SUMMARY AND CONCLUSIONS

The present study has analysed the financing choice and determinants of investment of the private corporate manufacturing sector in India in the context of financial liberalization. The motivation underlying economic liberalization in India was the recognition that central planning failed to work and that the private sector could play an important role in boosting investment and spurring economic growth. As a result market forces now increasingly govern the financing and investment decisions of the corporate sector. In this perspective, the larger objective of the study is to understand the impact of financial liberalization on the capital structure and investment decisions of the private corporate manufacturing sector.

There are many factors that led to the present study. First, the recent theoretical developments in modeling private investment that explicitly incorporate the policy changes that affect investment. Second, there is lack of convincing empirical evidence on the effect of financial liberalization on capital structure and investment in the private corporate sector. In the context of India, studies that specifically model the impact of financial liberalization on the financing choice of corporate sector are scarce. Third, though financial liberalization is still on the way, based on the theoretical argument of financial liberalization and its limitations in the context of asymmetric information and market imperfections, such an analysis assumes significance. Fourth, the firm level database employed in the study for the post liberalization period, we hope, will provide more incisive evidence on financing choice of firms and the implications of this on investment.

The empirical analysis of the study is based on the recent developments in the theoretical arguments of financial market imperfections. In this literature, the problems of imperfect information and moral hazard that characterize lending activities in the financial markets came in to the discussion on financial liberalization. This new literature on corporate finance has emphasized the cost
disadvantages of external finance due to asymmetric information. Because, in imperfect financial markets with asymmetric information, external funds are more expensive than internal funds and firms have to follow a hierarchy in which cheaper funds are preferable to more expensive ones and internal funds are the most preferred ones. This literature raises certain issues to be discussed in the context of financial liberalisation: (1) Have the expected benefits of the liberalisation and promotion of stock market and banking sector translated into better financing choices at firm level? (2) What is the influence of exogenous financial sector liberalisation on firm level capital structure? (3) How does the financing pattern relate to investment of firms? The present study empirically examines these aspects using firm level data for a sample of 2269 manufacturing firms in the Indian private corporate manufacturing sector.

The institutional framework within which the availability of funds is determined has been discussed to provide a background for the study. Given the prevalence of market imperfections in developing countries, financial liberalisation becomes a crucial determinant of investment with links being provided through the choices that firms exercise between the alternate sources of financing the investments. To elaborate, we have undertaken an in-depth discussion on various measures of financial liberalisation and its impact in altering the importance of various sources of finance for corporate investment. The examination of the pre-reform period has underlined that credit allocation under the financial repression regime resulted in distorted resource mobilisation by firms and restricted the freedom of intermediation of banks. Further, analysis of the post-reform period has shown that financial sector liberalisation has shifted the focus of financial repression, from the control of products prices to prudential regulation, supervision and promotion of competition.

It is evident from the discussion that financial reforms brought reduction in reserve requirements to enable the banks to increase revenues through more investments. Interest rate liberalization through dismantling the structure of administered interest regime has reduced the cost of credit in the post financial liberalization period. Many measures to reform the financial institutions and instruments have
injected liquidity in the financial system. The policy changes in the capital market led to the increase in the stock market size along with significant growth in terms of volume of transactions and new types of participants and products. The growth in the capital market is also accentuated by the liberalization of international capital flows. These initiatives have set the stage for the sectors having resource scarcity to augment investible resources for boosting investment in the post-liberalisation period. In nutshell, the reform measures have been mainly directed towards removing the liquidity constraints of firms and industries in the corporate sector and making finance at competitive rates. This analysis brings in to focus the general approach of the liberalization to open up the economy, give the market a greater role in price setting, increase the private sector's role in development, and the promotion of a diversified, efficient and competitive financial system with the ultimate objective of improving the allocative efficiency of available resources through operational flexibility, improved financial viability and institutional strengthening. Considering all these factors, the period of study is mainly confined to the financial liberalization regime in India.

Against the background of policy changes in the financial sector, we have analysed the trends and patterns of corporate finance at the aggregate level in the pre and post liberalisation period. One of the most striking aspects of trends in sources of funds for private corporate sector is the increasing dependence of firms on internal funds rather than external funds. The overall increase in retained profits and depreciation led to a tremendous increase in internal sources available to the corporate sector in the post reform period especially during later years of reforms. As a result the internal sources dominate in the sources of funds for the corporate sector in recent years. However, in the post liberalisation period external financing has shown different patterns over the years. After a boom in the initial years, the funds from capital market sources have drastically declined. A similar picture is seen in the case of total borrowings also. Except an increase in some years total borrowings witnessed a fluctuating trend with sharp decline towards the later years. The sharp decline in the share of borrowings (debt) in the post reform period is contributed by drastic decline in institutional borrowings (FIs), though the bank borrowings met with an increase. Against the trend of a decline in total borrowings, only notable feature of external financing is the re emergence of bank borrowings as
a major source of external financing over the years. However, this upward bias is to be seen in the context of a declining share of external sources of funds of firms. It is interesting to see that a booming stock market has not witnessed any significant increase in money raised by firms from the capital market. Though there was boom in the new issues market in the initial years of reforms, the number of issues and amount raised by the corporate sector met with wide fluctuations in the later period of reforms. Against this, the average BSE Sensex has increased tremendously. To conclude the jigsaw puzzle, even the regime of low interest rates and, more intriguingly, even in the phase of a booming stock market, firms have a clear preference for retained earnings over external sources of finance.

In terms of differences across firms, it is seen that debt levels increase with firm size. We find that large firms are able to borrow proportionately more than 2 times of debt from financial institutions. Adding up the share of debt from bank and non-bank financial institutions (secured debt), we see that small firms able to rely less on formal financial intermediaries. It is also noted that large firms seems to be benefited by substituting the more expensive domestic credit with cheaper foreign credit. The analysis provides suggestive evidence of strong credit constraints for small firms. Having analysed the behaviour of cost of debt and leverage ratios of different size categories, it is to be concluded that, given the institutional structure of Indian Manufacturing, conditions of access to financial resources (credit) significantly vary across different size categories of firms. This picture is inconsistent with the picture of small firms (less well connected) experiencing increased access to credit after reforms, albeit at higher interest rates, a result predicted by the conventional literature on financial repression and reform. From the analysis of debt ratios for size categories, it is not wrong to conclude that small firms are credit constrained in the financial liberalization period. However, given the increase in debt and its variations among different size groups it is our interest to study about various determinants of financing pattern of firms especially the impact of financial liberalisation on capital structure of firms.

Relying on recent theoretical and empirical studies on the link between financial market developments and financing choices we study the determinants of capital structure. More specifically, we have analysed the impact of financial liberalisation
on capital structure of firms by controlling for firm level characteristics. The study uses firm level panel data, covering the private corporate manufacturing sector for the period 1993/94 to 2003/04. We have used 19852 observations on 2269 sample manufacturing firms in the private corporate sector obtained from the electronic database PROWESS provided by Centre for Monitoring Indian Economy. To understand in more concrete terms the factors determining capital structure (narrowed down to debt to capital ratio), capital structure theories are relied upon. From a review of the theories, we have identified a number of firm level characteristics as controlling variables and financial liberalization, to be included in the analysis. Analysis of panel data using fixed effects model give results, which reveal the influence of asymmetric information and the presence of adverse selection problem in the choice of debt structure of firms. It implies that the attempts to develop financial markets have not produced any economy wide efficiency since small and young firms have not increased their debt levels. The study showed that though financial liberalisation had a positive impact on capital structure, it was mainly concentrated in large and export-oriented firms. It is seen that the export oriented and large-sized firms are able to enjoy more debt levels owing to their good and transparent management. This makes it cheaper for such firms to raise funds from debt (borrowings). This result supports the view that when asymmetric information prevails it prevents the benefit of deregulation of financial markets to be enjoyed by all firms. What implications do these results have for investment? In order to understand this, we have undertaken an empirical estimation of an investment function to study the relationship between financing patterns and investment.

It is seen from the analysis that as a percentage of GDP, manufacturing investment has declined drastically after an increase in the initial years just after reforms. A trend analysis using a recently developed econometric estimation procedure for structural breaks has been employed to analyse the growth rate of investment in the private corporate manufacturing sector. It is seen from the analysis that, against the expectation of a boom after liberalisation, the growth rate of private corporate manufacturing investment has declined after a break in 1995. The conclusion can only be that substantial liberalisation of the economy in the years following 1991 has not succeeded in raising the growth rate of investment in the private corporate sector.
Having noticed the presence of information asymmetry in determining the capital structure and a decline in the growth rate of manufacturing investment, a more detailed exercise accounting for the effects of various determinants of investments and financing patterns has been used to get a fuller picture of investment. The empirical work relates the traditional study of financial effects on investment to recent literature on capital market imperfections, especially on financial reforms, by studying investment behaviour in different category of firms with different financial characteristics. We carried out our empirical analysis by estimating an unrestricted investment equation of the lagged augmented accelerator model as developed by Fazzari, Hubbard and Peterson (1988). In order to bring out the differential behaviour of small and large firms, the model is estimated for each of these groups by using dynamic panel data technique for the period 1993/94 to 2003/2004. The theoretical discussion in recent times emphasizes the role of information asymmetries and agency costs in explaining investment decisions. The econometric evidences in our study provide qualified support for these theories.

The theoretical discussion in recent times emphasises the role of information asymmetries and agency costs in explaining investment decisions. We tested the hypothesis that whether financial liberalization had an impact on firms' investment decisions with respect to cash flow and debt. The theory implicitly assumes that asymmetric information and market imperfections in the credit and capital markets prevent the efficient mobilisation of resources, which hinder an economy wide efficiency. The study found that small firms are facing financial market imperfections in the form of liquidity constraints since it is seen that credit constraints were not eliminated or relaxed for these firms. This is evident from the fact that the prominence of cash flow variable has increased for small firms in the post liberalisation period. This implies that financial liberalisation has not improved the access to external finance for small firms. However, one surprising result is the positive and significant coefficient of debt-to-capital ratio for large firms irrespective of the financial liberalisation effect. From further enquiry we found that the positive and significant impact of debt on investment for large firms has changed once we estimate the model for large firms according other categories based on group and export orientation. It is seen that the positive and significant
impact of debt does not hold for large non-group and non-exporting firms. On the other hand, the positive effect of debt remains the same for large group and exporting firms. This implies that being in a group or having export orientation helped them to access more resources from financial markets.

The study found that the financial liberalisation reduced the financial constraints basically for large group and exporting firms. We have also concluded that the impact of firm specific factors on debt reflects information asymmetry and adverse selection after financial reforms. The differences in the results on the determinants of investment across different sized firms and other categories in the Indian context suggest that the impact of financial liberalisation on capital structure and investment is influenced by the differences in the financial structure of firms. To conclude, market imperfections exist in the financial markets that prevent an economy wide efficiency in the post liberalisation period. What do these results suggest for the financing practices of the corporate sector? To restate, financial liberalisation measures were aimed at increasing the rate of investment and thereby achieve higher economic growth. Of various liberalisation policies, great emphasis was given to reduce the cost of credit and broadening the financial markets by eliminating controls over capital issues and pricing. In response to this, changes in corporate financing pattern also observed a movement towards greater debt financing though equity financing got a momentum in the initial years of reforms. However, contrary to expectations, the debt ratio of firms has shown distinct variations across firms having different characteristics such as size, age and export orientation. The financial liberalisation also has not produced the desired impact on corporate investment. On the contrary, the change in financing practices seems to have been more of a drag on investment. Thus it seems pertinent to discuss what is it that has gone wrong with financial liberalisation?

It would be useful to recall that the underlying factor for firm financing is found to be information asymmetry, more specifically the operation of moral hazard and adverse selection. In such a situation one may argue that relative cost principle is not in operation even after financial reforms. In the context of the need to augment total resources available to corporate sector it implies that there is a need for greater role of the state to intervene in the financial markets in terms of evolving suitable
accounting standards, regulation on insider trading, strengthening fraud laws, and improving provisions for investors' protection. It should be recognized that the legal, informational, and incentive frameworks need reform. Such reforms will also involve a much greater private role in the banking sector and, correspondingly will require much stronger regulation and supervision to limit moral hazard. Generally Speaking, Indian regulation and supervision is not as strong as in many other developing countries, in terms of income recognition and provisioning. Thus, Indian banking needs not only more private management and ownership, appropriate incentives for sound banking that will contribute to development, but much better regulation and supervision to limit the moral hazard associated with private owners and high deposit insurance. Small borrowers often suffer from lack of access because they cannot demonstrate their willingness to pay due to lack of collateral. Thus to improve credit access, the credit registry should include information on small-sized borrowers from non-banking institutions that serve them. Improving the development contribution of India’s financial system will require a reduction in fiscal deficit and a clear focus on improving institutional, informational and incentive frameworks.

The study has brought out certain findings on the relationship between financing patterns and investment and concluded that market imperfections exist in the financial market. However, it has not been possible for the study to incorporate an analysis of the behavioural pattern across different industry groups. Similarly we have not considered the separate effects of money and capital markets on investment. The study thus suggests certain areas for further research with a particular focus on industry variations and with suitable measures to analyse the effect of different dimensions of liberalization in the financial system. This will help to get deeper understanding of the dynamic relationship between financing patterns and investment in the post reform period.