Working Paper 440

FINANCING PATTERN OF INDIAN CORPORATE SECTOR UNDER LIBERALISATION: WITH FOCUS ON ACQUIRING FIRMS ABROAD

P.L. Beena

FINANCING PATTERN OF INDIAN CORPORATE SECTOR UNDER LIBERALISATION: WITH FOCUS ON ACQUIRING FIRMS ABROAD

P.L. Beena

January 2011

This is a revised version of the paper presented in the Annual Conference for Development and Change 2010 held at Witwatersrand University, Johannesburg and the Economics department of the University of Johannesburg. An earlier draft was also presented in the All India Conference held at the Institute for Studies in Industrial Development, New Delhi during March 2009 and in the All India Conference held at ISEC Bangalore during January 2010. I have benefited by the comments from participants, especially by Alok Dash. I have also benefited from the interaction with Surajit Mazumdar on a regular basis and Chalapati Rao, Meena Chacko, Dennis Rajakumar and C.P. Chandrasekhar while working on this paper. This paper was also greatly enriched through the valuable comments from the anonymous referee. However, I take responsibility for any error or omission.

ABSTRACT

Indian corporate sector has experienced a paradigm shift over the last two decades with the initiation of certain measures of financial liberalisation. As a result of these policy changes, the ratio of Indian FDI outflows to Indian FDI inflows has increased significantly since 2000. An increasing trend in the purchases of firms or assets abroad is also observed since 2000, for various reasons. Against this background, an attempt has been made in this paper to analyse the financing pattern of Indian corporate sector during 1990-2009. This paper further seeks to identify the pattern of resource mobilisation of Indian firms acquiring firms abroad. Indian private corporate sector mobilised large share of resources through external sources although there is an increasing trend in the share of internal financing since 2000. Borrowings are the major source of external financing. Share of resources mobilised through capital market has sharply declined since mid-1990s. A similar trend is observed in case of the selected industries as well. Indian acquiring firms mobilised large funds through external sources although the share of retained profit was quite substantial unlike in case of the manufacturing sector. They could also consistently raise resources through capital market throughout our study period. However, borrowings constituted the major contributor to external financing. These firms were also raising resources from abroad and therefore we could argue that it is not primarily their financial muscles which enable firms to engage in acquisitions abroad. Revenue foregone through various tax concessions is still found to be a major source of corporate growth during liberalisation period. The paper argues that the pecking order theorem does not seem to be applicable in case of the Indian manufacturing sector. Further, we conclude that, although stock market development is expected to lower the cost of capital for Indian corporations, it has not played a major role as far as the actual resource mobilisation of the Indian manufacturing sector is concerned. Finally, we argue that regulation by the State through measures of corporate governance is important in order to create conditions for a desirable path of growth and development.

Key Words: Capital and Ownership Structure; M&As; Corporate Governance.

JEL Classification: G32, G34, G37

Introduction

Indian corporate sector has experienced a paradigm shift over the last two decades with the initiation of certain measures of financial liberalisation¹. Bombay stock Exchange (BSE) has the second largest number of domestic quoted companies in the world which is three times higher than China. Large Indian firms have also been permitted to directly raise capital in international capital markets through commercial borrowings and depository receipts. Various product innovations in the financial sector such as special purpose vehicles, financial derivatives, Global Depository Receipts (GDR), American Deposit Receipts (ADR), Foreign Currency Convertible Bonds (FCCBs), Foreign Currency Exchangeable Bonds (FCEBs), Private equity² or venture capital have also facilitated Indian firms to raise resources under this new institutional framework. Now new players have also emerged with the entry of hedge funds and pension funds into the stock markets. Specialised credit funds and managers of collateralized debt obligations have emerged as providers of instruments (refer Chandrasekhar 2009 for details). This change is expected to have an impact on the resource mobilisation of the private corporate sector in the Indian economy. It is also important

Financial liberalisation thesis brought out by Mc Kinnon (1973), Shaw (1973) and Cho (1986) emphasize an important role in resource allocation.

According to Venture Intelligence Estimates, there are 350 PE firms exist in India. Most of them primarily focus on specific sectors such as infrastructure (Deutsche Bank Research, 2009).

to note that Indian firms have started purchasing foreign firms since early 2000s as they were allowed to invest abroad without any profitability conditions. Given this background, an attempt has been made in this paper to analyse the sources of financing of Indian private corporate sector during 1990-2009. The paper further seeks to identify the resource mobilisation of Indian firms purchasing firms abroad. The paper is divided into five sections. The first section deals with the theoretical underpinnings and contextualises the study. The second section traces trends in the growth of equity markets in India. The third section analyses the resource mobilisation of the manufacturing sector as well as selected industries and also tests the empirical validity of pecking order theorem in the current context of the Indian corporate sector. The fourth section looks at the sources of financing of Indian firms which have acquired firms abroad based on a sample selected. Some cases of Indian acquiring firms are also discussed. The major findings are drawn in the last section. We have compiled data on the sources of financing in the Indian corporate manufacturing sector as a whole as well as in selected industries from the data- base on 'corporate sector' published annually by CMIE. The similar information at the firm level is collected from the PROWESS data- base published by CMIE. The analysis is based on simple ratios.

I. An Overview of Theoretical and Empirical Literature Survey

Modigliani and Miller (1958) argued that real investment decisions are independent of financial decisions. Capital structure of the firms or sources of financing has no bearing on their financial decisions. Contrary to the neo-classical models developed since 1950s, there are theoretical and empirical studies that stressed on the relationship between finance and investment (Minsky 1975; Fazarri and Variato 1994). The financial system facilitates intermediation between savers (public) and investors (firms) and helps translate savings into investments. The system can be credit (bank) based and securities (capital market) based

(Stiglitz 1994). Stiglitz (1994) further argued that market for corporate control provides the ultimate discipline in the stock market-dominated economies. Myres (1984) and Myres and Majluf (1984) opened up the way to the so- called pecking order theorem. Pecking order theorem predicts a negative relationship between profitability (as a measure of internal funds) and debt financing.

Debt and equity are not merely alternative modes of finance, but are also alternative modes of governance (Williamson 2002). Corporate governance is meant to create some rules and regulations which would ensure that external investors and creditors in a firm can get their money back and would not simply be expropriated by those who are managing the firm (Shleifer and Vishny 1997). Berle and Means (1932) argued that the separation of ownership and control may lead managers to pursue their own objectives at the expense of owners. However, it is also argued that the diffuse equity ownership can also make managers run the firm to their own benefits at the expense of investors (Bolton and Schartstein 1998, p.100). Cornelli, Portes, and Schaffer (1998) observed that the price of outstanding shares usually drops when a firm announces a new equity issue. An increase in debt has also a similar but less strong effect on share price. This could be the reason why managers prefer internal financing, turn to debt if the former option is not available and use equity issue only as a last resort. The rationale for the relevance of the internal finance could be defended from two theoretical perspectives: The managerial approach emphasises agency costs arising out of the separation of ownership from control and the role of internal finance in facilitating managerial discretion. However in the context of developing countries, including India, the primary agency problem has been between majority and minority owners (not between owners and managers) (refer La Porta et.al (1999) as cited by Reed Darryl p.15, 2004). The second approach i.e. the information-theoretic approach emphasises asymmetries of information between insiders (managers) and outsiders (suppliers of capital) leading to credit shortage faced by firms. Mishkin (1996) noted

that adverse selection³ and moral hazard⁴ problems arising from asymmetric information in investor-firm relationship necessarily create disruptions in financial markets, leading to inefficient allocation of investible funds. Asymmetric information framework relates information failures to the failures of intermediaries and stock markets and thus argues for government intervention. Stiglitz and Weiss 1981 & 1994 criticise the financial liberalisation thesis on the grounds that financial markets are prone to market failures. Singh (1997) further argued that less developed countries should promote a bank based system and prevent a market for corporate control. Singh (2003) argued that emerging countries with reasonably well- developed banking system and equity markets would follow pecking order pattern of finance, not only because of the informational asymmetries argued by Myres and Majluf for advanced countries,⁵ but also due to the institutional specificities of emerging markets in particular, (the desire to maintain family ownership and control of corporations).

The study by Mayer (1990) observed that two-thirds on the average of investment financing in developed countries like the US, UK, Japan, Germany, France, Italy, Canada and Finland are mobilised through internal financing. In contrast to the experience of the developed countries, Singh and Hamid (1992) observed very different trends in certain developing countries. The contribution of external sources to the financing of net fixed capital formation in the 1980s was around 50

³ Adverse selection refers to 'hidden information' problems which arise from the asymmetry of information about the riskiness of investment projects before investment occurs.

⁴ Moral hazard refers to 'hidden action' problems which arise because investors cannot distinguish the effects of managerial actions from the effects of events that management cannot control.

The study by Mayer (1990) observed that two-thirds on the average of investment financing in developed countries like the US, UK, Japan, Germany, France, Italy, Canada and Finland are mobilised through internal financing. The relative share in external financing through equity and bonds accounts even less than 10 per cent of the total investment expenditure.

per cent with a significant share coming from the stock market. Government regulations that directly discourage the use of debt by imposing specified limits to debt ratios of firms could explain to some extent the preference of developing countries' corporations for equity rather than debt financing. The study by Nagaraj (1996), Samuel (1996) and Singh (1998) showed similar trends in the case of Indian corporate sector. Mathew, Rupa et.al (1999) observed a declining trend in the internal financing among the large and medium-sized Indian firms between the periods 1972-80 to 1988-966 which supports the findings of other studies. Similar findings were observed by Rajakumar (2001), Sarkar and Sarkar (2004), Joshi (2005) and Bhole (2005), Various studies such as Singh and Hamid (1992), Nagaraj (1996), Singh (1995 & 1997), and Samuel (1996) argued that the capital market boom in developing countries is not associated with improved corporate profitability and therefore, may not help in achieving quicker industrialisation and faster long-term economic growth. A recent study by RBI (2005-06) has observed that the Indian corporate sector has mobilised a large share of resources from internal sources which accounts for 60.7 per cent during 2000-01 to 2004-05. Capital market has been considered as a last resort which contributed merely 9.9 per cent. The debt-equity ratio has also declined over the years as the corporate sector has been able to mobilise resources internally (refer Appendix 1). This kind of pattern of financing conforms to the so-called "pecking order" theory as applied in the developed countries (see Singh, 2003). However, the study does not reveal the contribution of depreciation on large scale as a source of internal finance which is also an important aspect to be explored.

The financial structure of these firms has been similar to that in Japan, South Korea and Germany, where development Banks have been the largest debt holders and shareholders of the firm. Financial institutions were holding market share of 45 per cent of corporate fixed investment even during the first half of the 1990s.

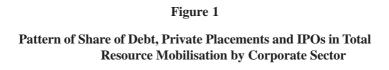
There are few empirical studies specifically on the investment pattern of the Indian corporate sector. Bhole (2005) argued that the gross or net savings rates of the private corporate sector remained low during 1966-67 to 2000-01. Moreover, this sector has not kept pace with its capital formation. However, there is an increasing trend of capital formation in the private corporate sector since 2002-03. According to Mazumdar (2008), the annual rate of growth of gross fixed capital formation at constant prices was quite high during 1990-91 to 1996-97 which accounts for 19.5 per cent. And the growth in capital formation during the 1990s was relatively higher than the growth registered in the 1980s (Nair 2005). Similar observations were made by another study based on ASI data (Nagaraj 2002). But this rate has sharply declined to the level of negative growth rate during 1996-97 to 2002-03 and again increased significantly to the level of 28.51 per cent during 2002-03 to 2007-08 (Mazumdar 2008). The latest study (Robertson, 2010) also observed that India's investment rate has increased from 25 per cent to 35 per cent of GDP in the present decade and argues that it may not get fully utilised in the long run. Notably, Indian economy has also experienced a large number of mergers and acquisitions (M&A) during the liberalisation period (Beena, P.L. 2008). One- third of the M&A deals that occurred in India during 1978-2007 were cross-border deals (Beena, S. 2010). Another recent study (Rao and Dhar 2010) observed that almost two-fifth of the foreign equity inflows was nothing but an acquisition of existing shares during 2005-06 & 2006-07. Services sector was exposed to large share of Private Equity (PE) or Venture Capital (VC) investments as compared to the manufacturing sector⁷. There have

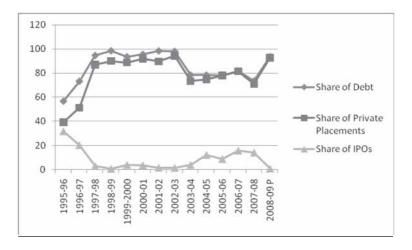
⁷ Chandrasekhar (2007) observed that the total number of M&A deals has increased from the level of 467 (\$18.3 million) in 2005 to 782 (\$28.2 billion) in 2006. Out of these deals, 302 involved private equity. Private equity is generally acquired either through the private placement of new shares or the sale of pre-existing shares by the controlling interest or minority shareholder, and therefore has features that characterise most take-overs.

also been several studies on Indian firms acquisitions (Nayyar 2007; Pradhan 2007; Nagaraj 2006). However no attempt has been made to understand the financing sources of these acquiring firms. Therefore this study intends to fill this gap to some extent, based on a small sample. Before getting down to the main analysis, it would be useful to understand the growth of equity market, euro issues and external commercial borrowings in the Indian corporate sector during the liberalisation era.

II. Growth of Equity Markets in India

The total resources raised by the corporate sector have increased to 2046.93 billion by 2008-09 from the level of 341.65 billion during 1995-96 (SEBI 2009: Table 7). The resources mobilised from the capital market has certainly increased since 1990s. The total capital raised through Initial Public Offerings (IPOs) has increased to 425.95 billion in 2007-08 from the level of 78.64 billion in 1993-94 (SEBI 2009: Table 12). However, the global financial crisis did hit the capital market and as a result, the capital raised through IPOs sharply declined to the level of 20.82 billion in 2008-09. The pattern of market capitalisation on the Indian stock markets as a proportion of the Gross Domestic Product (GDP) was only 12.2 per cent by 1990-91. This has been characterised by sharp fluctuations during the period of liberalisation. This share increased to 47 per cent during 1995-96 and further increased to its peak level of 84.7 per cent during 1999-00. This share however declined to the level of 28.49 per cent in 2002-03 and it sharply increased to the level of 109.3 per cent in 2007-08. It, once again, declined to the level of 58.12 per cent in 2008-09 as a result of the financial crisis (ISMR 2010: Table 1-1).





Source: SEBI 2009: Table 7 and Table 12.

Further, it is also important to note that the share of debt issues either public or right or through private placements has increased to 93.5 per cent of the total resource mobilisation by the corporate sector in 2008-09 from the level of 56.6 per cent in 1995-96. Moreover, the share of private placement in debt and equity issues to the total resource mobilisation has increased significantly from the level of 39.1 per cent of the total resource mobilisation by the corporate sector in 1995-96 to 92.6 per cent in 2008-09. The resources mobilised through ADRs/GDRs has increased to US \$6.6 billion in 2007-08 from the level of US \$0.2 billion in 1992-93. The resources mobilised from this source sharply declined to the level of US \$1.1 billion in the year 2008-09 due to the financial crisis. The resources mobilised from External Commercial Borrowings (ECBs) is almost seven times higher than the resources

mobilised through ADRs/GDRs during 2008-09 (SEBI 2009: Table 16).⁸ Now the following section intends to look at the mobilisation of resources and its investment pattern in the Indian manufacturing sector. A similar exercise would be carried out with respect to the selected industries which have experienced large share of M&A deals (refer appendix 2). We have made use of data published by CMIE for industry analysis since such information is not published by RBI.

III. The Financing Pattern of the Corporate Sector

From Table 1, it is observed that the share of internal financing has increased sharply during 2001-2005 and it accounted for 58 per cent. However, this share has declined during 2006-2009 to the level of 38 per cent which is still higher than the level of 26 per cent during 1991-94. The sharp growth in the share of internal financing since 2000 is attributed to the growth of retained profits. For instance, the share of retained profit has jumped from 9 per cent during the first (1991-94) and second phases ((1995-2000) to 36.5 per cent in the third phase (2001-05) and 25 per cent in the last phase (2006-09). Further, we have also observed that the provision for depreciation was quite high during the first phase (1990-95) as compared to the second and third phases (1995-2000 and 2000-05). This share has, once again, declined in the last phase (2006-09) and it has declined to a much lower level than the share

It is important to note that the resources mobilised from the external commercial borrowings have increased significantly during recent years. It was US \$ 5.2 billion in 2004-05 which has increased to US \$ 22.6 billion in 2007-08. This amount has sharply declined to US \$ 8.16 billion in 2008-09.

⁹ Based on ASI data, Uchikawa (2002) observed an increasing trend in the share of profit and depreciation in gross income during 1990s as compared to 1980s in some selected industries (p.37).

noticed in the first phase. ¹⁰ Our analysis further observed that an average share of 50 per cent of the total resources in the corporate sector has been used for the purpose of Gross fixed Assets during 1991-2009 (CMIE). However, the share of the provision for depreciation to the total sources of funds grew much faster than the growth of share of Gross Fixed Assets to the total uses of funds. The share of Gross Fixed Assets in the Total Uses of Funds registered a negative growth rate (-1 per cent) while the share of depreciation grew at the rate of 1 per cent during 1991-2009 (refer Appendix 3).

External sources still contribute a major source of financing throughout our study period except during the third phase (2001-2005). The share of funds raised from the capital market has declined drastically to the level of -0.5 per cent during 2001-05 from 25 per cent during 1991-94. However, a reverse trend is noticed in the last phase (2006-09). Although, bank borrowings were one of the major sources of external financing till 2000s, its share has declined sharply to 15 per cent during 2001-2005 from the level of 27 per cent during 1991-94. This share has further increased to 28 per cent during 2006-09. Further, we notice that the effective rate of tax paid by the manufacturing sector grew negatively while the resources mobilised by this sector through internal financing grew at the rate of 3 per cent during 1990-2009 (refer Appendix 4). It is important to note that the Indian corporate sector still enjoys tax exemptions during the period of the liberalisation under various overheads. Based on the estimates given by the budget documents, the total revenue foregone by the corporate tax payers grew from 578.52 billion during 2004-05 to 795.54 billion during 2009-10 (refer Receipts

The sharp decline in the share of depreciation could be the outcome of the decision taken by the Union Budget in 2005-06 to reduce the general depreciation rate for plant and machinery from 25 per cent to 15 per cent. Revenue foregone from the corporate sector through accelerated depreciation has also significantly decreased from the level of 47 per cent during 2005 to 21 per cent during 2009 although the total revenue foregone from the corporate sector as a whole has increased during the corresponding period.

Budget, various years). The share of revenue foregone as percentage of aggregate tax has increased from 9.5 per cent to 12.6 per cent during the corresponding years. Now let us analyse the pattern of financing across selected Indian industries such as Metal industry, Drugs and Pharmaceuticals, Automobile ancillaries, Petroleum products and Food industry. We have restricted our analysis to those industries which have experienced relatively large incidence of mergers and acquisitions. More importantly, Indian firms in these industries have also acquired firms abroad.

Table 1: Sources of Finance of Indian Manufacturing Sector(Percentage share to Total)

	1991 to 1994	1995 to 2000	2001- 2005	2006- 2009
Retained Profits	9.26	9.24	36.5	25.33
Depreciation	16.86	20.62	21.30	12.78
Internal Financing	26.12	30.16	57.8	37.68
External sources	73.88	69.84	38.6	62.5
Funds Raised from Capital Market	24.68	16.9	-0.5	NA
Fresh Capital Raised	6.38	4.88	1.5	10.3
Share Premium	11.14	6.48	1.5	9.05
Borrowings	26.96	26.44	15.4	28.45
Institutional Borrowings	8.28	6.9	-5.7	NA
Current Liabilities and Provisions	22.2	26.54	28.2	21.8
Sundry Creditors	10.34	10.54	18.5	10.83

Source: CMIE, Various Issues. NA- Not Available

Note: Internal sources = Retained Profits + Depreciation; External sources = Funds raised from the Capital Market + Borrowings + Current Liabilities and Provisions +Sundry Creditors.

We have already noted that in the case of corporate sector as a whole, how resources mobilised through internal financing has increased since 2000. However, external finance continues to contribute the major chunk in the case of Metal industry (Table 2). Although capital market was a major source of external financing in this industry during the first phase of liberalisation, its share has drastically declined. Funds raised through share premium have also declined over time in this industry although its share has increased marginally during 2006-09. Bank borrowings and current liabilities were found to be the major source of financing in Metal industry throughout our study period. 55 per cent of the total resources has been used for Gross Fixed Assets in this industry during 1991-2009 (CMIE, various issues).

Table 2: Sources of Finance of Indian Metal Industry

(Percentage share to Total)

	1991 to	1995 to	2001-	2006-
	1994	2000	2005	2009
Retained Profits	2.26	7.1	-5.74	22.68
Depreciation	9.68	0.28	32.88	9.28
Internal Financing	11.98	21.68	23.02	30.83
External sources	88.02	75.94	69.8	65.78
Funds Raised from Capital Market	34.36	12.52	1.66	NA
Fresh Capital Raised	9.54	4.9	1.1	6.83
Share Premium	11.36	4.74	1.84	6.48
Borrowings	32.74	40.42	26.88	40.13
Institutional Borrowings	10.82	11.33	NA	NA
Current Liabilities and Provisions	20.92	23.02	33.22	16.78
Sundry Creditors	13.92	13.94	15.48	18.7

Source: Table 1.

A similar scenario is noticed in the case of Pharmaceutical industry (Table 3). The share of internal financing has increased significantly to the level of 40 per cent in 2001-05 and 37 per cent during 2006-09 as compared to the level of 13 per cent during 1991-1994. Retained profit consistently rose and contributes a major share since 2000. Although the funds raised from the capital market has declined drastically in the third phase (2001-05), its share has increased during 2006-09. The contribution of share premium in this industry is relatively higher as compared to the manufacturing sector as a whole. The resources mobilised through bank borrowings is still a major source of external financing in this industry. This industry has allotted 41 per cent of its total resources for Gross Fixed Assets(CMIE, various issues).

Table 3: Sources of Finance of Indian Drugs and Pharmaceutical industry

(Percentage share to Total)

	1991 to 1994	1995 to 2000	2001- 2005	2006- 2009
Retained Profits	13.12	12.94	25.84	29.05
Depreciation	-0.26	14.2	13.88	8.825
Internal Financing	12.86	27.12	39.68	36.7
External sources	87.14	72.88	58.32	62.025
Funds Raised from Capital Market	NA	NA	NA	NA
Fresh Capital Raised	7.7	8.18	-0.04	13.975
Share Premium	14.78	11.36	5	12.925
Borrowings	30.48	24.92	26.78	27.4
Institutional Borrowings	NA	NA	NA	NA
Current Liabilities and Provisions	23.14	24.92	24.34	18.9
Sundry Creditors	9.42	10.44	10.34	6.475

Source: Table 1.

Internal financing contributes a significant share of resources as far as Automobile industry is concerned throughout our study period (See Table 4). This share has increased from the level of 40 per cent during 1991-94 to 55 per cent during 2001-05. However, this share has marginally declined in the last phase which corresponds to the trend in the manufacturing sector as a whole. But provision for depreciation accounts for a major share in this industry throughout our study period. The share of funds raised from capital market is relatively high as compared to other industries right from the 1990s and this share has declined significantly corresponding to the trend in the manufacturing sector as a whole. Borrowings, Current liabilities and other provisions were found to be a major source of external financing although it showed a declining trend. 58 per cent of the total resources have used for Gross fixed Assets.

Table 4: Sources of Finance of Indian Automobile Ancillaries Industry (Percentage share to Total)

	1991 to	1995 to	2001-	2006-
	1994	2000	2005	2009
Retained Profits	16.46	21.44	27.56	27.73
Depreciation	23.22	23.32	24.96	15.33
Internal Financing	39.72	44.76	54.86	43.08
External sources	60.28	55.24	46.68	56.93
Funds Raised from Capital Market	19.74	14.04	6.45	NA
Fresh Capital Raised	7.06	5.10	1.76	14.35
Share Premium	7.16	6.28	1.78	14.30
Borrowings	20.76	18.58	12.18	28.43
Institutional Borrowings	9.42	4.53	-2.55	NA
Current Liabilities and Provisions	31.66	16.64	25.90	12.80
Sundry Creditors	14.38	12.56	14.18	7.05

Source: Table 1. NA: Not Available

Although internal financing was found to be a major fund-raising channel as far as Indian Petroleum industry is concerned, its share has declined sharply to 32 per cent during 2006-09 from the level of 71per cent during 1991-94 (See Table 5). This is in contrast to the trend in the rest of the industries in our sample as well as the pattern observed in the manufacturing sector as a whole. Similar to the other industries, the current liabilities and other provisions were found to be a major source of external financing in this industry. The share of retained profit in this industry was quite high at 49 per cent during 1991-94 as compared to the manufacturing average at 9 per cent. It declined to 24 per cent at par with manufacturing average of 25 per cent during 2006-09. 70 per cent of the total resources raised by this industry has been used for the purpose of Gross Fixed Capital (CMIE).

Table 5: Sources of Finance of Indian Petroleum Product Industry(Percentage share to Total)

	1991 to	1995 to	2001-	2006-
	1994	2000	2005	2009
Retained Profits	49.3	24.98	16.82	24.03
Depreciation	21.68	16.9	35.48	22.45
Internal Financing	70.96	41.88	60.18	32.45
External sources	29.04	58.12	35.13	60.53
Funds Raised from				
Capital Market	11.8	5.48	NA	NA
Fresh Capital Raised	1.34	0.78	1.85	8.88
Share Premium	2.08	3.72	0.275	8.73
Borrowings	30.48	22.76	1.5	34.08
Institutional Borrowings	NA	NA	NA	NA
Current Liabilities				
and Provisions	61	33.76	35.15	14.63
Sundry Creditors	45.58	9.52	NA	9.88

Source: Table 1.

Although internal finance is not to be considered a major source of financing in the Indian Food industry, its share has increased from the level of 17 per cent during 1991-94 to 25 per cent during 2006-09 (See Table 6). The share of retained profit has also shown a small increase during the corresponding phase. However, depreciation accounts for a major share during 1995-2005. Although this industry was successful in fund-raising through capital market throughout the 1990s, its share has declined significantly during 2001-05. However, this share has further picked up since 2006. Despite fluctuations, borrowings and current liabilities were found to be a major source of external finance. Borrowings were on a much higher level in this industry than the manufacturing average. 54 per cent of the total resources have used for Gross fixed Capital in this industry (CMIE, various issues).

Table 6: Sources of Finance of Indian Food Industry

(Percentage share to Total)

	1991 to	1995 to	2001-	2006-
	1994	2000	2005	2009
Retained Profits	9.8	11.54	10.78	14.33
Depreciation	7.24	29.4	23.04	10.45
Internal Financing	17.02	40.94	33.8	24.8
External sources	82.98	59.06	56.9	75.2
Funds Raised from				
Capital Market	17.78	21.54	3.96	NA
Fresh Capital Raised	6.68	11.14	4.16	14.28
Share Premium	7.06	14.32	0.34	12.5
Borrowings	53	-12.24	27.82	41.28
Institutional Borrowings	NA	NA	NA	NA
Current Liabilities				
and Provisions	12.14	49.76	27.1	17.15
Sundry Creditors	7.6	21.84	15	8.75
	1	I		1

Source: Table 1

Thus from the above analysis, we could conclude that external sources still contribute a major source of financing in the Indian corporate sector although there is an increasing trend in the share of internal financing since the year 2000. Retained profit contributes a major chunk of internal financing throughout the decade of 2000s. Provision for depreciation was found to be the major source of internal financing till 2005 although it has declined, apparently, owing to a shift in the government policy. Although private corporate manufacturing sector was successful in fund-raising through capital market during the first phase, this share has declined in the second and third phases. The trend, once again, reverses in the last phase. Borrowings or fund-raising through current liabilities is still found to be the major source of external financing in the Indian manufacturing sector. A similar pattern is observed across various industries such as Metals, Drugs and Pharmaceuticals, Automobiles Ancillaries and Food industry and Petroleum products. From the above analysis, we could conclude that the pecking order theorem does not seem to be applicable in the case of Indian corporate sector. Our analysis further reveals that the effective tax rate (share of corporate tax to profit before tax) paid by the corporate sector has declined during the liberalisation period. Now let us see whether a parallel can be drawn by looking at the financing pattern of Indian firms which have acquired firms abroad. Further, we intend to understand to what extent the changes in financial policy facilitated the moves by Indian firms to raise resources through different channels to fund such deals.

IV. Financing Pattern of Indian Acquiring Firms

The foreign investment abroad by Indian firms, generally began after the liberalisation of investment policies with the introduction of Foreign Exchange Management Act (FEMA) in June 2000. In March 2003, the automatic route was liberalised significantly to enable Indian parties to fund to the extent of 100 per cent of their net worth. This limit was further increased to 200 per cent of their net worth in 2005 and to

300 per cent in June 2007. This has further enhanced to 400 per cent of the net worth in September 2007. The limit for portfolio investment by listed Indian companies in the equity of listed foreign companies was raised from 35 per cent to 50 per cent of the net worth of the investing company in September 2007 (refer RBI Bulletin January 2009 p.142 for more details). Funding a large acquisition through local borrowings was difficult till mid-2000s as the local bond market was not deep enough. In April 2003, banks were permitted to extend credit only up to 10 per cent of their unimpaired capital funds, subject to certain terms and conditions. In November 2006, the limit was extended to 20 per cent. However, this facility was available only to those firms where the company is a wholly owned subsidiary or Indian companies having holding of more than 51 per cent abroad. Since June 2005, Indian banks were allowed to extend financial assistance to Indian companies for acquisition of equity in overseas firms. Companies were also allowed to raise resources by an overseas SPV or joint ventures of an Indian company (Business Line, Feb.17, 2006). RBI has also raised ceilings on foreign currency borrowings of an Indian company from \$500 million to \$750 million in October 2006. As a result of these policy changes, the ratio of Indian FDI outflows to Indian FDI inflows has increased from 0.21 per cent during 2000-01 to 0.59 per cent during 2007-08 (Mani 2009). According to RBI statistics, majority of this FDI outflows took place in the form of equity. As we had discussed in the beginning of this paper, we do find an increasing trend of Indian firms purchasing firms or assets abroad during 2000 to 2010.

In terms of number, it has increased from 44 during 2001 to a peak level of 590 in 2007 and then slightly declined to 482 during 2010. The announced value involved in 22 deals during 2001 was US\$ 0.33 billion and that value has increased to US\$58.8 billion in 2010 (refer column 2 and 3 of table 7 and also Appendix 5). Value of acquisition in many years during 2001-2010 is much higher than the total FDI outflow from India (refer Table 7). This also corresponds to the data published by

Table 7: Trends of Indian acquisitions abroad

\$ million \$ million 38.58 118.72 680.6 98.86	Acc (US 3 3 15 15 15 15 15 15 15 15 15 15 15 15 15	Deals for Acquisition which value (US\$ millio is available 22 338.58 24 818.72 36 680.6 68 1598.86 147 10055
829 40.84 1490 54.95 1892 35.97 2076 77.02	829 1490 1892 2076 2309	338.58 829 818.72 1490 680.6 1892 1598.86 2076
	Acquisition (US\$ millio 338.58 818.72 680.6 1598.86 10055	Acc (US)
of deals Deals for which value is available 45 22 24 24 57 36 130 68 284 147	of deals of deals 45 29 57 130	

Source: Table 140, Handbook of Statistics of Indian Economy (2010), RBI; M& A Data Base, CMIE; Venture Intelligence; World Investment Report, UNCTAD.

Data related to the number and value of acquisitions for the period 2001 to 2003 is collected from M&A data base, CMIE. Similar data for the remaining years is collected from Venture Intelligence data base. Note:

World Investment Report for some years. For instance, the share of value of net purchases¹¹ of assets by Indian firms to the total FDI outflows from India is more than 100 per cent in many years and this call for an explanation. An attempt has been made here to identify the financing source of Indian acquiring firms abroad. For this, we have constructed our data-base on Indian acquisitions abroad based on various sources such as M&A data base of CMIE and Nayyar (2007).

Figure 2
Trends of Investment Abroad by Sample Firms



Source: PROWESS Data Base.

However, we had to restrict our analysis to a small sample of 38 firms as the detailed information relating to the rest of the acquiring firms could not be obtained. It is evident that the investment abroad by our sample firms has increased from the level of Rs 4.8 billion in 2000 to Rs 165.17 billion in 2007 and further increased to Rs 1108.24 billion in

According to the World Investment Report, net purchases is equal to the purchases of firms abroad by home based TNCs minus sales of foreign affiliates of home based TNCs. Further, it should be noted that this data on net purchases cover only those deals that involved an acquisition of an equity stake of more than 10 per cent.

2010. The total amount involved in 26 out of 38 acquisitions is Rs 998.38 billion. Disturbingly, from our tabulation, the value of acquisition by Indian acquiring firms is 26 times higher than the investment abroad recorded in these firms' own balance sheets during the year of acquisition. This coincides with the trends observed in Table 7. From this we could argue that these firms have been raising financial resources from abroad. Similarly, only 17 per cent of the total value of acquisition has been recorded as Profit after Tax at the time of acquisition. Further only 71 per cent of the value of acquisition has been recorded as net worth of these acquiring firms at the time of acquisition. Therefore it is quite important to understand how these firms were raising resources to buy large-sized firms abroad.

Based on certain performance indicators, it is noticed that these acquiring firms are excelling firms in terms of profit making so that they could retain profit for further investment abroad. In fact, in our sample, there were only 5 acquiring firms which had profitability (PAT/Net Worth) even to the tune of less than 10 per cent at the time of acquisition. However, the effective tax rate of these sample acquiring firms has declined significantly from the level of 42 per cent to 18 per cent during 1990-91 to 2008-09 (refer Appendix 6). Average debt-equity ratio of our sample of 38 acquiring firms at the time of acquisition was 0.95 per cent. The debt-equity ratio of 29 acquiring firms among them was below the average level. This ratio for 17 out of 38 has increased in the year immediately after the merger while the rest of the cases have shown a declining trend in the following year after the merger.

From Table 8, it is quite clear that these acquiring firms generally mobilised a major share through external sources which coincides with the trends in the Indian corporate sector. Borrowings were the major source of external financing as we have observed in the case of corporate sector. However, these acquiring firms were able to raise resources through capital market consistently. There is an increasing trend towards foreign

borrowings, apparently, taking advantage of policy changes. Current liabilities & other provisions were the major sources of external financing during the third phase where there was a dip in the funds raised from borrowings and capital market. Retained profit did contribute significantly for the internal financing throughout our study period. Significant amount (around 50 per cent) of these resources have been used for Gross Fixes Assets throughout our study period (CMIE).

Table 8: Sources of Finance of Indian Acquiring Firms

(Percentage share to Total)

	1991 to 1994	1995 to 2000	2001- 2005	2006- 2009
Retained Profits	15.83	23.28	26.49	28.61
110101110				
Depreciation	15.76	20.98	19.55	11.04
Internal Financing	31.60	44.26	46.05	39.65
External sources	68.40	55.74	53.95	60.35
Funds Raised from Capital Market				
Fresh Capital Raised	16.76	19.67	8.12	15.23
Share Premium	13.95	15.79	9.367	12.88
Borrowings	35.55	24.35	18.73	33.01
Institutional Borrowings				
Foreign Borrowings	0.58	9.81	-5.023	7.12
Current Liabilities				
and Provisions	16.09	11.71	27.11	12.11
Sundry Creditors	12.30	9.09	14.46	8.84
Share of GFA to Total Uses of Funds	54.06	61.01	45.47	54.31

Source: PROWESS Data Base.

Note: GFA refers to Gross Fixed Assets; NA refers to not available.

The following sub-section has made an attempt to understand the resource mobilisation of acquiring firms based on case studies. We have considered five firms for which we could gather detailed information relating to the financing source of acquisition. These five firms together invested 17 per cent of the total Indian investment abroad by our sample firms during the respective years of acquisition.

Case Studies

Tata Steel used a leveraged buy-out model to buy Corus for US\$ 12.1 billion or Rs 547.9 billion in 2006. It should be noted that the investment abroad by this firm shown in the balance sheet during 2006 was only Rs. 1.05 billion. Profit after tax of Tata Stall was only 6 per cent of the value of the acquisition announced by Tata Steel. Tata mobilised only \$4.1 billion fund on its own through debt and equity. The rest \$8 billion had to be paid on the strength of the Corus balance sheet and that was possible as Corus was not a loss making company (Business Line, Feb.4, 2007). But sales and revenue of Corus and JLR were badly affected due to the world recession. In addition to that the total borrowings of \$7.5 billion mobilised by Tatas' in order to buy Corus and JLR were due for refinancing in May 2009. But Tata was successful in making government-owned State Bank of India and ten other banks to guarantee the bond issue which allowed the Tatas' to mobilise Rs. 42 billion. This has also generated confidence among a group of 27 international banks to roll over \$1.05 billion of the bridge financing it had obtained for the JLR acquisition. Thus Tata Motors managed to return \$1.11 billion of its original bridge loan by mobilising funds through a rights issue, launching a fixed deposit scheme and by selling the shares of Tata Steel it held (Chandrasekhar 2009). Debt- equity ratio has increased to 0.71 during 2007 from the level of 0.26 from the year just before the acquisition. Subsequently, it has marginally decreased. Shareholder's profit (Profit after tax to Net worth) was 39 per cent at the time of acquisition and this ratio has declined to 30 per cent during 2007 and further went down to 17 per cent in 2008.

Hindalco bought Canadian aluminium giant Novelis for US\$ 6 billion in May 2007. Only 6 per cent of the value of acquisition is generated through profit after tax at the time of acquisition. Birla had borrowed US\$2.85 billion to buy US\$3.6 billion worth of Novelis' equity and another US\$ 0.75 billion was mobilised through other sources in the form of debt from group companies and through its cash reserves. Three banks namely ABN- Amro, Bank of America and UBS had organised 18 months loan in May 2007. ABN Minerals Netherland, a special purpose vehicle of Hindalco had taken a US\$ 3.3 billion bridge loan in May 2007. Hindalco had to further re-finance the US\$ 2.4 billion debt on Novelis' balance sheet as it could well be repaid with Novelis' cash flows. Hindalco raised US\$ 982 million foreign currency loan to repay the bridge loan. It had further mobilised Rs. 53.6 billion from its treasury operations in the first week of Nov.2008 and another 44.25 billion was raised through a right issue (IRIS, News Digest; Business Line, Feb11.2007). Hindalco could not go for a leveraged buy-out as Novelis' debt-equity ratio was already 7.23:1. Debt-equity ratio of Hindalco had increased only marginally during the year of acquisition. However, this ratio decreased to 0.49 from the level of 0.59 in the year immediately after the acquisition. Shareholders' profit has declined to 17 per cent in 2008 from the level of 21 per cent in 2007.

Videocon and Ripplewood signed an agreement to buy Daewoo's electronics business in a creditors' sale in 2005. Videocon would own just over 50% in a Special Purpose Vehicle that is being set up to make the acquisition while Ripplewood would own the rest. It is also expected to raise funds from the Daewoos' creditors who opt to continue as lenders to the company after the takeover and from acquiring firms' own funds. The money to pay for Daewoo purchase is \$720 million. Videocon paid only \$50 million in equity for the purchase and the rest was the foreign currency loans while Videocon paid 100% equity to buy Thomson's colour picture tubes business. The debt-equity ratio of this firm declined immediately in the year after merger from the level of 1.42 to 0.88. But

this firm had a lower debt-equity ratio in the year just before the acquisition. In the case of this firm, Shareholders' profit has increased marginally from the level of 8 per cent to 9 per cent in the year after acquisition.

Dr Reddy Laboratories' acquisition of Betapharm in 2006 was for 480 million Euros. Dr. Reddy signed an agreement with 3i, the private equity house that controls Betapharm. It is expected to be financed by internal cash reserves and committed credit facilities. 3i, UK-based group bought Betapharm for 300 million Euros in 2005. Betapharm is the fourth largest German drug firm having a market share of 3.5 per cent (Business Line, 17 2006). Dr Reddy's consolidated group debt was brought to \$700 million when the Betapharm deal was closed. The company therefore launched ADR in early January 2006 which helped them wipe out their debt. But the higher financing has affected the profit and loss account of Betapharm (Financial Express, Feb. 3, 2006). Debt-equity ratio has slightly increased in this case. But shareholders profit has increased significantly from 9.3 per cent to 27 per cent in the year following the merger and declined to 10 per cent subsequently.

Ranbaxy Laboratories Ltd. bought Terapia S.A. based in Romania in 2006 for Rs. 15 billion. The acquisition was funded from the proceeds of Foreign currency convertible bonds (FCCBs) issued by the company during the year of acquisition. FCCB is a mix of debt and equity. It acts like a bond by paying coupon and principal payments. The investors receive the safety of guaranteed payments on the bond and are also able to take advantage of any large price appreciation in the company's stock. This combination was expected to make Ranbaxy the No.1 generic firm in the Romanian market (Rao, 2007). Debt- equity ratio has decreased consistently after acquisition as compared to the period before acquisition. Shareholder's profit increased from 9 per cent to 17 per cent within a year after acquisition and it further increased to 24 per cent in 2008.

V. Conclusion

Although there is a significant level of growth in IPOs since 1990s, the share of debt issues accounts for a major share in the total resources mobilised by the corporate sector. From the trends on private placements, the issuance of public equity/debt was negligible. Our analysis also indicates a negative impact of financial crisis on the mobilisation of financial resources. A steady marginal increase in the effective tax rate of the corporate sector during the last phase could be related to the reduction in the depreciation rate pegged at a maximum of 15 per cent as announced by the Union budget, 2005-06. Revenue forgone through tax concessions is still found to be a major source of corporate growth as observed by Reed (2004). From our analysis on the financing pattern of corporate growth, we observed that relatively large share of resources was mobilised through external sources.

Analysing the patterns in the Indian manufacturing sector, we do find an increasing trend in the internal financing since the year 2000 and retained profit did contribute a major share during the corresponding period. The study observed that manufacturing sector and the selected industries are mainly relying on borrowings whenever more finance is required. Resources raised by the manufacturing sector from the capital market have declined significantly since mid-1990s although there is a reverse trend in the last phase (2006-09). More than 50 per cent of the resources have been used for the purpose of building fixed assets. Similar trend is observed when we looked at the pattern of the sources of financing in the selected industries and the acquiring firms within them. Although the acquiring firms have been quite successful in raising resources internally, they were depending largely on external sources. Borrowings were the major source although they were more successful in raising resources through the Indian capital market as compared to the Indian manufacturing sector as a whole. This relative success in the capital market could be arriving to the rise in investor confidence following acquisition moves. These firms have also made use of foreign borrowings and issues of bonds in order to acquire large-sized firms abroad. The effective tax rate paid by these acquiring firms has significantly declined during 1990-2009 while these firms were excelling in terms of profitability. Further, we can conclude that although stock market development was expected to lower the cost of capital for Indian corporate sector, it has not played a major role as far as the actual resource mobilisation of the Indian manufacturing sector is concerned. The study further observes that pecking order theorem does not seem to be applicable in the case of the Indian corporate sector, manufacturing sector, selected industries and the acquiring firms we have studied.

Regulation by the State through measures of corporate governance is important in order to create conditions congenial for growth and propeople development. This is especially important in order to ensure that investments made by minority shareholders are not appropriated by corporate interests and institutional investors. Corporate governance should also be designed to take care of creditors' rights as well since commercial banks in India play a significant role as providers of external finance and are expected to bail out the corporate houses in the event of any crisis. The Indian State also has the right as well as the responsibility to put reasonable limits on the moves by Indian corporate houses for external financing abroad.

P. L. Beena is Assistant Professor at the Centre for Development Studies, Trivandrum. She is currently an ICSSR General Fellow at the Institute for Studies in Industrial Development, New Delhi. Her research interests include Industrial Economics, International Trade and Finance; Applied Micro economics.

Email: beena@cds.ac.in , beena@isid.org.in

Appendices

Appendix 1: Pattern of Sources of Funds for Indian Corporate Sector

(Percentage share to Total)

	1985-86 to 1989-90	1990-91 to 1994-95	1995-96 to 1999-2000 to	2000-01 to 2004-05
Internal Financing	31.9	29.9	37.1	60.7
External sources	68.1	70.1	62.9	39.3
Equity Capital	7.2	18.8	13	9.9
Borrowings	37.9	32.7	35.9	11.5
Debentures	11	7.1	5.6	-1.3
From Banks	13.6	8.2	12.3	18.4
Institutional				
Borrowings	8.7	10.3	9	-1.8
Trade Dues& Other				
Current Liabilities	22.8	18.4	13.7	17.3
Total	100	100	100	100
Share of Capital				
market Related				
Instruments	18.2	26	18.6	8.6
Share of Financial				
Intermediaries	22.2	18.3	21.3	16.6
Debt-Equity Ratio	88.4	85.5	65.2	61.6

Source: Table drawn from "Report on Currency and Finance", RBI 2005-06.

Note: Data pertain to a sample of non-government non-financial public limited companies.

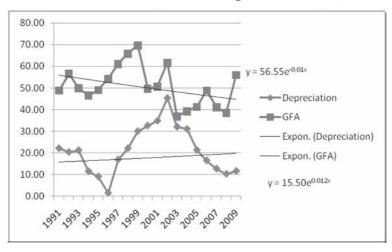
Appendix 2: Industry-Wise Distribution of Sample Acquiring Firms

	Number	% Share to	Number of	% share to
	of	% Snare to	Indian	% snare to Total
	Acquiring	Total	Firms	Total
	firms		Acquiring	
	1111113		Firms	
			Abroad	
Automobile	6	1.41	3	6.38
Automobile ancillaries	18	4.23	6	12.77
Beverages	11	2.58		0.00
Drugs & pharmaceuticals	46	10.8	14	29.79
Cosmetics, toiletries, soaps & Detergents	13	3.05	1	2.13
Petroleum Products	12	2.82	1	2.13
Other Chemicals	62	14.55	4	8.51
Electrical Machinery	32	7.51	1	2.13
Electricity	8	1.88		0.00
Electronics	17	3.99	2	4.26
Ferrous Metals	34	7.98	1	2.13
Non-ferrous Metals	7	1.64	2	4.26
Food	47	11.03	2	4.26
Mining	7	1.64		0.00
Non-Electrical Machinery	12	2.82		0.00
Other Machinery	7	1.64		0.00
•	/	1.04		0.00
Non-metallic mineral products	17	3.99	4	8.51
Pesticides	10	2.35	2	4.26
Textiles	38	8.92	2	4.26
Miscelleneous Manufacturing	22	5.16	2	4.26
Total	426	100	47	100.00

Source: Generated based on "Monthly Review of the Indian Economy",
Published by CMIE, M&A Data Base, Published by CMIE,
SEBI Website and PROWESS Data Base. We have considered
only actual deals listed as mergers and acquisitions categories.

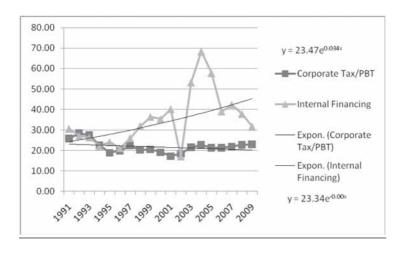
Appendix 3

Share of Depreciation and Gross Fixed Assets in the Sources/Uses of funds in the Indian Manufacturing sector (1991-2009)



Appendix 4

Trends of Internal Financing and Effective Tax Rate of
Manufacturing Sector



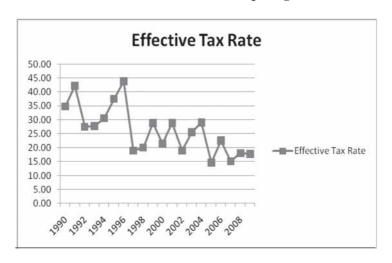
Appendix 5

Trends of Indian Acquisitions Abroad



Appendix 6

Trends of Effective Tax Rate of Acquiring Firms



References

- Beena P.L (2008) "Trends and Perspectives on Corporate Mergers in Contemporary India", *Economic and Political Weekly*, Vol. XLIII, No 39, September 27.
- Beena S (2010) 'Cross-Border Mergers and Acquisitions in India: Extent, Nature and Structure', *Working Paper No 434*, July, CDS, Trivandrum.
- Berle, A and Means, G (1993) *The Modern Corporation and Private Capital*, New York, Macmillan.
- Bhole L. M. and Jitendra Mahakud (2005) "Trends and Determinants of Private Corporate Savings in India," *Economic and Political Weekly*, September 25. pp.4243-4250.
- CMIE (Centre for Monitoring Indian Economy), Corporate Sector, Economic Intelligence Service, Various Issues.

-----POWESS Data Base

- Chandrasekhar C. P. (2007) "Private Equity: A New Role for Finance?" *Economic and Political Weekly*, March 31, 2007.
- Chandrasekhar C. P. (2009) "Continuity or Change? Finance Capital in Developing Countries: A Decade after the Asian Crisis" in Ghosh Jayati and Chandrasekhar C. P. (ed), *After Crisis: Adjustment, Recovery and Fragility in East Asia*, Tulika Books, New Delhi.
- Chandrasekhar C. P. (2009) "Tata Rides the Recession", *Macroscan*, 17th June.
- Cho, Y.J (1986) "Inefficiencies from Financial Liberalisation in the Absence of Well-functioning Equity Markets", *Journal of Money, Credit and Banking*, Vol. 18, No.2 (May), pp.191-200.
- Cornelli, F., R.Portes and M. Schaffer (1998) "Financial Structure of Firms in the CEECs" *In Different Paths to a Market Economy:*

- *China and European Economies in Transition*, Paris: Centre for Economic Policy and Research, OECD, pp.171-88.
- Dennis Rajakumar. J (2001), Financing Patterns and Investment: A Study of the Private Corporate Sector, Doctoral Thesis, CDS, JNU.
- Deutsche Bank Research (2009) "Trends in India's Corporate Financing", *Asia Current Issues*, October 27.
- Government of India (2006) Receipts Budget, 2008-09, Annex-12, http://indiabudget.nic.in.
- Grossman, Sanford. and Oliver, Hart (1986), "The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration," *Journal of Political Economy*, 94, pp.691-719.
- Hart, Oliver and John, Moore (1990) "Property Rights and the Nature of the Firm", *Journal of Political Economy*, 98, pp.1119-1158.
- ISMR (2009), "Indian Securities Market: A Review", Volume XII, www.nseindia.com.
- Joseph Mathew et.al (1999) "Meeting the Needs and Challenges of the Twenty-first Century" in Hanson JA and Kathuria S (eds.) *India:* A Financial System for the Twenty First Century, The World Bank and OUP.
- Mani Sunil, (2009) 'Has India Become more Innovative Since 1991?

 Analysis of the Evidence and Some Disquieting Features' *Working Paper No. 415*, CDS, Trivandrum.
- Mazumdar Surajit (2007-2008) "The Private Corporate Sector", in *Alternative Economic Survey*, India 2007-08. P.116.
- ———— (2008) "Investment and Growth in India under Liberalisation", *Economic and Political Weekly*, Vol. 43 (49), pp. 68-77.

- Mayer, Colin (1990) "Financial Systems, Corporate Finance and Economic Development," In R..G Hubbard (ed), Asymmetric Information, Corporate Finance and Investment, NBER, Chicago University Press.
- McKinnon, R.I (1973) *Money and Capital in Economic Development*, Washington DC, Brooking Institution.
- Mishkin F.S (1996) "Understanding Financial Crises: A Developing Country Perspective," In M. Bruno and B. Pleskovic (eds.) *Proceedings of the World Bank Annual Bank Conference on Development Economics*, 1993. Washington DC, World Bank, pp.19-52.
- Modigliani, F and Miller M.H (1958) "The Cost of Capital, Corporation Finance, and the Theory of Investment," *American Economic Review*, XLVIII (3), June,pp.261-297.
- Myers S and Majluf, N (1984) "Corporate Financing and Investment Decisions: When Firms have Information that Investors do not have", *Journal of Financial Economics*, Vol.13, No.2, pp.187-221.
- Mukherjee Ananya Reed (2004) "On Economic Reforms, Governance and Development: Examining the Problematic Role of Corporate Profit Strategies," Chapter 9, in Darryl Reed and Sanjoy Mukherjee (ed) *Corporate Governance, Economic Reforms and Development: The Indian Experience*, OUP, New Delhi.
- Nagaraj R (2002) "Performance of India's Manufacturing Sector in the 1990s: Some Tentative Findings" in Shuji Uchikawa (ed), *Economic Reforms and Industrial Structure in India*, Manohar, New Delhi.

- Nagaraj R (2006) "Indian Investment Abroad: What Explains the Boom?" Economic and Political Weekly, Vol. XLI, No. 46, pp. 4716-18.
- Nagaraj, R (1996), "India's Capital Market Growth: Trends, Explanations and Evidence," *Economic and Political Weekly*, Special number (September).
- Nayyar, D. (2007) "The Internationalisation of Firms from India: Investments, Mergers and Acquisitions". SLPTMD WP No. 004, Department of International Development, QEH, University of Oxford.
- Patrick, Bolton and David, S. Schartstein (1998) "Corporate Finance, the Theory of the Firm, and Organizations," *Journal of Economic Perspectives*, Volume 12, No. 4, pp. 95-114.
- Prabhakaran Nair.V.R (2005) "Determinants of Fixed Investment: A Study of Indian Private Corporate Manufacturing Sector," *Working Paper 369*, March, CDS, Trivandrum.
- Pradhan Jaya Prakash (2007) "Trends and Patterns of Overseas Acquisitions by Indian Multinationals," *Working Paper No: 2007/10*, October, ISID, New Delhi.
- Rajan R and L zingales (1995) "What do we know about the Capital Structure? Some Evidence from the International Data," *Journal of Finance* (December).
- Rao K.V.S.S Narayana (2007) *Handbook of Mergers and Acquisitions*, National Institute of Industrial Engineering, Mumbai.
- Rao Chalapati K.S and Dhar Biswajit (2010) "Accelerating India's FDI Inflows & Conceptual and Definitional Issues," *Draft paper prepared for discussion for symposium on Concepts, Definition and Data Issues Relating to FDI in India*, ISID, New Delhi, March 16.
- RBI (2005-06) Report on Currency and Finance, Bombay.

- Reed Darryl (2004) "Corporate Governance Reforms in Developing Countries", Chapter 1, in Darryl Reed and Sanjoy Mukherjee (ed) Corporate Governance, Economic Reforms and Development: The Indian Experience, OUP, New Delhi.
- Robertson Peter E (2010) "Investment Led Growth in India: Fact or Mythology," *Economic and Political Weekly*, Vol. XLV, No. 40.
- Sagar Seema (2005) "Financing and Investment Patterns of Indian Firms" *Economic and Political Weekly*, Vol. XL, No. 3, January 15.
- Samual Cherian (1996) "The Stock Market as a Source of Finance: A Comparison of US and Indian Firms," *World Bank Policy and Research Working Paper* (1592), Washington DC.
- Sarkar Jayati and Subrata Sarkar (2004) "Corporate Governance Reforms and Corporate Sector Development in India," Chapter 8, in Darryl Reed and Sanjoy Mukherjee (ed) *Corporate Governance, Economic Reforms and Development: The Indian Experience,* OUP, New Delhi.
- SEBI (2009) "Handbook of Statistics on the Indian Securities Market", SEBI.
- Shaw ES (1973) Financial Deepening in Economic Development, New York; Oxford University Press.
- Shleifer, A and Vishny R.W (1997) "Survey of Corporate Governance," *Journal of Finance*, 52, pp.737-83.
- Singh. Ajit (1997) "Financial Liberalisation, Stock Markets and Economic Development," *The Economic Journal*, Vol.107, (May), pp.771-82.

- Singh Ajit and Javed Hamid (1992) "Corporate Financial Structure in Developing Countries," *Technical Paper 1*, Washington DC, IFC, World Bank.
- Stiglitz, JE (1994) "The Role of the State in Financial Markets," In M Bruno and B Pleskovic (eds.) *Proceedings of the World Bank Annual Bank Conference on Development Economics 1993*, Washington DC, World Bank, pp.19-52.
- World Investment Report (Various years), UNCTAD, New York.
- Williamson, O.E. (2002) "The Theory of the Firm as Governance Structure: From Choice to Contract," *Journal of Economic Perspectives*, Volume 16, No. 3, pp. 171-195.

PUBLICATIONS

For information on all publications, please visit the CDS Website: www.cds.edu. The Working Paper Series was initiated in 1971. Working Papers from 279 can be downloaded from the site.

The Working Papers published after April 2007 are listed below:

- W.P. 439 RAJEEV SHARMA Diversification in Rural Livelihood Strategies: A Macro-Level Evidence from Jammu and Kashmir, December 2010
- W.P. 438 APARNA NAIR, The indifferent many and the hostile few:

 An Assessment of Smallpox Vaccination in the 'Model Native State' of Travancore 1804-1941. November 2010.
- W.P. 437 VINOJ ABRAHAM, The Effect of Information Technology on Wage Inequality: Evidence from Indian Manufacturing Sector. September 2010.
- W.P. 436 S. IRUDAYA RAJAN, D. NARAYANA, The Financial Crisis in the Gulf and its Impact on South Asian Migrant Workers. August 2010.
- W.P. 435 ANUP KUMAR BHANDARI, Total Factor Productivity Growth and its Decomposition: An Assessment of the Indian Banking Sector in the True Liberalised Era. August 2010
- W.P. 434 BEENA SARASWATHY, Cross-Border Mergers and Acquisitions in India: Extent, Nature and Structure.

 July 2010
- W.P. 433 VIJAY KORRA, Nature and Characteristics of Seasonal Labour Migration: A Case Study in Mahabubnagar District of Andhra Pradesh. July 2010
- W.P. 432 K.C. ZACHARIAH S. IRUDAYA RAJAN, Impact of the Global Recession on Migration and Remittances in Kerala: New Evidences from the Return Migration Survey (RMS) 2009. June 2010.

- W.P. 431 GARGI SANATI, Integration of India's Financial Markets on the Domestic and International Fronts: An Empirical Analysis of the Post-Liberalisation Period, June 2010.
- W.P. 430 SUNIL MANI, Has China and India Become more Innovative Since the onset of Reforms in the Two Countries? May 2010.
- W.P. 429 T. R. DILIP, School Educational Attainment in Kerala: Trends And Differentials. April 2010.
- W.P. 428 SUNIL MANI, The Flight from Defence to Civilian Space: Evolution of the Sectoral System of Innovation of India's Aerospace Industry. April 2010.
- W.P. 427 J. DEVIKA, V. J. VARGHESE, To Survive or to Flourish?

 Minority Rights and Syrian Christian Community Assertions
 in 20th Century Travancore/Kerala. April 2010.
- W.P. 426 ANUP KUMAR BHANDARI, Global Crisis, Environmental Volatility and Expansion of the Indian Leather Industry. March 2010.
- W.P. 425 P L. BEENA, HRUSHIKESH MALLICK, Exchange Rate and Export Behaviour of Indian Textiles & Clothing Sector: An Enquiry for Major Destination Countries. March 2010.
- W.P. 424 K. C. ZACHARIAH, S. IRUDAYA RAJAN, Migration Monitoring Study, 2008 Emigration and Remittances in the Context of Surge in Oil Prices. March 2010.
- W.P. 423 VIJAYAMOHANAN PILLAI N, Loss of Load Probability of a Power System: Kerala. February 2010.
- W.P. 422 JAYASEKHAR S, C. NALIN KUMAR, Compliance, Competitiveness and Market Access: A Study on Indian Seafood Industry. February 2010.
- W.P. 421 S. IRUDAYA RAJAN, V.J. VARGHESE, M.S. JAYAKUMAR

 Overseas Recruitment in India: Structures, Practices and

 Remedies. December 2009.

- W.P. 420 V.J. VARGHESE, Land, Labour and Migrations: Understanding Kerala's Economic Modernity, December 2009.
- W.P. 419 R.MOHAN, D. SHYJAN Tax Devolution and Grant Distribution to States in India Analysis and Roadmap for Alternatives, December 2009.
- W.P. 418 WILLIAM JOE & U.S. MISHRA Household Out-of-Pocket Healthcare Expenditure in India Levels, Patterns and Policy Concerns, October 2009.
- W.P. 417 NEETHI P Globalisation Lived Locally: New Forms of Control, Conflict and Response Among Labour in Kerala, Examined Through a Labour Geography Lens. October 2009.
- **W.P. 416 SUNIL MANI** *High skilled migration from India, An analysis of its economic implications,* September 2009.
- W.P. 415 SUNIL MANI Has India Become more Innovative Since 1991? Analysis of the Evidence and Some Disquieting Features, September 2009.
- W.P. 414 WILLIAM JOE, PRIYAJIT SAMAIYAR, U. S. MISHRA

 Migration and Urban Poverty in India Some Preliminary
 Observations, September 2009.
- W.P. 413 K.N. NAIR, T.P. SREEDHARAN, M. ANOOPKUMAR, A Study of National Rural Employment Guarantee Programme in Three Grama Panchayats of Kasaragod District, August 2009
- W.P. 412 B.S. SURAN, D. NARAYANA, The Deluge of Debt: Understanding the Financial Needs of Poor Households. July 2009
- W.P. 411 K.NAVANEETHAM, M.KABIR, C.S. KRISHNAKUMAR

 Morbidity Patterns in Kerala: Levels and Determinants.

 April 2009.
- W.P. 410 ARINDAM BANERJEE, Peasant Classes, Farm Incomes and Rural Indebtedness: An Analysis of Household Production Data from two States. March 2009.
- W.P. 409 SUNIL MANI, The Growth of Knowledge-intensive Entrepreneurship in India, 1991-2007 Analysis of its Evidence and the Facilitating Factors. February, 2009

- W.P. 408 M. S. HARILAL, Home to Market: Responses, Resurgence and Transformation of Ayurveda from 1830s to 1920. November 2008
- W.P. 407 HRUSHIKESH MALLICK, Do Remittances Impact the Economy? Some Empirical Evidences from a Developing Economy. October 2008.
- W.P. 406 K.C.ZACHARIAH, S.IRUDAYA RAJAN, Costs of Basic Services in Kerala, 2007, Education, Health, Childbirth and Finance (Loans) September 2008.
- W.P. 405 SUNIL MANI Financing of industrial innovations in India How effective are tax incentives for R&D? August 2008.
- W.P. 404 VINOJ ABRAHAM Employment Growth in Rural India: Distress Driven? August 2008.
- W.P. 403 HRUSHIKESH MALLICK, Government Spending, Trade Openness and Economic Growth in India: A Time Series Analysis. July 2008.
- W.P. 402 K. PUSHPANGADAN, G. MURUGAN, Dynamics of Rural Water Supply in Coastal Kerala: A Sustainable Development View. June 2008
- W.P. 401 K.K. SUBRAHMANIAN, SYAM PRASAD, Rising Inequality
 With High Growth Isn't this Trend Worrisome? Analysis of
 Kerala Experience, June 2008
- W.P. 400 T.R. DILIP, Role of Private Hospitals in Kerala: An Exploration, June 2008
- W.P. 399 V. DHANYA, Liberalisation of Tropical Commodity Market and Adding-up Problem: A Bound Test Approach, March 2008
- W.P. 398 P. MOHANAN PILLAI, N. SHANTA, ICT and Employment Promotion Among Poor Women: How can we Make it Happen? Some Reflections on Kerala's Experience. February 2008.

- W.P. 397 K.N.NAIR, VINEETHA MENON, Distress Debt and Suicides among Agrarian Households: Findings from three Village Studies in Kerala. December 2007
- W.P. 396 K.N.NAIR, C.P. VINOD, VINEETHA MENON, Agrarian Distress and Livelihood Strategies: A Study in Pulpalli Panchayat, Wayanad District, Kerala December 2007
- W.P. 395 K.C. ZACHARIAH, S.IRUDAYA RAJAN, Migration, Remittances And Employment Short-term Trends and Long-term Implications. December 2007
- W.P. 394 K.N.NAIR, ANTONYTO PAUL, VINEETHA MENON, Livelihood Risks and Coping strategies: A Case Study in the Agrarian Village of Cherumad, Kerala. November 2007
- W.P. 393 S. IRUDAYA RAJAN, U.S.MISHRA, Managing Migration in the Philippines: Lessons for India. November 2007.
- W.P. 392 K.N. NAIR, R. RAMAKUMAR Agrarian Distress and Rural Livelihoods, a Study in Upputhara Panchayat Idukki District, Kerala. November 2007.
- W.P. 391 PULAPRE BALAKRISHNAN, Visible hand: Public policy and economic growth in the Nehru era. November 2007.
- W.P. 390 SUNIL MANI, The Growth Performance of India's Telecommunications Services Industry, 1991-2006 Can it Lead to the Emergence of a Domestic Manufacturing Hub? September 2007.
- W.P. 389 K. J. JOSEPH, VINOJ ABRAHAM, Information Technology and Productivity: Evidence from India's Manufacturing Sector. September 2007.
- W.P. 388 HRUSHIKESH MALLICK, Does Energy Consumption Fuel Economic Growth In India? September 2007.
- W.P. 387 D. SHYJAN, Public Investment and Agricultural Productivity: A State-wise Analysis of Foodgrains in India. July 2007.
- W.P. 386 J. DEVIKA, 'A People United in Development': Developmentalism in Modern Malayalee Identity. June 2007.

- W.P. 385 M. PARAMESWARAN, International Trade, R&D Spillovers and Productivity: Evidence from Indian Manufacturing Industry. June 2007.
- W.P. 384 K. C. ZACHARIAH, S. IRUDAYA RAJAN Economic and Social Dynamics of Migration in Kerala, 1999-2004 Analysis of Panel Data. May 2007.
- W.P. 383 SAIKAT SINHA ROY Demand and Supply Factors in the Determination or India's Disaggregated Manufactured Exports:

 A Simultaneous Error-Correction Approach. May 2007.

This work is licensed under a Creative Commons
Attribution – NonCommercial - NoDerivs 3.0 Licence.

To view a copy of the licence please see: http://creativecommons.org/licenses/by-nc-nd/3.0/