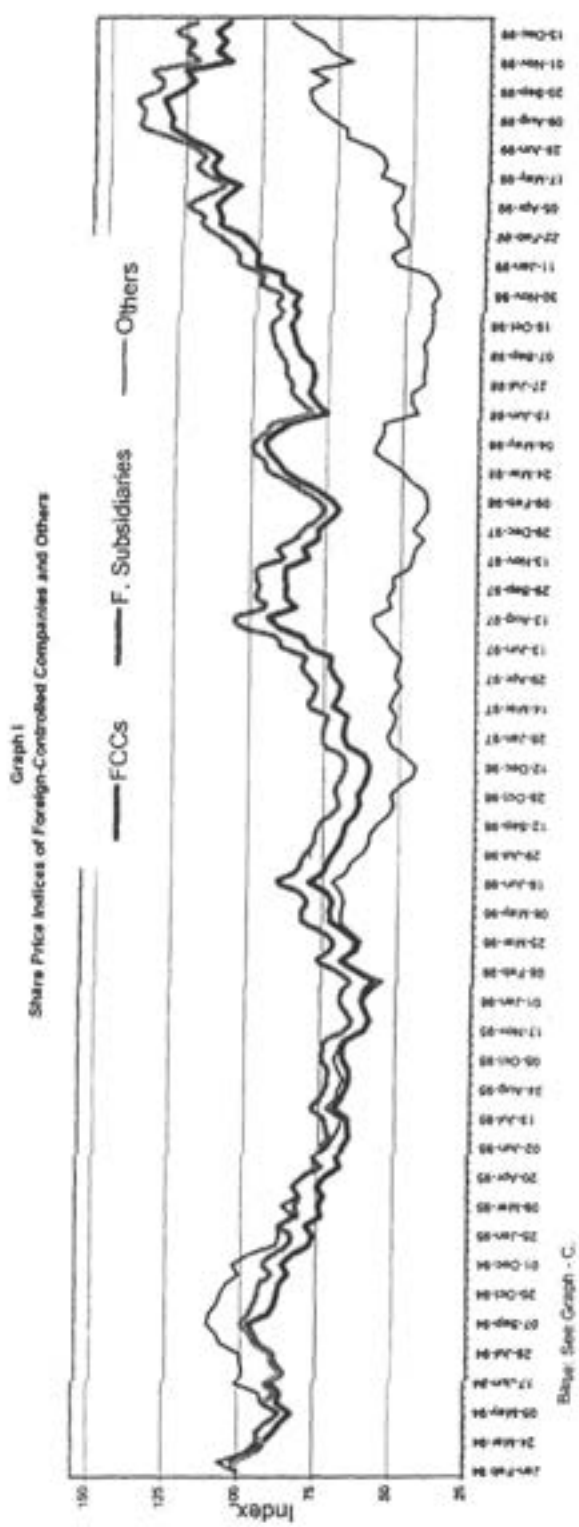

Graph I
Share Price Indices of Foreign-Controlled Companies and Others
FCCs
F. Subsidiaries
Others
Index
Base: See Graph - C.

Table 16. Share Price Indices Based on Use-based Industry Classification

Industry Category@ (1)	Beginning of 1994# (2)	End-1998$ (3)	End-1999$ (4)
Basic Goods	188.66	25.89	36.31
Capital Goods	203.66	44.53	77.40
Intermediate Goods	227.67	29.30	43.58
Consumer Durables	222.67	84.48	142.90
Consumer Non-Durables	340.33	85.53	124.50
All 500 Companies	258.67	58.34	94.03

@ Based on RBI Use-based Classification of Industries.
# Base: Average of the market capitalisation during the selected fortnights of April-June 1991.
$ Base: Average of the market capitalisation during first three fortnightly points of 1994.
End-period values are averages of the indices corresponding to the three final fortnightly points.

Source: Col. (2) is based on S.K. Goyal, et al, *ISID Development Indices*, a report submitted to the Ministry of Finance, 1994. Col. (3) and (4) are based on Sidex and its sub-components.

It can be seen from Graph-D that the relative low level of prices of basic and intermediate goods was not confined to end-of period position but a sustained one. The accentuation became more conspicuous from 1997 and finally in 1998 the two were far apart from the general index. However, there are sectors which withstood the downward pressure and performed quite well compared to the overall index. These are: consumer durables and consumer non-durables (Graph-E). While consumer durables remained above the Sidex and fluctuated violently, consumer non-durables started pulling away from it from the beginning of 1997. The process reached its culmination in September 1999. The picture emanating from the presentation of select industries at the disaggregated level further confirms the trends noticed at the use-based classification level as also the top sectors identified on the basis of market turnover. For instance, while the importance of cement declined in 1997 it continued to be near the top and re-entered the top 10 in 1999. On the other hand, metals and metal products which was in the third position in 1996 disappeared from the top 10 all together. Similar was the case with textiles.[40] Power, an important component of the infrastructure sector, suffered the worst from the point of share prices. After experiencing a steep fall in mid-1995, it never recovered. Pharmaceuticals which were moving closely with the overall index, started pulling away towards the end of 1997 (Graphs F and G). Incidentally, by 1998 it became part of the top 10 in terms of market turnover. The emergence of computer software among the top 10 in aggregate market turnover and its price index (Graph H) also tell a similar story. As we shall see in the accompanying paper on FII investments, there appears to be close relationship between FII investment exposure, large turnover sectors and movement of share prices.

The earlier study of ISID noticed that share prices of foreign-controlled companies (FCCs) increased faster than those of domestic companies. The later trends, especially during 1994-1998, further confirm the understanding that shareholders prefer FCCs. While the overall index fell to about 57 per cent of the original value, the index for FCCs declined to only 90. Indeed, shares of foreign subsidiaries among the FCCs withstood the general decline better (Table 17). Foreign subsidiaries have been market favourites all through the period. In general, the divergence between FCCs and domestic companies started emerging from the middle of 1996 (Graph I). But for the decline in the indices for foreign companies after September 1999, when the shares of consumer non-durables did not appreciate much, the difference would have been far wider.

Monitoring Company Managements

Shareholding pattern and company law provisions have important implications for monitoring and disciplining company managements. Controlling interests will have little difficulty in having their way if major portion of the shareholding is distributed among large number of individual shareholders especially in the absences of significant non-managerial shareholders. If the government directly or through public financial institutions holds substantial stake it could monitor managements through appointment of nominee directors and participation in shareholder meetings. This could be beneficial for the dispersed individual shareholders as well. An attempt is made here to examine the share holding pattern of BSE listed companies from these stand points.

Table 17. Share Price Indices of FCCs and Other Companies

Company Category (1)	Beginning of 1994# (2)	End-1998$ (3)	End-1999$ (4)
Foreign-Controlled Cos.	356.33	89.95	111.14
- of which Foreign Subsidiaries	N.A.	96.36	121.94
Other Companies	217.33	41.64	90.61
All Companies	258.67	56.93	96.67

Notes: See Table 16. N.A. Not available.
Source: See Table 16.

Out of the 3,388 companies studied,[41] for as many as 1,611 government shareholding was less than 1 per cent (Table 18). This implies that in a little less than half of the companies, the government does not have any direct say. If for effective participation a minimum of 10 per cent of the shareholding is needed, then the government cannot do much in case of three-fourths of

Table 18. Shareholding Pattern of the Non-Government Companies Listed on BSE, 1998

Equity Range (Rs Crore)	Government Shareholding# Less Than					Individual Shareholding@ ≥ 40 %		
	1 %	10 %	25 %	40 %	Total	Total	of which	
							Share of Corporate Bodies* and Directors & Relatives > 25%	Government Shareholding# >25 %
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Less than 5	628	859	954	990	999	523	383	9
5 - 10	716	1,075	1,247	1,300	1306	723	486	8
10 - 25	204	459	626	685	703	271	184	8
25 - 50	35	97	161	200	211	72	36	8
50 - 100	19	43	64	89	96	26	10	3
100 & above	9	31	56	72	73	26	8	4
All Companies	1,611	2,564	3,108	3,366	3,388	1,641	1,107	40

* Excluding the holdings categorised under foreign and government categories.
# Includes Government companies, public financial institutions, mutual funds, etc.
@ Includes top 50 and other individual shareholdings but excludes shareholdings of directors and relatives.
Source: K.S. Chalapati Rao, K.V.K. Ranganathan and M.R. Murthy, 'Indian Company Law and Protection of Shareholders' Interest', in *Global Capital Flows and the Indian Stock Market*, a report prepared under the Indo-Dutch Programme on Alternatives in Development, November 1999.

the cases [Ramaiah, 1991].[42] This may be understandable because in the post-liberalisation period companies relied on raising resources directly from the public instead of depending upon public financial institutions. Most of these are relatively smaller companies with less than Rs 10 crore equity capital and constitute three-fourths of the total number of companies having less than 10 per cent of government equity. The smaller companies are also characterised by high level of individual shareholding. More than half of the companies with less than Rs 10 crore equity have 40 per cent or more of individual shareholding. In the larger companies share of individuals varied between 27 and 38 per cent. It is also noteworthy that in such companies, substantial shares are held by corporate bodies, directors and their relatives while the share of government was significant in only a few companies. It has been also seen that in the post-liberalisation period, shareholding of government companies declined in the larger companies. Foreign shareholding had an opposite experience. Corporate bodies, directors and their relatives also, in general, improved their position. Significantly, the shareholding of individuals declined in about three-fourths of the cases [Rao et al., 1999].[43] This could be due, apart from the general increase in the level of foreign equity, to the Indian managements' attempt at consolidating control to face take-over threats.

The ownership structure of listed companies thus leaves little scope for monitoring by the Individual shareholders in a large number of companies. Government-controlled shareholding in many small companies is too small to be able to influence managements' decisions in shareholder meetings. The efforts at revamping the *Companies Act, 1956* that would have helped in strengthening the monitoring mechanism, however, got severely bogged down. The phenomenon of contested take-overs of listed companies, an essential element of the disciplining aspect of stock markets, has not yet manifested itself in any meaningful manner in India. Moreover, the introduction of new provisions for share buybacks, the liberalisation of the norms on inter-corporate investments in the *Companies Act, 1956* early in 1999 and the sanction that allows managements to increase their shares substantially without making public offer have further reduced the take-over threat. Thus, in a good number of cases the stock market does not provide a market for corporate control. A number of provisions of the Companies Bill, 1997, such as setting up of Audit Committee and expanding the scope of 'officer-in-default' aim at better governance by company managements. It is inexplicable why these were not made statutory along with share buy-back and relaxation of the limits on inter-corporate investments. SEBI has recently directed the stock exchanges to amend the Listing Agreement to provide for certain provisions of corporate governance.[44] It should be seen how these could be enforced and in actual practice work in the absence of corresponding changes in the *Companies Act*.

Summing Up

In the endeavour to encourage companies to raise resources directly from the investors and dismantle administrative barriers, in spite of the known shortcomings, the Indian stock market was encouraged alongside liberalisation. The necessary regulatory framework was, however, slow to evolve. *The Capital Issues Control Act* was repealed even in the face of the securities scam as if one was following a pre-set timetable. From hindsight, it appears that the process of liberalisation could have been more gradual. The inexperience of the regulatory body, namely, SEBI coupled with the government's failure to arm it with adequate powers in time, enabled the private promoters to misuse the new freedom and generated a series of scams of varying magnitudes and types. Sudden deregulation created chaotic conditions as private promoters tried to take advantage of the situation. The fact is that not only perpetrators of scams but even large houses and transnational corporations took advantage of policy vacuum and issued shares to themselves at ridiculously low prices. The official response

to the scams unfortunately was characterised by long drawn investigations, procedural delays and a slow acting judiciary. The process understandably brought a lot of discredit to the stock market.

The abrupt change to a market-based system denied the general investor the time to adjust to the new situation where the public financial institutions, the industrial licensing system and finally, the capital issue control mechanism could no longer be relied on to assure the viability of investment projects. The typical investors were neither in a position to understand the nuances of investing in new issues having no long term track record nor were ready to appreciate the risk factors. As a matter of fact, SEBI observed that in the prevailing euphoric atmosphere, the investors ignored the risk factors revealed in the issue prospectuses of the so-called 'vanishing companies'.

After experiencing a boom in the early years of liberalisation, the primary market almost dried up as investors lost confidence and households shifted away from investing in shares and debentures. Companies had to once again opt for assistance from banks and financial institutions denying the stock market its resource allocation role. SEBI had to tighten issue norms to prevent further damage. The non-responsive primary market also affected public sector divestment targets and the plans had to be deferred repeatedly.

Since the confidence of the general investor in the market has been shaken, the response to the repetitive attempts by the government at reviving the market proved to be short-lived. Trading got increasingly concentrated and trading volumes were increased mainly through greater speculation. In the face of increasing turnover, the concentration in trading manifested itself in a number of ways: (i) nil or very infrequent trading in an overwhelming number of companies; (ii) increasing concentration both in value and number of trades terms; and (iii) dominance of a few sectors in trading. The heavy emphasis on a few companies and sectors has its reflection in the remaining ones being illiquid. Since in an overwhelming number of companies there was either nil or very little trading, investors hardly had a chance to learn the real value of their shares. Lack of liquidity also meant that the investor could not exit from a company even after realising that the prospects of capital appreciation or dividend earnings were very poor.

While the National Stock Exchange, which was to specialise in medium-sized companies, counts on a number of large companies which are also listed on the BSE, the Over the Counter Exchange of India (OTCEI), meant for smaller companies, has become virtually defunct, hurting the interests of small companies. OTCEI too has come to rely on companies listed on other stock exchanges and permitted to be traded on it for the trading volumes [OTCEI, 1999, p. 14].[45] This is contrary to the expectation that medium and small-sized companies would gain better access to capital market. The turnover activity is concentrated in only a few centres showing the base of the capital market to be highly un-even in the country. Even for the National Stock Exchange three-fourths of its turnover is accounted by just five cities, namely, Bombay, Delhi, Calcutta, Madras and Ahmedabad.

There is a possibility of interpreting the lack of interest shown by the ordinary investor following the primary market scam, as a sign of his maturity and that he would be more cautious in future. Even granting that this was a positive outcome, it should be recognised that this has been achieved at a substantial cost and brought the very concept of stock market regulation to disrepute. The recent developments when excessive attention is being paid to sectors like information technology, telecommunications, media and pharmaceuticals, however, throws serious doubts about the Indian investor gaining maturity. Seeing that investors were flocking to companies carrying software and information technology tags, SEBI had to caution them. Without proper education, the ordinary investors are bound to behave like a herd. Given the

comparatively ill-informed investors and lack of liquidity in many shares, the investors would only concentrate on a few shares.

The market's reliance on a few scrips as reflected in the increasing concentration in the number of transactions and market turnover is likely to worsen the volatility. The sudden jumps and steep falls periodically witnessed in the Indian stock market appear to be a result of this banking on the few by the investors - foreign as well as local, large and small. The first two months of 2000 have thrown further indications in this regard with large intra-day as well as day-to-day fluctuations of the Sensex.[46]

While computer software, telecommunications, electronic media, pharmaceuticals and consumer non-durables emerged as leaders, the extent of price declines in the case of important basic, capital and intermediate goods sectors unfortunately has never got reflected in the price indices referred to as barometers of the market mood. If the general lack of interest of the stock market in the latter sectors is due to the excessive attention paid to the former, serious thought should be given as to how their financing needs could be met.[47] If the stock market does not support these industries due to investors' preference for quick returns, as is clearly evident from the low delivery ratios, the efforts of the state in the form of development financial institutions should not be undermined. If the functioning of financial institutions has also to be decided by market forces they cannot obviously undertake ventures based on the projects' long term potential and in the interest of the economy. Given the investors' propensity to seek quick returns due the unsteady nature of the market, it is doubtful if the improvements in the form of dematerialisation of shares, rolling settlement, etc., would improve the situation. In this the role of foreign institutional investors and mutual funds need to be watched carefully.

The fact that 1999 proved to be different in terms of the relatively higher level of share prices and larger number of companies getting traded may give rise to a false sense of security. A number of problems remain. While the share prices of many companies increased in consonance with Sensex, not only the index for these companies remained far lower than its 1994 position, there are wide inter-sectoral differences. The concentration in trading continued to be quite high. The somewhat better distribution at the top appears more to do with investors flocking to select sectors. The shareholding pattern of the listed sector does not appear to be conducive to monitoring by shareholders. The efforts at revamping the *Companies Act, 1956* that would have helped in strengthening the monitoring mechanism are, however, bogged down severely. Since the shareholding pattern does not seem to support stock market discipline, and investor activism is yet to take an organised form, other institutional mechanisms in the form of amendments to the *Companies Act* should have been given precedence over the liberalisation provisions like buy-back, inter-corporate investments and enhanced shares for the promoters.

Stock markets have to function in a country's social, political and economic milieu. When encouraging stock markets it is necessary to give due attention to how rules are framed and how they are implemented by the authorities on the one hand and respected by the target groups on the other. Indian experience shows that evolution of such an institutional framework will most often be gradual and cannot be achieved in a swift manner and that without a suitable institutional framework in place, the cost of transition could be very high. The study, therefore, suggests the need for a deeper understanding of the functioning of developing country stock markets without which inferences based on aggregate data may lead to inappropriate policy prescriptions. Such an understanding would contribute to better appreciation of the role of stock markets in resource mobilisation and their contribution to economic development.

Annexure

Average and Relative Number of Companies Traded at BSE: 1994-1999

Month (1)	Average Number of Companies Traded (2)	No. of Companies Listed (3)	% of Companies Traded (2)/(3) x 100 (4)
9401	1670	3353	49.81
9402	1802	3483	51.74
9403	1758	3585	49.04
9404	1842	3705	49.72
9405	1903	3813	49.91
9406	1989	3900	51.00
9407	2035	3987	51.04
9408	2153	4077	52.81
9409	2206	4172	52.88
9410	2327	4245	54.82
9411	2413	4345	55.54
9412	2479	4413	56.17
9501	2470	4495	54.95
9502	2545	4595	55.39
9503	2483	4702	52.81
9504	2718	4829	56.28
9505	2873	5063	56.75
9506	3146	5183	60.70
9507	3612	5303	68.11
9508	3582	5379	66.59
9509	3619	5435	66.59
9510	3579	5499	65.08
9511	3409	5568	61.22
9512	3639	5621	64.74
9601	3427	5451	62.87
9602	3658	5545	65.97
9603	3591	5603	64.09
9604	3589	5596	64.14
9605	3421	5719	59.82
9606	3610	5760	62.67
9607	3345	5799	57.68
9608	3283	5885	55.79
9609	2856	5933	48.14
9610	2557	5969	42.84
9611	2190	5988	36.57
9612	2184	5999	36.41
9701	2767	6008	46.06
9702	2271	5839	38.89
9703	2316	5832	39.71
9704	1914	5831	32.82

(Contd.)

Annexure (Concld.)

Month (1)	Average Number of Companies Traded (2)	No. of Companies Listed (3)	% of Companies Traded (2)/(3) x 100 (4)
9705	1945	5840	33.30
9706	1849	5844	31.64
9707	1942	5844	33.23
9708	2038	5848	34.85
9709	1662	5839	28.46
9710	1684	5842	28.83
9711	1480	5842	25.33
9712	1435	5843	24.56
9801	1500	5850	25.64
9802	1384	5852	23.65
9803	1490	5853	25.46
9804	1884	5853	32.19
9805	1570	5852	26.83
9806	1265	5854	21.61
9807	1229	5850	21.01
9808	1143	5851	19.54
9809	1302	5854	22.24
9810	1135	5855	19.39
9811	1316	5857	22.47
9812	1300	5860	22.18
9901	1644	5861	28.05
9902	1819	5860	31.04
9903	1983	5848	33.91
9904	1482	5850	25.33
9905	1474	5850	25.20
9906	1420	5851	24.27
9907	1785	5851	30.51
9908	1967	5852	33.61
9909	2041	5854	34.87
9910	2318	5855	39.59
9911	1963	5858	33.51
9912	2516	5863	42.91

[1] Previous month's figure was repeated in the absence of the corresponding month's figure.

Source: Col. (2) - CMIE, *Capital Markets*, October 1998 for the period January 1994 to March 1998. Estimated from the daily trade data for the remaining months. Data for some days in 1999 was not available. Col. (3) - BSE, *The Stock Exchange Review*, various issues.

NOTES

1. The World Bank noted that capital markets were needed in any mass privatisation programme especially for sale of state assets through direct share offerings. The UN noted that 'Besides the stock market's ability to mobilize domestic savings effectively, it also draws in foreign savings to augment investment. Clearly countries without a stock market will have severe difficulties competing with other countries having such an institution'.

2. The Narasimham Committee [1991] which recommended the discontinuation of the Controller of Capital Issues (CCI), felt that

> (I)n the scenario that we envisage it would be for the merchant bankers and the underwriters who should offer professional advice on a particular issue, on the nature of the instrument, its terms and pricing and for the issuer to decide on these matters. The Committee does not believe that CCI or, for that matter, SEBI should be involved in prior sanction of new capital issues in respect of companies whose scrips are listed on the stock exchange. In respect of unlisted shares however, where investor awareness of the prospects and background of the promoters may not be high and with a view to prevent any misuse by promoters, it may be stipulated that the Stock Exchanges should approve the prospectus.

3. Though the exchange is now called The Stock Exchange, Mumbai, we shall refer to it as Bombay Stock Exchange or BSE, its better known form.

4. As a follow up of the adoption of the FERA it became obligatory for all foreign branches operating in India to get registered as Indian companies under the *Companies Act, 1956* with up to 40 per cent foreign equity. Companies already registered in India and having more than 40 per cent foreign equity were also required to dilute the extent of foreign equity to 40 per cent.

5. The consequential wide dispersal of shareholding (a) provided insurance against likely attempt at cornering of shares by any groups or individuals and (b) created a situation in which a large number of shareholders can be mobilised to create public opinion in favour of the foreign company. For an empirical analysis of FERA dilution strategy.

6. For instance, the issue of Mcleod Russel was oversubscribed 41 times, that of Warren Tea by 27 times, Britannia 20 times and of Cadbury 16 times.

7. Since market capitalisation depends on prevailing share prices, its ratio to GDP must be read with caution. Market capitalisation is a stock concept, whereas the GDP represents flow. The use of this ratio to represent the size of a market has, however, been justified on the ground that market size is positively correlated with the ability to mobilise capital and diversify risk.

8. Besides being the oldest, most of the larger Indian companies are listed at the Bombay Stock Exchange. It is estimated that at the end of 1997, companies listed on BSE accounted for 92 per cent of market capitalisation of all-India listed companies. The share of traded volumes of BSE, however, got reduced in a substantial manner with commencement of the operations by the National Stock Exchange (NSE) in 1994. Subsequently, BSE introduced On-Line Screen Based Trading covering different cities to recover the lost ground.

9. These figures, however, have to be read with caution due of the uncertainty surrounding the estimation of the paid-up capital of the Indian corporate sector. Moreover, growth in the market capitalisation and the listed capital need not necessarily be due to new productive investments but due to the listing of *existing large companies*. For instance, in India many large public sector companies came to be listed on the stock exchanges in the post-liberalisation period due to partial divestment of government equity. These included Indian Oil Corporation, Steel Authority of India (SAIL), Mahanagar Telephone Nigam (MTNL) and Oil and Natural Gas Corp. (ONGC) apart from large banks like the State Bank of India (SBI) and financial institutions like the Industrial Development Bank of India (IDBI) and the Industrial Finance Corporation of India (IFCI). The importance of public sector companies can be seen from the fact that at the end of 1996 there were seven public sector companies among the top ten in terms of market capitalisation. Additionally, much of the market capitalisation of public sector companies is illusive because an overwhelming part of the equity of the companies is still with the government.

10. Capital can be raised from the primary market either through public issues or from rights issues to the existing shareholders. The amounts can either be in the form of equity, preference shares or debt. There are differences in the estimates provided by the *Economic Survey* and private monitoring organisations like the Centre for Monitoring Indian Economy (CMIE) and the Praxis Consultancy and Information Services Pvt. Ltd.'s Prime Database. While there are differences in number of issues and the amount raised, there is considerable similarity in the overall dimensions and the year-to-year movements. CMIE has been preferred here because it gives ownership-wise distribution of issues.

11. Though the two sources are not comparable, the fact that the situation worsened in 1998-99 is reflected from the data offered by SEBI. According to SEBI the number of issues declined from 111 in 1997-98 to 58 in 1998-99. Even among these, initial issues suffered the worst with just 18 in 1998-99 against 52 in the previous year.

12. Through irregularities in securities and banking transactions huge amounts were diverted to the stock market.

13. By sheer coincidence, we found that the observations of a Committee in 1948 describe aptly the situation that prevailed during those months. In the context of the steep rise in the shares of Indian Iron & Steel Co. between June 1936 and April 1937 from about Rs 9 to Rs 79 3/4 it was noted that: For the first time in its history, the stock market became the playground for all comers. Seized with an insatiable lust for money-making, uninitiated in the technique of stock speculation, ill-informed as to the relative position of and the value of the various speculative shares, the man-in-the-street was wildly dragged into the maelstrom of stock market boom. After reaching the above record price on 6th April, Indian Irons fell abruptly to Rs 43-4-0 by the end of the month causing immense loss to numerous persons and benefiting only a few clever manipulators who had taken full advantage of the pitiable *laissez faire* policy then pursued by the Government.

14. Part of this was through issue of new shares and part through off-loading of government shares.

15. An additional safeguard was provided in the form of official scrutiny at the time of issuing an industrial licence.

16. Exceptions were, however, allowed for banks. SEBI subsequently modified the criteria. The latest guidelines indicate that instead of actually paying dividend the issuing company should have had *distributable* profits and minimum networth of Rs 1 crore during three out of the immediately preceding five years. In case of infrastructure projects it is sufficient if the projects have been appraised by public financial institutions and if any such institutions irrespective of whether they appraised the issue or not meet 5 per cent of the project cost. See SEBI Disclosure and investor Protection Guidelines 2000.

17. SEBI Chairman was reported to have said that '(T)he details of the mechanism (to find out the vanishing promoters) will be worked out soon. The total amount raised by these promoters is not known'. It was also reported that about half of the nearly 6,000 listed companies did not file annual results for March 1998.

18. According to RBI, the number of new non-government public limited companies which made new capital issues declined sharply from 577 in 1995-96 to just 27 in 1997-98 and to only 7 in 1998-99. Financing companies were affected severely in the process. The number of public issues of NBFCs declined from 477 in 1995-96 to 249 in 1996-97 and further to just 24 in 1997-98.

19. The case of CRB group whose diversion of funds raised from public issues led to the focus on non-banking financial companies provides a relevant example here. The group was associated with a number of public issues in the 'eighties. The kingpin of the group was even auditing the accounts of companies on which his father and mother were directors. Some other auditors associated with the group at that time later appeared as auditors to CRB Capital Markets Ltd., a merchant banking company, also engaged in leasing and other financial services. The company came to the public thrice in the early 'nineties - public issue August 1992, and public-cum-rights issues in August 1993 and January 1995 - the total issue amount being Rs 238 crore. Another company of the group CRP Crop Ltd., formerly Jaihind Granite Industries Ltd.) made two issues totalling Rs 81 crore. (See: Praxis Consulting and Information Services Pvt Ltd., Prime-MRL and Prime-MIL, covering All public Issues: 1.4.1989 - 31.3.1999 and All Rights Issues: 1.4.1990 - 31.3.1999, n.d.) The group received FDI approval for floating a financial services joint venture with Daewoo group of Korea and for setting up asset management companies in association with Daewoo Securities and Keystone Group Inc., USA. The group floated a mutual funds in August 1994 to raise about Rs 100 crore. The Group was on the verge of promoting a bank when the matter was exposed. In addition to the NBFCs, the operations of 'plantation companies' have also hurt the investor sentiment.

20. CMIE's observations are relevant in this context. CMIE noted that '(U)nlike the 1980s or the early 1990s, the business sectors are unable to directly draw upon the savings of the household sectors. IPOs are replaced by private placement issues. Banks and financial institutions have displaced manufacturing corporates and a significant part of fund mobilised is through debt instruments rather than equity'.

21. Liquidity enables investors to alter their portfolios quickly and cheaply and makes investments less risky. One measure of liquidity is total value traded as a proportion of GDP. Turnover ratio, *i.e.*, value of total shares traded as a proportion of market capitalisation is another important one. However, high level of trading in a few scrips may indicate unhealthy speculation.

22. When shares are purchased they will normally be taken delivery at the end of the settlement by making the necessary payment or the deals are squared off. The carry forward system enables the purchaser to postpone the delivery to the next settlement by paying *badla* or carry forward charges to a *badla* financier. The main difference between the margin system in USA is reported to be while in the Indian case there is no need for the seller to have shares and the buyer to have the money, in the margin trading the buyer has to put up at least 50 per cent of the purchase value of shares and also pledge the shares in actuality. For a detailed description of the carry forward system. In December 1993, SEBI directed the four major stock exchanges in Bombay, Delhi, Ahmedabad and Calcutta, where forward trading is permitted, to have all fresh trades only on cash basis. Banning of *badla* had severe adverse impact on trading volumes of Specified Group (also called the A Group) shares during 1994-95 in BSE. Average daily turnover in A group fell from Rs 285 crore in 1993-94 to Rs 67 crore in 1994-95. Due to this, the share of A group in total volume got reduced from 73.59 per cent in 1993-94 to only 22.81 per cent in 1994-95. Re-introduction of *badla* in January 1996 again led to the A Group's share increasing substantially in total volume transacted in the last quarter of 1995-96. During the first nine months of 1996-97, the share of A Group in total trading volume rose to 93 per cent.

23. Though data for certain days in 1999 was missing, the estimates may not have been affected seriously as only the number of days for which the data was available were taken for arriving at the average number of companies traded.

24. For purposes of this and the subsequent analysis of BSE trading data for the years 1996, 1997, 1998 and 1999, we have relied on the daily trade data supplied in machine readable format (called the QE files) along with the Investment Decision Support System (IDSS) by the Dalal Street Journal group. The database was later renamed as *Equity Research Station* (ERS) and is being maintained by the Asian CERC Information Services (India) Ltd. Though there are a few gap in the provided by the company, since most of the exercises analyse the relative shares of different sets of companies instead of the absolute amounts, this may not significantly affect the conclusions. The face value of each share is Rs 10 though there are some exceptions. Such companies are invariably the older ones with a face value of Rs 100. The assumption of uniform face value of Rs 10 made here does not, therefore, result in any over-estimation. The stock splits that have been introduced recently, however, make such assumptions unrealistic in future.

25. The percentage of premium issues was especially high during 1994-95 and 1995-96. During 1994-95 out of the 1,230 issues as many as 388 had a premium component. Out of 87 equity issues by already listed companies as many as 75 involved premium. Indeed, during 1995-96 all but one of the 59 public issues by the already listed companies were premium issues. During this year also the premium issues were high as out of 1,351 issues 300 had premium component (Based

on Prime Database Annual Reports).

26. The Bombay Stock Exchange has started giving data on trading values in 1996. We have confined to trading in equity shares of companies after excluding data relating to debt securities and transactions by mutual funds. For companies traded both in the regular and dematerialised forms with distinct scrip codes, the turnover has been combined and only one scrip code has been retained.

27. The concentration appears quite heavy when compared with the trading pattern at the New York Stock Exchange (NYSE). The turnover data of the NYSE for 1998 shows that at the 10 company mark, the share in turnover was only 12.64 per cent while it was 67.20 per cent for BSE. When the top 100 companies are considered the share at NYSE works out to about half of the share at BSE. Even at the 500 company level there is considerable difference between the shares: 83.13 per cent for NYSE against 99.82 per cent for BSE.

28. Initially BSE decided to remove 26 companies and introduce 27 new ones to maintain the strength of the Group was 149 at the time of revision). It, however, decided to bring in only 17 new companies thereby reducing the Group's strength to 140.

29. FIIs are obliged to take/give delivery of the shares traded by them.

30. The classification broadly follows the equity research (ERS) database pattern.

31. While the scrips in A Group can have carry forward deals with weekly settlements, those in B1 would have weekly settlements without the facility of carry forward. Those of B2 (also referred to as B Group) would be similar to B1 but with a fortnightly settlement.

32. These were: Aftek, Cybertech, DSQ Software, Kale Consultants, Mars Software, Mastek, Rolta (I), and Visualsoft in the software sector; Lupin Labs and Morepen Labs in the pharmaceutical.

33. Including Boss Industries (new name: Sriven Multitech) and Vakrangee Ltd. (new name: Vakrangee Software) which are reported to be under the scrutiny of BSE for changing their names to relate to software business.

34. A limited exercise at identifying public sector companies in 1999 revealed that its share declined further to about nine per cent.

35. The Sensex was revised in November 1998 by the inclusion of two FCCs (Castrol and Novartis) and two computer software companies (NIIT and Infosys Technologies). These replaced two public sector companies (SAIL and IPCL) and two large house companies (Arvind Mills and GE Shipping).

36. The mass media (Radio & T.V. networks) as also the newspapers invariably give prominence to the Sensex. Even the *Economic Survey* 1998-99, while presenting the monthly levels of Sensex (30 companies) and the NSE Nifty (50 companies) described the movements in BSE Sensex and referred to those in Nifty in a passing manner. Needless to say, there was no discussion on industry-wise price movements.

37. Though the FIIs started making purchases in early 1993, it was only during the last quarter, i.e., October-December 1993 their net investments reached a substantial amount of US$ 600 million.

38. Private sector accounted for about two-thirds of the gross mobilisation and nearly three-fourths of the mobilisation in net terms. Resources mobilised by different types of mutual funds are discussed a little more in the accompanying paper on FII investments.

39. Out of the 70 companies in the capital goods category as many as 30 were FCCs. Their presence becomes more prominent if computer hardware companies are taken out: 28 out of 61.

40. See Table 7 in the accompanying paper: 'Foreign Institutional Investments and the Indian Stock Market'.

41. Out of about 5,600 companies listed on the BSE during 1998, we could get the shareholding pattern for 3,894 companies. After excluding public sector companies and companies promoted by them and the companies for which the information was not available for any of the years 1996, 1997 or 1998 we were left with 3,388 companies.

42. Under Section 169 of the *Companies Act, 1956* the minimum voting strength required for convening an extraordinary general meeting is 10 per cent of the paid-up capital of the company.

43. For this, a separate exercise was made to identify top 200 private sector companies in 1989-90 for which a shareholding pattern was available for both pre- and post-liberalisation periods. We assumed that shareholding data prior to mid-1992 represents the pre-liberalisation period and that for any time after 1995 reflects the impact of liberalisation. By eliminating companies for which shareholding data was not available for both the periods, companies which have got merged, the unlisted ones, those which have undergone extensive restructuring and the public sector companies, the final list of top 200 companies based on their ranking in 1989-90 was arrived at.

44. The Circular which followed the recommendations of a Committee constituted by SEBI under the Chairmanship of Mr. Kumar Mangalam Birla was issued in February 2000.

45. At the OTCEI, during 1999, turnover of equity shares of listed companies was Rs 4.47 crore against the corresponding figure of Rs 1,778.90 crore for the permitted ones.

46. On the 15 of the 41 days traded, daily highs of the Sensex were at least 3 per cent higher than the corresponding daily lows.

47. It is relevant to note here that investor preferences for select sectors have resulted in wide variations in the price-earning ratios. Out of the 304 product/activity groups for which price-earning (P/E) ratios are available, in case of six the ratio was more than 100 and in case of another five it was more than 50. For as many as 196, it was less than 10. The six with the highest P/E ratios are: Entertainment and Electronic media (765); Large Computer Software Companies (431); Magnetic Tapes and Cassettes (281); Computer Software Converts (161); Large Telecommunication Equipment (128); and computer Education (125). Figures in brackets are P/E ratios. Source: Industry Score Board at www.capitalmarket.com. Prices are for February 18, 2000.

ABBREVIATIONS

BHEL	Bharat Heavy Electricals
BSE	Bombay Stock Exchange
CCI	Controller of Capital Issues
CICA	Capital Issues Control Act, 1947
CMIE	Centre for Monitoring Indian Economy
ERS	Equity Research Station

FCCs	foreign-controlled companies
FDI	Foreign Direct Investment
FERA	Foreign Exchange Regulation Act, 1973
FIIs	Foreign Institutional Investors
FMCG	Fast Moving Consumer Goods
GDP	Gross Domestic Product
HPCL	Hindustan Petroleum Corp. Ltd.
ICICI	Industrial Credit & Investment Corp. of India
IDBI	Industrial Development Bank of India
IDPAD	Indo-Duch Programme on Alternatives in Development
IDSS	Investment Decision Support System
IFCI	Industrial Finance Corporation of India
IPCL	Indian Petrochemical Corp.
ISID	Institute for Studies in Industrial Development
MRTP	Monopolies and Restrictive Trade Practices Act, 1969
MTNL	Mahanagar Telephone Nigam Ltd.
NBFCs	Non-Banking Financial Companies
NSE	National Stock Exchange
NYSE	New York Stock Exchange
ONGC	Oil and Natural Gas Corporation
OTCEI	Over the Counter Exchange of India
PUC	Paid-Up Capital
RBI	Reserve Bank of India
SAIL	Steel Authority of India Ltd.
SBI	State Bank of India
SEBI	Securities and Exchange Board of India

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CHAPTER 7

FOREIGN INSTITUTIONAL INVESTMENTS AND THE INDIAN STOCK MARKET

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To facilitate foreign private capital flows in the form of portfolio investments, developing countries have been advised to develop their stock markets. It was suggested that these investments would help the stock markets directly through widening investor base and indirectly by compelling local authorities to improve the trading systems. While the volatility associated with portfolio capital flows is well known, there is also a concern that foreign institutional investors might introduce distortions in the host country markets due to the pressure on them to secure capital gains. In this context, this paper seeks to assess the importance of foreign portfolio investments in India relative to other major forms and to study the relationship between foreign portfolio investments and trends in the Indian stock market during the past four years.

Introduction

The character of global capital flows to developing countries underwent significant changes on many counts during the 'nineties. By the time the East Asian financial crisis surfaced, the overall size of the flows more than tripled. It stood at US$ 100.8 bn. in 1990 and rose to US$ 308.1 bn. by 1996. The increase was entirely due to the sharp rise in the flows under private account that rose from US$ 43.9 bn. to 275.9 billion during the same period. In relative terms the percentage of private account capital flows increased from 43.55 to 89.55 per cent (Table 1). Simultaneously, the Official Development Assistance (ODA), declined both in relative and absolute terms. All the main components of the private account capital transfers, namely, (a) commercial loans, (b) foreign direct investments (FDI), and (c) foreign portfolio investments (equity and bonds) (FPI) recorded significant increases. Portfolio flows increased at a faster rate than direct investments on private account. As a result, starting with a low level of 11.16 per cent, the share of capital flows in the form of portfolio investments quadrupled to reach 37.22 per cent in 1996 reflecting the enhanced emphasis on private capital flows with portfolio investments forming the second important constituent of the flows during the 'nineties. In this process multilateral bodies led by the International Finance Corporation (IFC) played a major role.[1]

Following the East Asian financial crisis, initially there was a slow down followed, by a decline in private capital flows. While bonds and portfolio equity flows reacted quickly and declined in 1997 itself, loans from commercial banks dropped a year later in 1998. Decline in FDI was also delayed. But the fall in FDI was quite small compared to the other three major forms of private capital flows. While flows on official account increased, following the crisis, they continue to constitute only a small portion of the total flows. Thus, starting with the resolve by the developed countries to provide one per cent of their GNP as developmental aid, the industrialised world preferred to encourage private capital transfers through direct investments instead of official assistance [Goyal, 1980, Pp. 843-50; Goyal, 1982].[2] The declining importance of official development finance is attributed to budgetary constraints in donor countries and the optimism of private investors in the viability of the developing countries [World Bank, 1998, p. 5].

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Table 1. Aggregate Net Long-term Resource Flows to Developing Countries

(US$ bn.)

Type of flow	1990	1991	1992	1993	1994	1995	1996	1997	1998
A. Official Flows	56.9	62.6	54.0	53.3	45.5	53.4	32.2	39.1	47.9
B. Total Private Flows	43.9	60.5	98.3	167.0	178.1	201.5	275.9	299.0	227.1
of which.									
International Capital Markets	19.4	26.2	52.2	100.0	89.6	96.1	149.5	135.5	72.1
- Private Debt Flows	15.7	18.6	38.1	49.0	54.4	60.0	100.3	105 3	58.0
- Commercial Banks	3.2	4.8	16.3	3.3	13.9	32.4	43.7	60 1	25.1
- Bonds	1.2	10.8	11.1	37.0	36.7	26.6	53.5	42.6	30.2
-Others	11.4	3.0	10.7	8.6	3.7	1.0	3.0	2.6	2.7
- Portfolio Equity Flows	3.7	7.6	14.1	51.0	35.2	36.1	49.2	30.2	14.1
Foreign Direct Investment	24.5	34.4	46.1	67.0	88.5	105.4	126.4	163.4	155.0
C. Aggregate Net Resource Flows (A+B)	100.8	123.1	152.3	220.2	223.6	254.9	30K. 1	338.1	275.0
Share of' Private flows in Total Flows (C)	43.55	49.15	64.54	75.84	79.65	79.05	89.55	88.44	82.58
Share of Portfolio Capital Flows (equity+bonds) in Private Flows (B)	11.16	30.41	25.64	52.69	40.37	31.12	17.22	24.35	19.51

Source: Based on World Bank, *Global Development Finance*, 1999, Table 2.1.

Portfolio investments spread risk for foreign investors, and provide an opportunity to share the fruits of growth of developing countries which are expected to grow faster. Investing in emerging markets is expected to provide a better return on investments for pension funds and private investors of the developed countries. For developing countries, foreign portfolio equity investment has different characteristics and implications compared to FDI. Besides supplementing domestic savings, FDI is expected to facilitate transfer of technology, introduce new management and marketing skills, and helps expand host country markets and foreign trade [World Bank, 1997, p. 31]. Portfolio investments supplement foreign exchange availability and domestic savings but are most often not project specific. FPI, are welcomed by developing countries since these are non-debt creating. FPI, if involved in primary issues, provides critical risk capital for new projects. Since FPI takes the form of investment in the secondary stock market, it does not directly contribute to creation of new production capabilities. To enable FPI flows which prefer easy liquidity, multilateral bodies, led by the International Finance Corporation (IFC), have been encouraging establishment and strengthening of stock markets in developing countries as a medium that will enable flow of savings from developed countries to developing countries.

FPI, it is expected, could help achieve a higher degree of liquidity at stock markets, increase price-earning (PE) ratios and consequently reduce cost of capital for investment. FPI is also expected to lead to improvement in the functioning of the stock market as foreign portfolio investors are believed to invest on the basis of well-researched strategies and a realistic stock valuation. The portfolio investors are known to have highly competent analysts and access to a host of information, data and experience of operating in widely differing economic and political environments. Host countries seeking foreign portfolio investments are obliged to improve their trading and delivery systems which would also benefit the local investors. To retain confidence of portfolio investors host countries are expected to follow consistent and business-friendly liberal policies. Having access to large funds, foreign portfolio investors can influence

developing country capital markets in a significant manner especially in the absence of large domestic investors.

Portfolio investments have some macro-economic implications. While contributing to build-up of foreign exchange reserves, portfolio investments would influence the exchange rate and could lead to artificial appreciation of local currency. This could hurt competitiveness. Portfolio investments are amenable to sudden withdrawals and therefore these have the potential for destabilising an economy. The volatility of FPI is considerably influenced by global opportunities and flows from one country to another. Though it is sometime argued that FDI and FPI are both equally volatile [Claessens et al, 1993], the Mexican and East Asian crises brought into focus the higher risk involved in portfolio investments.

The present paper has two objectives. One, to assess the importance of different types of foreign portfolio investments in capital flows to India. And two, to understand the investment behaviour of foreign portfolio investors through an analysis of the portfolios of five US-based India specific funds. Such an exercise, it is hoped, would explain the relationship between foreign institutional investments and trading pattern in the Indian stock market better than aggregate level analysis.

FPI and India

While foreign portfolio investments are not new to the Indian corporate sector, the importance of portfolio investments received special impetus towards the end of 1992 when the Foreign Institutional Investors (FIIs) such as Pension Funds, Mutual Funds, Investment Trusts, Asset Management Companies, Nominee Companies and incorporated/institutional Portfolio Managers were permitted to invest directly in the Indian stock markets. The entry of FIIs seems to be a follow up of the recommendation of the Narasimham Committee Report on Financial System. While recommending their entry, the Committee, however, did not elaborate on the objectives of the suggested policy. The Committee only stated:

> The Committee would also suggest that the capital market should be gradually opened up to foreign portfolio investments and simultaneously efforts should be initiated to improve the depth of the market by facilitating issue of new types of equities and innovative debt instruments [*Narasimham Committee Report*, p. 121].

Press reports of early 1993 indicate that the Asian Department Bank (ADB) influenced the Committee's recommendations [Patriot, 1993; Hindustan Times, 1993; Dataline Business, 1993]. The then ADB President's *Report on India's Request for a Financial Sector Program Loan*, mentioned that:

> The Bank (ADB) had also called for capital market reforms including allowing private mutual funds to operate, *allowing investment in Indian firms by foreign investors* and allowing increased access to world capital markets for Indians (emphasis added).[3]

Attracting foreign capital appears to be the main reason for opening up of the stock markets for FIIs [Lalitha, 1992]. The Government of India issued the relevant Guidelines for FII investment on September 14, 1992. Only a few days prior to this, a statement attributed to IFC suggested that India would have to wait for some years before the expected large foreign investment materialises [Financial Express, 1992]. Regarding the entry of FIIs the then Finance Minister said at a meeting organised by the Royal Institute of International Affairs (London) that the decision to open up the stock market to investments by foreign companies would be good for the country as India needed international capital. He further said that a non-debt creating instrument such as this was superior to raising loans of the classical

type so that an unsustainable debt burden was not piled up. The Finance Minister also said that the liberalisation of the economy would bring in international capital of about $10 bn a year rising to $12-13 bn. over the following 2-3 years [*Economic Times*, 1992]. It may also not be a mere coincidence that India decided to open its stock markets to FII investments in the aftermath of the stock scam. The Sensex, BSE Sensitive Index, fell to 2,529 on August 6, 1992 from the unprecedented high level of 4,467 reached on April 22, 1992. As an incentive, FIIs were allowed lower rates for capital gains tax. This was justified on the basis that '(T)his will guard against volatility in fund flows' [*Economic Survey*, 1993-94, p. 54].[4] Indian industry did protest against this and called for a level playing field [Pai Panandiker].

During the period 1992-93 to 1998-99 out of the total capital inflow to India of about US$ 28.6 billion, a little more than US$ 15 billion or nearly 54 per cent of the total, was on account of foreign portfolio investments. These aggregate capital flows were a little less than the foreign currency assets at the end of 1998-99. During the period, external debt did increased from US$ 85 bn. to 98 bn. [*Economic Survey*, 1999-2000]. Much of the increase, however, took place by 1995. Thus, the strategy of relying on non-debt creating instruments seems to have yielded results. The flows, however, did not match the initial expectation that capital flows will aggregate US$ 12-13 bn. a year, i.e., nearly US$ 50-60 bn. for the five year period 1993 to 1997. Within portfolio investments, FIIs had a share of nearly 50 per cent and GDRs 44 per cent (Table 2). From the point of capital flows and managing balance of payments, it does appear that an active pursuance of GDRs could be a viable alternative to FII investments. Unlike portfolio investments, GDRs are generally project specific and hence the benefits from such issues are more tangible.

Table 2. Inflow of Foreign Investments in the Post-liberalisation Period

(Amount in US$ mn.)

Year	Total Inflows (Direct+ Portfolio)	Of which, Portfolio Investments		
		Total	Of which FIIs#	GDRs@
(1)	(2)	(3)	(4)	(5)
1992-93	559	244	1	240
1993-94	4,153	3,567	1,665	1,520
1994-95	5,138	3,824	1,503	2,082
1995-96	4,892	2,748	2,009	683
1996-97	6,133	3,312	1,926	1,366
1997-98	5,385	1,828	979	645
1998-99	2,401	-61	-390	270
Total	28,661	15,462	7,693	6,806

Represent fresh inflow/outflow of funds by FIIs.
@ Figures represent GDR amounts raised abroad by the Indian companies.
Source: India, Ministry of *Finance, Economic Survey: 1999-2000.*

FII Investments on the Indian Stock Exchanges

In November 1995, SEBI notified the Foreign Institutional Investors Regulations which were largely based on the earlier guidelines issued in 1992. The regulations require FIIs to register with SEBI and to obtain approval from the Reserve Bank of India under the *Foreign Exchange Regulation Act, 1973* to enable them buy and sell securities, open foreign currency and rupee bank accounts and remit and repatriate funds. For all practical purposes, full convertibility of rupee is applicable to FII investments. Gradually, the scope of FII operations has been expanded by

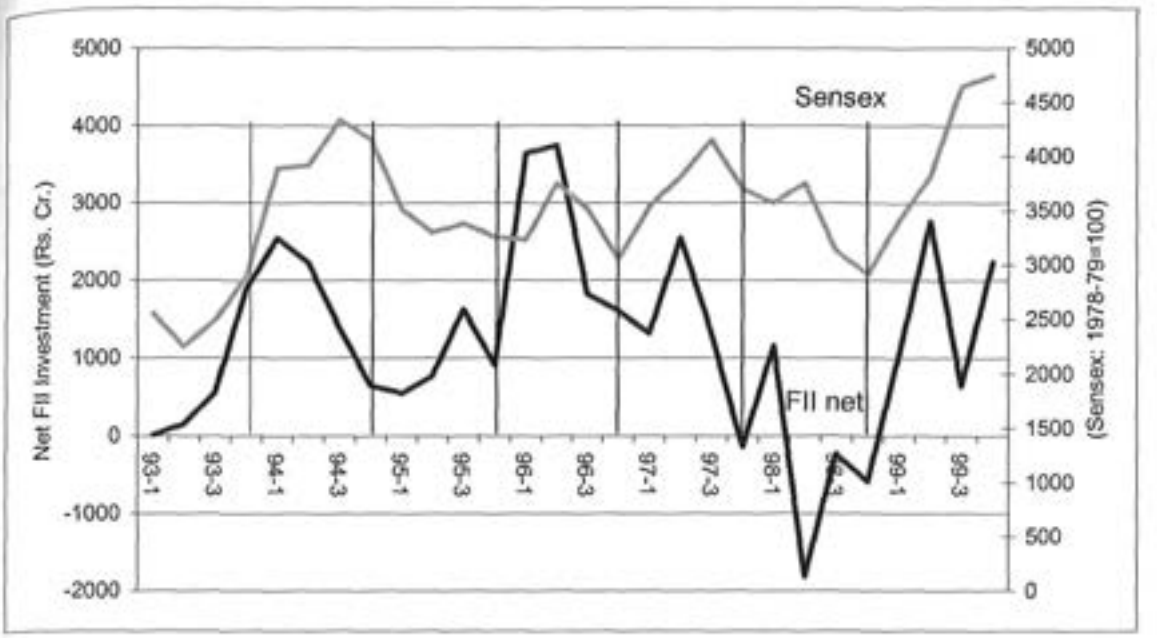
permitting (a) additional categories of investors, (b) recognising other instruments in which they can invest, and (c) altering the individual and aggregate FII shares in any one Indian company. The latest position is that an FII (investing on its own behalf) or a sub-account can hold up to 10 per cent of paid-up equity capital (PUC) of a company. The total investment by all FIIs and sub-accounts in any one company cannot exceed 24 per cent of the total PUC. In companies which pass a special resolution in this regard, the total FII investment can reach up to 30 per cent of the PUC. Imposition of investment ceilings, one expects, was aimed at: *one*, preventing cornering of shares that could result in take-over operations;[5] and *two*, to keep price fluctuations under limits. The 24 per cent limit does not include investments made by the foreign portfolio investors outside the portfolio investment route, *i.e.*, through the direct investment approval process. Investments made through purchases of GDRs and convertibles are also excluded. For calculating the FII investment limits, investments by NRIs and Overseas Corporate Bodies predominantly controlled by them, which were included earlier, are no longer included for purposes of monitoring the FII investment ceilings.[6] In the Budget Speech 2000-2001 it was proposed to raise the upper limit to 40 per cent.

In spite of the fact that FPI has been given an important place in India's financial sector under the liberalisation package, very few studies of the FII operations in India exist. One reason for this has been the paucity of data. Empirical studies have remained confined to aggregate level studies [Joshi, 1995; Pal, 1998, Pp. 589-98; Samal, 1997, Pp. 2,729-32]. The studies generally point to the positive relationship between FII investments and movement of the Bombay Stock Exchange share price index. We looked at the relationship in a somewhat different way. It has been noticed that net FII investments were lower in the fourth quarter in all the years except 1993, their first year of operations, and 1999. The average of BSE Sensex also fell in the last quarter except in 1993 and 1999. Contrary to the expectations FII investments picked up during the last quarter itself after a dip in the third quarter of 1999. Average level of Sensex also did not decline during the last quarter. It does, however, appear that FIIs buy in the first and second quarters following the depression created by their low activity or relative selling pressure in the last quarter. The decline, which starts in the third quarter, reaches the maximum in the last quarter[7] (Graph). One of the possible explanations for the BSE Sensex also declining during the last quarter could be that the local market players look towards FIIs for leads. In such a situation, even with relatively small turnovers, FIIs can swing the market by their actions. The extent of FII influence on market players can probably be gauged from the fact that SEBI asked the stock exchanges not to release FII trading details [*Hindu Business Line*, 1999][8] as SEBI decided to release the data with a one day lag and after due confirmation with the FIIs' custodians.

To give better empirical content to the general understanding that FIIs influence the Indian equity markets we tried to get detailed data on FII transactions. Our efforts at getting FII-wise information from the RBI and SEBI, however, did not meet with any success.[9] In view of this, we had to rely on other sources. At the beginning of March 2000, the number of FIIs registered with SEBI stood at 502. The sheer number of FIIs does not give a full picture of the FII operations in India since each of the FIIs can represent unlimited number of sub-accounts. On the number of sub-accounts, however, no information is available. With the importance attached to sub-account-wise investment limits one would have expected SEBI to provide information on these. Also, a good number of FIIs are under common control (as indicated by their names, addresses and telephone numbers) and render individual FII limits less relevant.

Graph

Quarterly Movements in Net FII Investments and Average Sensex Levels: 1993:1999



Note: Quarterly averages of Sensex closing values.
Source: Net FII investments are taken from CMIE, *Capital Markets*, October 1998 and SEBI.

After 1993-94, SEBI stopped giving a category-wise break up of the registered FIIs in India. From an examination of the registration numbers, available from the SEBI web site, it appears that most FIIs fall under two categories: 'FA' and 'FD' (Table 3). FA appears to stand for fund advisers and asset management companies implying that most FIIs (56.57 per cent) work as representatives of others. From a similar deduction it appears that FD stands for investment funds.[10] These two categories account for 93 per cent of the FIIs. There are 9 FIIs under the category 'FC' which are most likely pension funds. The other important category is 'FE' which includes an assortment of insurance companies, investment trusts and government bodies.

Out of the 502 FIIs, as many as 200 were from USA and another 121 have UK addresses. A few FIIs are reported to be from Hong Kong, Singapore, Luxembourg, etc., but some of them, it is our assessment, had their origin in USA and UK. For instance, those registered from Singapore include: Citicorp Investment Bank (Singapore) Ltd., Templeton Asset Management Ltd., and J.P. Morgan Securities Asia Pvt. Ltd. The registrants from Hong Kong include Jardine Fleming Intl. Mgt. Inc., Merril Lynch Far East Ltd., and ABN Amro Asia Ltd. One of the registrants from Bahrain is Citicorp Banking Corp. Very few FIIs had their addresses in tax havens like Bahamas and Cayman Islands. Only one FII has given a Mauritius address. It thus appears that the phenomenon of FIIs is essentially a domain of funds from USA and UK.

The larger FIIs have multiple associates in India including locally incorporated companies which operate either as brokers, managers or mutual fund operators.[11] Some of the FIIs floated joint ventures with Indian companies: either belonging to the broking community or India's

business groups. Coupled with the fact that the FIIs can invest through the GDR route, it appears that the operations of FIIs cannot be understood if investments by FIIs registered with SEBI are examined in isolation. The network of entities belonging to the Jardine Fleming Group may provide a concrete example in this regard (Box 1). We shall discuss the involvement of FIIs in the Indian mutual funds industry a little latter to further provide evidence in this regard.

Table 3. Country-wise Distribution of FIIs Registered with SEBI

Country	Asset Management Cos./Fund Advisers$	Investment Funds/ Trustees on Behalf of Such Funds	Insurance Cos. Investment Trusts, Government Bodies, etc.	Pension Funds	Others	Total
	[FA]	[FD]	[FE]	[FC]		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
USA	102	86	5	7	-	200
UK	68	42	10	1	-	121
Hong Kong	31	2	1	-	-	34
Singapore	19	1	2	-	1	23
Luxembourg	8	22	-	-	-	30
Australia	5	10	1	-	-	16
Switzerland	12	2	1	-	-	15
Canada	8	4	-	1	-	13
Netherlands#	7	6	-	-	-	13
Italy	6	1	-	-	-	7
Japan	4	1	-	-	-	5
Others (Incl. unclassified)	14	6	5	-	-	25
Total	284	183	25	9	1	502

$ This classification is based on relating registration numbers with the names of FIIs.
# Including one from Netherlands Antilles.
Source: Based on the registration details given at SEBI's website.

From the available information it appears that FIIs do not play a major role in the primary market. According to SEBI, in 1995-96, out of the 1,426 public issues involving an issue amount of Rs 14,240 crore, in 79 issues Rs 212 crore were reserved for FIIs. In the following year Rs 549 crore were reserved in 23 issues out of a total amount of Rs 11,557 crore issued by 751 companies. In 1997-98 the amount reserved was Rs 12 crore in 3 issues [SEBI, 1996-97 and 1997-98; 1998-99, Pp. 50-51].[12] The following exercise will, therefore, be concentrating on the FII operations in the secondary market. In the secondary market also, going by the values, FIIs are more active on the equity market than in the debt segment [BSE, 2000, Pp. 13-18].[13] At the Bombay Stock Exchange, which accounts for about half of the FII sales and purchases, against the total market turnover of Rs 5,27,960 crore in 1999, FII purchases were Rs 17,165 crore and sales, Rs 13,174 crore.[14] The total turnover for 1998 stood at Rs 2,65,995 crore; FII purchases at Rs 6,684 crore and their sales, Rs 6,940 crore. Thus, in comparison to total trading values on the BSE, FII sales and purchases appear to be quite small.

For understanding the investment pattern of FIIs we tried to examine the N-30D filings of investment funds with the US capital market regulatory body, namely, the Securities and Exchange Commission (SEC). Form N-30D is required to be filed by registered investment

companies and contains semi-annual and annual reports mailed to the shareholders.[15] The SEC data are available for different years. One can, therefore, make useful comparisons over a period. The filings also offer details on the investment strategies of FIIs. A study of American funds could be quite representative of the FIIs investment behaviour in India because most FIIs registered in India are from the USA.

BOX - 1
JARDINE FLEMING# & INDIA

Jardine Fleming India Fund Inc.,	Maryland, USA
Investment Adviser:	Jardine Fleming International Management Inc. (JFIM), British Virginia Islands. Regd. with SEBI as an FII from HK.
Broker:	Jardine Fleming India Broking Pvt. Ltd., India (*Affiliate of JFIM*)
Revolving Credit Agreement WITH:	Jardine Fleming Bank Ltd. (*Affiliate of JFIM*)
Administrator:	Mitchell Hutchins Asset Management Inc. Wholly-owned subsidiary of Paine Webber
Mauritius Administrator:	Multiconsult Ltd., Mauritius
Custodian:	Citibank, US & India
JF India Trust Trustee & Registrar:	HSBC Trustee (Mauritius) Ltd., Mauritius
Investment Manager:	JF Unit Trust Management Ltd., British Virgin Islands
Manager:	JF India Fund Management Ltd., British Virgin Islands
Investment Adviser:	Jardine Fleming Investment Management Ltd.
Registrar's Agent: & HK Representative:	Jardine Fleming Unit Trusts Ltd.
Jardine Fleming India Asset Management Pvt. Ltd., India	Asset Management Co. of Jardine Fleming Mutual Fund.
Fledgeling Nominees Intl. Ltd., Cayman Islands.	Regd. as FII with SEBI. C/o Jardine Fleming India Securities Pvt. Ltd., India, Mumbai.
Robert Fleming Nominees Ltd., London	Regd. as FII with SEBI. C/o Jardine Fleming India Securities Pvt. Ltd., India, Mumbai.
Jardine Fleming India Securities Pvt. Ltd.	Approved by the FIPB in June 1994 for undertaking merchant banking, corporate finance, stock broking and asset management. The approval was for Jardine Fleming, Mauritius.
Jardine Matheson's Joint Venture with Tata Industries with Bermuda as the home country	Approved by FIPB in April 1996 for undertaking retailing, distribution, financial services, property, hotels, engineering and construction.
Fleming Fund Management (Luxembourg) S.A., Luxembourg	Regd. as FII with SEBI

\# Jardine Fleming was established in 1970 in Hong Kong and is jointly owned by Jardine Matheson Holdings Limited and Robert Fleming Holdings Limited. Early last year Flemings fully acquired Jardine Fleming.

Note: Prepared in early 1999 by way of illustration and is by no means exhaustive.

By a process of string search in the text, we could identify 53 funds which invested in India in 1998.[16] Only five of them were specific to India.[17] The others invested in GDRs of Indian companies, India specific funds of USA or UK or directly in a few Indian companies. Apart from the five India specific funds, only six other funds invested in more than ten Indian companies in 1998. This may indicate that the focus of FIIs on India is quite narrow.

Investment Pattern of Five India Specific Funds

The five India specific funds whose invest-

ment details for 1996 and 1998 we will be presenting in the following are: (i) India Growth Fund Inc.; (ii) India Fund Inc.; (iii) Jardine Fleming India Fund Inc.; (iv) Morgan Stanley India Investment Fund Inc.; and (v) Pioneer India Fund.[18] All the five have different investment advisers and the total value of investment in 535 Indian companies in mid-1996 was US$ 915 mn.[19] The number of companies compares well with the official estimates for 1996-97 that FIIs have been active in over 600 scrips out of more than 6,000 listed ones. It has also been indicated that out of the 427 registered at that time, on an average 130 were active in any given month and about two-thirds of the purchases and sales were accounted for by only 25 FIIs [*Economic Survey*, 1996-97, p. 61]. But by 1998, presumably as a fall out of the East Asian crisis, the sanctions following India exploding nuclear devices in May 1998 and the general slow down of the Indian economy, the number of companies in which the funds invested declined and stood at 375 (Table 4).[20] The market value of the assets held by the funds declined to US$ 762 mn. Decline in the number of companies is common to four of the five funds.

The accompanying study of trading at BSE[21] showed that out of the nearly 6,000 companies listed at the exchange, the largest 500 companies in terms of market turnover account for over 99 per cent of the turnover. FII investments have generally confined to this set of high turnover companies as the share of such companies in the market value of investments increased from 86 to 98 per cent between 1996 and 1998 (Table 5). This suggests that FII operations are progressively confining to liquid shares.[22] By 1998, it is also observed that A Group (Specified) companies, in which carry forward deals are permitted,

Table 4. Basic Details of Five India Specific Funds

Name of the Fund	Investment Adviser	No. of Companies Invested in		Value of Investment (Mn. US$)	
		1996	1998	1996	1998
(1)	(2)	(3)	(4)	(5)	(6)
1. Morgan Stanley India Investment Fund Inc.#	Morgan Stanley Asset Management Inc.	255	165	387.59	291.34
2. India Growth Fund Inc.	UTI Investment Advisory Services Ltd., India	224	174	134.31	276.02
3. India Fund Inc.#	(i) Advantage Advisers, a subsidiary of CIBC Oppenheimer Corp. (ii) Infrastructure & Financial Services Ltd., India	188	27	282.08	95.21
4. Jardine Fleming India Fund Inc.#	Jardine Fleming Intel. Management Inc., British Virginia Island	77	77	79.97	84.24
5. Pioneer India Fund	(i) Pioneer Management Corp. (ii) Kothari Pioneer AMC Ltd., India	93	52	31.02	14.78
All the Five Funds		535	375	914.97	761.59

\# Claimed tax residency status in Mauritius.

Note: The number of companies do not add up to the total as more than one fund invested in some of the companies.

Source: Based on the Funds' N30-D filings with the U.S. Securities and Exchange Commission (SEC). For the first three funds the data refers to June-end of the respective years. For Jardine Fleming it is May-end and for Pioneer it is April-end.

Table 5. Shares of Different Categories of Companies in the Market Value of Investments

Company Category	Market Value (US$ mn.)		Percentage in Total	
	1996	1998	1996	1998
(1)	(2)	(3)	(4)	(5)
Top Market Turnover Companies$	791.64	746.84	86.52	98.06
A Group#	623.70	619.58	68.17	81.35
	(521.76)		(57.03)	
Sensex Companies	326.27	256.33	35.66	33.66
Foreign-Controlled Cos. (FCCs)	190.29	214.04	20.80	28.10
Public Sector Companies	151.98	157.29	16.61	20.65
Large Indian Houses	339.85	108.63	37.14	14.28
All Companies	914.97	761.59	100.00	100.00

Percentages do not add up to 100 because of over-lapping of the groups.

$ Ranked according to the total market turnover at BSE in the corresponding year.

The A-group was expanded in February 1998 to include 50 companies. Figures in brackets indicate the aggregate and percentage with regard to the composition of the Group prior to its expansion.

increased their share from 68 per cent to 81 per cent.[23] The share of Sensex (pre-November 1998) companies remained at about one-third of the total value. However, it is significant that the five funds invested in practically all the Sensex companies, implying that their operations could potentially influence the index. Names and other particulars of the top 25 companies in terms of value for each of the five funds are given in the Annexure. While the share of foreign-controlled companies (FCCs) in the value of investment increased from about 21 to 28 per cent. The share of public sector companies increased from about 17 to 21 per cent. Along with the decline in the number of companies in which the funds invested, the share of top companies in terms of market value of investment increased substantially. The share of top ten companies increased from about 26 per cent to 45 and that of top 100 from 77 per cent to 94 per cent. In all, the value of the investment of the five funds is concentrated in about 150 companies (Table 6).

Table 6. Share of Top Companies in the Market Value of Investments by Five India Specific Funds

Top Companies#	Percentage in Total Value of Investment	
	1996	1998
(1)	(2)	(3)
10	25.90	44.77
50	61.01	82.82
100	77.33	93.87
150	86.54	98.06
All Companies	100.00	100.00
	(535)	(375)
Total Amount (Mn. US$)	914.97	761.59

Based on value of investment and includes investment in GDRs.
Figures in brackets are the number of companies invested in the respective years.

A sector-wise classification of the companies, in which the funds have invested shows that there was a major shift in the investment exposure within two years.[24] Computer software (development and training) group of companies which was not among the top 10 in 1996, reached the top-most position in 1998. Pharmaceuticals sector improved its position from the fifth to the third position. Food & Beverages and Personal Care products made their entry into the top 10. Major industries that moved down below the 10th position were: metals and metal products, textiles, cement and electrical machinery (Table 7).

It may be noted that at the Bombay Stock Exchange also computer software, food and beverages, pharmaceuticals and personal care products improved their position in 1998 compared to 1996. Similarly, trading values showed increased concentration and the number of companies traded declined during the same period. While share of FCCs in the turnover increased, that of Indian large companies declined. The resemblance between the distribution of trading values at BSE and exposure of FII investments seem to suggest a strong positive relationship between the two and possible influence of FII investment pattern on trading at BSE. This goes to strengthen the general conclusion drawn on the basis of comparison of quarterly net FII investments and movement of the Bombay Stock Exchange Sensitive.

Table 7. Investment Exposure of Five India Specific US Funds: Changing Sectoral Importance between 1996 and 1998

Ranking		Industry	Market Value of Investments (US$ mn.)		Percentage to Total	
1996	1998		1996	1998	1996	1998
		(1)	(2)	(3)	(4)	(5)
1	2	Automobiles	93.77	85.21	10.25	11.19
2	14	Metals and Metal Products	65.72	19.54	7.18	2.57
3	4	Non-Electrical Machinery	60.85	55.85	6.65	7.33
4	6	Diversified	59.43	44.28	6.50	5.81
5	3	Pharmaceuticals	53.07	67.16	5.80	8.82
6	13	Auto-Ancillaries	50.84	20.82	5.56	2.73
7	19	Textiles	42.38	6.03	4.63	0.79
8	17	Electrical Machinery	41.56	11.73	4.54	1.54
9	18	Cement	39.02	10.99	4.26	1.44
10	16	Entertainment/Multimedia	33.33	16.22	3.64	2.13
14	1	Computer Software (Devt&Trg)	25.68	133.94	2.81	17.59
19	5	Food, Beverages & Tobacco Pr.	19.06	47.14	2.08	6.19
16	7	Personal Care Products	20.61	44.02	2.25	5.78
11	8	Telecommunications	37.92	27.94	4.14	3.67
15	9	Refineries	22.83	25.53	2.50	3.35
12	10	Public Sector Banks	30.64	24.73	3.35	3.25
		Total (including others)	914.96	761.58	100.00	100.00

Source: Complied on the basis of the Funds' N-30D filings with the US SEC.

A factor which emerged from the funds' filings is that three[25] out of the five funds claimed tax residency status in Mauritius with which India has entered into double taxation treaty. That this was a mere strategy of tax planning is evident from the fact that one of the funds (India Fund Inc.) reported that

> (T)he Fund has established a branch in the Republic of Mauritius. ... Multiconsult Ltd. (the 'Mauritius Administrator') provides certain administrative services relating to the operation and maintenance of the Fund in Mauritius. The Mauritius Administrator receives a monthly fee of $1,500 and is reimbursed for certain additional expenses.[26]

The other two funds also paid similar amounts to Multiconsult.[27] The Mauritius company should only be lending its address, as, for such small amounts, one cannot think of any other professional service. In this background, from the taxation of profits and capital gains, point of view, the country status described earlier has little relevance.[28] Incidentally, the address of Multiconsult Ltd., is used, apart from India Fund Inc. and Morgan Stanley India Investment Fund Inc., the two other funds claiming Mauritius residency status, also by such other foreign investors that invested in India and as varied as US West Cellular Investment Co., Chatterjee Petrochem (an NRI company which received approval to invest in Haldia Petrochem) and Marconi Telecommunications.

FIIs and Emergence of Computer Software, Consumer Non-Durables and Pharmaceutical Sectors

There appears to be a good deal of co-ordination and similarity in business approach among the five Funds in spite of each having different investment advisers. All of them started looking at the computer software, pharmaceutical as also fast moving consumer goods sectors while reducing their exposure to commodities and chemicals (Box 2).

The FII preferred sectors seem to have caught the attention of others too. The emergence of software, pharmaceuticals and personal care products in BSE market turnover could be a reaction of the local investors, especially the mutual funds promoted in association with FIIs, to the FIIs' investment strategy. For instance, Prudential ICICI Growth Plan managed by Prudential-ICICI Asset Management Co. (AMC), a joint venture of Prudential Corp. Plc., of UK and ICICI, by the end of 1998, had a quarter of its net asset value (excluding cash) in consumer goods companies, 17.01 per cent in pharmaceutical companies and 15.91 per cent in software companies. The combined share of the three sectors worked out to as high as 58.56 per cent. The electronic newsletter of the company dated March 17, 1999 informed that the share in the three sectors increased further to 72 per cent. Similarly, in the case of Birla Advantage Fund, managed by Birla Capital International Ltd.,[29] as on November 30, 1998, the share of the three sectors stood at nearly half of the overall value of investments.[30] It may be noted that after the mid-November revision, the three sectors have an overall weightage of 43.52 in the Sensex. Taking advantage of the popularity of software scrips, a few companies are reported to have even changed their names indicating their involvement in information technology, probably, to mislead the investors [*Hindu Business Line*, 1999; SEBI, 1999].[31]

BOX - 2

Investment Choices of US-Based India Specific Funds

India Growth Fund Inc: June 30, 1998

In January 1997, it was decided to decrease the Fund's investment exposure in industries such as *cement, iron and steel, commercial vehicles, chemicals, and heavy engineering.* ... exposure was *increased in information technology, pharmaceuticals/ healthcare and food and agro products.* ... The decision to restructure the portfolio *by reducing exposure to a small number of companies* and reducing exposure in declining and cyclical sectors has started to show results. The decision to *divest of stocks in small and madcap companies,* eliminate smaller holding where potential for appreciation was limited, ... has helped ... (emphasis added)

Pioneer India Fund: April 30, 1998

We *added pharmaceutical stocks,* with the belief that these companies should be able to advance regardless of the region's economic condition. ... In our strongest move of the period, we *significantly increased investments in the Indian software and computer industry.* (emphasis added).

India Fund Inc: June 30, 1998

The Fund continued its strategy *of overweighting the software sector* which is considered to be a longterm secular growth industry for India. This sector remains an inherent hedge in the case of a weakening currency due to high export earnings ... the Fund *steadily increased its exposure to ... consumer companies in areas of healthcare, food, detergents and other household goods* as people shift to using high quality branded products. The Fund *increased its holdings of both Hindustan Lever and ITC* ... The Fund *further reduced its holdings in commodities such as petrochemicals and textiles* where growth prospects continued to deteriorate due to delayed economic recovery in India ... (emphasis added).

Morgan Stanley India Investment Fund Inc: June 30, 1998

Given the political outlook and the poor visibility on the economy we remain defensive on the market and our Fund is being structured on these lines. We *remain positive on software, media, pharmaceuticals and the FMCG sectors* and we are *holding on to our large weightings in these sectors.* (emphasis added).

Jardine Fleming India Fund Inc: May 31, 1998

The Fund's portfolio is comprised of high quality counters with the manager's investment focus both on return equities and on those sectors where India has proven skills. Consequently, *the consumer, technology and pharmaceutical sectors are noticeably featured* together with utility stocks in an environment of some caution. (emphasis added).

Prudential-ICICI introduced a new fund specialising in what are now being popularly referred to as FMCG (fast moving consumer goods) scrips [*Hindu Business Line*, 1999].[32] According to Prudential-ICICI, FMCGs include:

> ... tea, coffee, bread, butter, cheese, biscuits, soaps, detergents and various other products that you use every day.

Regarding the favoured companies the AMC stated that:

> ... (T)he list speaks for itself: Hindustan Lever, Cadbury, Britannia, Procter & Gamble, Nestle, Reckitt & Colman, Henkel Spic, Indian Shaving Products, Marico & Smith Kline Beecham.
>
> ... All these are companies which feature great brands, a strong distribution network across the country, professional management and financial soundness, apart from consistent performance year after years. As a testimony to this fact, the stocks of these companies have performed better than the market in the last three years, giving an annualised return of 34.3 per cent as compared to an annualised return of only 4 per cent in the BSE 200 and the Sensex.[33]

The emphasis on FMCG thus actually implied emphasis on transnational corporations (TNCs) because of their well-known brand names, large advertisement expenditures and distribution networks. The importance of TNCs in market turnover of BSE may be a reflection of this phenomenon. This, seen in the context of new FCCs avoiding the stock market may mean that the existing listed ones will continue to be the favourites of investors as they have limited options. Paradoxically, these are the companies that may not need to raise resources from the Indian investors.

FIIs and the Indian Mutual Funds Industry

It was seen in the above that two of the FII associated local mutual funds also followed the pattern set by FIIs. In this context, it may be useful to examine the relative importance of FII affiliates in the Indian Mutual Funds industry. Following SEBI guidelines of 1993, which defined the structure of mutual funds (MFs) and asset management companies, mutual funds were launched in the private sector for the first time. A few years earlier in 1987, public banks and insurance companies, were allowed to enter the mutual funds sector which was till then the preserve of Unit Trust of India. While initially they raised considerable amounts, the mobilisation suffered with the general industry performance. Of late, private sector mutual funds have started becoming important once again [RBI, 1999]. An important contributory factor is the tax break allowed in the Budget 1999-2000 when the income distributed under the US-64 and other open-ended equity-oriented schemes of UTI and other Mutual Funds was exempted from dividend tax and income received by individuals from MFs was fully exempted from income tax. As a result, during April-December 1999, MFs raised Rs 35,915 crores in gross terms compared to Rs 16,288 crore in the corresponding period of 1998. The performance in net terms is more impressive: Rs 12,194 crore against a net outflow of Rs 950 crore in the previous period. During April-December 1999, share of private sector was 68.4 per cent in gross mobilisations and 74.33 per cent in net terms [*Economic Survey*, 1999-2000, p. 67]. Private sector MFs accounted for nearly ten per cent of the net assets of all mutual funds at the end of March 1999 [SEBI, 1998-99, p. 68]. By the end of the year the share doubled to nearly 21 per cent [SEBI, 1999, p. 26]. From independent compilations on mutual funds, it does appear that within the private sector MFs, funds with foreign associates have come to occupy an important position (Table 8).[34]

While it can be expected that foreign affiliated mutual funds would follow the investment pattern of FIIs, it is important to note that many domestic ones also followed FIIs. The sectors favoured by FIIs account for a substantial portion of the net assets under control of many MFs. Even the UTI started focussing on certain of these sectors. UTI Chairman is reported to have said in February 2000 that US-64's (flag ship fund of UTI) exposure to the information technology sector rose to 19.13 per cent at the end of December 1999 from 5.68 per cent a year earlier.[35] UTI's involvement

with IT and pharmaceutical sectors is further revealed in its floatation of sector specific funds. UTI has floated five funds called UTI Growth Sector Funds. These are: Brand Value fund (FMCG), Pharma and Healthcare fund, Software Fund, Petro Fund, and Services Sector Fund. While understandably the Software fund is exclusively for computer software companies, the Services Sector Fund also concentrates on computer related companies [*Economic Times*, 1999].[36] Among the others who promoted sector specific funds are: Birla Mutual, IL & FS, Kothari Pioneer, Prudential ICICI, SBI Mutual and Tata Mutual. Interestingly, it is reported that though it is not a sector specific fund, JM Equity Fund's reliance on the software sector increased from 34 per cent in September 1999 per cent at the end of December 1999 [Gulati, 2000].[37]

Table 8. Assets Under the Management of Different Categories of Mutual funds

(Rs Crore)

Category	At the end of		Increase	
(1)	1998 (2)	1999 (3)	amount (4)	Per cent (5)
A. Unit Trust of India	54,339	67,207	12,868	23.68
B. Bank Sponsored MFs (6)	4,504	7,290	2,786	61.86
C. Institutions (4)	1,993	2,999	1,006	50.48
D. Private Sector incl. (22)	4,924	19,532	14,608	296.67
- Indian Companies (6)	776	2,225	1,449	186.73
- JVs: Predominantly Indian (7)	2,163	7,977	5,814	268.79
- JVs: Predominantly Foreign (9)	1,985	9,330	7,345	370.03
Total (A+B+C+D)	65,760	97,028	31,268	47.55

Source: Based on the data provided by the Association of Mutual Funds in India (AMFI) at it website www.amfiindia.com. Figures in brackets indicate the number of funds.
Assets under the management of UTI are at book value.
JVs: Joint Ventures.

From the above it emerges that mutual funds are gaining prominence in the Indian Stock market and that (i) the share of foreign affiliated MFs is growing, (ii) a number of Indian funds are following the investment strategies of the foreign ones, (iii) there are sector specific funds for IT, Pharmaceuticals and FMCG, (iv) schemes of many funds focus on these sectors without actually claiming themselves to be one such. This provides further explanation to the sectoral developments in the Indian stock market during 1999. Such concerted effort may have further underplayed the importance of the other sectors and widened the differences in P/E ratios between the so-called new economy sectors and the others.[38] The latest change in Sensex announced by BSE further acknowledges the increasing importance of IT, media and pharmaceutical companies. From April 10, 2000 Satyam Computer Services, Zee Telefilms, Reddy Labs and Reliance Petroleum would replace Tata Chemicals, Tata Power, IDBI and Indian Hotels Co. in the Sensex [*Economic Times*, 2000].[39]

It may be noted further that while there was net outflow on account of foreign portfolio investors during 1998-99, private sector mutual funds in India mobilised Rs 1,453 crore on net terms. During the first nine months of 1999-2000 the net collections were Rs 9,064 crores which compare well with net inflows of foreign portfolio capital of Rs 6,766 and Rs 11,735 crore during 1997-98 and 1996-97, respectively [Economic Survey, 2000, p. S-77]. It can thus be expected that progressively stock prices would be affected not only by net FII investments but also the size of funds under control of their local counterparts. While FIIs can remit capital and profits back to their home countries, the local affiliates will have to invest in the domestic market only [SEBI, 1999].[40] Yet another development during 1999 which affected share price movement in India is the listing of Infosys Technologies and Satyam Infoway, a subsidiary of Satyam Computers, on Nasdaq of USA. It is now believed in stock market circles that prices of information technology companies in India are influenced by the Nasdaq

[*Economic Times*, 2000].[41] This phenomenon is going to be increasingly prominent as more and more Indian companies get traded abroad.

Summing Up

There has been a significant shift in the character of global capital flows to the developing countries in recent years in that the predominance of private account capital transfer and especially portfolio investments (FPI) increased considerably. In order to attract portfolio investments which prefer liquidity, it has been advocated to develop stock markets. The general perception about the foreign portfolio investments is that, not only do they expand the demand base of the stock market, but they can also stabilise the market through investor diversification [UN, 1996, p. 151]. Towards the end of 1992, the Government of India allowed FIIs to buy and sell securities directly on the country's stock markets, primarily to attract foreign capital. Concessional rates of tax on capital gains and to some extent the limits on the extent of foreign equity were expected to reduce the volatility and possibly to protect managements from hostile take-overs.

From the point of attracting foreign capital, the initial expectations have not been realised. Investment by FIIs directly in the Indian stock market did not bring significantly large amount compared to the GDR issues. GDR issues, unlike FII investments, have the additional advantage of being project specific and thus can contribute directly to productive investments. FII investments, seem to have influenced the Indian stock market to a considerable extent.

Though 502 FIIs are reported to be registered with SEBI at the beginning of March, 2000, due to inter-linkages among many FIIs, the effective number of entities would be much smaller. These factors render the limits on shareholding in a company by a particular FII serve only a limited purpose. While the country-wise distribution of FIIs suggests the predominant place of USA and UK in FII registrations in India, these inter-linkages make the two countries' dominance more prominent. It has also been noticed that only a few FIIs are active on the Indian stock market. While portfolio investments are known to be volatile, the fact that only a few FIIs and that too mainly from two countries namely USA and UK are interested in the Indian stock market increases its vulnerability to fluctuations.

Analysis of the investment exposure of five US-based India specific funds suggested a close resemblance between FII investment profile and trading pattern at the BSE. This finding takes quite further the general understanding that net FII investments influences stock prices in India as it traces the relationship to the sectoral level. The heavy emphasis on computer software, consumer goods in the Indian stock markets seems to have much to do with the process initiated by the FIIs after 1996 as a defensive mechanism.[42] Compared to 1996, in 1998, they reduced their exposure in terms of the number of companies and the amount involved. One implication that can be drawn from the similarity between FII investments and trading on the Indian stock market is that the Indian Investors, since they perceive FIIs to trade on the basis of well-researched strategies, may have followed the FIIs like a 'herd' and in the process accentuated the selective process introduced by the FIIs. FIIs having a strong presence in the Indian Mutual Funds segment meant that the funds have also started following a similar investment pattern. Many Mutual Funds floated specific funds for the sectors favoured by the FIIs. As a result, the differences have got so accentuated that food and beverages and computer software reached the top in 1998 and accounted for nearly two-fifths of the turnover at BSE during the same year. In line with the changing emphasis of FIIs, by 1999 consumer non-durables receded and computer software took the lead.

An implication of MFs gaining strength in the Indian stock market could be that unlike individual investors, whose monies they manage, MFs can create market trends whereas the small individual investors can only follow the trends. The situation becomes quite difficult if the funds gain a vested interest in certain sectors by floating sector specific funds. One can even venture to say

that the behaviour of MFs in India has turned the very logic that mutual funds invest wisely on the basis of well-researched strategies and individual investors do not have the time and resources to study and monitor corporate performance, upside down. Thus, the entry of FIIs has not resulted in greater depth in Indian stock market; instead it led to focussing on only a few sectors.

Growing concentration of trading in a few sectors could reduce the stability base of the stock markets. The expectation that by adding liquidity to local markets, foreign investments would reduce the volatility which results from the thinness of the markets in developing economies may thus prove unfounded. So far as the incentive of lower tax is concerned, FIIs have apparently tried to circumvent even the low taxes by using Mauritius as a shelter. Ultimately to provide a level playing field, even the domestic investors had to be offered lower rates of capital gains tax.

From the point of monitoring company managements, it can be argued that the FIIs and large domestic financial institutions together can play a useful role to force company managements improve their performance and refrain from indulging in mal-practices and investor-unfriendly decisions as together they hold substantial shares in many large Indian companies. This argument has the inherent weakness that the FIIs cannot remain attached to a single company. They are expected to exert pressure on managements by their selling or buying activity. On the other hand, government through holdings controlled by it, in the long term interest of Indian industry can, if there is political will, take a firm stand. There are also other problems with utilising foreign portfolio equity for monitoring domestic companies. One is not sure how much of the such equity is in fact return of the flight capital. In such a case, the so-called FII investment will only support the existing managements. Even if it is accepted that FII investment could be helpful in monitoring, due to their propensity to invest in a few liquid shares, the problem of monitoring a large number of companies still remains.

The need for a proper regulatory system is reflected from the fact that due to severe regulatory failure even the presence of FIIs did not help the revival of India's primary market for a long time. A strong domestic base is a prerequisite for providing depth and spread to the stock market and to enable it to counter any precipitative action by the FIIs not based on fundamentals. The only safeguard can be Indian financial institutions (FIs) holding large shares and in their capacity for direct intervention. The size of the holdings and internal resources with Indian FIs will be an important factor in containing the volatility induced by FIIs. Attracting FIIs cannot be a substitute for domestic policy formulation and institutional development.

While it is said that to attract portfolio investments and retain their confidence, the host countries have to follow stable macro-economic policies, the fact is that developing countries have their own compulsions arising out of the very state of their social, political and economic development. How FIIs view the domestic situation can be seen from the following extract from a semi-annual report of Jardine Fleming India Fund Inc.

> *Politics, as usual, remains the joker for investors* in the Indian market. The decision of Kesri, President of the Congress Party, to withdraw his Party's support from the United Front Government, came as a complete surprise to almost all and caused the market to fall approximately 10 per cent in a short period. This simultaneously jeopardised not only the passage of the Budget *but also Chidambaram's tenure at the Finance Ministry. Kesri's actions are regrettable since they destroy shareholder value*, tarnish India's global reputation, and exacerbate the hardship of the 350 million Indians who continue to live in poverty [Jardine Fleming India Fund Inc., 1997, p. 4] (emphasis added).

Obviously, political personalities or fundamentalist and extremist organisations would have a logic of their own in whatever they do. Fall-out of their actions on foreign investment and Indian stock markets will be the last thing on their minds

when they act. This is the reality of developing countries. Whether or not they indulge in local politics, they seem to impress upon (even pressurise) the host governments to follow liberal policies in order to attract large inflows.[43]

To trends suggest that the Indian stock market may weaken its relationship with the rest of the economy. As it focuses excessively on certain sectors [Economic Times, 2000].[44] Can the developing countries rely on the wisdom of the stock market, particularly if it reacts to external factors, for industrialising their economies is a question that needs to be examined in greater detail. To the extent that this phenomenon has been introduced and accentuated by FII operations gives rise to a doubt whether foreign portfolio investments would serve the objective of local stock market development or the tangible benefit from them would only confine to getting the balance of payment support along with its attendant risks.

Annexure Fund-wise List of Top 25 Companies in terms of Value of Investment

S.No Company	Industry/Activity	FCC	Sensex	GDR Issue	Top Turnover Company$	A Group	Percentage Share in Total Value#
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
INDIA FUND INC							
1 NIIT Ltd	Computer Software		Y		Y	A1	12.52
2 Infosys Technologies Ltd	Computer Software		Y		Y	A1	7.38
3 Punjab Tractors Ltd	Automobile				Y	A1	6.89
4 Hindustan Lever Ltd	Personal Care	Y	Y		Y	A	6.64
5 Reliance Industries Ltd	Diversified		Y	Y	Y	A	5.43
6 ITC Ltd	Food & Beverages	Y	Y	Y	Y	A	4.43
7 Hindustan Petroleum Corp Ltd	Refineries		Y		Y	A	4.01
8 Dr Reddy's Laboratories Ltd	Pharmaceuticals			Y	Y	A	3.90
9 Satyam Computer Ltd	Computer Software				Y	A1	3.70
10 Ranbaxy Laboratories Ltd	Pharmaceuticals		Y	Y	Y	A	3.45
11 Mahanagar Telephone Nigam	Telecommunications		Y	Y	Y	A	3.32
12 Larsen & Toubro Ltd	Diversified		Y	Y	Y	A	2.97
13 Hindalco Industries Ltd	Metals		Y	Y	Y	A	2.29
14 Videsh Sanchar Nigam Ltd	Telecommunications			Y	Y		1.74
15 ABB Ltd	Machinery - Elect.	Y			Y	A	1.59
16 DSQ Software Ltd	Computer Software				Y		1.44
17 Tata Iron & Steel Co Ltd	Metals		Y		Y	A	1.37
18 Oriental Bank Of Commerce	Banks – Public Sector				Y	A	1.34
19 TVS Suzuki Ltd	Automobile	Y			Y	A1	1.33
20 Bank Of Baroda	Banks Public Sector				Y	A1	1.27
21 Associated Cement Companies	Cement		Y		Y	A	1.06
22 E Merck Ltd	Pharmaceuticals	Y			Y	A1	1.04
23 Bharat Heavy Electricals Ltd	Machinery - Non.Elect		Y		Y	A	0.99
24 Madras Refineries Ltd	Refineries				Y	A1	0.98
25 Indian Rayon & Industries Ltd	Diversified			Y	Y	A	0.96
Total							**82.04**

(Contd...)

Annexure (Contd.)

S. No.	Company	Industry/Activity	FCC	Sensex	GDR Issue	Top Turnover Company$	A Group	Percentage Share in Total Value#
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
INDIA GROWTH FUND INC								
1	ITC Ltd	Food & Beverages	Y	Y	Y	Y	A	9.75
2	Hindustan Lever Ltd	Personal Care	Y	Y		Y	A	7.36
3	NIIT Ltd	Computer Software		Y		Y	A1	5.71
4	TVS Suzuki Ltd	Automobile	Y			Y	A1	5.52
5	Bajaj Auto Ltd	Automobile		Y	Y	Y	A	4.65
6	Smithkline Beecham ConsHealth	Food & Beverages	Y			Y	A	4.46
7	Punjab Tractors Ltd	Automobile				Y	A1	3.86
8	Reliance Industries Ltd	Diversified		Y	Y	Y	A	3.66
9	Hindustan Petroleum Corp Ltd	Refineries		Y		Y	A	3.39
10	Hero Honda Motors Ltd	Automobile	Y			Y	A	3.28
11	Mahindra & Mahindra Ltd	Automobile		Y	Y	Y	A	2.78
12	Mahanagar Telephone Nigam	Telecommunications		Y	Y	Y	A	2.30
13	Satyam Computer Ltd	Computer Software				Y	A1	2.26
14	Nestle India Ltd	Food & Beverages	Y	Y		Y	A	2.11
15	EIH Ltd	Hotels & Resorts			Y	Y	A	2.00
16	DSQ Software Ltd	Computer Software				Y		1.95
17	Colgate Palmolive (India) Ltd	Personal Care	Y	Y		Y	A	1.88
18	Hindalco Industries Ltd	Metals		Y	Y	Y	A	1.55
19	Credit Rating Information Serv	Finance - General				Y		1.55
20	Vashishti Detergents Ltd	Cons. Non-Durable	Y			Y		1.48
21	National Aluminium Co Ltd	Metals				Y		1.43
22	Housing Development Fin Corp	Finance - Housing				Y	A	1.22
23	Castrol India Ltd	Auto-Ancillaries	Y	Y		Y	A	1.17
24	Carrier Aircon Ltd	Consumer - Durable	Y			Y	A1	1.07
25	Tata Tea Ltd	Food & Beverages				Y	A	1.00
	Total							**77.39**

(Contd...)

Annexure (Contd.)

S. No.	Company	Industry/Activity	FCC	Sensex	GDR Issue	Top Turnover Company$	A Group	Percentage Share in Total Value#
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
JARDINE FLEMING INDIA FUND								
1	Hindustan Lever Ltd	Personal Care	Y	Y		Y	A	12.14
2	ITC Ltd	Food & Beverages	Y	Y	Y	Y	A	8.04
3	Bajaj Auto Ltd	Automobile		Y	Y	Y	A	4.41
4	Hindustan Petroleum Corp Ltd	Refineries		Y		Y	A	4.27
5	Videsh Sanchar Nigam Ltd	Telecommunications			Y	Y		4.23
6	Satyam Computer Services Ltd	Computer Software				Y	A1	4.21
7	State Bank Of India	Banks – Public Sector		Y	Y	Y	A	3.53
8	Mahanagar Telephone Nigam	Telecommunications		Y	Y	Y	A	3.26
9	Bank Of Baroda	Banks – Public Sector				Y	A1	3.19
10	TVS Suzuki Ltd	Automobile	Y			Y	A1	3.00
11	Punjab Tractors Ltd	Automobile				Y	A1	2.92
12	BSES Ltd	Power Gen./ Distn.		Y	Y	Y	A	2.67
13	Housing Development Fin Corp	Finance – Housing				Y	A	2.51
14	Reliance Industries Ltd	Diversified		Y	Y	Y	A	2.26
15	Reliance Industries Ltd	Diversified		Y	Y	Y	A	2.25
16	ICICI Banking Corporation Ltd	Banks Public Sector				Y	A1	2.12
17	Mahanagar Telephone Nigam	Telecommunications		Y	Y	Y	A	2.03
18	Videsh Sanchar Nigam Ltd	Telecommunications			Y	Y		1.97
19	NIIT Ltd	Computer Software		Y		Y	A1	1.77
20	Reliance Petroleum Ltd	Refineries				Y		1.52
21	Indian Hotels Co Ltd	Hotels & Resorts		Y	Y	Y	A	1.42
22	Aptech Ltd	Computer Software				Y		1.39
23	Infosys Technologies Ltd	Computer Software		Y		Y	A1	1.39
24	Carrier Aircon Ltd	Consumer - Durable	Y			Y	A1	1.29
25	ICI (India) Ltd	Diversified	Y			Y	A1	1.29
Total								**79.08**

(Contd...)

Annexure (Contd.)

S. No.	Company	Industry/Activity	FCC	Sensex	GDR Issue	Top Turnover Company$	A Group	Percentage Share in Total Value#
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
MORGAN STANLEY INDIA INVESTMENT FUND								
1	Bharat Heavy Electricals Ltd	Machinery - Non.Elect		Y		Y	A	13.87
2	Infosys Technologies Ltd	Computer Software		Y		Y	A1	11.69
3	Container Corp Of India Ltd	Service - Transport				Y		8.12
4	Housing Development Fin. Corp	Finance - Housing				Y	A	7.01
5	Zee Telefilms Ltd	Entertainment				Y	A1	5.25
6	Punjab Tractors Ltd	Automobile				Y	A1	3.66
7	Smithkline Beecham Pharm.	Pharmaceuticals	Y			Y	A	3.28
8	Hero Honda Motors Ltd	Automobile	Y			Y	A	3.20
9	State Bank Of India	Banks – Public Sector		Y	Y	Y	A	2.65
10	Hoechst Schering Agrevo	Pesticides/Agro Chem	Y			Y		2.25
11	Novartis India Ltd	Pesticides/Agro Chem	Y	Y		Y	A1	2.22
12	TVS Suzuki Ltd	Automobile	Y			Y	A1	2.21
13	ITC Ltd	Food & Beverages	Y	Y	Y	Y	A	2.09
14	Hoechst Marion Roussel Ltd	Pharmaceuticals	Y			Y		1.88
15	Cipla Ltd	Pharmaceuticals				Y		1.78
16	MRF Ltd	Auto-Ancillaries				Y	A	1.71
17	Supreme Industries Ltd	Plastic Products				Y	A	1.51
18	NIIT Ltd	Computer Software		Y		Y	A1	1.47
19	Sandarac Fasteners Ltd	Auto-Ancillaries				Y		1.30
20	Sun Pharmaceutical Industries	Pharmaceuticals				Y	A1	1.23
21	Cummins India Ltd	Machinery – Non.Elect	Y			Y	A1	1.14
22	Colour-Chem Ltd	Chemicals – Dyes	Y					1.07
23	ICI (India) Ltd	Diversified	Y			Y	A1	1.00
24	Motor Industries Co Ltd	Auto-Ancillaries	Y			Y		0.98
25	Revathi-CP Equipment Ltd	Machinery – Non.Elect	Y			Y		0.88
	Total							**83.45**

(Contd...)

Annexure (Contd.)

S. No.	Company	Industry/Activity	FCC	Sensex	GDR Issue	Top Turnover Company$	A Group	Percentage Share in Total Value#
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
PIONEER INDIA FUND								
1	Bharat Petroleum Corp Ltd	Refineries				Y	A	5.32
2	Satyam Computer Services Ltd	Computer Software				Y	A1	4.73
3	Hindustan Petroleum Corp Ltd	Refineries		Y		Y	A	4.54
4	Larsen & Toubro Ltd	Diversified		Y	Y	Y	A	4.22
5	Tata Infotech Ltd	Computer Hardware				Y		3.87
6	Videsh Sanchar Nigam Ltd	Telecommunications			Y	Y		3.76
7	Pentafour Software & Exports	Computer Software				Y	A1	3.30
8	Mahanagar Telephone Nigam	Telecommunications		Y	Y	Y	A	3.24
9	Ranbaxy Laboratories Ltd	Pharmaceuticals		Y	Y	Y	A	3.21
10	Oil & Natural Gas Commission	Petrochemicals				Y		3.10
11	Bajaj Auto Ltd	Automobile		Y	Y	Y	A	3.00
12	NIIT Ltd	Computer Software		Y		Y	A1	3.00
13	Infosys Technologies Ltd	Computer Software		Y		Y	A1	2.94
14	Industrial Credit & Invt Corp (I)	Term Lending Inst.		Y	Y	Y	A	2.88
15	Pentafour Software & Exports	Computer Software				Y	A1	2.77
16	TVS Suzuki Ltd	Automobile	Y			Y	A1	2.45
17	State Bank Of India	Banks – Public Sector		Y	Y	Y	A	2.28
18	Housing Development Fin. Corp	Finance – Housing				Y	A	2.20
19	ABB Ltd	Machinery – Elect.	Y			Y	A	2.19
20	National Aluminium Co Ltd	Metals				Y		1.84
21	Reliance Industries Ltd	Diversified		Y	Y	Y	A	1.83
22	Novartis India Ltd	Pesticides/Agro Chem	Y	Y		Y	A1	1.72
23	Pfizer Ltd	Pharmaceuticals	Y			Y	A	1.69
24	Bank Of India	Banks – Public Sector				Y	A1	1.66
25	Cochin Refineries Ltd	Refineries				Y	A1	1.58
	Total							**73.32**

A1: Companies which were included in the A-Group in February 1998.
With respect to total value of investments of the fund.
$ Among the top 500 companies in terms of market turnover in 1998.

NOTES

1 IFC promoted foreign portfolio investment in developing countries by helping to establish 'country funds', venture capital funds and debt funds that invest in emerging market securities issues. IFC also claims that by pioneering and actively promoting such funds for developing countries, IFC introduced many international portfolio investors to emerging markets. See: http://www.ifc.org/depts/html/ capemkts.htm.

2 Brandt Commission Report: *North-South - A Programme for Survival*, Pan Books, 1980.

3 From the letter written in April 1993 by Shri Chandra Shekhar, former Prime Minister, to the then Finance Minister.

4 The then Finance Minister said: 'Under the scheme of permitting Foreign Institutional Investors (FIIs) in our capital market, we had indicated that such investors would be liable to tax at 20 per cent on investment income and 10 per cent on long term capital gains. I also propose to extend a concessional rate of tax of 30 per cent in respect of short term capital gains for such investments'. Budget Speech 1993-94, para 63. The Union Budget 1999-2000 removed this discrimination and the Indian investors are also eligible for the lower long term capital gains tax of 10 per cent.

5 This may be in response to the earlier experience when in the early 'eighties an NRI tried to take over two major companies of that time, namely, Escorts & DCM.

6 Experience shows that ceilings are generally reached in case of smaller companies only.

7 The general decline in the fourth quarter is attributed to book closure during November by most American fund managing houses. It is stated that there 'will be lack of trading activity in November and a 'buyers' strike till at least 15 November, with FIIs not being involved in any markets at all'. See: Ridham Desai, 'FII selling is not India-specific', http://www.capitalmarket.com/capitalmarket/mag/cm1418/face.htm.

8 It was reported that some brokers were giving inflated figures of purchases or sales of FIIs to give a false impression of FII activity in the market.

9 It was emphasised that not only the detailed trading information, but also total trade/investment by individual FIIs and the names of the companies along with the extent of FII investment is price sensitive and thus cannot be disclosed. One got a feeling that one should not be too much concerned with FII investments as the money as well as the risk was after all of FIIs.

10 This deduction is based on the names of the FIIs and was ascertained from SEBI sources. We have been informed that at present only two categories namely, FA & FD are being followed.

11 Morgan Stanley was among the earliest to tap the local market with its mutual fund in 1993-94 after the sector was thrown open to private sector.

12 Though SEBI does not report the corresponding figures for 1998-99, the fact that FIIs would not have contributed in any significant manner is evident from the fact that out of the total capital raised during the year, the amount reserved for banks and financial institutions was only Rs 33.83 crore.

13 Out of the net investment of Rs 6,697 crore at the all-India level during 1999, Debt accounted for only Rs. 119 crore.

14 Total reported FII purchases at the all-India level in 1999 were reported to be Rs 36,394 crore and sales Rs 29,816 crore. (See: Bombay Stock Exchange, *Stock Exchange Review*, January 2000). BSE turnover measures one-sided transactions, *i.e.*, sales or purchases. In case of FIIs, they can either sell or purchase *from others or from other FIIs. The transactions of FIIs* cannot, therefore, be strictly compared with the total net turnover of the Exchange. If one averages sales and purchases, the share of FIIs in 1998 works out to about 2.5 per cent of total net turnover of BSE. The corresponding share in 1999 was 2.9 per cent.

15 Companies that have fewer than 500 investors and less than $10 million in net assets are not required to file annual and quarterly reports with the SEC.

16 Out of the total list of N-30D filings during 1996 and 1998, we searched for the words, India, International, Global, Asia, Emerging, etc., in the funds' names. The filings of the funds thus identified were downloaded. Out of these, those having 'India' within the body of the file were further identified.

17 The funds' investments in the neighbouring countries are negligible both in terms of numbers and value.

18 The 1998 data generally refers to the post-sanctions period. The exercise was not extended to 1999 because Pioneer India fund ceased to be India specific and renamed itself as Pioneer Indo-Asia Fund, the N-30D filing of Jardine Fleming was available only for March 1999 and India Fund Inc. is no longer traceable at the SEC website. In any case, the years chosen cover an important period during which the substantial shifts occurred in the industry-wise trading pattern.

19 Excluding small investments in Pakistan.

20 For instance, India Fund Inc. stated: Several events during the first six months influenced the market. The Asian economic crisis continued to negatively impact the markets. The elections in India resulted in yet another coalition government, continuing the political instability in the country. Most significant, however, was the testing of nuclear weapons by the BJP government, which triggered economic sanctions by the U.S. and other countries. And, Pioneer India Fund informed: As the rest of the world looked for a competitive advantage so too did India. Economic reform continued, even in the face of political change. Unfortunately, as this report goes to press, India also initiated a series of nuclear tests that put the world and the region on edge.

21 Some Aspects of the Indian Stock Market in the Post-Liberalisation period'.

22 For instance, explaining their investment strategy, Sun F&C Mutual Fund said, 'Contrary to belief, some smaller companies do offer tremendous value opportunities. However, they often bring with them lack of liquidity. Companies with reasonable levels of liquidity, on the other hand, allow us the freedom of buying and selling the value shares as and when we want. *Investment in small companies is, therefore, restricted to a small percentage of the fund*' (emphasis added). The fund is managed by Sun F&C Asset Management (India) Pvt. Ltd., a joint venture of Foreign and Colonial Emerging Markets Ltd., UK with Sun Securities (India) Pvt. Ltd. See: www.sunfc.com/invest/factsheet.html. On its part ING Savings Trust said '(T)he portfolio is designed to have concentrated holding within reasonable risk limits, rather than an unproductive and excessive diversification'. See: the Monthly

Update for December 1999 at: www.jmsavingstrust.com/technical_fin/sub/mark2.html.

23 For the classification of companies and description of the Specified Group, see the accompanying paper: 'Indian Stock Market in the Post-Liberalisation Period: Some Insights' in this issue of this Journal.

24 Since value of investment varies with share prices, interpretation in terms of exposure may be more appropriate rather than treating the amounts as investment.

25 These are India Fund Inc.; Jardine Fleming India Fund Inc.; and Morgan Stanley India Investment Fund Inc.

26 The relevant file at SEC is : 0000891554-98-00105.txt.

27 In the case of Jardine Fleming India Fund Inc. it was $1,500 a month and for Morgan Stanley it was $22,000 a year, or $1,833 per month.

28 This is in sharp contrast to the country-wise distribution presented earlier, and which indicated that only one out of the 472 FIIs furnished a Mauritius address. Indeed, we came across other funds which were using the Mauritius route. For instance, Fleming India Fund of Luxembourg operates through a wholly-owned Mauritius subsidiary.

29 Joint venture of Aditya Birla Group and Capital Group of Companies Inc. USA.

30 Based on the information downloaded from the respective fund managers' web sites. Further evidence to this phenomenon can be seen from the sectoral composition of investments by FFF-Fleming India Fund at the end of February 1999. IT accounted for 27.7 per cent of the investments followed by Consumer Non-durables with 19.6 per cent and Pharmaceuticals with 12.1 per cent. Similarly, the top five holdings of JF India Trust as on February 26, 1999 were Hindustan Lever (9.8 per cent), Satyam Computer Services (8.6 per cent), ITC Ltd. (6.6 per cent), Infosys Tech. (5.8 per cent) and VSNL (4.9 per cent).

31 SEBI is reported to be concerned that shares of some of the companies which changed their names showed high volatility and had advised the stock exchanges to examine the matter. SEBI tightened the issue norms for companies in the IT sector later in October 1999. In case the company going for an initial public offer does not have distributable profits in three out of five preceding years from out of IT activities. In case the company fails to fulfil this criterion, it can access the market if the issue is appraised and financed by a bank or financial institution. The same conditions apply to a listed company which changed its name to reflect activities in the IT sector.

32 The idea seems to be catching on fast. Kothari Pioneer was reported to have planned two funds *Kothari Pioneer FMCG Fund* and *Kothari Pioneer Pharma Fund*.

33 Extracted from the description of the Prudential ICICI FMCG Fund downloaded from web site of the Prudential ICICI Asset Management.

34 Some of the foreign affiliated MFs are: Alliance Mutual (Alliance Capital Asset Management, USA); Birla Mutual Fund (Sun Life Assurance Co., Canada); Cholamandalam Cazenove (Cazenove Fund Management, UK); Credit (Lazard Group, UK and Edinburg Fund Management); DSP Merrill Lynch (Merril Lynch, USA); Dundee MF (Dundee group, Canada); Kothari Pioneer (Pioneer Group Inc., USA); Morgan Stanley MF (Morgan Stanley, US); Prudential ICICI (Prudential Corp, UK); Sun F&C (Foreign & Colonial Foreign & colonial, UK); Sundaram MF (Newton Investment Management, UK); Tata MF (Dresdner RCM Global Investor Holdings, UK); and Zurich India MF (Zurich Financial Services, Switzerland).

35 See: www.indiainfoline.com/mufu/news/29html.

36 For details see: UTI's website www.unittrustofIndia.com. It was estimated IT, Pharmaceuticals and FMCG accounted for close to 30 per cent of US-64 exposure to equity in December 1999. Exposure of other schemes of UTI to information technology is also quite high at 12 per cent (in December 1999). It is relevant to note in this respect the statement of UTI Chairman that '(W)e might have entered a bit late, but we have entered big'.

37 Some other funds with 40 per cent or more of their net assets in computer software and hardware companies during Dec/Nov 99-Feb. 2000 are Tata Tax Saving Fund; ING Growth Portfolio; Alliance 95; IL&FS Growth & Value; Kotak Mahindra - K30; and SBI Magnum Tax Gain '93.

38 See the accompanying paper 'Some Aspects of the Indian Stock Market in the Post-Liberalisation Period', foot note 70.

39 It was suggested that just four companies Infosys, NIIT, Satyam computers and Zee Telefilms would claim a fifty per cent weightage in the Sensex.

40 Indian MFs have, however, been allowed in September 1999 to invest in ADR/GDR issues of Indian companies. MFs are permitted to invest in ADRs/GDRs initially within overall limit of US$ 500 mn. An individual MF should not exceed 10 per cent of the net assets managed by them subject to a minimum of US$ 20 mn. and a maximum of US$ 50 mn.

41 Chief Investment Officer of SBI Mutual Fund was reported to have Said: 'Running with the Nasdaq is a fact, but I see it as a short-term phenomenon'.

42 For instance, India Fund Inc., in its report for the period ending June 30, 1998 informed that '(T)he Fund's strategy of maintaining positions in defensive sectors of the economy such as consumer non-durables and pharmaceuticals as well as its strong overweighting in the technology sector continued to generate out performance'. See 0000891554-98-001105.txt, the relevant filing with the SEC.

43 President of Morgan Stanley India Investment Fund Inc., said in his letter to the shareholders than the investors base both local and international is looking to this government to kick-start the reform process, which should serve as a pointer to the direction where the policy framework of the government is headed. If the current government can establish its reformist credentials, then the markets will improve quickly. If, for any reason, this government falls short and fails to deliver on the reforms agenda or on issues such as reforms in insurance industry, legislation on patents or accelerating investment in infrastructure, then India as a country runs the risk of having wasted another year. See: The Fund's filing with the SEC, namely, 0001047469-99-008656.txt.

44 It was indeed claimed that the IT sector on whom the Indian stock market is placing heavy emphasis has little to do with the local conditions. The Chief Investment Officer of Jardine Fleming was reported to have said that '(I)t's fairly obvious. IT companies are different: they don't borrow from local banks, their customers are international and their sales

don't at all depend on what happens in India'. Similar was the view attributed to HCL group head. According to him: '(O)ur future has little to do with the Indian market'.

ABBREVIATIONS

ADB	Asian Development Bank
AMC	Asset Management Co.
AMFI	Association of Mutual Funds in India
BJP	Bhartiya Janata Party
BSE	Bombay Stock Exchange
FMCG	Fast Moving Consumer Goods
FIs	Financial Institutions
FCCs	Foreign Controlled Companies
FDI	Foreign Direct Investment
FIIs	Foreign Institutional Investors
FPI	Foreign portfolio investment
GDRs	Global/American Depository Receipts
GNP	Gross National Product
IDPAD	Indo-Dutch Programme on Alternatives in Development
IFC	International Finance Corporation
JFIM	Jardine Fleming International Management Inc.
NRIs	Non-resident Indian
ODA	Official Development Assistance
PUC	paid-up capital
PC	pension funds
PE	Price Earning Ratio
RBI	Reserve Bank of India
SEBI	Securities and Exchange Board of India
SEC	Securities and Exchange Commission
TNCs	Transnational corporations
UTI	Unit Trust of India
VSNL	Videsh Sanchar Nigam Ltd.

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CHAPTER 8

FOREIGN DIRECT INVESTMENTS IN THE POST-LIBERALISATION PERIOD: AN OVERVIEW

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For a long time India's approach towards foreign direct investment was governed by the multiple objectives of self-reliance, protection of national industry and entrepreneurs, import of select technologies and export promotion. As a part of the Structural Adjustment Programme, along with virtually dismantling the industrial regulatory system, India sought to attract FDI with special favours and persuasion. While the new regime places heavy emphasis on attracting large amount of FDI, there is very little discussion on the various facets of actual implementation. This paper seeks to provide empirical content to the developments during the first seven years of liberalisation.

Introduction

For more than three decades after independence, India maintained a selective approach towards foreign direct investment (FDI) [Kidron, 1965; Goyal, 1979; India, 1969]. The approach was governed by multiple objectives of self-reliance, protection of national industry and entrepreneurs, import of select technologies and export promotion. The emphasis was on technology imports without financial participation by the technology supplier. This was intended to give the much needed boost to technological development as the recipients of foreign technology were expected to absorb the technology and modify and develop further with the help of their own R&D. It was believed that this could help India move on the road to technological self-reliance. Foreign investment in low technology areas was not encouraged in order to shelter local industry and to conserve foreign exchange. The policy regime since 1991 has been altered and the rationale for restrictions on and regulation of foreign investments in India that made India a partially closed economy have been given up. It was argued, that restrictions on Foreign Direct Investment (FDI) and imports and strict internal regulations Monopoly and Restrictive Trade Practices Act (MRTPA) and Industries (Development and Regulation) Act, 1951, (IDRA), enabled local manufactures to exploit monopoly rent, produce poor quality goods and services, gave high profits with no obligation or concern for the average consumer. From a position of selectivity, the transition to the present position is one of welcome to FDI and treating with special favours and persuasion. Drastic changes in Indian economic policies have been initiated to permit entry of foreign capital and free flow of international trade.

Beginning with July 1991, the government introduced a number of changes in the country's regulatory policies under the general acceptance of the policy package known widely as the Structural Adjustment Programme (SAP). The important departure from the past was in the form of: revision of the Industrial Policy Resolution, 1956 and Schedules A & B, resulting in the opening up of many a public sector reserved area;[1] drastic revision of IDRA with the objective of removing a major entry point hurdle[2] [GOI, para 23], doing away with the registration requirements under MRTPA; removal of the general ceiling of 40 per cent on foreign-held equity under Foreign Exchange Regulation Act (FERA); lifting of the restrictions on use of foreign brand names in the local market; removal of the restrictions on FDI entry into low technology consumer goods; abandonment of the phased manufacturing programme (PMP); dilution of the

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dividend balancing condition and export obligations; liberalisation of the terms for import of technology and royalty payments; permission to invest up to 24 per cent in the equity of small scale units; reduction in tax rates; etc. In the new policy regime, proposals for foreign investment need not necessarily be accompanied by foreign technology agreements.

The new regime placed special emphasis on attracting a large amount of foreign capital. To understand the significance of the change, one needs to examine the number, the size and the nature of the newly approved investments, actual capital inflows, take-over of local companies by FDI and performance in terms of net foreign exchange earnings by FDI enterprises. These issues are interrelated. Very often in the policy making circles and in the general discussion on the state of the economy, concern is expressed at the wide gap between foreign investment approvals and actual inflows. This study makes an attempt to obtain empirical content to these questions. The paper draws extensively from the studies completed as also under progress at the Institute for Studies in Industrial Development [Goyal et al., 1994 and 1995]. We make use of the aggregate data and information on individual approvals reported by the Secretariat for Industrial Assistance (SIA), Indian Investment Centre and other official agencies. Our attempt is a limited one, i.e., to provide a broad picture of the flow of FDI and indicate the possible factors at play. We hope the insights into the operations of the new policy regime would help promote informed debate on the subject.

FDI refers to the participation of a foreign investor in the risk capital of an existing or a new undertaking. FDI does not always imply holding of the entire risk capital by a foreign undertaking though this used to be true when Foreign Company Branches operated in India and held a dominant position in tea, coffee and rubber plantations. The most common system of FDI flows is through participation in risk capital and gaining a say in management and control of the host country enterprise. In contrast, foreign portfolio investments are not associated with management control and are basically aimed at benefitting from capital appreciation and share in profits in the form of dividends. Financial participation is generally accompanied by the foreign partner providing technology support as well. This may be by way of process know-how, design and drawings of equipment or responsibility to provide managerial skills or evolve new marketing skills. Generally, there are no agreements which can be strictly classified as financial or technical. In select industries government approvals are automatic and subject to general limits on foreign equity levels and the size of payments for technology. The liberalisation of industrial policy in 1991 introduced a two-way approval process for foreign direct investment. First is the automatic approval route which is applicable to the industries listed in Annexure-III of the Industrial Policy Statement of July 1991 and is subject to limits on foreign equity participation. The initial limit on foreign investment was 51 per cent. Those seeking to invest under the automatic approval process, were required to formally inform the Reserve Bank of India (RBI). This requirement has since been dispensed with and companies need only to inform the RBI after issue of shares to a foreign company. The upper limit for foreign equity participation under automatic approval was raised from 51 to 74 per cent of the equity capital (and 100 per cent in case of Non-residential Indian (NRI)) in select industries in January 1997. The list of industries open for automatic approval was also expanded. In the Budget Speech 1999-2000 it was announced that the scope of automatic approval would be expanded further. If the foreign investors wish to enter other industries or feel the need to secure higher percentage of foreign equity for themselves, they need to go through a formal process

of case by case approval, with the Foreign Investment Promotion Board (FIPB) playing the main role.

As a result of the policy changes in 1991 and active promotion of India as a destination, the amount of FDI approved and received rose sharply. The total number of technical and financial collaborations approved during 1995, 1996 and 1997 did not appear to change but there is a clear trend for more financial collaborations and a decline in pure technical collaborations. (See Table-1). In terms of the amounts approved, the FIPB occupies a more important position compared to the RBI. While the RBI gave automatic approval in nearly one-fourth of the financial collaboration cases, the foreign investment associated with these proposals was only six per cent of the total investments approved. But for the change in policy in January 1997, RBI approvals would have accounted for even a still lesser share. In the context of the liberalisation of industrial policy, it is thus significant that much of the investment approved went through a formal procedure of approval unlike the automatic approval case where the investors might not have been so serious. During the initial period, equity hikes undertaken by many of the companies already under foreign control were approved automatically. After a sharp public criticism of the manner in which the hikes in the extent of foreign-held equity were affected at ridiculously low prices as compared to the prevailing market prices, the terms of issue were tightened[3] [Goyal, 1997].

The automatic procedure is, however, more effective in technical collaboration agreements. Out of the 5,791 technical collaborations approved up to August 1998, the RBI granted 3,248 approvals, i.e., nearly 56 per cent. The relative significance of financial collaborations in the total approvals has increased rapidly during the 'nineties. From about 10 to 15 per cent of the total collaborations approved during the latter half of the 'seventies, the financial collaborations (FCs) accounted for a little less than one-third of the total towards the end of the 'eighties. The share of the FCs increased further after liberalisation of industrial policy and exceeded half of the total since 1993. During 1997 financial collaborations accounted for nearly two-thirds of the total, i.e., double of their share in the late 'eighties. (Table 1)

Approved Foreign Investment

The overall value of the investment proposals and their approval by the government increased substantially since the adoption of new economic policies in 1991 (Table 1 and Figure 1). The size of foreign investments approved in 1981 was nearly Rs 10.9 crore. The peak year during the 'eighties was 1989 when the approvals aggregated Rs 316.7 crore. During the first year after adoption of the SAP, i.e., 1991, size of approved foreign investment shot up to Rs 534.1 crore from the low of Rs 128.3 crore in 1990. Till August 1998, i.e., during the seven years since adoption of the SAP package, official estimates place the gross value of the approvals at Rs 1,73,510 crore. This amounts to nearly Rs 25,000 crore per year. Out of this as much as Rs 1,46,040 crore or more than four-fifths was approved during 1995 to August 1998. Approvals since 1994 include GDR issues and Foreign Currency Convertible Bonds.[4] GDR issues are portfolio investments and lack the essential criteria of control over the enterprise; strictly speaking GDRs should not be treated as direct investment except for purpose of reporting[5] [UNCTAD, 1997]. If the GDR amount of about Rs 18,729 crore is taken out, the size of approved investments works out to Rs 1,54,781 crore for the seven years. There is a possibility of some other approvals also being included as FDI though these would not strictly qualify as direct investments since they lack the essential characteristic of control.[6] The approvals have grown significantly over the past seven years. Yet, India's share in total global inflows continues to

Table 1. Financial and Technical Collaborations: 1981 to August 1998

Year	No. of Approved Collaborations			Relative Share of Financial Collaborations (Col. 2 as % of Col 4)	Investment Approved (Rs Crore)
	Financial	Technical	Total		
(1)	(2)	(3)	(4)	(5)	(6)
1981	57	332	389	14.65	10.9
1982	113	477	590	19.15	62.8
1983	129	544	673	19.17	61.9
1984	151	601	752	20.08	113.0
1985	238	786	1,024	23.24	126.1
1986	242	715	957	25.29	106.9
1987	242	611	853	28.37	107.7
1988	282	644	926	30.45	239.8
1989	194	411	605	32.06	316.7
1990	194	472	666	29.13	128.3
1991	289	661	950	30.42	534.1
1992	692	828	1,520	45.53	3,879.1
1993	785	691	1,476	53.18	8,861.8
1994	1,062	792	1,854	57.28	14,190.0
1995	1,355	982	2,337	57.98	32,070.0
1996	1,559	744	2,303	67.69	36,150.0
1997	1,665	660	2,325	71.61	54,890.0
1998 (up to 1991-Aug'98	820	433	1,253	65.44	22,930.0
	8,227	5,791	14,018	58.69	1,73,510.0

Note: Foreign investment includes Global/American Depository Receipts (GDRs) and FCCBs amounting to Rs 18,729 crore. Source: (i) India, Department of Scientific & Industrial Research, Ministry of Science & Technology, *Foreign Collaborations: A Compilation*. (ii) India, Ministry of Industry, *Handbook of Industrial Statistics*, and (iii) 1991 onwards: India, Ministry of Industry, *SIA Newsletter*, September 1998.

Figure 1. Share of Financial Collaborations in Approvals

remain small. Even within South, East and South-East Asia, India's share was only 2.27 per cent. It is, however a significant improvement over the earlier level of 1.37 per cent during 1985-1990 [UNCTAD, 1997].

Extent of Foreign Ownership

As mentioned earlier, restrictions on the maximum percentage share of equity normally allowed to foreign investors (40 per cent, as stipulated under the FERA) were seen as a deterrent to foreign companies to invest in India. Removal of FERA restrictions on holding of majority stake should thus be expected to encourage foreign direct investment inflows, especially from large transnational corporations (TNCs). It should, therefore, be a justifiable expectation that the distribution of companies in different shareholding ranges would undergo changes. One may recall that a number of branches and subsidiaries of foreign companies were operating in India prior to the enactment of FERA. The number of foreign subsidiaries came down substantially due to the implementation of FERA[7] [Goyal, 1990]. This was in spite of the fact that majority foreign equity was not banned in cases of high technology and export-oriented companies. Some of the companies, notably those in the drugs and pharmaceutical sector, voluntarily diluted their foreign equity to 40 per cent [Goyal, 1982].[8] In the liberalised industrial policy environment the preference for gaining higher stake in equity becomes visible both in the case of new entrants and also for those which had earlier opted for equity dilution and shed the foreign subsidiary status. The extent of foreign equity shares in an enterprise would also reflect the foreign investor's perception of the need for a local partner. Foreign investors would normally prefer to have an Indian counterpart instead of going alone in a nationally regulated environment. The political sensitivities do not permit full foreign ownership. But, by having a national collaborator one can find easy and convenient routes to administrative patronage. This would be particularly true for new foreign investors. By associating Indian collaborators, foreign investors also obtain access to the local network of contacts, political support, business and a variety of operational advantages [Goyal, 1979]. Avoiding discrimination at the administrative level could be another motive for associating a local, preferably a large industrial house.

Table 2 provides the pattern of the distribution of approvals over the seven-year period 1991 to 1998 as compared to the three years 1981 to 1983. The shift in the pattern of approvals is only too obvious. In the early 'eighties, the distribution was overwhelmingly in favour of the percentage ranges up to 40 per cent. Out of the total amount of Rs 218 crore, as much as 89 per cent fell in this category. The share of 100 per cent subsidiaries in the approved investment was a mere 0.62 per cent. In contrast, 100 per cent foreign-owned subsidiaries accounted for more than one-third of the approved investment during the 'nineties, the post-liberalisation period. Subsidiaries of foreign companies accounted for nearly 65 per cent of the total approved investment during 1991-97. Those settling for up to 40 per cent foreign share accounted for nearly 13 per cent of the new investments.[9]

Table 3 shows that out of the 7,694 approval cases, 1,334 were for proposals with 100 per cent foreign ownership. Nearly three-fourths of these were approved during the post-1995 period. Further, the proportion of approvals for majority ownership (subsidiary status) increased gradually over the period. From a little less than one-third during the first one and a half years to 37.37 during the middle period (1993 to 1995) and to 58.77 per cent in the last two and a half years. In the last period, one-fourth of the approvals are for 100 per cent foreign owned enterprises.

Table 2. Distribution of Approved Investments According to Foreign Share

Foreign Equity Share Offered (Per cent)	No. of Approvals	Percentage in Nos.	Approved Amount (Rs Cr.)	Percentage in Amount
(1)	(2)	(3)	(4)	(5)
A: August 1991 to August 1998				
Less than 10 per cent	324	4.21	547.08	0.37
10 to 24.99	869	11.29	4,856.58	3.25
25 to 40	1,229	15.97	14,768.54	9.87
40.01 to 50	1,629	21.17	32,949.27	22.03
50.01 to 73.99	1,669	21.69	26,370.64	17.63
74 to 99.99	640	8.32	14,238.93	9.52
100 per cent	1,334	17.35	55,839.60	37.33
All Cases$	7,694	100.00	1,49,570.63	100.00
B: 1981 to 1983				
Less than 10	6	2.19	1.11	0.51
10.0 to 25.0	70	25.55	24.95	11.45
25.0 to 40.0	160	58.39	168.31	77.22
40.0 to 50.0	9	3.28	10.65	4.89
50.0 to 74.0	22	8.03	11.20	5.14
74.0 to 99.99	5	1.82	0.38	0.17
100	2	0.73	1.35	0.62
All Cases	274	100.00	217.95	100.00

$ Excludes GDR Issues and cases for which information on foreign share/investment was not available.

Source: A: Generated from a database developed at the Institute using collaboration approvals reported in Indian Investment Centre, *Monthly Newsletter* and Ministry of Industry, *SIA Newsletter*, various issues.
B: [Goyal, et al., 1994].

Table 3. Increasing Share of Foreign Subsidiaries in FC Approvals

Period	Total No. of Approvals	Of Which Foreign Ownership		Percentage in Total	
		Above 50 Per cent	100 per cent Owned	Above 50 per cent	100 per cent Owned
(1)	(2)	(3)	(4)	(5)	(6)
August 1991 to 1992	810	249	33	30.74	4.07
1993 to 1995	3,045	1,138	335	37.37	11.00
1996 to August 1998	3,839	2,256	966	58.77	25.16
Total Since 1991	7,694	3,643	1,334	47.35	17.34

Note: Excludes GDRs and cases where foreign share or amount of investment were not available.

Industry-wise Pattern of Approvals

FERA was enacted with multiple objectives in mind. In the scheme to permit higher equity share in high technology and export-oriented enterprises it was implied that FERA would help channelise foreign investments into priority areas. Even while retaining the basic concept of selectiveness, the post-July 1991 phase enlarged the scope for foreign investment. At the end of 1989-90, the manufacturing sector accounted for 85 per cent of the total FDI stock of Rs 2,705 crore

[RBI, 1993a, Pp. 1,031-51]. Plantations had a share of 9.5 per cent. Within the manufacturing sector, Chemicals & Allied Products stood at the top followed by Machinery & Machine Tools, and Electrical Goods & Machinery in that order. Liberalisation of industrial licensing in the form of freeing public sector reserved areas has been the single most important policy decision that influenced the sectoral pattern of FDI. It also appears that to generate a demonstrative effect, certain high profile collaborations like Coca-Cola had to be approved initially. With the emphasis on non-traditional exports and those hitherto treated as low-technology based industries, the change in industry composition of foreign investment was bound to take place. A major policy change in the new regime is with regard to drastic contraction in the public sector reserved areas, notably power and telecommunications.

Industrial policy changes, especially with regard to public sector led to a dramatic upsurge in approvals for new projects in power, oil and telecommunications. Nearly half of the total approved foreign capital was proposed in these sectors[10] (Table 4). If Iron & Steel and Air Transport are also taken into consideration, nearly half of the new investment proposals approved happen to be in areas formerly reserved for development in the public sector.

Table 4. Shares of Different Sectors in Approved Foreign Direct Investment (August 1991 to August 1998)

Industry/Sector (1)	No. of Approvals (2)	Approved Investment (Rs. Cr.) (3)	Share in Total (per cent) (4)
Power & Fuels	339	54,103.93	31.20
Telecommunications	346	31,466.12	18.15
Chemicals (other than Fertilizers)	645	11,034.00	6.36
Metallurgical Industries	233	10,981.97	6.33
Service Sector	528	10,962.05	6.32
Transportation Sector	425	10,631.77	6.13
Electrical Equipments (incl. Software)	1,407	8,986.87	5.18
Food Processing Industries	546	8,132.39	4.69
Hotel & Tourism	212	3,488.61	2.01
Textiles (include Dyed, Printed)	417	2,764.04	1.59
Paper & Pulp (incl. Paper Products)	85	2,265.11	1.31
Industrial Machinery	413	1,931.02	1.11
Fermentation Industries	41	1,125.51	0.65
Sugar	6	1,000.75	0.58
Others	2,497	1,453.87	8.38
Total	8,140	1,73,413.31	100.00

Source: Based on data provided in Ministry of Industry, SIA Newsletter, September 1998.

During the initial two years of the adoption of the liberalisation package, fuel and power projects accounted for 40 per cent of the approved investments [Goyal et al., 1994]. But by 1996, telecommunications was at the top position with 23.55 per cent in total [SIA Newletter, 1996]. Next in importance is the 'Service Sector'. However, since most of the investment in the telecommunications sector was directed at cellular mobile and basic phone services, this investment could as well be treated as a part of the services sector. If the service sector is regrouped taking into account the other service categories like Hotels & Tourism, the service

sector would come to occupy the top position with as much as one-third share of the total investment. A regrouping in case of Food and Agro products brings its share to 6.33 per cent.[11] This sector is dominated by TNCs like Coca-Cola, Pepsi, Kellogg, Heinz and Seagram.

Industrial machinery accounted for 1.11 per cent only of the approved investment. The sectoral investments also includes increase due to enhanced foreign equity stake in the existing foreign controlled companies. In this background, new foreign investment leading to expansion of production capabilities in the machinery sector could be even lower. It has also been observed that the sector is not receiving much attention even in technical collaborations. Compared to the 1986-1990 period, the average number of approved technical collaborations declined by 5.95 per cent for the Industrial Machinery group and by 38.84 per cent for the Machine Tools sector during 1991-1995 [Murthy and Ranganathan, 1997, Pp. 3-9].

Due to the inclusion of GDR issues, official tabulations at times tend to be misleading. The attempt at adjusting the official sectoral totals for GDR approvals could not be carried further due to the vagueness in the product classification of some GDR issues as also to the non-standard nature of the official classification itself. If the industry distribution is adjusted for GDR approvals to the extent possible, the inter se ranking does not get affected in any significant manner within the top sectors.[12]

Discussion on foreign investments in India generally reflects the concern about their role in consumer goods industries. *The Economic Survey, 1996-97* placed the share of consumer goods sector at 15.31 per cent and that of capital goods and machinery at 13.14 per cent and that of core and infrastructure sectors at 49.13 per cent in the FDI approved during August 1991 to October 1996. However, while in relative terms the share of consumer goods industries may look to be small, in volume terms it is big enough to cause significant changes in the structure of many products. While food processing sector occupies the seventh position with less than six per cent share, the total approvals amount to Rs 7,500 crore of investment. Coca-Cola alone received approvals of nearly Rs 2,700 crore and approvals on account of Pepsi and its group companies work out to more than 1,000 crore. The changes that occurred in the Indian soft drink industry since liberalisation are of significant importance.[13] A number of consumer goods foreign companies are setting up holding companies in India. The approved foreign investment figures do not reflect the full potential of the investments involved in these approvals for influencing market structures. For instance, most of the takeovers, joint ventures and alliances of the Unilever group in India do not figure in the approved list: take over of Tata Oil Mills and its subsidiaries, Kwality ice cream, Kissan, Lakme and other enterprises does not get reflected in the size of new foreign investments. These were cases of Hindustan Lever (incl. the merged Brookebond Lipton) alone, which is a subsidiaries of Dutch-British Unilever. This holds true of many other existing large foreign controlled companies.

A point that remains very in-adequately debated is whether it is essential to relax the FDI policy with regard to consumer goods industries if the purpose of inviting FDI is to develop the core and infrastructure sectors with foreign participation. The character of infrastructure and service sectors is such that the foreign investors have to physically set up their operations in the country if they wish to extend their operations to the country. In contrast, in the manufacturing sector, be they consumer goods or others, the investor has the option of exporting to India instead of taking up local manufacture. Due to the rapidly falling trade barriers, this possibility has become more real. The possibility of treating the

two broad spheres, namely, the manufacturing sector and others independently for policy purposes is obvious.

Size-distribution of Approvals

We have seen in the above that approved investment is concentrated in Power & Fuel and Telecommunications. These being heavy investment sectors, their share in the number of approvals is small compared to the share in the overall investment approvals. The two sectors together accounted for 685 approvals or a little more than 8 per cent of the total approvals. Understandably, this sectoral character of the approvals will have its reflection in the size distribution of investments as well. From Table 5, it can be seen that the proposals with Rs 500.00 crore and higher investment each were only 58 out of 7,694, i.e., less than 1 per cent. But these claimed 38 per cent of the approved investments. If the approvals in the Rs 100 -- 500 crore range are also included, 296 approvals accounted for more than 72 per cent of the total investment. At the other extreme are the projects in the less than Rs 1 cr. bracket, which, while constituting a little less than half of the approvals, accounted for less than 1 per cent of the total investment. The pattern of the approvals makes it clear that the success or failure of the expectations with regard to inflow of foreign investment would be determined by a limited number of large projects and their industry characteristics.

Table 5. Distribution of FCs According to Size of Foreign Investment (August 1991 to August 1998)

(Amount in Rs Crore)

Investment Range (Rs Crore) (1)	No. of Approvals (2)	Amount Approved (3)	Per cent of Col. 2 (4)	Per cent of Col. 3 (5)
0 to 1 cr.	3,678	1,092.27	47.80	0.73
1 to 5 cr.	2,074	4,770.43	26.96	3.19
5 to 25 cr.	1,175	13,150.37	15.27	8.79
25 to 50 cr.	288	10,141.58	3.74	6.78
50 to 100 cr.	183	12,548.66	2.38	8.39
100 to 500 cr.	238	50,886.13	3.09	34.02
500 cr. & above	58	56,981.19	0.75	38.10
All Cases	7,694	1,49,570.63	100.00	100.00

Note: Excludes GDRs and cases where the investment figures and foreign shares are not available.

Country-wise Distribution of Approvals

Given the relative freedom now offered to foreign investors, one should expect that the sources of foreign investments would get further diversified. At the same time, since many large TNCs are based in the USA, the country may gain even a better foothold in India. At the end of 1989-90, US occupied the highest position with nearly half of the FDI stock. UK was in the second position with 19 per cent share followed by West Germany and Japan.[14] The four countries had a combined share of 83 per cent [RBI, 1993a]. As better or higher technology does not appear to be a special consideration for permitting new investments, one might witness a diversification of sources of investment. From Table 6 it can be seen that while USA stands at the top with a 27.48 per cent, share of the former top four countries (USA, UK, Germany and Japan) came down substantially to 44 per cent. Europe takes the second position with a 24.41 per cent share. In all, the developed countries account for two-thirds of the investment.

Table 6. Sources of Approved FDI (August 1991 to August 1998)

Country/Group (1)	Amount (Rs Cr). (2)	Per cent Share in Total (3)
USA	42,029.72	27.48
Europe	37,340.48	24.41
. U.K.	11,980.65	7.83
. Germany	6,460.80	4.22
. Belgium	3,904.68	2.55
. Netherlands	3,723.80	2.43
. France	3,337.42	2.18
. Italy	2,632.74	1.72
. Switzerland	2,362.18	1.54
. Sweden	1,420.25	0.93
Other Developed Countries	18,658.14	12.20
. Japan	7,213.34	4.72
. Israel	4,226.51	2.76
. Australia	3,336.88	2.18
. Canada	2,042.77	1.34
. South Africa	1,746.88	1.14
South, East & South East Asia	19,674.89	12.86
- Korea (South)	6,031.17	3.94
- Malaysia	5,443.56	3.56
- Singapore	2,987.98	1.95
- Thailand	2,451.82	1.60
- Hongkong	1,742.10	1.14
Tax Shelters	23,199.64	15.17
- Mauritius	17,940.94	11.73
- Cayman Island	3,621.37	2.37
- Panama	621.44	0.41
- Bermuda	506.37	0.33
- Luxembourg	239.54	0.16
- Isle of Man	156.97	0.10
NRIs	7,424.69	4.85
West Asia	2,703.88	1.77
- Saudi Arabia	672.58	0.44
- U.A.E.	638.54	0.42
- Kuwait	584.28	0.38
- Oman	569.72	0.37
- Baharin	122.57	0.08
Erstwhile Socialist Bloc	988.10	0.65
- China	685.05	0.45
- Russia	257.73	0.17
- Slovakia	0.13	Negl.
- Byelorussia	0.05	Negl.
- Vietnam	0.03	Negl.
Latin America	787.90	0.52
- West Indies	515.43	0.34
- Mexico	252.43	0.17
- Argentina	18.40	0.01
- Jamaica	1.00	Negl.
- Brazil	0.63	Negl.
- Uruguay	0.01	Negl.
Africa	147.89	0.10
- Nigeria	147.54	0.10
Others	2.05	0.00
Total	152,957.37	100.00
Euro Issue (GDRs/FCCBs)	18,748.83	
Total	173,508.31	

A notable feature of the country-wise distribution is that Korea took the lead over Japan which played an important role in the eighties. Next important category is that of South, East and South-East Asian countries led by South Korea. These countries contributed nearly 13 per cent to the approved investment representing diversification of sources of FDI. A surprising case is that of small countries led by Mauritius, which are known as tax havens or tax shelters.[15] Many of the investments routed through Mauritius can be traced to US companies. Similarly, some of the investments from Mauritius as also Switzerland were found to have NRI association. Notable among these are the Rs 600 crore investment by Parmars whose proposal was approved in the name of International Petroleum, Switzerland and a project with Rs 300 crore investment approval for Chatterjee Petrochem (Mauritius). This is in addition to the officially reported Rs 5,900 crore investment by other NRIs. In the past too, certain TNCs from advanced countries invested in India through their subsidiaries and associates in locations other than their home country. For instance, foreign equity in Nestle India was held from Bahamas Islands and in Pfizer it was from Panama though their respective parent companies belong to Switzerland and USA respectively [Goyal, 1979]. If these factors are taken into account, the share of USA and NRIs could turn out to be more substantial.

The substantial share of NRIs in the total investment approved may resemble the experience of China. A significant portion of the huge investment in China is reported to have been contributed, over the years, by people of Chinese origin. Does it happen to be the case in India too? It remains an open question for further enquiry.

State-wise Location of New Foreign Investments

States have been showing considerable interest in attracting foreign investments. In this context and in the context of wide inter-state disparities in industrialisation, location of projects with foreign investments has assumed significance. Given the nature of approvals, however, the available information has serious limitations in reflecting the actual amounts that are likely to flow to different states. If one goes by the official figures, Delhi will be receiving the maximum amount of foreign investment followed by Maharashtra (Table 7). More importantly, in about 30 per cent of the cases, location was not indicated at the time of the approval. These projects account for approximately one-third of the total investment. While Delhi stands at the top, it is obvious that most of the corresponding 458 projects will not be located in Delhi. Delhi, in all probability, must be representing the neighbouring states or the foreign investors might have used the services of local agents for communication and for doing the initial spadework. Depending upon the nature of the project the actual location could be somewhere else in the country. Also, in case of the services sector, location will not carry the same meaning and equal significance when compared to the manufacturing ventures. Incidentally, most of the approvals for Cellular and Basic Phone services carry Delhi, Bombay, Bangalore and Madras as the locations for these approvals. For all practical purposes Delhi should also be clubbed with the others (un-indicated) category. It, therefore, means that for almost half of the investment, the location is not known in advance. In view of the importance of a few large projects in the approved investment, even a couple of projects can make a large difference to a state's share. And if for any reason, the projects do not materialise, the share in actuals could slump significantly. For instance, in the case of Orissa, the number of approvals is quite small and its high position is mainly due to a few major projects.

Actual Inflows of Approved Investment

While the investment approvals show a promising picture, at least in comparison to India's past experience, considerable anxiety is expressed in different quarters over the slow pace of inflows.[16] Given that the inflows do not start flowing immediately after the approval, one should expect a time lag between approvals and inflows, especially for large and long gestation projects. In these cases it is reasonable to assume that actual flows of capital would be gradual and vary with the project's progress. The number of approvals against which inflows have been recorded would, probably, give a better indication of the extent of likely implementation of approved foreign investment projects. This information is not, however, available. Official figures indicate that inflows constitute about one-fifth of the approvals [*Economic Survey*, 1999, p. 87].

Table 7. State-wise Distribution of Approved Foreign Investment (August 1991 to January 1997)

State (1)	No. of Approvals (2)	Amount (Rs Cr.) (3)	Share in Total Investment (per cent) (4)
Delhi	458	17,330.36	17.08
Maharashtra	832	12,676.39	12.49
Karnataka	434	5,493.90	5.41
Tamil Nadu	543	5,468.75	5.39
Madhya Pradesh	110	5,268.33	5.19
West Bengal	179	5,249.55	5.17
Orissa	49	3,790.79	3.73
Gujarat	251	3,762.54	3.71
Andhra Pradesh	295	2,511.27	2.47
Uttar Pradesh	219	2,444.52	2.41
Haryana	268	1,788.40	1.76
Punjab	66	821.20	0.81
Rajasthan	128	605.47	0.60
Other States	424	3,116.55	3.07
Others (state not indicated)	1,752	32,592.67	32.12
Total	5,814	1,01,494.02	100.00

Source: Based on Ministry of Industry, SIA Newsletter, February 1997.

Instead of the aggregate-level comparisons, a sector-wise comparison could give a better picture of inflows and project implementation. This is, however, possible if FDI inflow data is available for the industry groupings similar to the ones followed in the case of approvals. Unfortunately, RBI for some reasons, followed its own classification and level of aggregation. It is difficult to understand why investment figures are not being made available in a standardised format, which would enable meaningful comparisons. In spite of these problems of comparison, the fact that infrastructure sectors received very little investment becomes evident from the inflow data released by the RBI for the past four years (1994-95 to 1997-98). The top most position was occupied by Engineering (23.5 per cent) followed by Electronics & Electrical Equipments (13.7 per cent), Chemicals & Allied Products (11.5 per cent), Finance (10 per cent) and Services (7.4 per cent) (Table 8). Power, Fuel and Telecommunications do not figure in the details offered by RBI.

Table 8. Industry-wise Inflow of Foreign Investment: 1994-95 to 1997-98

Industry/Sector (1)	Amount US $ Mn. (2)	Percentage in Total (3)
Engineering	1,693.6	23.5
Electronics & Electrical Equipment	984.2	13.7
Chemical & Allied Products	829.0	11.5
Finance	732.6	10.2
Services	530.3	7.4
Food & Dairy Products	395.7	5.5
Computers	260.2	3.6
Domestic Appliances	183.8	2.6
Pharmaceuticals	146.3	2.0
Others	1,447.3	20.1
Total	7203.0	100.0

Note: Exclude inflows under the NRI direct investments route through the RBI.
Source: Reserve Bank of India, *Annual Reports* for 1996-97 and 1997-98.

Another way of looking at the inflows is by the country of origin. In a scenario of slow rate of inflows, knowledge of better project implementation by investors of certain countries may enable them to form more realistic future expectations. However, as noticed earlier, the increasingly important role played by tax shelters has further distorted the country distribution to such an extent that during the past three years, Mauritius reached the top position in inflows with a one-third share. USA was a distant second with a share of less than one-fifth! (Table 9).

Three factors should be noted in a discussion on inflows. *Firstly*, approvals have picked up significantly during the last two and a half years and account for two-thirds of the approved investment. *Secondly*, a few approvals (296) account for a substantial portion (72 per cent) of the total investment. And, *lastly*, industry composition is such that Power, Fuel and Telecommunications sectors dominate the approvals to a large extent. The policy formulation in respect of these sectors has been very slow. Some of these projects are also surrounded by national controversies. The Enron and Cogentrix are cases in point. Telecom sector witnessed a major scam. Slow pace of implementation of large infrastructure projects is thus a major reason for the poor rate of inflows.

Table 9. Country-wise Inflows of FDI (1994-95 to 1997-98)

Country (1)	Inflow (Rs Cr.) (2)	Share in Total (per cent) (3)
Mauritius	8,666	33.62
USA	4,700	18.23
Germany	1,595	6.19
Korea	1,561	6.05
Japan	1,453	5.64
UK	1,348	5.23
Netherlands	1,337	5.18
Others	5,212	19.86
Total	25,779	100.00

Note: Figures do not include NRI direct investment routed through RBI.
Source: RBI, Annual Reports 1996-97 and 1997-98.

On the other hand, implementation appears to be quick in consumer goods industries [Cheema, 1997].[17] The official approvals enabled many consumer goods TNCs to hike their shares reversing the impact of the FERA. This probably explains the near 50 per cent realisation of the approved investments within a year. Inflows during the year 1991 were reported to be Rs 351 crore out of the approved amount of Rs 739 crore. In some cases, TNCs preferred to follow the take-over route (especially in consumer goods) to make a quick entry or to consolidate their position in the Indian market. In a few cases, the take-over factor was hidden. For instance, Heinz started its operations by taking over the food business of Glaxo and Modi-RJR's foray into manufacturing was through the take-over of a small cigarette manufacturer in Andhra Pradesh. Certain existing units were transferred to new joint venture companies while the original Indian companies continue to exist. We shall discuss this aspect further in the section on take-overs. The implementation also appears quick if it implies getting the products manufactured by local units and the foreign

company marketing them under its own brand names (e.g., Laboratories Garnier promoted by L'Oreal of France).

There is a view prevailing that the sluggish pace of capital inflows is largely due to the slow moving and hurdle creating bureaucracy and its failure to free itself from the old mind set. The fact, however, is that this view need not necessarily be relevant in *all the cases of delay*. The investors could also be responsible for the delays in a number of projects [RBI, 1985].[18] A long-term investment demands close study of the market. This is perhaps the reason that McDonald took almost five years to open its first outlet. Inability to decide on the local partners is yet another reason for delays or even abandonment in some cases. For instance, since 1991, BMW tried different partners but till now one is not sure whether the company will go ahead with the projects (motor cycles and passenger cars). Similarly, LG Electronics' attempt at joining hands with either RPG or Birlas did not meet with any success. Finally, it seems to have opted for a 100 per cent owned unit. This is also related to the foreign investors' perception of the Indian market. The continuing sluggishness of the economy can be expected to lead to delays or even abandonment of certain proposals. In certain cases, even though the product is available in the Indian market, the operations may have not have been set up fully. For instance, the automobile manufacturers' insistence on importing CKDs and SKDs (completely knocked down and semi knocked down) kits implies that full manufacturing operations have not yet been established. This may also imply that the companies might be keeping the escape routes open.[19]

Since project location is not always specified in a large number of cases location studies and negotiations with state governments for better terms might take time. One also suspects that in the initial period there was a strong possibility of inflating the investment figures by the foreign collaborators to ensure quick approval. Indeed, such a practice suited the government's strategy also as it wished to project large amount of FDI approvals as a measure of the success of its policies. Had sectoral policies preceded approvals, the rate of implementation could in all probability have been faster. Also, in cases where the Indian partners or state governments tried to protect the local interests (e.g., Indian Oil Corp in case of East Coast Refinery,[20] Madhya Pradesh government in case of diamond mining in the state,[21] Industrial Development Bank of India (IDBI) in the case of steel plant in Orissa,[22] Gujarat Government in the case of Parmar Refinery[23]) which resulted in delays, or even abandonment of a project, official machinery may not be faulted. When it comes to extracting the maximum out of the ventures for themselves, NRIs did not seem to lag behind others.[24] Tikoos and Balsaras are the other prominent NRIs apart from Hindujas and Pauls who promised large investments but delivered too little.

Take-overs and Implementation of FCs

Significantly, in spite of the low level of capital inflows, the structure of many consumer goods industries has got altered in a substantial manner. In the liberalised policy environment, the Indian entreprencur seems to have lost his bargaining power and well-known Indian brands have been taken over by TNCs providing them a ready market with lesser competition from local industry. The process is continuing. Take-overs have the additional implication that they do not add to new production capacities or employment opportunities.[25] On the contrary, these can add to the growing outflow of foreign exchange. A survey conducted by us in 1993-94 revealed that the major consideration of the Indian parties in entering into a collaboration agreement was to get superior technology. 'Access to foreign funds' was way below in the ranking [Goyal, et al., 1994]. One implication of these observations is that had the official policy not been liberalised,

the Indian promoter could have refused foreign stake taking advantage of the fact that the policy prohibited foreign investment in many areas. This may be understandable because for many small and medium projects, raising funds from the public was not a problem given the promising stock market. As we shall see in the following, in a number of companies with foreign equity, the relative significance of foreign investment was quite small.

The controversy over ICI's (UK) attempted entry into Asian Paints, its major competitor in India, brought into sharp focus the phenomena of TNC take-over of Indian companies. When Parle's brands were sold to Coca-Cola not much debate was generated. Similar was the case when TOMCO was taken over by Hindustan Lever. One reason for this could be that in the latter two cases, the Indian promoters withdrew on their own while in the former, the promoters resisted the TNC's entry. The fact, however, is that in many other cases the ownership of Indian companies changed hands affecting market structures significantly. In this process, probably what has not attracted much attention is the transfer of units as distinct from take-over or merger of a whole company (Table 10 for an illustrative list). This route was adopted

Table 10. Illustrative List of Unit/Division Transfers to Joint Ventures

Unit to be Transferred/Transferred (1)	Remark (2)
Apar Lighting Division	Transferred to the joint venture GE-Apar Lighting Ltd.
Compressor unit of Kirloskar Brothers	Transferred to Kirloskar Copeland
Compressor units of SIEL and Kelvinator	Taken over by Tecumseh Venture
Engine Valves Division of Kirloskar Oil Engines	Proposed to be transferred to a JV with MWP, subsidiary of Mahle, Germany
Halol Plant of Hindustan Motors	Being used by the joint venture with General Motors.
Hinditron Equipments Mfg Co. Ltd. and Hinditron Computers Pvt Ltd. (certain assets and know-how) and all the shares of Hinditron Information Technologies Ltd.	Acquired by Digital Equipment (India) Ltd., a JV between Hinditron Group and Digital Equipment.
India Linoleum Unit of Birla Jute	Transferred to Birla DLW Ltd., a 50:50 JV with DLW of Germany
Kalyani Plant of Premier Automobiles Ltd.	Transferred to Pal-Peugeot Ltd., a JV with Peugeot, France
Kirloskar Filters Division of Kirloskar Oil Engines	To be transferred to a JV with Knecht of Germany
Kurla Plant of Premier Automobiles Ltd.	To be transferred to a JV with FIAT.
Luxor Pen manufacturing facilities	Transferred to Luxor Writing Instruments India Pvt Ltd. a joint venture with Gillette
Electric Metres Division of VXL Ltd.	Transferred to VXL Landys Gyr Ltd.
Motor Cycle Division of Escorts	Transferred to Escorts Yamaha Ltd.
Motor Cycle Engine Division of Hero Motors	Proposed to be hived off to a 50:50 joint venture with Rotax of Austria
Oral Care Divn. of Parle	Acquired by Gillette
Refrigerator Division of Godrej & Boyce Mfg.	Transferred to the JV, Godrej-GE Appliances (with General Electric, USA)
Speciality Chemicals Divn. of Max India	Transferred to Max Atotech a 50:50 JV between Max and Atotech BV
Stabiliser Bar Division of Jamna Auto	To be taken over by NHK Jai Suspensions Ltd., a new joint venture in which the Japanese company will hold 74 per cent share.
Sugar Machinery Division of KCP Ltd.	To FCB-KCP Ltd., a JV with FCB of France
Two and Three Wheeler tyre plant of Ceat	Transferred to South Asian Tyres Ltd. a JV with Goodyear, USA

for entry into consumer durables and machinery sectors. For instance, after the transfer of two plants Premier Automobiles is a pale reflection of its original self, even though it might remain a company 'owned by Indians'. In a broader sense, hike in foreign share and entry of the hundred per cent foreign-owned companies, setting up of parallel operations by TNCs and even crowding of the Indian market with foreign companies (with possible reduction in number and size of operations of locally owned companies) could also be interpreted as leading to diminishing role of Indian entrepreneurs and general investors and consolidation of TNC control over Indian markets. Similar is the case with alliances whereby the competitors are turned into allies (e.g., transfer of Lakme's brands to a 50:50 joint venture with the Levers) followed by the purchase of Lakme's stake in the joint venture.

Had the Indian partners not resisted the foreign companies' attempts at consolidating their position, more joint ventures would have passed in to the latter's hands. TVS-Suzuki, Hero-Honda and Godrej-GE Appliances are the cases in point. While Honda raised its stake in Kinetic Honda to 51 per cent, it could not achieve the same in Hero Honda. GE is on a spree to consolidate its position in its joint ventures. It has already received approval for converting GE-Elpro Medical Systems into a wholly-owned one by acquiring Elpro's 49 per cent stake. It is also reported that GE is increasing its share in its joint venture with IPCL. After initial resistance, Birlas seem to have yielded to the pressure from their Swedish partners to allow majority stake in VXL Landys Gyr. Birlas are also at the receiving end in Birla 3M and Birla Kent Taylor. Whirlpool took over TVS Whirlpool and Fuller Intl took over Fuller-KCP. Suzuki's attempts at gaining majority control over Maruti Udyog are well known.

Some other relevant cases are: Mercedes Benz getting approval for increasing its share to 76 per cent in its venture with Telco; Bridgestone planning to increase its stake to from 51 to 74 per cent in its joint venture with ACC; Bausch & Lomb increasing its share in the Indian venture to 69 per cent; and Henkel hiking its share to 70 per cent in Henkel Spic. It may be interesting to recall that Pepsi was started as a joint venture of Voltas, Punjab Agro Industries Corp and Pepsico, USA. The two Indian partners are nowhere in the picture now. Blue Star got edged out of Motorola Blue Star and Hewlett Packard India. Similar was the experience of Hinditron group in Hinditron Tektronix and Digital Equipment, and Shrirams in SRF Nippondenso. Shrirams' share also got reduced in Shriram Honda Power.[26] One reason for these developments is that some of the joint ventures were formed either through transfer of units and hence did not involve any cash investments by local partners or they were formed prior to 1991 when restrictions on foreign stake prevailed. If the Indian partners initially obtained shares in lieu of the transferred units, they may not be in a position to provide necessary funds for expansion or bring in additional money to sustain the venture if it runs into trouble. On the other hand, after gaining experience, the foreign partner may find the local partner to be dispensable. For a joint venture to be meaningful, both partners should have some strengths to offer to the venture.

At one level, the take-over phenomenon seems inevitable because the worldwide boom in foreign direct investment is fuelled by mergers and acquisitions. Indian experience probably should not come as a surprise since take-overs and privatisation are gaining importance as a form of capital flows. For instance, in USA, acquisitions represented 85 per cent of foreign investment in 1995 with new establishments contributing only 15 per cent [OECD, 1997, p. 21]. According to

UNCTAD, cross-border mergers and acquisitions involving majority control accounted for almost half of global FDI flows in 1996. For some of the developing countries FDI from privatisation was an important component of the total FDI received by them during 1970-95 -- forty per cent of total FDI in Eastern Europe and Central Asia and 21 per cent in the case of Latin America [Bouton and Samlinkski, 1997]. This shows that FDI has been substituting local ownership. One might thus say that FDI inflows could have been probably faster for India if there was a greater degree of privatisation and freer take-overs.

Public attention gets attracted more to happenings in the consumer goods sector. The illustrative list of consumer product companies given in Table 11 might help in understanding the popular perception of TNC takeover of the markets.27 These cases illustrate the extent of new foreign entry in different consumer products. Visibility of TNC products increased in the market both through entry of new TNCs as also new brands/products introduced by the older ones.

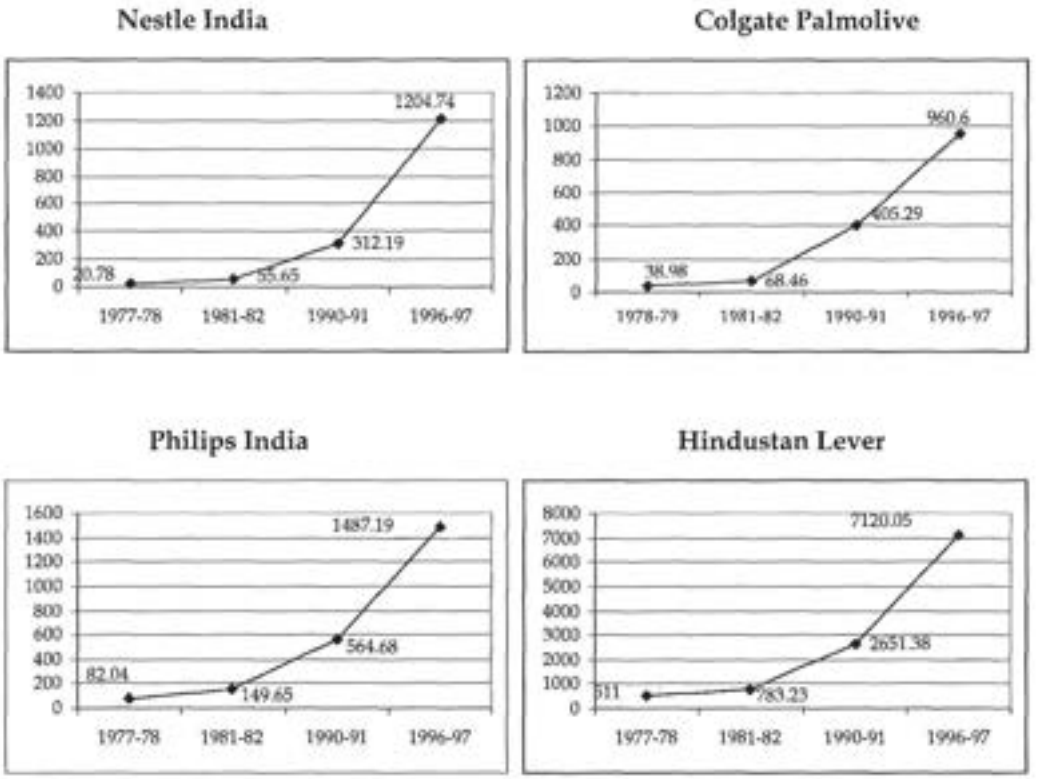
FERA, instead of being a hurdle to business expansion, operationally speaking, came handy for foreign corporations to obtain state patronage and access to institutional support that was denied to them as foreign subsidiaries. The removal of entry barriers in the post-SAP period has opened-up new opportunities for foreign corporations, most of whom already operate in India, to engage themselves in take-overs and mergers of Indian enterprises. The scope for such expansion did not exist with Chapter III of MRTPA being on the statute. Take-overs by existing foreign-controlled corporations is possible without any fresh capital being brought in from abroad. Table 12 shows the trends in the value of the turnover of the major consumer goods TNCs operating in India during the past two decades. (Also see Figure 2).

Table 11. Illustrative List of Financial Collaborations for Consumer Goods Approved in the Post-Liberalisation Period$

Consumer Electronics:	
Akai	Other Food:
Grundig	Danone
LG Electronics	Heinz
National Panasonic	KFC
(Matsushita)	McDonald
Samsung	Pizza Hut
Shivaki	Quaker Oats
Sony	Dunken Donut
Thomson	Kandos
	Baskin Robbins
Automobiles:	Domestic Appliances:
BMW	Daewoo
Daewoo	Electrolux
Fiat	General Electric
Ford	LG Electronics
	Samsung
General Motors:	Whirlpool
Honda	
Hyundai	Garments:
Mercedes Benz	Benetton
Volkswagen	KB&T
Volvo	Lacoste
Yamaha	Levistrauss
	Mexx
	Pierre Cardin
Alcoholic Beverages:	Soft Drinks:
Bacardi Intl	Cadbury Schweppes
Brown & Foreman Corp	Coca-Cola
Douglas Laing	
Foster's Brewing Group	Cosmetics, Perfumes, etc.
Henninger-Brau	Avon Products
Hiram Walker	Baccarose
International Distillers	Cussons Group
Macdonald & Muir	L'Oreal
Seagram	Maxim Cosmetic
United Distillers	Nectar Overseas
White & Mackay	Revlon
Confectionery:	Miscellaneous:
Agrolimen	Black & Decker
Chuppa Chup	Gillette
Lotus Chocolate	Kimberley Clark
Mars	Reebok
Perfetti	Sara Lee
Van Melle	Timex
Wriggley	General Electric

$ Excludes FCs for the existing foreign affiliates and subsidiaries.

Figure 2. Showing Growth in Sales of Major TNCs: 1977-78 to 1996-97



Based on data provided in *Bombay Stock Exchange Official Directory*. Net sales of Hindustan Lever include sales of Lipton and Brook Bond for earlier years.

Table 12. Showing the Increase in Turnover of Select TNCs (1977-78 to 1996-97)

Name of the Company	Net Sales at Current Prices (Rs Cr.)			Ratio of Sales	
	1977-78	1990-91	1996-97	1996-97 over 1990-91	1996-97 over 1977-78
(1)	(2)	(3)	(4)	(5)	(6)
Nestle India Ltd.	21	312	1,205	3.86	57.94
Colgate Palmolive (I) Ltd.	39$	405	961	2.37	24.64
Philips India Ltd.	82	565	1,487	2.63	20.29
ITC1.td.	384	2,286	5,863	2.56	15.28
Siemens Ltd. . .	78	383	1,168	3.05	15.02
Hindustan Lever Ltd.@	511	2,651	7.120	2.68	13.93
Glaxo India Ltd.#	56	364	702	1.93	12.42

$ Data refers to 1978-79.

@ Figures prior to 1996-97 include sales of Lipton and Brooke Bond.

Glaxo sold its food products division to Heinz India Pvt. Ltd., during 1994-95.

Source: S.K. Goyal, "Policy Processes', in Alternative Survey Group, *Alternative Economic Survey: 1991-1998*. 1998.

It is also observed that in this process, product monopolies are getting established, especially in the area of consumer goods and soft technology manufacturing. The cases in point are ice cream, soft drinks, soups, common salt, biscuits and the like. Since foreign corporations have world-wide experience at administering advertisement technologies, it is no surprise that within the last few years more than two-thirds of the national advertisement space is commanded by TNCs (Table 13 for a list of Top TNC advertisers). This is true of print as well as of the electronic mass media. The Indian commercial scene when judged in terms of advertisements appears as much under foreign influence as is true of the industrially advanced markets.

Table 13. Showing Top TNCs Advertisers during 1997

Name of the Company	Advertisement and Other Promotional Expenditure (Rs Cr.)
(1)	(2)
Hindustan Lever Ltd.	443.11
ITC Ltd.	172.60
Colgate-Palmolive (India) Ltd.	13.75
Nestle India Ltd.	79.89
Pond's (India) Ltd.	47.04
Castrol India Ltd.	42.87
Philips India Ltd.	41.49
Reckitt & Colman of India Ltd.	40.83
Smith Kline Beecham Consumer Healthcare Ltd.	31.91
Cadbury India Ltd.	29.62
Britannia Industries Ltd.	29.04
Procter & Gamble India Ltd.	25.64

The list is confined to Stock Exchange listed TNCs only.
Source: IDSS Corporate Database.

Export Prospects and FCs

The earlier policy on foreign investments placed special emphasis on export promotion. Foreign companies (FCs) with their knowledge of international markets, established brand names, superior technology and product acceptance, close association with the consumers through world-wide subsidiaries and affiliates, were expected to be in a better position to promote host country exports. Indeed, a number of studies in India focused on this aspect of TNCs [Goyal, 1979; Kumar, 1994; Subrahmanian et al., 1978; Dijck and Chalapati Rao, 1994]. The general finding of these studies was that either foreign controlled companies were not significantly better export-oriented than Indian companies and/or that their operations have had a negative direct impact on the overall balance of payments. In certain cases, the apparent better performance was mainly due to trading (often in unrelated products). In a somewhat recent instance of this nature it was found that Coca-Cola's exports from India included green coffee, black pepper, white hulled sesame and granite [*Economic Times*, 1995]. The export baskets of large trading houses have many things in common: commodities, garments, leather products, handicrafts and marine products.

The present policy, however, places very little restriction on this count. In a sense, exports are now a voluntary activity. In an earlier study it was observed that during 1991-92 to 1995-96, export orientation of 100 largest TNC affiliates/subsidiaries in India increased marginally from 8.07 to 8.64 per cent while the import dependence (imports as a percentage of sales) nearly doubled from 6.86 per cent to 12.94 per cent. As a result, these companies turned net losers of foreign exchange: from a positive balance of Rs 270 crore to a deficit of Rs 1,600 crore. Another major factor that contributed significantly to this development was the steep increase in payments in foreign exchange for technology, dividends, travel, etc., from Rs 120 crore to almost Rs 500 crore [Goyal, 1997].

Given the composition of investments, with emphasis on infrastructure sectors, it is too early to say to what extent the other sectors will take advantage of the improved infrastructure and generate exports. To form some opinion in this

respect, howsoever tentative, we made an attempt to analyse the export projections made by foreign collaboration projects during a year and a half (during 1996 and 1997). The projections are reported to the press but do not form part of the basic collaboration details reported regularly by the SIA and the Indian Investment Centre. We could procure a good number of the FIPB press releases for the period. The available releases cover an investment of Rs 25,000 crore and should, therefore, reasonably be representative of the recent position. From a study of the releases it emerges that the 1,239 approvals project total exports of the magnitude of Rs 52,335 crore over a five year period. We are conscious that since the approvals include large investments in infrastructure sectors, a comparison of investment and exports may not be fully justified. A comparison of number of projects may give a better idea of the future scenario. It was noticed that out of the 1,239 approvals, less than 400 projected any exports. However, even among these, as many as 164 anticipated exports are of less than Rs 5 crore per annum. Table 14 gives an illustrative list of FCs projecting exports of Rs 250 crore or more over a five year period. It is interesting to find that the very first case, KRC colour Monitor Tubes projects, exports worth more than Rs 16,000 crore. That this was not a printer's devil is confirmed by the fact that the corresponding press release gave the total projections at Rs 21,000 crore. The third largest projection was by Archana Telecom which is planning to set up a technology and resource park. The projected exports of Rs 1760 crore cannot obviously be on account of the company. The sectoral characteristics of the proposals and the amounts of export earnings projected reveal that textiles, trading and software companies stand at the top. Quite a few others are also in the computer software development. A number of textile units were approved under the 100 per cent EOU scheme.

Since these are only projections, one may not read much into these figures except drawing some broad conclusions that two-thirds of the projects do not have immediate plans for exports. The export areas and collaborators are such that in many cases these are not associated with large foreign investors. Some of them are NRIs. In some cases given the small size of the project, it is doubtful if the projected exports would materialise. It appears that there is no strong direct relationship between size of foreign investment and export projections. One implication of this is that if stepping up of exports is an important objective, foreign investment policy could be more selective.

FDI and the Indian Stock Market

Implementation of FERA made it obligatory for branches of foreign companies operating in India to register themselves in India with foreign equity of not more than 40 per cent. Those already registered but having more than 40 per cent equity held abroad were also to bring down the foreign share to 40 per cent.[28] Equity dilution through issue of additional shares to Indians turned out to be the most popular way of diluting foreign equity. For instance, out of the 46 companies studied only seven diluted equity solely through disinvestment and in another four a part of the foreign share was divested but simultaneously fresh shares were issued [Chaudhuri, 1979, Pp. 734-44]. The FERA strategy of conserving foreign exchange through foreign equity dilution was flawed because dividend payments constituted only about 4 per cent of the total expenditure on foreign exchange by the foreign subsidiaries in India. Raw materials imports was the single largest item accounting for 85 per cent of the total foreign exchange outgo. It was, therefore, foreseen that the impact of equity dilution under the FERA ' could only be marginal, even if all the subsidiaries are forced to bring down their foreign equity to 40 per cent level [Goyal, 1979, Pp. 43-44]. Indian investors were

Table 14. Illustrative List of Financial Collaboration Approvals Projecting more than Rs 250 Crore Exports each Over Five Years

Name of the Company	Foreign Collaborator	Product	Month/Year Approved	Foreign Equity	5-Year Exports (RsCr.)
(1)	(2)	(3)	(4)	(5)	(6)
KRC Colour Monitor Tubes	Winny Electronic Enterprises. Taiwan	Colour Monitor Picture Tubes for Computer Monitors	Nov.96	70.00	16438.00
South Asian Petrochem Ltd.	EMS Inventa Ag, Switzerland	Bottle Grade Polyester Chip	Sept. 96	41.25	3487.70
Archana Telecom Services Ltd.	Universal Holding Ltd., West Indies	For setting up of an internationally compatible technology and resource park at Bangalore	Jan. 97	97.98	1760.00
	ED&F Man Netherlands BV, Netherlands	For setting up 100 per cent wholly owned subsidiary in India to conduct international trade in Sugar, Molasses Alcohol, Nuts and Spices, Cocoa and other de-regulated Goods	April 97	3.50	1102.50
Tata Industries Ltd, and Tata Information Systems	IBM World Trade Corporation, USA	Providing Information Technology Services	May 97	72.00	806.40
ST1 India Ltd.	Commonwealth Dev. Corporation, UK	Cotton Yarn, Polyester/Cotton Yarn, Cotton Knitted Fabrics	Feb. 97	9.71	733.93
Klinkenberg India Pvt. Ltd.	E Klinkenberg BV, Netherlands	Export of Agro Produce viz., Cashew Kernels, Groundnut Kernels, Seasame Seeds, Walnuts, Spices (Black Pepper, Cardamom, Red Chilli, Cumin Seeds, etc.). Tea & Coffee	July 97	0.01	694.63
Do	Sumitomo Corpn., Japan	To establish wholly owned subsidiaries in field of general trading	Nov.96	14.00	654.50
Kanbay Software (1) Ltd.	Kanbay (Asia) Ltd., Mauritius	Computer software	Feb.97	5.32	593.50
Gabriel India Ltd.	Arvin Exhaust Intl., Netherlands	For manufacture and sale of exhaust system/catalyst	Aug. 96	11.84	563.00
Mandvi International Export	NRI	Basamati Rice	April 97	0.49	530.55
TMT(I)Ltd.	Agro Advies Buro, Netherlands	Cut Flowers	Oct. 96	160.00	528.00

(Contd...)

Table 14. (Contd.)

Name of the Company (1)	Foreign Collaborator (2)	Product (3)	Month/Year Approved (4)	Foreign Equity (5)	5-Year Exports (RsCr.) (6)
Makharia Organics Ltd.	NRI	Manufacture of Para Nitroaniline, other Aniline Derivatives & their Salts, Ortho Chloro Paranitroanilines, etc.	Sept. 96	32.00	480.00
Fabworth India Ltd.	NRI	All wool Worsted Fabrics	April 96	2.50	465.88
Nortel Mauritius Ltd.	Nortel Mauritius Ltd. Mauritius	To Set up a Wholly Owned Subsidiary in India which will participate in the development of the Telecom Industry in India by bringing in its latest technology into India and sup.	Nov. 96	157.50	437.50
Chemplast Sanmar Ltd.	Euro issues, Euro issues	Issue of FCCBs to part finance an export oriented Textile Project	Aug.96	17.50	400.00
Devarshi Cements Ltd	Enderlien Project Engg. Germany	Cement; Portland Clinker and Power (for captive consumption)	Feb.97	16.00	399.16
Bondex India Ltd.	Kobe Steel Ltd. Japan	Manufacture and Marketing of Spun-bonded Non-woven Fabrics	Sept. 96	3.60	364.85
KB+T Ltd.	Thakral Invest., Singapore	Men's Suitings	Nov,96	10.93	359.90
Sritech Information Tech.	NRI	For the Manufacture of Professional Integrated Receiver Decoders	March 97	1.76	354.24
Do	SHV Makro NV, Netherlands	To set up a Wholly Owned Subsidiary in India which would involve opening several whole sale stores in the main cities in India to introduce cash and carry distribution	Dec. 96	140.00	350.00
	LG Electronics Inc., Korea (S)	To set up a 100 per cent Owned Subsidiary company in India for the manufacture, marketing and sale of electrical and electronic appliances such as Washing Machines, Refrigerators, Air Conditioners	Jan.97	204.75	350.00

(Contd...)

Table 14. (Contd.)

Name of the Company	Foreign Collaborator	Product	Month/Year Approved	Foreign Equity	5-Year Exports (RsCr.)
(1)	(2)	(3)	(4)	(5)	(6)
Incab Industries Ltd.	Leader Universal (Mauritius) Co., Mauritius	Manufacture of Power and Telecom cables involved in project engineering jobs on contract basis	Nov.96	16.00	348.22
Manish Jain	Hanil Synthetic Fiber Co., Korea (S)	Acrylic blanket, cotton yarn, polyester cotton yarn, cotton acrylic yarn. wool acrylic yarn	Sept. 96	7.88	338.38
S Kumars Synfabs Ltd.	Allied Textiles Machinery, UK	For manufacture of pure wool and wool/polyster/viscose blended fabrics	Sept. 96	5.00	330.29
Texmaco Ltd.	Howa Machinery Ltd., Japan	For manufacture of advanced spin ning M/c	Sept. 96	10.20	307.00
Dynamix Dairy Industries Ltd. '	NRI Schreiber International Inc., NRI	To manufacture a full range of value-added dairy products, such as Lactose Casein Cheese Baby Food Mineral Salts Butter and Ghee	Jan. 96	7.56	300.00
Associated Cement Co.s	Tele Quarz GMBH	Quartz Crystals of various specification	Nov. 96	19.11	288.87
Marquip Asia Pacific Ltd., Mr. Senthil Kumar	Marquip Asia Pacific Ltd. Mauritius	Paper-pulp/paper-board making machinery including cutting machines of all kinds	July 97	2.95	286.31
Do	Intel Services Inc., USA	To establish a wholly owned subsidiary in India with two business organisations under two separate divisions	Feb. 97	42.00	283.50
Baidyanath Enterprises Ltd.	Yusung Co. Ltd. Korea (S)	Worsted wolen yarn	Oct. 96	1.79	282.65
Rilspin Synthetics Ltd.	NRI	Polyester Viscose Blended Yarn	Sept. 96	12.00	280.00
Kolhapur Steel Ltd.	Intl. Meehanite Meta. UK	Ductile Iron Pipe (100 Mm to 700 Mm ID)	Dec. 96	2.80	280.00
Ace Tech India Pvt Ltd.	Nova Technology Inc. USA	Integrated Circuits	Nov.96	26.94	277.55
Mormugao Maritime Ltd.	Marubeni Corpn., Japan	To provide support services to water transport operation; maintenance of pier loading	June 97	5.40	266.05
M Fabrikant & Sons	M. Fabrikam & Sons Inc. USA	Exports and domestic sales of loose diamond	Jan. 97	0.35	262.50
Sarda Plywood Industries Ltd.	Polymer Group Inc., USA	For manufacture of Non-woven Fabrics	Sept. 96	43.75	254.63
	Lottex Management Inc. Canada	For setting up a wholly owned subsidiary in India which will establish and operate a manufacturing facility for computer terminals	Jan. 97	17.50	252.00

Based on official Press Releases released through Press Information Bureau of the Government of India.

attracted to FERA companies' public issues in a big way and the issues were oversubscribed many times. The prevailing capital issue guidelines ensured wide dispersal of shareholding after equity dilution. It was, therefore, suggested that the FERA proved to be a blessing for TNCs as they gained national acceptability not only with consumers but also with Indian government and policy makers *without any loss of freedom or control over their investments* [Goyal, 1979, Pp. 43-44]. Due to the entry of such companies with substantial foreign equity -- then popularly known as FERA companies -- foreign collaboration, especially participation in equity capital, was perceived as a qualification by the investors. FERA issues thus increased investors' awareness of the stock market as a medium of savings and thus helped mobilise resources.

Primary market is the main route through which new companies enter the stock market. A compilation of the public issues by unlisted companies during the post-liberalisation period may, therefore, provide leads for figuring out the future role of FDI in the stock market.[29] While rights and further issues by the already listed companies also form part of the primary market, we will not be considering these here because they do not reflect entry of new companies. For purpose of this exercise companies promoted/controlled by non-residents Indians (NRIs) are treated as a special category and have been kept out of the analysis.

Table 15. Foreign Equity Participation in IPOs

Year	No. of IPOs	Total Equity of IPO Cos (Rs. Cr.)	No. of IPOs with Foreign Equity	Total Equity of IPO with Foreign Equity (Rs. Cr.)	Percentage of IPOs with Foreign Equity in	
					Numbers	Equity
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1991-92	146	1,117.71	21	215.93	14.38	19.32
1992-93	468	3,471.32	31	502.32	6.62	14.47
1993-94	681	5,196.16	50	601.38	7.43	11.57
1994-95	1,288	9,503.48	87	1,560.50	6.75	16.42
1995-96	1,399	7,735.70	53	703.34	3.78	9.09
1996-97	719	5,927.61	26	395.75	3.62	6.68
Total	4,804	33,937.42	268	3,979.22	5.58	11.73

Source: Generated on the basis of data available in *Prime Annual Report*, various issues.

Even though the number of initial public offers (IPOs) with foreign equity as also the amount of foreign equity increased somewhat till 1994-95, their share in the corresponding total was small. The overall share of IPOs with foreign equity is less than six per cent and the share declined gradually over the years except for 1993-94 (Table 15). The share in the risk capital is somewhat higher at about 12 per cent. The share in equity also declined over the period. Size-wise distribution of IPOs with foreign equity suggests that in two-thirds of the cases the total equity was relatively small at less than Rs 10 crore. The distribution of companies with foreign investment is more skewed with as many as 235 companies (88 per cent of the total) having foreign investment of Rs 5 crore or less (Table 16).

Since Rs 5 crore is equivalent to about US$ 1.5 million,[30] it can be seen that the level of foreign equity is extremely small in an overwhelming number of cases. Notwithstanding the small size of the investments in individual projects, the share of the foreign collaborator which indicates the extent of the risk shared by him and his involvement as also the contribution to the coming into being of the new project, which might

not have been taken up in their absence, is also relevant in the present context. In this respect too, projects with substantial foreign shares (25 per cent or more for Foreign Controlled Company (FCCs)) constitute only one-fifth of the total. (Table 17) Out of the total 55, in 35 cases the foreign investment involved was not more than Rs 5 crore implying that during the period 1991-92 to 1996-97 only 20 FCCs with foreign equity of US$ 1.5 mn. or more entered the stock market.

Table 16. Size-wise Distribution of Financial Collaborations in IPOs$ (Number of Companies)

Equity Range (Rs Cr.) (1)	Total Equity (2)	Foreign Equity (3)
Less than Rs 5 Cr.	66	235
5 to 10 cr.	112	17
10 to 25 cr.	66	8
25 to 50 cr.	9	6
50 Cr. & more	15	2
All Cases	268	268

$ Only issues with foreign financial collaboration are analysed here. Excludes 14 cases for which foreign equity details are not available. The amounts involved in these issues were small.

Table 17. Foreign Share-wise Distribution of IPOs

Foreign Share in Equity (per cent Range) (1)	No. of Issues (2)	Percentage in Total (3)
Less than 1	3	1.12
1 to 5	46	17.16
5 to 10	65	24.25
10 to 25	99	36.94
25 to 40	36	13.43
40 to 50	11	4.11
50 & above	8	2.99
All Cases	268	100.00

From the foregoing it appears that FCCs are not prominent in the primary market in the post-liberalisation period. Slow pace of implementation of collaboration projects does not seem to be responsible for this phenomenon as the trends at setting up parallel - often wholly-owned - subsidiaries by large TNCs (Table 18), and increasing share of foreign majority cases indicate a general tendency to avoid the stock market. Compared to the pre-liberalisation period, the number of cases where majority foreign equity is sought and approved has increased substantially (Table 6). Many joint ventures (JVs) preferred 50:50 or 51:49 form or other combinations in which both the partners together hold 100 per cent ownership of the JV to the exclusion of ordinary Indian shareholders. These include the ventures of GE, IBM, General Motors, Daimler-Benz and Coca-Cola. The parallel operations of large TNCs are likely to have direct implications for the future growth of their listed affiliates.

Table - 18. Illustrative List of TNCs having Listed Affiliates which Obtained Approval for Setting Up Wholly-owned Subsidiaries

ABB
American Cyanamid
Astra
BASF
Bayer
Cadbury Schweppes
Ciba-Geigy
Coats Viyella
Ferodo
Groupe Danone
Hoechst
Hoffman La-Roche
Knoll
Merck
Monsanto
P&G
Phillip Morris
Sandoz
Sandvik
Smith Kline Beecham
Timex
Unilever
Warner Lambert
Xerox Corp

As of now indications are that most of the major new ventures in the automobile sector do not have plans to offer shares to the Indian public.[31] An illustrative list of FCCs which have set up operations in the post-liberalisation period and which have not come to the public is given in Table 19. Indeed, the trend is in the reverse direction. An important case is that of Fuller International which has got delisted after the foreign shareholder acquired 100 per cent ownership of what was initially started as joint venture.In case of Tektronix India, the earlier attempt

to delist is reported to have failed and the company was keen to buyback the public shareholding [*Financial Express*, 1997; *Business Standard*, 1998]. In Daewoo Motors local shareholders have already been marginalised. In Nalco Chemicals the foreign holding has reached 80 per cent [*Financial Express*, 1998].[32] Similar is the case with Carrier Aircon in which the foreign financial collaborator's stake reached 88 per cent [*Economic Times*, 1998]. Ricoh was reported to be planning to buy the entire shareholding of financial institutions and the public in Ricoh India. It already holds 76 per cent of the latter's equity [*Financial Express*, 1998].[33] The share buyback provision introduced in the Companies Act recently and the proposed buy out facility in the Companies Bill may enable larger number of FCCs to opt for delisting.

Table 19. Illustrative List of TNCs which have set up Operations in India During the Post-liberalisation Period and had not Entered the Stock Market

Product Group (1)	Transnational Corporation (2)
Automobiles & Allied Products	General Motors, Ford, Mercedes Benz, Honda, Hyundai, Fiat, Toyota, Volvo, Yamaha, Cummins, Goodyear
Food & Beverages	Coca-Cola, Cadbury Schweppes, Kellogs, Heinz, Seagram, Hiram Walker, United Distillers, Perfetti, Wriggley, KFC, McDonald
White Goods, Consumer Electronics and Domestic Appliances	Daewoo, Samsung, Sony, General Electric, LG Electronics, Black & Decker, Kimberley Clark
Personal Care Products	Revlon, L'Oreal, Cussons, Unilever

FDI is side-stepping stock market in yet another manner. Some of the FCCs in the pharmaceutical industry have attempted to sell-off the existing units and promote new Wholly Owned Subsidiaries (WOS) or to transfer certain divisions/products to wholly owned subsidiaries of the parent company. For example, Pfizer Ltd., is reported to be planning to sell 51 per cent of its stake in Duchem, a 100 per cent subsidiary, to its parent Pfizer Inc.[34] This is expected to help the foreign parent to garner a larger portion of the profits from the sales of Becosules vitamin pills, Pfizer Ltd.'s top brand. Becosules is reported to be among the highest-selling brands in the Indian pharmaceutical industry. Some of the wholly-owned subsidiaries (WOS) specify conducting R&D as one of their objectives. This implies that the local listed subsidiary may not come to 'own' the outcome of the research.

Technical Collaborations

The official policy emphasis during the nineties has been on attracting large amount of foreign investment. It is, therefore, not surprising that while the number of foreign investment approvals increased from 1,355 in 1995 to 1,559 in 1996, and further to 1,665 in 1997, the number of approved technical collaborations (TCs) gradually declined from 982 in 1995 to 660 in 1997 which is almost equal to the figure for 1991 (Table 1). The reported technical collaboration agreements are an underestimate because, a number of financial collaboration agreements are accompanied by payments for technology in the form of lump sum and/ or royalty payments. Such approvals can be classified as financial- cum-technical. On the other hand, filing of a formal collaboration agreement becomes necessary only when payments have to be made abroad. An examination of the technical collaboration

approvals reveals that a significant number of these were in fact entered into by the very joint venture companies that were approved in the new policy period. A few others could also be traced to the older/earlier JVs. It was also noticed that some of the foreign companies that initially entered into only technology licensing agreements have later on acquired equity shares in such collaboration projects. In other words, a purely technology transfer arrangement was later converted into a financial collaboration.

If these factors are taken into account, the actual number of independent technical collaboration agreements in the new policy regime may turn out to be fewer than during the 'eighties. These observations tend to indicate the decreasing importance of arms-length transfer of technology which is giving way to technology transfer among affiliates. Technology may then remain closely held by foreign companies with little chance of further local development.

Some of the technical collaborations approved in the case of large TNCs shed doubts about the real purpose of the agreement as also the possible behaviour of TNC subsidiaries. Some of these collaborations involve companies which have been operating in the country for many years. For instance, there is a collaboration involving Nestle India and Nestec (a subsidiary of Nestle) for the manufacture of infant weaning food. What is noteworthy here is not that Nestle India is manufacturing infant food -- it has been doing that for a long time -- but the Indian subsidiary has been allowed to pay royalty (3.5 per cent on domestic sales, and 5 per cent on external sales) [Goyal et al., 1994]. Another interesting case is that of Colgate. The list of collaboration approvals shows five TCs and one FC against Colgate Palmolive USA. The financial collaboration was in respect of increasing the foreign equity from 40 to 51 per cent in Colgate Palmolive India. One of the TCs was to impart technology for the manufacture of toilet soaps to the Indian subsidiary. Out of the remaining four TCs involving royalty payments to the US company, at least three were for toothpaste. Incidentally, Colgate Palmolive (India) markets the toothpaste manufactured by at least three of the four Indian parties seeking technology from Colgate Palmolive USA [Goyal et al., 1994].

Thus, technology and brand names are so closely controlled by the foreign parent companies that the local subsidiaries in spite of producing the items for years cannot pass on the technology horizontally. The fact that companies with substantial foreign holdings are likely to continue to look towards their foreign parent companies and follow in their footsteps is evident from the following observations of Glaxo India Chairman:

> The parent company, Glaxo Holdings, had divested its milk based products more than a decade ago to concentrate on pharmaceuticals and had achieved great success. Therefore, *there was no support* for Family Products Division (FPD) either in products or in marketing from the parent. *For any subsidiary it is very risky to go out on a limb on its own.* (emphasis added) [Glaxo (India) Ltd., 1996].

Payment of royalties in case of fully owned subsidiaries was another point of debate. In certain cases the government allowed such payments with the hope of encouraging R&D by TNCs. But it leaves the question as to who would benefit from such R&D.

Technology import has significant direct costs associated with it. The main forms in which payments are made for imported technology are through pre-determined lump sum payments and royalties on sales. That the approved collaborations imply an increasing and large foreign exchange outgo is reflected in the figures given in Table 20. The lump sum payments for purchase of technology increased more than seven times

during the period 1991 to 1995, far too rapidly compared to the increase in the number of collaborations. From Rs 980 crore in 1991, the approved payment increased to Rs 7,198 crore by 1995. To get a more realistic picture, one has to add the outgoings on account of royalties but this cannot be given here, as royalties are dependent on actual sales -- both domestic and exports.

Table 20. Approved Lump Sum Payments (1981-1995)

Year (1)	Approved Lump Sum Payments (Rs Cr.) (2)
1981	56
1982	142
1983	150
1984	300
1985	421
1986	588
1987	418
1988	584
1989	699
1990	574
1991	980
1992	2,281
1993	3,690
1994	2,300
1995	7,198

Source: [Murthy and Ranganathan, 1997, Pp. 3-9].

Summing Up

In the new era when the emphasis is on attracting a large amount of foreign investment, approvals for foreign direct investment marked a significant rise compared to the immediately preceding phase. The approval data reveals that while infrastructure sectors attracted maximum investment, consumer goods sectors also had an important place in the approvals. The broad category of services accounted for almost one-third of the total. The main factors behind the large approved amount appear to be the dereservation of public sector reserved areas, de-licensing, allowing larger share for foreign investors, and the general boom in global investment flows. The actual inflows while considerably small compared to approvals, many a time did not go into creation of immediate additional production capabilities. A good part of the new investment resulted in either consolidation of control by TNCs in their affiliates or in acquiring control over Indian companies or their operations.

The steep increase in the approved amount since 1995, especially during 1997, is a reflection of further relaxation in the official policy towards foreign investment. The logic and rationale behind FIPB approvals is not clear. How the terms were negotiated with the foreign collaborators is not public knowledge.[35] The larger amount seems to have been obtained by conceding control -- often absolute -- to foreign investors. In contrast, the experience on the technology import front indicates that the scope for independent transfer of technology has reduced drastically. One main implication is that purchasing technology on market terms may become increasingly difficult. In the liberal policy environment, the foreign investors are opting for sole or joint ventures to one time sale of technology. A corollary is that once foreign companies acquire control, their local affiliates may neither have the freedom nor the incentive to invest in R&D. They will continue to look towards their parent companies for technology improvements. Even if they conduct any R&D, it is difficult to visualise that the local subsidiaries will be given the right over their innovations. This will entail continuous outflow on account of royalties and lump sum payments. The trends on the technology acquisition front, therefore, warrant a careful review.

Size and sector-wise distribution of the approvals suggests that relatively small number of proposals falling under power, fuel and telecommunications sectors account for almost half of the approved investment. However, in view of the large investments and importance of the infrastructure sector, pricing would remain a crucial factor. Considerable sums can be siphoned-off both at the implementation stage and after the projects go onstream. Downward

revision of cost estimates by power sector projects, in response to severe public criticism, suggests the need for a cautious and transparent approach in case of large projects. Besides dividends, in case of infrastructure projects foreign companies would focus on equipment imports, technology payments and long term fuel supply. Since the infrastructure ventures are generally majority/wholly foreign owned, dividends would have lesser significance compared to the long term assured flows to parents and affiliates on other heads. Hence, an approach that foreign investors should be best left to themselves since they bear the entire risk, may not be prudent.

Further, the high share of infrastructure and service sectors in approvals implies huge servicing burden as these (except a few like software) cannot generate direct foreign exchange earnings on their own. Indications are that the scope for substantial export earnings through new FDI is rather limited. It is, therefore, imperative that if only certain sectors are going to contribute to export earnings, such sectors can be dealt with on a different footing for attracting FDI. A point also arises whether it is essential to relax the FDI policy with regard to consumer goods industries if the purpose of inviting FDI is to develop core and infrastructure sectors. Infrastructure and service sectors are such that the foreign investors have to physically set up their operations in the country if they wish to extend their operations to the country. National policy may seek to exploit this compulsion to its advantage.

The fact is that FDI approvals in the post-liberalisation period are increasingly for setting up of subsidiaries. It may, therefore, be not surprising that very few companies with substantial foreign equity entered the stock market during the post-liberalisation period. This is in contrast to the post-FERA experience when many large and well-known FCCs came to be listed. Recent experience indicates that no major FCC is going to be listed on the Indian stock exchanges. FCCs may, therefore, remain outside the regulatory framework which listing requirements impose on the companies; local investors will be avoided from sharing the benefits which they might if large TNCs' shares are listed. The development of stock market may get affected adversely with large and well-known FCCs staying away from it and limiting the future growth prospects of listed affiliates.

The sector-wise distribution of approvals enabled the government to claim that FDI is coming into infrastructure sectors in a big way and to underplay its role in consumer goods sectors. Pattern of inflows, however, give a different picture with infrastructure not figuring prominently. Increasing dominance of foreign companies in consumer goods sectors is a reality. Take-over of Indian companies has been going on in a subtle and gradual manner. Take-over need not always reflect the weakness of Indian companies and brands.[36] The MRTP Act was rendered ineffective in the initial days of liberalisation and the need for setting up a watchdog for overseeing competition in the domestic industry has been ignored till recently.

The High Level Committee on Balance of Payments, in the initial stages of liberalisation, felt that:

(i) Our growth process is substantially determined by domestic savings and investment; foreign investment plays quantitatively very small but qualitatively a significant part (in terms of foreign trade, technology, competition inducements). The strategy, policy and procedures should reinforce the qualitative aspects;

(ii) Government policy towards direct foreign investments has to be discriminating. An open door policy is not likely to produce optimum results unless supported by checks and balances;

(iii) Government should maximise the benefits from the technology brought in by foreign investors. This can be done by identifying the thrust areas/sectors for foreign investments, and working out the linkages so that technology gets absorbed at the earliest; and

(iv) A National Investment Law should be seriously considered codifying the existing policy and practices relating to dividend repatriation, disinvestment, non-discrimination subject to conditions that may be specified, employment of foreign nationals, non-expropriation, and sanction and servicing of external commercial borrowings [RBI, Bulletin, 1993b, August, Pp. 1,139-80].

It is debatable if the experience of the past eight years matches these expectations of the Committee.

NOTES

1. Only five areas remain reserved for the public sector. There is notable revision regarding: generation and distribution of electricity; mining of metalic ores, gypsum, sulphur and diamonds; irons and steel; ship building; aircrafts and air transport, and telephones and telephone cables.

2. Industrial licensing is now confined to industries with 'security and strategic concerns, social reasons, problems related to safety and over-riding environmental issues, manufacture of products of hazardous nature and articles of elitist consumption'.

3. For instance, against the ruling market price of Rs 700 Colgate allotted shares to its parent company at Rs 60. The total amount gained by the parent company in the process was about Rs 720 crore. Similarly, in the case of Castrol, the corresponding figures were Rs 1,050, 110 and Rs 330 crore respectively.

4. For the sake of convenience, here after we shall refer to these as GDR issues.

5. UNCTAD defines foreign direct investment as an investment involving a long-term relationship and reflecting a lasting interest and control of a resident entity in one economy ... in an enterprise resident in an economy other than that of the foreign direct investor ... Foreign direct investment implies that the investor exerts a significant degree of influence on the management of the enterprise resident in the other economy.

6. It is not possible to classify each FC approval as portfolio investment or otherwise.

7. The number of Indian subsidiaries of foreign companies came down from 202 in 1973 to 66 by March 1988. The number of foreign branches had reduced to nearly 300 by 1981 compared to 541 in 1972.

8. These companies could, however, retain full control over their Indian affiliates through restrictive clauses in the Articles of Association of the affiliates.

9. These results hold good even if one excludes cases involving equity hike.

10. Industry classification for individual approvals was not available. This restricts the possibility of cross-tabulations.

11. Also included are: Sugar (0.58 per cent); Fermentation Industries (0.65 per cent); Vegetable Oils and Vanaspati (0.11 per cent); Horticulture (0.07 per cent); Agriculture (0.07 per cent); and Floriculture (0.16 per cent).

12. The large GDR issues include: VSNL (*Rs* 2,625 crore) and SBI (Rs 1,750 crore).

13. Similarly, in the advertising sector, the approvals do not indicate any significant amounts - we could trace approvals for less than 15 crores - but it is well known that the sector is now dominated by foreign advertising agencies.

14. At the time of Independence three quarters of the foreign capital was owned by the British. For understanding the role of colonial rule by the British in this process, (see Kidron, 1965).

15. Indeed, even Singapore and Hong Kong are used for tax saving purposes. This might explain why some of the US TNCs and NRIs sought approvals through these countries.

16. It is reported that the government was planning to associate an American consultant with the foreign investment approval machinery to help improve the situation!

17. Based on a reply in the Parliament it was estimated that consumer Goods accounted for 28.5 per cent of the inflows till March 1996. In addition, automobiles accounted for another 7.1 per cent of the Rs 10,000 crore inflows recorded till that time.

18. Past experience also indicates that factors other than bureaucratic delays could seriously affect implementation of foreign collaboration approvals. For instance, during 1977-81 infructuous collaboration proposals formed 43 per cent of the effective agreements. Inability of the parties to agree on the terms of collaboration, failure of the collaborators to fulfil their commitments and emergence of unfavourable conditions such as imposition of emergency, financial stringency and raw material difficulties were the main reasons cited in this regard.

19. Even though, Sony has set up its operations in the country, its Managing Director said in an interview that 'It will make sense to manufacture in India only if we make not less than half a million sets in India, which will take time' [Indian Express, 1997].

20. The points of contention were: (i) demand for higher share by Hindujas, (ii) tying up crude purchases with private promoters' group companies, and (iii) using the joint venture for marketing the products of private promoters.

21. De Beers, which was initially tipped to get the assignment, is known to market all the produce under their control through their London-based Central Selling Organisation for which they earn a commission. The company controls over 70 per cent of world rough diamond supply. They regulate supply of roughs and in the process are known to delay development of new mines and to cut back production. Russia has been having a tough time in arriving at an agreement with the group and has decided for open tenders for some of its mines.

22. Caparo group was unhappy with IDBI for not agreeing to the higher debt-equity ratio (3:1) suggested by them for financing the project.

23. Press reports (1993) on the project reflect the hollowness of the claims of the promoters.

24. For a few instances of unfavourable terms of collaborations involving NRIs, see (Goyal, et al., 1994). Indeed, one tends to be circumspect about the production buyback agreements and export commitments reported in issue prospectuses involving NRIs.

25. This, however, does not mean that the taken over companies would not get new technology and production capabilities in the future.

26. The problems in dealing with large TNCs are highlighted by a recent case. Dabur India entered into a joint venture agreement with Osem of Israel. Osem agreed to take up a minority stake of 40 per cent leaving the remaining to Dabur and also to allow the joint venture to make all the products manufactured by itself. In the meantime Osem was taken over by Nestle. Nestle was reported to be insisting for a majority stake in the joint venture (Excelsia Foods). (see Economic Times, 1997)

27. At one time Pepsi's entry into *bhujia* marketing was seen as stepping on the traditional Indian terrain. But when Nestle entered pickles and sweets (advertised heavily during the current festive season as *Mithai magic*) no adverse reaction was noticed probably because Nestle refrained from using Bandar *Mithai* or *Bengali* Sweets unlike Pepsi which called its product *Bikaneri Bhujia* after a place in Rajasthan famous for the item.

28. Higher levels of foreign shares were to be allowed depending upon the area of operation and export orientation. Foreign airlines and shipping companies were treated on a reciprocity basis.

29. *Prime Annual Reports* which are compiled by Praxis Consulting and Information Services Pvt. Ltd., are a major source of detailed data on the primary market.

30. This is based on an exchange rate of Rs 32 which prevailed for most part of the period under study.

31. Even though some of them have been set up as joint ventures of listed companies (which gives an option for the local investors to indirectly take advantage of the benefit), the listed companies have been gradually losing control over the JVs.

32. On being asked by the shareholders, the chairman of the company clarified that '(T)here is no proposal at present to delist our securities'.

33. This report was, however, contradicted by the company management later on.

34. It was expected that the approval for a 100 per cent subsidiary by Pfizer would hit the share price of Pfizer India [*Financial Express*, 1999a and 1999b].

35. Nor are the reporting systems streamlined.

36. A case which seems to have important ramifications is the reported move of Novartis to take over Althrocin, the main brand of Alembic Chemicals and also the second-highest selling brand in the country. This case, coupled with Coca-cola's failure to 'kill' Thums-Up, indicates that it is not the weakness of the product/brand per se but the Indian entreprenueir's fear that he may not survive in the new environment and the lure of large money which are responsible for handing over their companies/brands to foreign companies.

ABBREVIATIONS

FCC	Foreign Collaboration Company
FCs	Financial Collaborations
FDI	Foreign Direct Investment
FERA	Foreign Exchange Regulation Act, 1973
FIPB	Foreign Investment Promotion Board
GDR	Global/American Depository Receipts
IDBI	Industrial Development Bank of India
IDRA	Industries (Development and Regulation) Act, 1951.
IPO	Initial Public Offer
MRTPA	Monopolies and Restrictive Trade Practices Act, 1969
NRI	Non-resident Indian
PMP	Phased Manufacturing Programme
RBI	Reserve Bank of India
SAP	Structural Adjustment Programme
SIA	Secretariat for Industrial Assistance
TC	Technical Collaborations
TNC	Transnational Corporation
UNCTAD	United Nations Conference on Trade and Development
UNCTC	United Nations Centre on Transnational Corporations
WOS	Wholly Owned Subsidiary

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Chapter 9
Indian Company Law and Protection of Shareholders' Interest

Resource mobilisation and liquidity aspects of the stock market in India have been analysed in Chapter 8. This chapter focuses on the other important aspect namely, of monitoring of company managements. Along with extensive deregulation of the economy initiated in 1991, the process of revamping the *Companies Act, 1956* (CA) that governs the formation, management, regulation and winding-up of companies was also taken-up. The government sought to replace the existing Act with a new one instead of merely amending certain provisions. The overall thrust was to lessen governmental intervention over corporate affairs and place greater reliance on Board procedures, internal control mechanisms and shareholder participation in decision-making. The initial attempt, in the form of the Companies Bill, 1993, however, turned abortive. A new Companies Bill was introduced in the Parliament in August 1997. The Bill was preceded by a Working Group report[1] and a working draft, which were circulated for public debate. The report was severely criticised for being biased in favour of the managements.[2] Further, the coming into open of the CRB affair and activities of other non-banking financial and plantation companies[3] and to an extent the Chhabria group's revelations and the 'vanishing' of promoters after raising resources from the primary market seem to have led to the incorporation of certain stricter provisions in the Bill.[4] With the dissolution of the Lok Sabha and holding of fresh elections in early 1998, the process got stuck once again.

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1 See: India, Department of Company Affairs, *Report of the Working Group on the Companies Act, 1956*, February 1997.

2 For instance, postal ballot which could have enabled larger shareholder participation in decision-making was not supported by the Group ostensibly due to the shortcomings of the postal system. The suggestion of professional bodies and financial institutions for making Audit Committees compulsory, did not find favour with the Group. It was argued that "in the present milieu, legislating in favour of Audit Committees would be counter-productive, and lead to such situation where such Committees would be often constituted to meet the letter - and not the spirit - of the law". For a critique of the Working Group's recommendations see for instance, L.C. Gupta, ' Working Group to protect promoters", *Economic Times*, May 12, 1997; the series of articles by Shripad R. Halbe in the *Business Standard* during August-September 1997; "Companies Act Report fails to protect interest of small investors: GVR", *Pioneer*, March 17, 1997; "Small Investors get a raw deal", *Economic Times* (Editorial), March 22, 1997; and K.S. Chalapati Rao, "Corporate Sector and Emerging Company Law" in Alternative Survey Group, *Alternative Economic Survey: 1996-97*, Delhi Science Forum, Delhi, 1997.

3 See for instance, "The BT Special Report on NBFCs", *Business Today*, August 7-21, 1997, pp. 73-101.

4 See: "DCA, Sebi to set up joint panel to tame errant promoters", *Economic Times*, February 28, 1998.

While the recodifying exercise was going on, the government introduced a number of changes in the CA as interim measures. Important among these include relaxation of the limits on managerial remuneration, simplifying the procedure for altering the Memorandum of Association and tightening the provisions relating to acceptance of deposits, etc. The most recent one having major implications is the issue of an Ordinance followed by passing of an amendment Bill in March 1999 to allow buy-back of shares, free inter-corporate investments and loans from government control, permit issue of 'sweat equity',[5] set up Investor Education and Protection Fund, etc.

Managements of many large Indian companies are known to rely on the support of public financial institutions for controlling the companies.[6] In the new regime, having been threatened by take-overs the private managements are under compulsion to increase their stakes. This, one expects, would lead to major changes in the shareholding pattern of the large corporate sector. In the smaller companies, however, one would expect larger stakes by the controlling interests. Review of the literature in Chapter 2 suggested that for better monitoring, the shareholding pattern should not be concentrated and that there should be large shareholders who would have the resources, expertise and the need to monitor managements. If, however, the large shareholders also happen to be the controlling interests, this expectation may not be met. It is, therefore, relevant to study whether the emerging shareholding pattern promotes monitoring by the investors and whether the changes in company law effected in the post-liberalisation period improve such a possibility.

Section I
Shareholding Pattern of the Listed Corporate Sector

With official intention to transfer decision-making powers to shareholders, shareholder meeting acquires greater importance. The expectations with regard to effective shareholder participation depend upon the shareholding pattern. If the shares are widely dispersed among large number of shareholders and

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[5] The expression 'sweat equity' would mean equity shares allotted either on discount or for consideration other than cash for providing knowhow, making available the intellectual rights or value addition.

[6] See for instance: S.K. Goyal, "Private Managements and Takeovers of Public Owned Companies", in Ayub Syed (ed.), *The Swraj Paul Factor*, Palakmati Printers, n.d. and S.K. Goyal, "Nature and Growth of the Indian Corporate Sector", Brij Narain Memorial Lecture, delivered at Panjabi University, Chandigarh, January 12-14, 1987.

geographically, in the absence of postal ballot and other forms of indirect participation controlling interests with less than majority stake will have little difficulty in pursuing their objectives. If they own majority equity, there can be little doubt about this possibility. To give empirical dimension to this issue we analysed the shareholding pattern of listed companies. The analysis is based on the shareholding particulars of companies listed at the Bombay Stock Exchange.[7] The data set offers the number of shares held by different types of shareholders namely, foreign, government, corporate bodies, directors and their relatives, top 50 individual shareholders and other individual shareholders.[8] Since the holding of controlling interests are not given separately, it is assumed that the shareholdings of controlling interests will be in the form of shares held by directors and their relatives and inter-corporate investments[9]. It is also assumed that at the present juncture, substantial stake by government and government-controlled financial institutions[10] may be desirable as it can be used to monitor managements through nominating directors to the companies' Boards and participation in shareholder meetings. In case a substantial portion of the shares is held by individual shareholders, the controlling interests will have little difficulty in having their way especially if there is no significant government shareholding.

Out of about 5,600 companies listed on the Bombay Stock Exchange (BSE) during 1998, we could get the shareholding pattern for 3,894 companies. After excluding public sector companies and companies promoted by them and the companies for which the latest information[11] was not available, we were left with 3,388 companies[12]. Out of the 3,388 companies, in as many as 1,611 companies government shareholding was less than 1 per cent. (See Table-9.1) This implies that in a little less than half of the companies, the government does not have any direct

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7 The data was downloaded towards the end of February 1999.

8 *Shareholdings of NRIs, OCBs controlled by them, foreign nationals, foreign portfolio investments* and financial institutions are aggregated under the head 'foreign'. The head 'government' covers the shareholding of term lending institutions, insurance companies, government and government companies, mutual funds, etc.

9. It is possible that some of the individuals among the top 50 shareholders could also form part of the controlling group and not all the inter-corporate investments can be credited to the controlling interests. Given the non-availability of direct information on the extent of shareholding of controlling interests, the above assumption seems to be unavoidable and reasonable.

10 Hereinafter referred to as government shareholding for the sake of convenience.

11 Information prior to 1995 is not considered for purposes of this exercise.

12 The fact that so many companies do not file the share distribution schedules with the stock exchanges, a requirement under the stock exchange listing agreement, may be reflective of the poor state of monitoring of listed companies in India.

Table - 9.1
Shareholding Pattern of the Non-Government Listed Companies*

Equity range (Rs. Cr.)	Government Shareholding# Less Than					Individual Shareholding@ > 40%		
	1%	10%	25%	40%	Total	of which		Total
						Share of Corporate bodies** + Directors & Relatives >25%	Government Shareholding# >25%	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Less than 5	628	859	954	990	999	383	9	523
5 - 10	716	1,075	1247	1,300	1306	486	8	723
10 - 25	204	459	626	685	703	184	8	271
25 - 50	35	97	161	200	211	36	8	72
50 - 100	19	43	64	89	96	10	3	26
100 & above	9	31	56	72	73	8	4	26
All Companies	1,611	2,564	3,108	3,366	3,388	1,107	40	1,641

* The shareholding data refers topost-1995 period.
** Excluding the holdings categorised under foreign and government categories.
# Includes Government companies, public financial institutions, mutual funds, etc.
@ Includes top 50 and other individual shareholdings but excludes shareholdings of directors and relatives.

say. If for effective participation a minimum of 10 per cent of the shareholding is needed, then the government cannot do much in case of three-fourth of the cases.[13] This may be because in the post-liberalisation period many companies relied on raising resources directly from the public instead of depending upon public financial institutions.

Very low or negligible government shareholding is prevalent in relatively smaller companies i.e., those having less than Rs. 10 crores equity capital. In nearly 84 per cent of the companies having less than Rs. 10 crores equity, government shareholding was less than 10 per cent. Many smaller companies were also characterised by high level of individual shareholding. More than half of the companies with less than Rs. 10 crore equity have 40 per cent or more of individual shareholding. It is reasonable to expect that the controlling interests will then have a considerable hold over the companies and shareholder approval in general meetings may actually be a formality. The data also suggests that in the case of companies, with more than Rs. 10 crore equity, fewer companies have low government shares.

Changes in the Shareholding Pattern of Large Companies

It is possible that the transformation of the policy environment might have influenced changes in the shareholding pattern. It was, therefore, attempted to identify the direction of change in the large private sector companies in the post-liberalisation period. Since the necessary shareholding distribution data was not available from a single source, we had to rely on the *Official Directory* of the Bombay Stock Exchange, shareholding distribution data obtained from the Bombay Stock Exchange Website, and a corporate database. In spite of this, we had to assume that shareholding data earlier to mid-1992 represents the position prevailing prior to liberalisation and that for any time after 1995 the post-liberalisation situation. By excluding companies for which shareholding data was not available for both the periods, companies which have got merged, the unlisted ones, public sector companies and those which underwent extensive restructuring, we arrived at a list of top 200 companies based on their ranking in 1989-90.[14]

It can be seen from Table-9.2 that in nearly two-thirds of the cases, shareholding of the government companies declined. In about one-third of the cases the decline was more than 5 per cent. On the other hand, increases of 5 per cent or more occurred only in 13 per cent of the cases. Foreign shareholding had an opposite experience. In 138 cases its share increased while the declines were recorded in 55 cases. Even within these, in a good number of cases, the decline was quite small *i.e.*, up to 1 per cent. While increases of 5 per cent or more were recorded in almost half of the companies, a decline to a similar extent happened in only 20 cases. This general increase in the level of foreign equity could be due to the foreign companies increasing their shareholding to majority, entry of foreign institutional investors, and the increased scope for NRI investment. Corporate bodies, directors and their relatives also, in general, improved their position. Significantly, the shareholding of individuals declined in about three-fourths of the cases. This could be due to apart from the increase in the level of foreign equity to the Indian managements' attempt at consolidating control to evade take-over threats.

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[13] Under Section 169 of the *Companies Act, 1956* The minimum voting strength required for convening an extraordinary general meeting is 10 per cent of the paid-up capital of the company. See: *Guide to the Companies Act*, A Ramaiah, Eleventh Edition, Wadhwa & Co., Nagpur, 1991.

[14] The companies were selected from out of the top 300 and top 1000 companies compiled by the *Business Standard* on the basis of their sales in 1989-90 and 1996-97 respectively. The lists are given in the publications: (i) *300 Corporate Giants: A Business Standard Study*, January 1991 and (ii) *BS 1000 India's Corporate Giants*, November 1997.

Table – 9.2
Change in the Shareholding Pattern of Large Private Sector Companies

(Number of Companies)

	Change in Share (Percentage points)	Government-Controlled Share-holding#	Foreign Holding$	Corporate Bodies**, Directors & Relatives	Individual Share-holders@
	(1)	(2)	(3)	(4)	(5)
	Decline				
1	Less than or equal to -10	27	11	25	51
2	-10 to -5	43	9	16	38
3	-5 to -2	22	9	29	33
4	-2 to -1	22	4	11	8
5	-1	14	22	14	13
	Total Declines (1 to 5)	**128**	**55**	**95**	**143**
6	**No Change**	-	8	-	-
	Increase				
7	0 to 1	12	28	16	9
8	1 to 2	13	10	8	9
9	2 to 5	21	20	16	11
10	More than 5	26	79	65	28
	Total Increases (7 to 10)	**72**	**138**	**105**	**57**

**, # and @ See Table-9.1.
$ Includes equity of foreign collaborators, NRIs, FIIs, etc.

Government shareholding is substantial (25 per cent or more) in a little less than half of the 200 large companies in the post-liberalisation period. On the other hand, in about two-thirds of the cases corporate bodies together with directors and their relatives hold 25 per cent or more of the equity. The number of companies with 40 per cent or more of foreign equity did increase from 40 to 47 but more important changes took place within this range. There are now lesser number of companies with 40-50 per cent foreign equity and more in the 50 per cent and above category. (See Table 9.3) The 47 companies with 40 per cent or more of foreign equity are characterised by low involvement of other corporate bodies, but high shares of government and individuals.[15]

The foregoing results suggest that in the smaller companies managements are in a strong position. The government which could play a balancing role does not have much direct stakes in these companies. On the other hand, in the larger companies, the trends suggest the ongoing attempts by the managements to

[15] A number of ex-FERA companies are known to have incorporated certain restrictive clauses in their Articles of Association at the time of implementation of FERA to give their parent companies disproportionate control over the Indian operations. It is not known whether these clauses have since been removed. For a detailed account of the restrictive clauses see: S.K. Goyal, "The New International Economic Order and Transnational Corporations", in : *The New International Economic Order: Problems and Perspectives*, Indian Council of Social Science Research, New Delhi, 1983.

consolidate their control. Foreign parents have already acquired majority equity in their erstwhile affiliates. The government appears to be in a position to play the monitoring role in a good number of large companies, In the over all, shareholding pattern suggests the need for legislative support for better protection of investors' interest.

Table-9.3
Pattern of Shareholding of Large Non-Government Companies

Percentage Range	Government#		Foreign$		Corporate Bodies*, Directors and Relatives	
	Pre-Liberalisation	Post-Liberalisation	Pre-Liberalisation	Post-Liberalisation	Pre-Liberalisation	Post-Liberalisation
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Less than 5%	14	15	103	71	32	31
5 to 10	17	18	15	19	14	13
10 to 25	67	76	18	39	57	36
25 to 40	72	76	24	24	56	67
40 to 50	21	11	27	13	23	30
50 and above	9	4	13	34	18	24
Total	200	200	200	200	200	200

*, # and $ See Table 9.1.

Section II
Provisions for Investor Protection in the Companies Act

Protecting investor interest, an essential element of corporate governance, cannot be limited to monitoring of whether the capital raised at a particular point of time is deployed for the stated purpose or deposits are repaid regularly along with interest or board meetings are conducted as per the provisions of the Act, etc. An important issue is how to deal with managements' proneness to take decisions benefiting their personal interests and to enrich themselves at the cost of ordinary shareholders. This is truer in case of companies with large public shareholding. There are a number of ways in which managements can enrich themselves at the cost of non-managerial shareholders. Some of the better-known ones are:

- Siphoning off funds in sale and purchase transactions and provision of services;
- Investing in companies in which the managements are interested not caring for their worthwhileness;
- Fixation of prices at the time of mergers, take-overs and unit/share transfers to suit their interest;

- Paying themselves, their close relatives and associates high salaries and perks (who could also be allies in perpetrating frauds);
- Booking personal expenses to company's account; and
- Insider trading in company shares.

In India attempts were made over time to cover these aspects (following major corporate misdeeds or to address to certain prevailing practices).[16] The regulations devised, however, appear to suffer from a number of weaknesses. These are illustrated in the following taking the provisions relating to inter-corporate investments and loans, transactions with companies in which the directors are interested and the effectiveness of the institution of auditors on the one hand and the number of prosecutions for non-compliance of certain provisions on the other.

The number of joint stock companies in India stood at nearly 4.85 lakhs at the end of 1997-98. From Tables-9.4&9.5 it appears that relative to the size of the sector, the number of applications for under select provisions and the number of prosecutions for non-compliance are only a few. It might mean that (a) the constituents of the corporate sector are not unduly constrained by the requirements of the CA, (b) the provisions are inadequate to meet the requirements of the spirit of the law, or (c) the official monitoring system is so weak that the companies are not worried about complying with it or a combination of these. The following description tends to suggest such a possibility.

Companies under the Same Management

In order to avoid siphoning off funds to related companies and excessive investments which could be at the cost of the main entity itself, the CA provided safeguards under Section 370 of the Act. Section 370 1(B) defines companies under the same management of a company. Loans to and investments in such companies have to be made under government approvals. However, criteria for identifying companies under the same management are so weak that well-known large house companies could claim that there were no companies under the same management in spite of the fact that they were registered under the MRTP Act as inter- connected

[16] The most important one is the affairs of Dalmia-Jain house which resulted in the appointment of Vivian Bose Commission. See: India, Ministry of Commerce and Industry, *Report of the Commission of Enquiry: Inquiry on the Administration of Dalmia Jain Companies, 1963*. (Chairman: Vivian Bose).

Table-9.4
Number of Applications Received by the Central Government Under Select Provisions of the Companies Act

Purpose	1995-96	1996-97	1997-98
(1)	(2)	(3)	(4)
Sole Selling/Buying Agents[17]	64	13	40
Loans to directors and relatives[18]	56	67	91
Contracts in which directors are interested[19]	409	445	468
Inter-corporate loans[20]	65	42	42
Inter-corporate investments[21]	632	518	622

Based on India, Department of Company Affairs, *Annual Reports on the Working and Administration of the Companies Act, 1956* and of the Department for the respective years.

Table-9.5
Number of Prosecutions for Select Defaults under the Companies Act

Section	Nature of Default	Cases filed in 1995-96	Cases filed in 1996-97
(1)	(2)	(3)	(4)
63	Mis-statement in Prospectus	4	0
146	Non-maintenance of the Registered Office of the Company	3	1
147	Publication of name by Company	2	2
159/162	Non-filing of Annual Returns with Registrars	1442	1604
166/168	Non-holding of Annual General Meeting	58	90
220(3)	Non-filing of Balance Sheets with ROCs	1503	1507
295	Loans to Directors, etc. without approval of the Central Government	2	1
297	Board's sanction not taken for certain contracts in which particular director is interested	12	2
370	Loans, etc. to companies under same management without approval of the Central Government	3	0
371	Penalty for contravention of Section 369, 370 and 378	1	1

Source: India, Department of Company Affairs, *Annual Report on the Working and Administration of the Companies Act, 1956* for 1995-96 and 1996-97.

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[17] Sub-sections (2) and (3) of Section 294AA of the Companies Act require companies to obtain approval of the Central Government for appointment of sole selling/buying agent in certain products. Subsection (2) applies to those companies in which sole selling/buying agents through themselves or through their relatives hold paid-up capital of Rs. 50 lakhs or 5 per cent of the paid-up capital of the company whichever is less. Sub-section (3) of Section 294AA of the CA applies to those companies whose paid-up capital is Rs. 50 lakhs or more.

[18] Under Section 295(1) of the CA public limited companies and private limited companies which are subsidiaries of public limited companies, are obliged to obtain prior approval of the central government before giving any loan or guarantee in connection with the loans to directors, relatives of the directors or to a private limited company or a firm in which directors of the company are interested.

[19] Section 297(1) of the CA makes it obligatory for companies having paid-up capital of Rs. 1 crore or more, to seek prior approval of the Central Government in respect of any contract to be entered into for sale, purchase or supply of any goods, materials or services or for underwriting subscription of any shares or debentures of the company with a director of the company or his relatives, is a partner, or a private company of which a director is a member of director.

[20] Section 370(1) of CA provides that all public limited companies and subsidiaries of private limited companies have to obtain prior approval of the central government for making any loan to other bodies corporate in excess of the prescribed limits. Before the Companies Act was amended in March 1999, companies were being allowed to give loans and make investments up to 30 per cent of their net worth.

[21] Section 372 of CA regulates inter-corporate investments in excess of the prescribed limits.

undertakings.[22] It, therefore, follows that the safeguards on misuse of loans and investments in group companies could not have been effective. Indeed, the provisions covered smaller groups better than the large ones. It needs to be underlined that `satellite' companies, `promoter associates', `family companies'[23] and similar companies of large houses were not registered under the MRTP Act, thereby implying that even the supposedly stringent criteria under the MRTP Act for identifying inter-connection failed to take the corporate realities fully into account.[24] In this background, the weak criteria for same management would obviously be inadequate to serve its intended purpose.[25]

Inter-corporate Investments and Loans

It is, therefore, not surprising that the number of applications for inter-corporate investment are very few. The rate of rejection of such applications is even lower for the provisions to be restrictive. Business houses circumvented the restriction through floating multiple subsidiaries and investment companies. There are many instances where such companies with nominal paid-up capital were advanced large amount of funds for engaging in take-overs or strengthening the groups' control.[26] Such investment companies were often mere file companies. Moreover, how some houses used the mechanism of inter-corporate investments through circular and cross-holdings is well recorded.[27] Cross and circular holdings help in minimising risk and giving disproportionate control over enterprises and also to present healthy debt-equity ratios.[28] Surprisingly, cross-investments were sometimes even officially allowed. For instance, some of the Kirloskar house

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[22] Such companies include Tata Sons, TISCO, TELCO, Grasim, Birla Cotton, Century Textiles, Ballarpur Industries, J.K. Industries and a host of foreign-controlled companies like BASF, Glaxo, ITC, Nestle and Philips. For a description of the criteria and their drawbacks and more cases see: K.S. Chalapati Rao and Alok Puranik, "Protection of Investors' Interest -- Intention and Implementation: A Case Study of the Concept of Companies under the Same Management", *Company News & Notes*, March 1996, pp. 3-12.

[23] Such terms were used by official committees, in prospectuses and press reports to describe the companies associated with the houses and promoters.

[24] See S.K. Goyal, *Monopoly Capital and Public Policy*, Allied, 1979.

[25] The comment that "In many cases the test applied by this sub-section will prove illusory" in Ramaiah *Guide to the Companies Act*, op. cit. is quite relevant here.

[26] Greaves Cotton, Ceat, J.K. Synthetics and Reliance Industries provide telling examples in this regard. For a commentary on the misuse of subsidiaries see: Vipin Agarwal, "Of subsidiaries and subterfuge", *Economic Times'*, April 23, 1997.

[27] See for instance, R.K. Hazari, *The Structure of the Corporate Private Sector*, Asia, 1966 and V.K. Singhania, *Economic Concentration through Inter-corporate Investments*, Himalaya, 1980.

[28] For different varieties of inter-corporate linkages prevailing in the Indian corporate sector, see: S.K. Goyal, supra note 6.

companies were allowed to acquire each other's shares, all in a single month.[29] In a classic example, each of three foreign tea companies issued shares to the other two as part of FERA dilution strategy.[30] The efforts of Tata House at strengthening their position through inter-corporate investments are further evidence to the fact that even large companies would not hesitate to take advantage of this instrument. [31] Being concerned with strengthening their positions, business houses cannot be expected to exercise restraint and are likely to resort to such mechanisms in a significant manner.

Contracts in which Directors are Interested and the Role of Auditors

As per the Manufacturing and Other Companies (Auditor's Report) Order, 1988, (MAOCARO) auditors have to comment upon the reasonableness of the amounts received in pursuance to contracts maintained in the register under section 301 of the CA. The register refers to contracts entered into by the company with companies/firms in which the directors of the company and their relatives are interested. The scope of interpretation of the guidelines under MAOCARO is, however, so wide that transactions where directors are interested can escape strict scrutiny by auditors. The guidelines state:

> In determining the reasonableness of the prices, the auditor should take into account all the factors surrounding the transactions of purchase or sale such as delivery period/schedule of implementation, the quality of the product/service, the quantity, the credit terms, the previous record of the supplier/buyer/client, etc.

Moreover, while the MAOCARO covers the sale of services, purchase of services by the reporting company are not covered. Such loopholes can obviously facilitate siphoning off funds for personal gains.

Auditors are also required to qualify their report in case the practices followed by the companies are not in accordance with the norms set by the Institute of Chartered Accountants of India. The managements in their turn, are duty-bound

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[29] Each of the companies were to invest in shares of the other company whose value was almost equal to the share it would be taking in the former. For instance, Kirloskar Brothers Ltd was to purchase shares of Kirloskar Oil Engines Ltd worth Rs. 21.48 crores and Kirloskar Oil Engines Ltd was to take up shares of Kirloskar Brothers Ltd costing an equal amount.

[30] These were Mcleod Roussel, Namdang Tea and Moran Tea.

[31] TISCO's lending money to its subsidiary, Kalimati Investments, and the subsidiary in turn investing in the shares of Tata Sons constituted a roundabout way of TISCO financing the acquisition of its own shares by Tata Sons through the medium of its own investment subsidiary. Opinion in legal circles pointed to the possibility that the company might have violated the spirit, if not the letter, of the law relating to financing acquisition of shares. See: "Investments by Subsidiary: Tisco Denies Law Violation", *Hindu Business Line*, July 25, 1996.

to explain the deviations and discrepancies. In practice, however, auditors' qualifications, many a time, were neglected by the managements. This fact was acknowledged even by the Secretary, Department of Company Affairs, when he admitted that 'the time had come for the Government to take serious note of the auditors' qualifications in the annual reports'.[32]

Certain cases of close association of auditors with controlling interests, which came to our notice, suggest that the auditors are more likely to take a view favourable to the management given the wide scope for interpretation noted above. When a person sits on the Board of one company and audits the accounts of another company belonging to the same group,[33] or a father sits on a company's board and the son audits the same company's or group companies' accounts,[34] or some group companies' registered offices are given as care of the auditors of other companies within the group,[35] a question arises whether an arms-length relationship between the company/group and the Auditors can exist in practice. The experience of the networks of companies which came to the public in the stock market boom of the mid-'eighties provide multiple instances where the distinction between brokers, auditors, signatories to the Memorandum of Association and company directors could hardly be made.[36]

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[32] See: "Need for better corporate governance stressed", *Hindu Business Line*, May 13, 1998.

[33] Shri Y.H. Malegam is the Director of Tata Tea and its subsidiary Consolidated Coffee. Earlier he was director of TOMCO. He signs the accounts of TISCO, TELCO and Tata Power being a partner of S.B. Billimoria & Co., who are auditors for a large number of other Tata companies.

[34] The following extract from Reliance Industries' prospectus is self-explanatory.

> Shri J.R. Shah, Director of the Company is deemed to be interested to the extent of the fees paid and/or payable by the Company to Rajendra & Co., Auditors of the Company for services rendered and/or to be rendered in their capacity as the Company's Auditors and/or other professional services by virtue of his son being the Proprietor of Rajendra & Co. Shri J.R. Shah is also deemed to be interested to the extent of the fees paid or payable by the Company for services rendered and/or to be rendered in his capacity as the Company's Tax Consultants.

See: Prospectus of Reliance Industries Ltd issued in connection with the Public Issue of 19,20,000 Debentures in June 1981, p. 20.

[35] Vidyarthi & Sons were the Auditors of Indore Exporting & Importing Co. Ltd and some of its subsidiaries; Punjab Produce & Trading Co. Ltd. Addresses of some of the Birla companies in Gwalior were given as "C/o Vidyarthi & Sons, Chartered Accountants 3-L Gandhi Nagar, Gwalior". These were: Central India General Agents Ltd., Central India Industries Ltd., Gwalior Commercial Co. Ltd., Gwalior Finance Corp. Ltd., and Ujjain General Trading Society Ltd. The firm was also auditing the accounts of Grasim. Another interesting case is that of C.C. Choksi & Co. C.C. Choksi & Co., have been the auditors for a number of Mafatlal companies including Mafatlal Industries, NOCIL and Standard Industries. We noticed that about 40 trading/investment companies were registered at Mafatlal Centre, Nariman Point, Bombay with the registered office addresses given as C/o C.C. Choksi & Co.

[36] The case of CRB group provides a relevant example here. For instance, Mr. C.R. Bhansali audited the accounts of Likhami Holdings Ltd. (1985-86), Sidh Exports Ltd. (1981-82). While his father was on the board of these companies. There are a number of other companies in which there were Bhansalis and located at the addresses known to be associated with the CRB group (D-33 Mansarovar Garden, Delhi and F-133 Canning St., Calcutta) on the Board which were audited by Mr. Bhansali. Incidentally, the

Non-filing of Statutory Documents

Another important facet of poor monitoring of the Indian corporate sector is that even the status (where they are and what they do) of more than half of the nearly 5 lakh companies is not known as they do not file their annual reports with the Registrar of Companies. Given the nature of growth of the sector with high concentration in major cities, company registration in clusters,[37] one can only expect that non-reporting was either wilful or the companies were made to be defunct after they had served out their purpose. For instance, out of a little more than 2 lakh entries in the *Directory of Joint Stock Companies in India, 1990* for as many as 74,000 no financial data was reported, presumably due to non-receipt of annual reports. Nearly two-thirds of the non-responding companies were registered during the 'eighties. The non-reporters include both large and small and public and private limited companies. It is, therefore, not possible that all of these were defunct and hence did not report any financial data. Non-response could even be attributed to management strategy. Particularly it cannot be said that large companies and the small companies floated by persons managing large companies are not aware of the statutory provisions.[38]

In spite of large number of companies not filing annual reports, the number of prosecutions launched during 1995-96 and 1996-97 were only about 1,500. (See Table-9.5) Newspaper reports indicate that the government becomes active and launches prosecutions against companies not filing annual reports only when a group gets involved in some major scandal.[39]

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other auditors associated with the group at that time later appeared as auditors to CRB Capital Markets Ltd., a merchant banking company, also engaged in leasing and other financial services and which came to the public twice in the early 'nineties.

37 See K.S. Chalapati Rao, "Growth of the Indian Private Corporate Sector: Some Characteristics and Trends", *Company News & Notes*, August 1997. This aspect was further highlighted in India, Central Statistical Organisation, *Report of the Working Group No. 5 (Commerce, Industry and Corporate Sector Statistics)*, November/December 1998. The Working Group noted that "Besides serious data gaps on the sector, there is uncertainty even about the size of the sector itself. Due to extensive non-filing of annual reports, even the number of companies in operation is not known with any reasonable degree of accuracy" and recommended a one-time Census to identify the existing ones and deregister the bogus ones.

38 See K.S. Chalapati Rao and K.V.K. Ranganathan, "Directory of Joint Stock Companies in India 1990: A Review", Institute for Studies in Industrial Development, August 1992. The report was presented to the Department of Company Affairs.

39 For instance, the issue of 'vanishing companies' had to be brought to the notice of the Department of Company Affairs (DCA) by SEBI and the stock exchanges. The non-committal and evasive response of the DCA to this matter is reflected in its recent release. The DCA noted:

> The Capital market had witnessed a boom period during 1993-94 & 1994-95 when many new companies have tapped capital market and collected funds from the public through issue of shares/debentures and fixed deposits. Of late, it has been noticed that many of these companies have defaulted in their commitments made to the public while mobilising funds. Some of these

Section III
Companies (Amendment) Act, 1999

Buy-back

Following persistent demands of the private sector for freeing inter-corporate investments and for allowing share buy-back, the government acceded to the demand through an emergency measure: first by issuing an Ordinance and following it up with an Amendment Act in 1999. The Amendment provided for buy-back of shares, freeing inter-corporate investments and loans from government control, permit issue of 'sweat equity', set up Investor Education and Protection Fund, etc. None of these, however, cover the shortcomings described above. Buy-back means that a part of the share capital of the company will be purchased by the company itself from individual shareholders who are willing to sell their shares.[40] The consequent reduction in capital will help listed companies to increase their share prices although neither the physical performance nor the profitability of operations may have improved. Profits generated are compared against a smaller amount of owners' capital and hence the possibility of increase in share prices. Ostensibly, buy-back helps companies by relieving them of idle surplus funds, as companies, instead of investing in unrelated and high-risk expansions, can use the funds to increase shareholder value. It is argued that buy-back provides liquidity to listed companies, which are not well traded, and brings a degree of momentum to their share prices. It is also said that both the sellers and those who hold on to their shares will benefit

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companies are not even traceable. ... Though, it is for the concerned stock exchanges where the shares or debentures of these companies are listed to ensure that the companies comply with requirements under the listing agreements and the primary responsibility to monitor the working of such listed companies vests in SEBI/Stock Exchanges, instructions were issued by the Department to its field organisations with a view to take timely action for violation, if any, of the provisions of the Companies Act, 1956 and to enlist assistance of police authorities and general public to ascertain the whereabouts of such companies. ... Further measures are also being taken by the Department for making laws more stringent against the defaulting companies. For this necessary amendments and additions to Companies Act are being studied.

Ironically, in nearly two-thirds of the cases the DCA launched prosecution/issued default notices to the companies for not filing Annual Returns and/or Balance Sheets. See: http://www.nic.in/dca/vanishcos.html.

[40] The main provisions of the buy-back formulated by SEBI are: i) a special resolution has to be passed in general meeting of the shareholders; (ii) buy-back should not exceed 25 per cent of the total paid-up capital and free reserves of the company; (iii) the post-buy-back debt equity ratio should not be more than 2:1; (iv) a declaration of solvency has to be filed with SEBI and ROC; (v) the shares bought back should be extinguished and physically destroyed; (vi) the company should not make any further issue of securities within 2 years (except bonus, conversion of warrants, etc.); and (vii) the buy-back should follow SEBI guidelines.

from buy-backs. Because of these expectations, on its part, the Government could have hoped that buy-back will revive the stock market that had been languishing.

Limiting management's shareholding may be necessary because if the managements have unassailable control over the companies under their charge, they are less likely to bother about minority shareholders. [41] It is easier for them to get through whatever they wish at the shareholder meetings. Any move, which inhibits the expected role of AGMs may not be desirable. Only then the qualification of 'widely-held' for listed companies will be appropriated and the objective of resource mobilisation through stock exchanges meaningful. In addition, in the new policy regime, foreign investors are keen to increase their holdings in their Indian affiliates and subsidiaries. Transnational corporations may increase their already high shares without bringing in additional capital by taking advantage of the buy-back provision.

Since the immediate use of buy-back will be as a shield against hostile take-overs, it goes against the very logic of stock market discipline. Take-over threat is one major characteristic of the stock market which forces managements to act in the overall interest of shareholders instead of taking decisions purely on personal profit motives. Since buy-back will blunt that disciplining characteristic of the stock market it may be undesirable from the point of developing a healthy stock market in India at the present juncture.

SEBI, while allowing different modes of buy-back, placed a restriction that promoters should not participate in buy-back through the stock exchange mode. This restriction of SEBI does not appear to have much relevance. In the context of buy-back being used to strengthen managements' control over the companies by using company resources, the managements cannot be expected to reduce their holdings by selling their shares to the company. Secondly, SEBI has an elaborate definition of a promoter and places obligations on listed companies to continually disclose promoter shareholding. For instance, every company whose shares are listed on a stock exchange, has to make yearly disclosures to exchange, the changes, if any, in respect of the holdings of the persons owning more than 10 per cent of the shares of the company and also holdings of promoters or person(s) having control over the company. It should be illuminating to know how many companies file

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[41] See: L.C. Gupta, "What Ails the Indian Capital Market?", *Economic and Political Weekly*, Vol. 33 Nos. 29-30 pp. 1961-66.

these particulars with the respective stock exchanges. This is particularly relevant in the context of a significant number of companies not filing even the share distribution schedules. Given the tendency of corporates to conceal information for obvious reasons, the existence of multiple companies within each group, one can judge the extent of information filing and its quality only if it is available publicly. It is also relevant to find how this information is monitored and by whom because this has implications for curbing insider trading.[42]

Inter-corporate Investments and Loans

Removal of the restrictions on inter-corporate investments and loans, is another demand of the managements. Prior to the amendment, companies were authorised to invest up to 30 per cent of their paid-up capital and free reserves. Salient features of the Amendment are:

i) companies can give loans, guarantees or invest up to 60 per cent of the paid-up share capital and free reserves or 100 per cent of its free reserves, whichever is more;
ii) for exceeding the limits the company should get the authorisation of the general meeting through a special resolution;
iii) loans cannot be made to other companies at lower than the prevailing bank rate of interest;
iv) all loans, investments and guarantees should be approved unanimously by the members of the company's board present in the meeting; and
v) if any term loan is subsisting, prior approval of public financial institutions is essential.

By implication, the provisions suggest that non-investment companies after getting necessary approvals can invest all owned funds in other ventures keeping no owners funds with themselves. In such a situation, one wonders whether the purpose of such companies will be to invest in other companies or to do business of their own. Even the revised limit of 60 per cent of paid-up capital and free reserves is so high that unscrupulous managements can easily siphon-off funds. Once the money is invested, the investing company's board can have no control over the manner in which the amount is put to use. The requirement of unanimous agreement of the directors present can probably be circumvented by selective absence of

[42] In this context, it may be noted that the Bombay Stock Exchange (BSE) placed the shareholding pattern of only about 3,900 companies on its website out of more than 5,800 companies listed with it. For more than 1,200 of these companies, the information was dated and refers to 1996 or earlier. This is in spite of the fact that listed companies are obliged to file share distribution schedules with the stock exchanges.

directors who do not wish to be a party to such a decision. Given the shareholding pattern noticed earlier there is no possibility of finding 'outside' directors in a vast majority of listed companies' Boards. This renders the expectation of selective absence of Directors even more hypothetical. The stipulation that companies should seek approval of public financial institutions in case of subsisting term loans is , however, welcome.

The measures contained in the *Companies (Amendment) Act, 1999* namely, buy-back, inter-corporate investments and sweat equity on the one hand and enhancing the limits for creeping and substantial acquisitions under the SEBI take-over code on the other, enable managements to consolidate their control. The other measures contained in the Amendment Act, namely, nomination facility and setting up of Investor Education and Protection Fund do not serve the purpose of increasing managements' accountability. The crucial nature of safeguarding control for the managements is further evident from the manner in which buy-back was permitted even in the midst of a hostile take-over attempt.

Further Amendments to the Companies Act

The Companies (Amendment) Act, 1999 did not cover many of the restrictive provisions of the 1997 Bill namely,[43] appointment of a Chief Financial Officer by listed companies having paid-up capital of Rs. 3 crores; need to obtain a Compliance Certificate from a Company Secretary; vastly enlarging the scope of Officer-in-Default (especially to include the auditor); mandatory constitution of Audit Committee by every public company with a paid-up capital of not less than Rs. 5 crores; compulsory retirement of auditors every five years; allowing proxies to vote in a show of hands and to speak at shareholder meetings; prescribing minimum paid-up capital for companies; empowering the Central Government to appoint a Director General of Inspection and Investigation; and postal ballot.[44]

On its part, the Companies Bill, 997 itself needs improvement in a number of important respects. It has, instead of improving the provisions, liberalised some of them to such an extent that managements will have greater freedom to achieve their objective if the associated mechanism is not strengthened. For instance, the Bill seeks

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[43] The provisions of the 1997 Bill relating to non-voting shares, group resource companies, share buy-outs and decrease in the number of relatives for purposes of Company Law which are in favour of the managements did not form part of the Amendment.

[44] SEBI is reported to have supported the incorporation of postal ballot in the *Companies (Amendment) Act, 1999.*

to reduce the number of relatives thereby increasing the scope for transactions in which the directors could have an interest. The Bill expects that it will be enough if the shareholders are aware of the existence of certain information. Filing of information with the registrars does not serve much purpose unless systematic and easy access is possible. Listed companies' performance and managements' role in it should become public knowledge. With regard to many provisions aiming at investor protection, SEBI has only a limited role to play. The company law and accounting standards, therefore, have to be strengthened. It should be noted that even the Confederation of Indian Industry (CII), a leading industry association, admitted that about 70 per cent of companies are still not committed to the corporate governance principles.[45]

The Bill leaves the scope of postal ballot (which improves shareholder participation) to be defined by the Government. The least that could have been done is to clearly specify certain situations like mergers, asset sales, buy-back, etc. where postal ballot has to be followed and give the government powers to further enlarge its scope. Even the earlier little-used provision which enables companies to follow proportional representation for election to the Board of Directors has been left as such without making it mandatory. Similarly, the weak criteria for the 'companies under the same management' has been left untouched. Further, given the nature of large number of private limited companies that have been registered during the past one and a half decades and the undeniable existence of multiple unlisted companies owned and controlled by persons managing public limited companies, the proposed relaxation on private limited companies may not be justified.

Besides the erstwhile minority-owned companies, and partially owned subsidiaries, foreign companies are being allowed to set up wholly owned subsidiaries. Such wholly owned subsidiaries generally take the form of private limited companies. The proposed changes may for many practical purposes close access to information on such companies. Unless minimum disclosures are made obligatory, it may be difficult even for the government to effectively monitor the operations of foreign companies in India. In case of transnational corporations (TNCs)

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[45] The Director General of CII is reported to have described such companies as "corporate cowboys" and that those are characterised by "too much debt, too little equity, too much fund diversion, too little corporate governance, too much insider trading, too little attention to shareholder value, too much cross-holding, too little focus, too many projects and too much nexus with government and political parties". See: "Corporate Governance? Umm.. come again", *Economic Times*, November 9, 1999.

the concept of director's interest appears to be quite ineffective. Indian company law does not have the reach to cover transactions of TNC affiliates in India with their worldwide associates. For instance, there is a remote possibility for Indians who are on the Boards of TNC affiliates in India, to be directors or significant shareholders of the parent company. Even expatriate directors would be on the Boards of a limited number of foreign affiliates; particularly those located within a specified region. If India is covered by a regional head, based say in Singapore, Indian affiliates' transactions with the TNC head quarter, say in USA, or affiliates in other regions, are unlikely to be attracted by the existing provisions because none of the directors of the Indian affiliate would be on the board of the parent company nor the `parent' has any *direct investment* in the Indian affiliate. The directors can favour the parent company through transfer pricing without attracting company law provisions. In the case of TNC subsidiaries shareholder interest need not necessarily coincide with that of the host economy.

Section IV
Summing Up

Effective safeguards should have been put in place before granting the private sector freedom. Freedom to managements without making the general meetings meaningful, directors accountable, decision-making broad-based and minority shareholders' rights strengthened, may prove to be harmful. The experience of the past few years when companies raised money from the public and 'vanished' afterwards, increased promoters' stake at below the market prices, managements consolidated their control through cross-holdings, adapted blatantly biased pricing norms while de-subsidiarising, etc. clearly demonstrate that managements of companies small or large or TNCs, do not hesitate to pursue their own interest at the cost of other shareholders disregarding ethics or public criticism.

The phenomenon of contested take-overs of listed companies, an essential element of the disciplining aspect of stock markets, has not yet manifested itself in any meaningful manner in India. The introduction of new provisions for share buy-backs, the liberalisation of the norms on inter-corporate investments in India's Company law and the sanction that allows managements to increase their shares substantially without making public offer have further reduced the take-over threat. Thus, in a good number of cases the stock market does not provide a market for

corporate control. Given the shareholding pattern of the listed companies, one cannot expect monitoring and disciplining by the shareholders to effective. Other institutional mechanism in the form of amendments to the Companies Act to allow greater participation of shareholders, unambiguous and effective rules and guidelines, better disclosures and dissemination, etc. need to be given priority.

Chapter 10

Summary and Conclusions

The foregoing studies have examined a number of aspects relating to capital flows and stock market development relevant for policy makers and academics in both developing and developed countries. It has been shown that one of the big threats to the financial stability of developing countries is the stock of short-term debt to foreign banks. While much has been said about the dangers of short-term global capital flows of a speculative nature, the main danger of capital flows appears to emanate from foreign bank credit. In lending to the private sector international banks must be satisfied that in the period under consideration the country can generate a sufficiently large surplus on the balance of payments to provide the borrowing companies the foreign exchange necessary to repay the loans. If each bank were to stop lending on the basis of any uncertainty in this regard, the expectation would become self-fulfilling. The banks might anticipate an exchange rate correction that would lead them to stop rolling over their loans. The ensuing "bank panic" would make the exchange rate correction unavoidable.

Although very moderate in comparison to the Mexican and Korean crises, the Indian crisis of 1991 is an example of a "bank panic". It is probably a better example than the other two cases because of the small amounts involved and because of the relative unimportance of the external sector to the Indian economy. The principal account responsible for the decline in capital inflows in 1991 was the decline in bank loans to the monetary authorities, the government and the domestic banks. The Indian crisis of 1991 clearly highlights, even more than in the two other cases, the vulnerability of a developing country to the vagaries of the international financial system. Developing countries should, therefore, carefully monitor both state and private indebtedness in relation to foreign exchange reserves. Secondly, since the danger does not appear to come from the speculation of small portfolio investors it appears reasonable to relax the regulations on portfolio and direct investment in order to attain the same or increased capital inflows. This could be accompanied by a smaller exposure to international banks. Implied in this is the suggestion that

capital flows through stock markets may be preferred to bank lending as the problems get resolved faster in the former than in the latter in a crisis.

The IMF's role as mediator between the developing countries and the banks needs to be reviewed because the concerns of the IMF have boosted the negotiating capacity of banks and have prevented them from negotiating the value of their claims. Devising a debt-equity conversion mechanism that does away with the 'seniority' of the banks is another recommendation that needs serious consideration. Such a mechanism would lead to prompt restructuring of firms in trouble as a result of their own actions as well as those that may encounter financial difficulties because of economy-wide changes such as modification of the exchange rate.

Empirical estimation revealed that in some instances the standard, efficient market hypothesis, capital flow model could be rejected in favour of the technical trade capital flow model. This result suggests that there may be a positive feedback mechanism that may drive the economy away from equilibrium. Thus, the freedom of global capital flows together with a technical trading strategy may cause capital inflows to be greater than they should. This in turn may lead to an overvaluation of the currency, induce an unsustainable balance of payments deficit and set in motion the eventual financial and economic crisis.

Another question of theoretical and practical importance in emerging market economies is whether investment in the stock market will serve as a hedge against devaluation. The empirical results show that the CAPM beta does not seem to incorporate the information given by the ratio of exports to sales, the relation between foreign debt and assets, the percentage of bank debt, the growth of sales, the commerce and the construction variables. The latter are important characteristics that determine the valuation of a stock after a devaluation. Thus, investors who pay attention to the characteristics mentioned above may protect themselves against the adverse effects of a devaluation. The increased interest of investors in companies having these characteristics implies that additional resources would flow to companies that do well in international markets and those not relying heavily on debt.

The studies on the Indian stock market revealed that in spite of its known shortcomings, the stock market was promoted alongside liberalisation without putting the necessary regulatory framework in place. While the initial steps to free stock market entry were taken in quick succession as a part of SAP, the essential legal

and institutional mechanism was slow to evolve. The new regulatory body, SEBI, was too inexperienced to meet the challenge of market regulation and failed to prevent private promoters from misusing the new freedom and avoid the series of scams of varying magnitudes and types that followed. Sudden deregulation thus seems to have created chaotic conditions with every one trying to take advantage of the situation. The official response was unfortunately characterised by long drawn investigations, procedural delays and a slow acting judiciary. While no one was penalised for the 'primary market scam', it took almost seven years for the courts to sentence the alleged kingpin of the 1991-92 stock scam. Even then the indicted one promptly obtained a stay from the higher court. The process understandably brought a lot of discredit to the stock market. On its part, the government was slow to delegate powers to SEBI and there were even disputes about its jurisdiction.

The abrupt change to a market-based system denied the general investor the time to adjust to the new situation where the public financial institutions, the industrial licensing system and finally, the capital issue control mechanism could no longer be relied on to assure the viability of investment projects. The typical investors were neither in a position to understand the nuances of investing in new issues having no long term track record nor ready to appreciate the risk factors. As a matter of fact, even SEBI observed that the investors ignored the risk factors revealed in the issue prospectuses of the so-called 'vanishing companies'.

After experiencing a boom in the early years of liberalisation, the primary market almost dried up as investors lost confidence and households shifted away from investing in shares and debentures. Companies had to opt for loans from banks and financial institutions denying the stock market its resource allocation role. SEBI had to tighten issue norms to prevent further damage thus hampering the primary market once again. The non-responsive primary market also affected public sector divestment targets and the plans had to be deferred repeatedly.

Since the investor confidence in the market has been shaken, the response to the repetitive attempts by the government at reviving the market proved to be short-lived. For liquidity reasons investors progressively limited themselves to select scrips. Trading got increasingly concentrated and trading volumes were increased mainly through greater speculation. The government, instead of taking a firm stand and enforcing the measures designed to curb unhealthy speculation, the hallmark of stock exchange trading in India, diluted these measures following pressure from the

stock-broking community. In the face of increasing turnover, the concentration in trading manifested itself in a number of ways: (i) nil or very infrequent trading in an overwhelming number of companies; (ii) concentration of trading in only a few centres; (iii) increasing concentration both in value and number of trades terms; and (iv) dominance of a few sectors in trading. The heavy emphasis on a few companies has its reflection in the lack of liquidity of the remaining ones. The investors' reliance on a limited number of scrips has implications for the market's volatility. Since in an overwhelming number of companies there was either no or very little trading with very low volumes, investors hardly had a chance to learn the real value of their shares. Moreover, the sale of these shares proved to be very difficult and the situation may indeed be growing worse.

While the National Stock Exchange, which was to specialise in medium-sized companies, counts on a number of large companies which are also listed on the BSE, the Over the Counter Exchange of India, meant for smaller companies, has become virtually defunct, hurting the interests of small companies. This is contrary to the expectation that medium and small-sized companies would gain better access to capital market.

The studies indicate that foreign institutional investors focus on a few large companies. Their investments were narrowed to an even smaller number of liquid stocks ones over the period of time in question. Thus, permitting FIIs to invest directly on the Indian stock exchanges and enabling wider investor base did not seem to have helped to improve the liquidity of the stock market as a whole as their investments were restricted to a few scrips. The common approach of the FIIs and the India-registered mutual funds managed by them, coupled with the influence they came to exert on local investors' trading and investment patterns seem to have further contributed to the concentration in trading and excessive focus on certain sectors to the neglect of others. The local investors, not being well versed in stock market investing, perceived FIIs to be investing on well-researched strategies and followed them like a herd and contributed to periodic upswings and downfalls of the market. Moreover, since there are only a few active FIIs, if at any time there were flight of capital there would be a crash and financial crisis. Given the extent of ups and downs in share prices caused by FIIs, it is reasonable to expect that the volatility would have been far more severe if there were no major local institutional investors.

The size of the holdings and internal resources with these institutions will be an important factor in containing the volatility induced by FIIs.

At the aggregate level there is evidence of a direct relationship of FII operations and share price movements in Indian stock exchanges. Net investments by FIIs started their decline in the third quarter in each of the years to reach the minimum in the last quarter. Correspondingly the BSE sensitive index also fell in the last quarter. The compulsion on FIIs to book profits in the last quarter introduced an additional dimension to stock market trading unrelated to the fundamentals of the economy.

By 1998, trading on Indian stock exchanges came to be centred on consumer non-durables, pharmaceutical and computer software sectors on which the FIIs started focussing after 1996. Since the first two sectors are dominated by FDI companies the rise in share prices and consequential higher price-earning ratios in these sectors may not be relevant in terms of resource mobilisation by these sectors. The only sector that seems to have benefited from this phenomenon is the computer software segment. Apart from this sector, if the price-earning ratios do not rise for the smaller companies due to the above mentioned regulatory problems it is the few larger ones which benefit from FIIs trading. In conclusion, it is difficult to visualise how the entry of portfolio investors could contribute to reducing the cost of capital for the small and medium companies.

Foreign portfolio investors operate in multiple forms. It appears that in India these inter-linkages have not been taken into account while determining individual ceilings. If developing countries wish to monitor investments by foreign portfolio investors from the point of cornering of shares, destabilising the market, the take-over of local companies, inter-branch transactions by the foreign portfolio investors to manipulate prices and tax liability, they need to develop a much broader information network than what India has been able to set up so far.

The studies designed to construct industry-level share price indices revealed that consumer non-durables, pharmaceuticals and computer software – favourites of FIIs -- emerged as high performers at the stock exchange. The extent of price declines in the case of important basic and capital goods sectors unfortunately has never got reflected in the price indices referred to as barometers of the market mood. The wide differences in price movements of different sectors indicate the need for

policy makers to pay better attention to sectoral level indices instead of focusing on day-to-day movements in share price sensitive indices.

The heavy emphasis on trading in high-profit and quick-yielding sectors may indicate that for financing infrastructure, and long gestation projects, India may not be able to rely on the stock market. In this context, the role of development financial institutions should not be undermined. In the post-liberalisation period, these institutions also came to be listed on the stock exchanges thereby making them subject to market pressures. It needs to be studied if this has influenced their approach at funding basic industries and infrastructure sectors.

In the context of stock market development being advocated as a means of attracting capital flows, the fact that Global Depository Receipts contributed amounts comparable to that of FII investments on the Indian stock market raises some important issues. *First*, FIIs did not contribute directly to the new investments in a substantial manner. In contrast, GDR issues are a net addition to the resources available to the companies. Second, capital flows in the form of GDR issues are not known to introduce the type of distortions attributed to FII investments. GDRs may thus be seen as a viable and preferable alternative to FII investments in the local stock market.

In the post-liberalisation period many foreign direct investors opted to set up local subsidiaries bypassing their own listed subsidiaries and affiliates. This was also reflected in the declining importance of companies with substantial foreign equity in the new issues. The possibility of the unlisted affiliates and subsidiaries being shown preference over the listed ones by the foreign investors has been worrying the investors and they have started expressing their unhappiness over this development. It has been also brought out that most new FDI projects, especially the larger ones, are unlikely to seek listing on local stock markets and hence certain sectors especially automobiles, telecommunications, power, etc. may progressively get under represented on the stock market.

The ownership structure of listed companies that emerged leaves little scope for monitoring by the shareholders in a vast majority of companies. Government-controlled shareholding in a large number of small companies is too small to be able to influence managements' decisions in shareholder meetings. The efforts at revamping the *Companies Act, 1956* that would have helped in strengthening the monitoring mechanism, however, got severely bogged down. The phenomenon of

contested take-overs of listed companies, an essential element of the disciplining aspect of stock markets, has not yet manifested itself in any meaningful manner in India. Moreover, the introduction of new provisions for share buybacks, the liberalisation of the norms on inter-corporate investments in India's Company law and the sanction that allows managements to increase their shares substantially without making public offer have further reduced the take-over threat. Thus, in a good number of cases the stock market does not provide a market for corporate control. Since the shareholding pattern does not support stock market discipline, and investor activism is yet to take an organised form, other institutional mechanism in the form of amendments to the Companies Act to allow greater participation of shareholders through postal ballot, etc. need to be given serious thought. In cases where managements have a majority or high stakes, the effectiveness of ordinary shareholders even with introduction of a postal ballot will be limited. In such a case, mere disclosures would not serve the purpose and more direct measures would be required to protect shareholders' interest. It is worth considering if and how the controlling interests use their voting right in special situations like the transfer of business to affiliates and transactions with affiliates. A number of provisions of the Companies Bill, 1997 such as setting up of Audit Committees and expanding the scope of 'officer-in-default' aim at better governance by company managements. While it is inexplicable why these were not made statutory along with share buy-back and relaxation of the limits on inter-corporate investments, these should be incorporated into the Companies Act at the earliest.

The deadwood on the stock exchanges has to be weeded out and regulation of entry, disclosures, trading and monitoring of intermediates should be given emphasis. Given the comparatively ill-informed nature of the domestic small investors, the stock exchanges and SEBI should provide for shareholder education on reading and interpreting company documents and also strive to make the relevant information easily available. In view of the poor liquidity in an overwhelming number of stocks, efforts should be directed at providing the investors an exit route through mechanisms like market makers. Experience shows that there is a conflict between liberal FDI policy and stock market development. Policy makers have a difficult choice to make in this regard. In any case better monitoring needs to be introduced when transactions take place between a listed affiliate and an unlisted one of the same TNC. Also, allowing higher stakes for managements may serve the

purpose of protecting the managements but does not promote disciplining by shareholders nor does it allow take-over threat to work.

The studies on India demonstrated that the promotion of stock markets in a weak regulatory environment might not produce the anticipated financial and economic development. They confirmed the existence and continuation in India of the weaknesses identified with developing country stock markets. Evidence suggests that portfolio capital flows instead of helping the market overcome these limitations might, on the contrary, introduce certain distortions. Stock markets will have to be developed as a part of domestic corporate financing options and attracting foreign portfolio investors cannot be a substitute for domestic policy formulation and institutional development. India's case suggests that unplanned liberalisation can prove counter-productive if, as is often the case, bringing in the necessary institutional structure takes longer than initially expected.