

# India's Capital Market Growth

## Trends, Explanations and Evidence

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*This study, first, documents India's capital market boom, and its proximate causes. What does it mean for the economy and private corporate sector? It is largely disintermediation: household sector substituted 'shares and debentures' for bank deposits, and corporate sector securitised its debt. There is no association between growth rates of the capital market mobilisation and aggregate saving rate, corporate physical investment and value added. Long-term decline in the contribution of internal finance to corporate fixed investment and in profitability in 1980s are noted, despite a fall in ratio of corporate tax to gross profit. The study concludes by raising some questions.*

FOR some time now, the capital market in India is much in news.<sup>1</sup> There is a widespread appreciation of the private corporate sector's (corporate sector, hereafter) ability to issue a growing volume and variety of marketable securities, as this suggests an increasing role for markets in the economy's resource allocation. It also raises many questions. What does the trend imply for the economy's aggregate saving rate and its composition, and for corporate performance. Is it necessary and desirable for the economy's long-term development prospects? This study seeks to explore these and related questions.

Section I describes long-term trends in India's capital market growth. To understand them, Section II briefly reviews the recent literature. On this basis, Section III examines the implications of the observed trends for the economy and the corporate sector. Summarising the main findings, the concluding section raises some questions that seem to follow from the capital market development.

### I Trends

After remaining dormant for nearly two decades since around 1960, resource mobilisation in the primary capital market showed an upturn from the late 1970s (Figure 1). The growth accelerated towards the end of 1980s. The market capitalisation ratio went up from about 5 per cent of GDP in 1980-81 to 63 per cent in 1992-93.<sup>2</sup> In eight years after 1986, the average daily turnover in the secondary market grew at about 35 per cent per year.<sup>3</sup> Between 1980-81 and 1992-93, the RBI index of securities prices increased almost thrice (20.7 per cent per year) as fast as the wholesale price index (7.6 per cent per year). This, in principle, reduces cost of equity capital and increases prospects for capital gains.

However, much of the growth is for debt securities. About a third is for convertible debentures.<sup>4</sup> Proportion of equity (or risk) capital in market mobilisation came down from about 90 per cent in the early 1970s

to about 30 per cent two decades later (Figure 2). However, in absolute terms, nominal value of fresh equity capital raised grew at 18 per cent per year. Promoters' contribution in this more than doubled, from 21 per cent in 1970-71 to 45 per cent in 1990-91. This, in principle, is a favourable change as they now have a greater stake in the companies' financial success (Table 1).<sup>5</sup> Proportion of equity underwritten also rose steadily, reflecting the stock market's growing maturity [Samuel 1996a]. Moreover, the market witnessed growth of new financial institutions offering a variety of services and tradable instruments with varying components of debt, equity, maturities and risk.<sup>6</sup>

How does India compare with other 'emerging market economies' (EME)? Reportedly, India is the biggest among them with about 8,000 quoted companies in 1995, an increase of over 70 per cent over the last decade (*The Economist*, July 6, 1996).<sup>7</sup> In market capitalisation, India ranked seventh in 1995 (*The Economist*, July 15, 1995).<sup>8</sup> However, as Indian firms are small (measured by market capitalisation), they do not figure in the list of top 30 firms in EMEs (*The Economist*, August 12, 1995).

What explains the capital market growth? Proximate causes are a series of policy initiatives since around the late 1970s when, as mentioned, the stock market had a marginal role in financing industry.<sup>9</sup> Initially, dilution of equity holding in foreign-controlled rupee companies – popularly called the 'FERA companies', as they attracted this 1973 act – was perhaps a conscious effort to stimulate the primary capital market [Morris 1985].<sup>10</sup> FERA companies' success was probably significant for further development of the market.

This broadly coincided with the rise in nominal interest rates and the financial sector's growing resource constraint.<sup>11</sup> With increasing reserve requirement and 'priority sector' lending targets at concessional interest rates, commercial banks reportedly could not meet the industrial sector's credit needs. In these circumstances, development finance

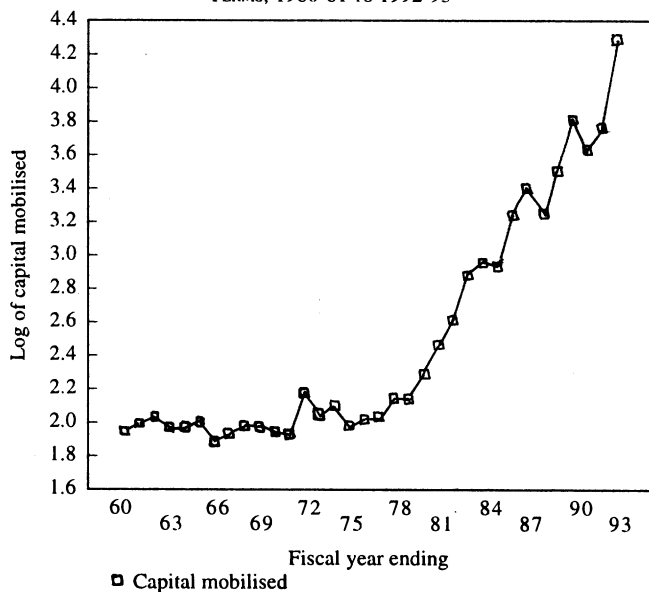
institutions (DFI) persuaded firms to raise part of the required funds from the capital market.<sup>12</sup> Anticipating corporate sector's resource constraint in the Sixth Plan (1981-85), government initiated many steps to encourage flow of household saving into capital market [Planning Commission 1982].<sup>13</sup> These included hike in interest rates on debt instruments, their convertibility into equity, raising of tax exemption limits on dividend income and easing its (and interest) deduction at source. Similarly, corporate tax rates were reduced.<sup>14</sup> Thus capital market reforms since 1991 perhaps reflect a continuation of a trend initiated over a decade ago.<sup>15</sup>

What do these trends (and policies that seem to underpin them) imply for long-term development? Do they represent a 'natural' evolution of a 'repressed' financial system towards a more 'market-oriented' system with a greater need for regulation, as the Narasimham Committee noted [Government of India 1991]. Does it necessarily mean a greater allocative efficiency as resource use is increasingly market determined? Are there alternative 'models' or 'systems' of financial development to choose as our trajectory. To explore these questions, the recent analytical literature and comparative experience is briefly reviewed below.

### II An Analytical Sketch

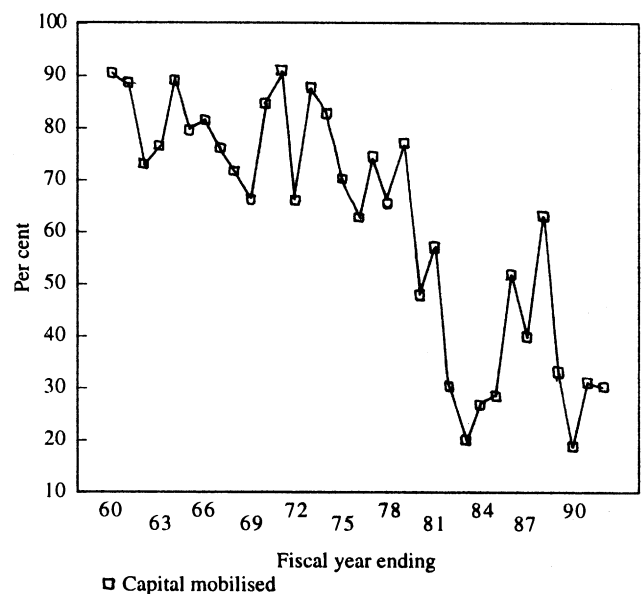
For much of the recent literature on financial markets, Mackinnon (1973) and Shaw (1973) form the points of departure. These studies argue that state intervention in setting interest rates and quantitative measures of resources allocation – defined as financial repression – adversely affect not only allocative efficiency but also depress the aggregate saving rate (hence investment) in less developed economies (LDCs). Therefore, they advocate liberalisation of financial markets. However, their arguments are mostly related to interventions in banking, like interest rates ceiling, statutory reserve requirements and directed lending programmes at concessional interest rates.

FIGURE 1: CAPITAL RAISED IN INDIA'S PRIMARY CAPITAL MARKET IN NOMINAL TERMS, 1960-61 TO 1992-93



Source: RBI Report of Currency and Finance, various issues.

FIGURE 2: SHARE OF EQUITY IN TOTAL CAPITAL MOBILISED, 1960 TO 1992



Source: RBI Report of Currency and Finance, various issues.

Extending their thesis, Cho (1986) argued that financial market liberalisation may remain incomplete without an efficient market for equity capital as a means of spreading risk (and reward).<sup>16</sup>

In principle, stock market, as a part of a well organised financial system, has many advantages. It allows efficient risk sharing. Stock market induces gathering of information which gets reflected in stock prices. These prices are then signals for resource allocation. In the secondary market, stock prices are powerful signals for managerial incentives and corporate governance.

Attributing part of the debt crisis of the 1980s in LDCs to inadequate development of their financial markets, the *World Development Report (WDR)*, 1989 [World Bank 1989] broadly reflects the preceding analytical position. However, recognising information failure that can be acute in financial markets, the report argues for a sound supervisory mechanism and institutions to ensure their efficient functioning. On these considerations, the World Bank (and its affiliate, International Finance Corporation) makes policy-based lending and offers technical assistance for capital market development. Stock market growth in many LDCs in recent years perhaps reflects these policies and financial incentives. In India too, of late, much of the policy discussion seems to follow this dominant thought.

Till some time ago, shortage of long-term capital was believed to be a major constraint on industrialisation, since banks supply only short-term loans. As capital markets were practically non-existent (or reportedly

inefficient) in most LDCs, state promoted DFIs (often supported by World Bank's advice and lines of credit) were expected to make up for the absence of an efficient capital market. Keynes' precepts about inefficiency (and fickleness) of the stock market and banks' limitation in meeting long-term financial needs of industrialisation perhaps underpinned much of the earlier policy.<sup>17</sup> Gerschenkron's (1962) historical account offered empirical support for it.<sup>18</sup>

Many believe one of the reasons for the post-war success of Japanese and German growth and productivity is the difference in their institutional set up for financing industry [Zysman 1983, Dore 1985, Dimsdale and Prevezer 1994]. In these economies, large firms and banks have close financial (and managerial) links, while stock markets are relatively small and illiquid. Hence, firms reportedly take a long-term view of corporate success. In contrast, firms in the US and UK have arms length relations with banks. Firms are apparently more concerned about short-term prospects as their market valuation depends on quarterly/half-yearly financial performance.<sup>19</sup> A growing opinion seems to find the US system of stock market – though efficient and liquid – unsatisfactory for corporate governance. [Bhide 1994].

Another reason for questioning capital markets' role in financing development is the recent empirical research that revived the 'financing hierarchy' hypothesis in corporate finance literature [Koch 1943, Donaldson 1961]. Contrary to the widely held belief, Mayer found, using company balance sheet data, that internal resources finance bulk of corporate (physical) investment in major OECD countries and stock market's role

(net of redemption) is very limited. To quote him:

The first is that retentions are the dominant source of finance in all countries...where external finance is raised it generally comes from banks rather than from securities

TABLE 1: PROPORTION OF PROMOTERS' SUBSCRIPTION TO EQUITY CAPITAL RAISED, 1970-71 TO 1990-91\*

Year	Per Cent
1970-71	20.7
1975-76	9.0
1980-81	22.5
1986-87	24.0
1987-88	38.3
1988-89	28.5
1989-90	56.9
1990-91	45.0

\* 'Promoters' include collaborators and employees.

Source: RBI Report on Currency and Finance, 1991-92.

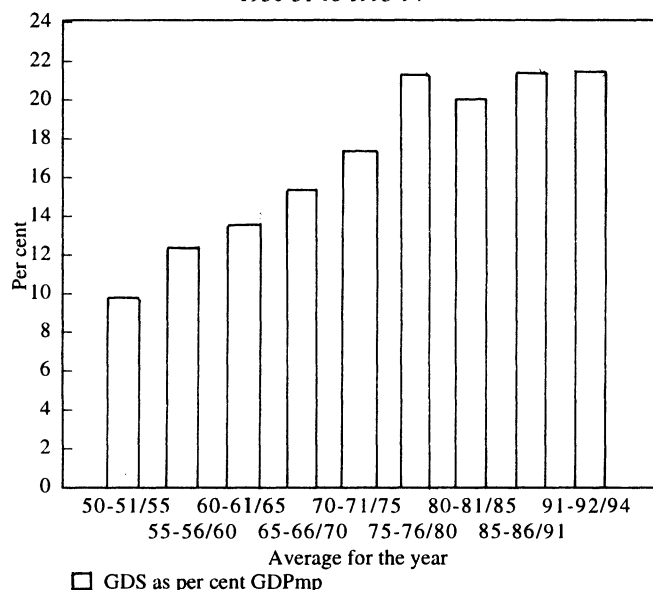
TABLE 2: CHANGING COMPOSITION OF NET FINANCIAL SAVING, 1960-61 TO 1993-94

Year	Bank Deposits	Shares and Debentures	Government
1960-61/64-65	23.4	14.3	57.1
1965-66/69-70	29.9	11.2	55.0
1970-71/74-75	42.8	3.8	52.5
1975-76/79-80	44.9	3.3	51.2
1980-81/84-85	38.8	6.0	54.1
1985-86/90-91	26.9	11.8	59.1
1991-92/93-94	29.6	22.6	44.3

Notes: Government includes net claims on government, life insurance fund and provident and pension funds.

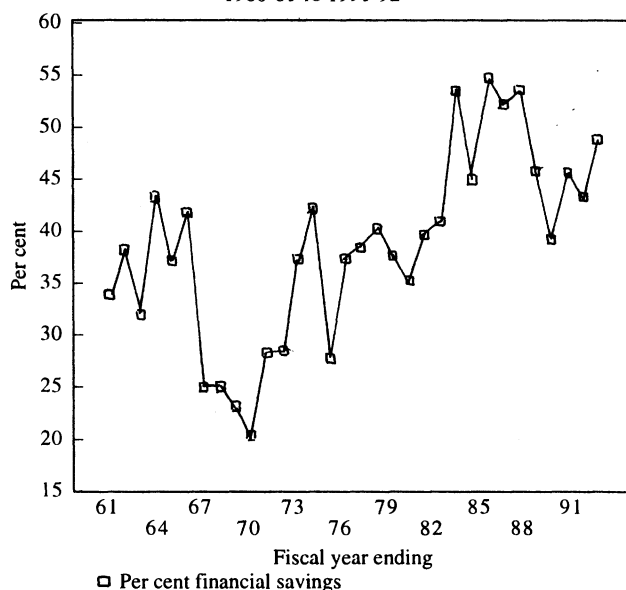
Source: National Accounts Statistics, various issues.

FIGURE 3: GROSS DOMESTIC SAVING AS PER CENT OF GDPMP, 1950-51 TO 1993-94



Source: National Accounts, Statistics, various issues.

FIGURE 4: SHARE OF FINANCIAL SAVING IN GROSS DOMESTIC SAVING, 1960-61 TO 1991-92



Source: National Accounts, Statistics, various issues.

market...stock markets contribute very little to new sources of finance for companies: new equity issues account for well under 10 per cent of the total sources of finance raised by companies in all major OECD countries... bond markets are a relatively minor source of finance for industry in aggregate in all countries other than the US and Canada. [Mayer 1992: 465]<sup>20</sup>

Reiterating the same stylised fact, Stiglitz highlights problems of information failure that are severe in financial markets and notes the need for state intervention [Stiglitz 1991, 1993]. He says, "... we must bear in mind the quite limited role that they [market for equity] play in raising capital in developed countries. Hopes of raising substantial amounts of capital in this form within LDCs appear to me to be unreasonable." In a footnote, he further adds, "Today, investors in LDCs bring to bear the full experience of how equities have been abused, even in societies with fairly well functioning legal systems. This should make them wary about what would happen in LDCs" [Stiglitz 1991:11].

Thus, we seem to have two broadly competing perspectives. One, the financial liberalisation thesis that emphasises centrality of stock market in resource allocation and the secondary market's disciplining role (with independent supervision) on managerial behaviour. Two, information economics theorists who, on theory and history, argue for its limited role.

In development economics, stock market did not receive adequate attention as it is a recent phenomenon in LDCs. To our knowledge, Singh and Hamid (1992) and Singh (1995), analysing corporate financing

pattern of top 50 (100) private corporate firms in nine (ten) EMEs in 1980s, are significant efforts.<sup>21</sup> Contrary to the OECD experience they find, on average, equity capital finances about 40 per cent of corporate investment growth in these economies.<sup>22</sup> However, noting the limitations of sample size and methodology, Cobham and Subramaniam (1995) seriously qualify Singh's finding. Following Mayer's methodology, they show a much limited role for equity in financing corporate growth in India. To quote them:

...India is broadly comparable to... France and Italy which have relatively small stock market (with no market for corporate control), large sectors of medium and small

sized companies and a banking system which lends substantial amounts to companies but does not have very close ties with firms and cannot exert the same influence and control over them typical of Japanese banks [Cobham and Subramaniam 1995: 31].

Mindful of the OECD experience and analytical limitations of the financial liberalisation thesis, Singh (1992) suggested that the real test for capital market in developing economies is its effect on saving, investment and growth. To quote him:

...the important question is whether the development of the stock markets in these economies has led to an increase in aggregate savings or whether it simply represents the substitution of one form of saving (say bank

TABLE 3: SHARE OF RETENTION IN FINANCING CORPORATE PHYSICAL INVESTMENT, 1956-57 TO 1991-92

Year	Datta Roy Chaudhury Series		RBI	NAS
	Gross Retention <sup>1</sup> (1)	Net Retention <sup>2</sup> (2)	Series <sup>3</sup> (3)	Series <sup>4</sup> (4)
1956-57/59-60	64.4	34.2		34.5
1960-61/64-65	67.1	54.3	60.1	50.5
1965-66/69-70	126.5	55.6	61.9	94.8
1970-71/74-75	95.2	92.5	64.3	119.0
1975-76/79-80	86.7	75.0	62.4	89.7
1980-81/84-85	58.5	37.9	49.6	16.3
1985-86/86-87	39.4	5.0		30.1
1985-86/89-90			49.5	42.3
1990-91/91-92			50.1	

Notes: 1 Gross saving (retained earnings plus depreciation) as per cent of gross fixed capital formation at current prices.

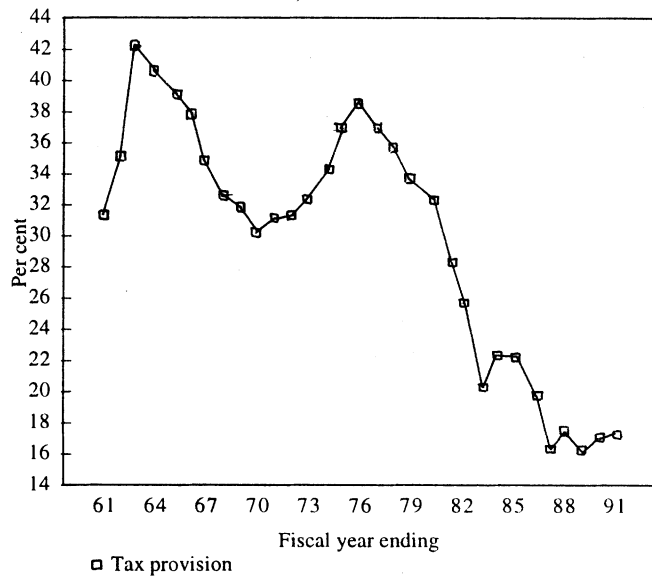
2 Net saving (retained earnings) as per cent of net fixed capital formation at current prices.

3 Gross saving as per cent of gross capital formation, for medium and large non-financial public limited companies.

4 This includes financial companies and co-operative banks and societies. But since non-financial companies form over 90 per cent of the total, these figures are broadly comparable with the rest of the table.

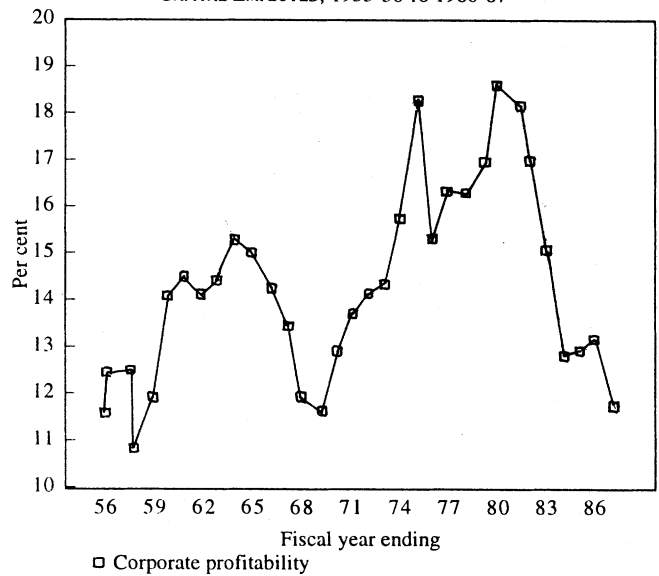
Source: Datta Roy Chaudhury (1992); RBI Bulletin, various issues.

FIGURE 5: TAX PROVISION AS PERCENTAGE OF CORPORATE SECTOR'S GROSS PROFIT, 1960-61 TO 1990-91



Source: RBI Bulletin, various issues.

FIGURE 6: CORPORATE PROFITABILITY: GROSS PROFIT AS PERCENTAGE OF CAPITAL EMPLOYED, 1955-56 TO 1986-87



Source: Dutta Roy Chaudhari (1992).

savings or government bonds) for another (purchase of corporate shares in stock-market)...it could be argued that the stock market is still useful insofar as it leads to a more efficient allocation of these savings or to better corporate performance as a result of stock market exposure (pp 38-39, emphasis as in the original).

The preceding brief review helps us ask relevant questions about the recent Indian experience. What does capital market growth mean for domestic saving rate, corporate investment rate and output growth? What proportion of physical investment is financed by internal resources? Has it changed since the capital market boom? Does capital market mobilisation represent additional resources for investment or a substitution of external finance for internal resources? Has the composition of external finance changed in recent years? Is capital market boom associated with improved corporate performance? The following section examines these questions empirically.

### III Evidence

#### INDIA'S CORPORATE SECTOR: A BRIEF ACCOUNT

In this study, the corporate sector is defined as non-financial, non-government joint stock companies. As this sector accessed bulk of the capital market resources, it will be useful to begin by describing the broad dimensions of this sector. In 1994, it consisted of about 3.4 lakh registered companies [Department of Company Affairs 1995]. Slightly less than half of them are engaged in manufacturing and about a quarter in 'finance, insurance, real estate and business services'. However,

bulk of corporate value added originates in registered manufacturing. Only about 12 per cent of the corporate sector are public limited companies, yet they account for about 80 per cent of the total paid up capital. Among public limited companies, the top 670 companies accounted for 43 per cent of net value added in the corporate sector in 1986-87.<sup>23</sup> Only about 2 per cent of public limited companies accessed capital market in 1993-94.

Corporate sector constituted 11 per cent of current GDPfc in 1986-87 (about 9 per cent in 1960-61), and about 27 per cent of

non-agriculture, private sector GDPfc.<sup>24</sup> Within the corporate sector, public limited companies' share in value added declined by 10 per cent (from 80 per cent), over two and a half decades from 1960-61. This seem to broadly correspond to faster growth in the number of private limited companies. In other words, private limited companies, representing mostly small and closely held firms, increased their share in corporate sector value added.<sup>25</sup> These statistics show the relative size of India's corporate sector and the (skewed) distribution of firms in it.

TABLE 4: CHANGING COMPOSITION OF CORPORATE SECTOR'S EXTERNAL FINANCE, 1961-62 TO 1990-91

Years	As Per Cent of Total External Finance			As Per Cent of Gross Capital Formation		
	Paid-Up Capital	Borrowing	Trade Credit	Paid-Up Capital	Borrowing	Trade Credit
1961-62/64-65	17.3	52.6	30.0	10.6	33.2	18.9
1965-66/69-70	10.9	56.4	32.5	7.5	38.7	22.1
1970-71/74-75	5.7	40.9	54.5	2.7	23.6	31.9
1975-76/79-80	4.4	46.6	48.7	4.2	45.0	46.4
1980-81/84-85	4.0	55.2	40.2	3.6	50.2	36.3
1985-86/89-90	11.3	55.7	33.5	10.4	57.8	39.3
1990-91/91-92	11.8	54.5	33.6	11.5	55.1	34.0

Note: Paid-up capital includes share premium.

Source: RBI Bulletin, various issues.

TABLE 5: CHANGING PROFILE OF CORPORATE BORROWING, 1961-62 TO 1990-91

Year	Share in Total Borrowing			
	Banks	Debentures	Fixed Deposits	Others
1961-62/64-65	63.3			36.7
1965-66/69-70	62.0			38.0
1970-71/74-75	72.9			27.1
1975-76/79-80	55.6			44.4
1980-81/84-85	30.0	22.0	13.3	34.7
1985-86/89-90	38.3	28.0	6.8	26.9
1990-91/91-92	26.6	23.7	2.7	47.0

Source: RBI Bulletin, various issues.

TRENDS IN AGGREGATE SAVING AND  
ITS COMPOSITION

As is widely known, India's gross domestic saving rate (GDS) after peaking at 23 per cent of GDP at market prices (GDPmp) in 1978-79, fluctuated around 21 per cent for about a decade, till it regained the earlier level in 1990-91. Figure 3 shows five-yearly average in GDS since 1950-51.<sup>26</sup> The share of financial saving in GDS rose steadily from 20 per cent in 1970-71 to about 55 per cent in 1984-85. However, it declined to about 40 per cent in the second half of 1980s, though it has improved somewhat subsequently (Figure 4). Therefore, no association exists between capital market growth and aggregate saving rate (or its share in financial assets).<sup>27</sup>

However, in the 1980s financial saving's composition shifted away from bank deposits to 'shares and debentures', with little change in the share of resources accruing to government through contractual saving schemes, like provident fund (Table 2). Between 1980-81 and 1992-93, the proportion of 'shares and debentures' in financial saving increased four times, from 5 per cent to 21 per cent. Therefore, the growth of (primary) capital market mobilisation represents a substitution of tradable securities for (fixed interest rate) bank deposits. Higher than bank interest rate on debentures, with opportunities for capital gains (in case of convertible debentures) and tax saving (in case of tax-free public sector bonds) are perhaps responsible for the shift in the portfolio.<sup>28</sup>

CHANGING PATTERN OF CORPORATE FINANCE

This subsection uses three sets of time series data: (i) Datta Roy Chaudhury (1992) for 1955-56 to 1986-87, (ii) RBI finances of medium and large non-financial public limited companies, 1960-61 to 1991-92 and (iii) flow of funds (FOF) of private corporate business sector, for 1951-52 to 1991-92.<sup>29</sup> We use balance sheet data as well as FOF table covering overlapping time periods to ensure robustness of our findings. Our effort seems an improvement over Singh (1995)

as well as Cobham and Subramaniam (1995) since we use data for the entire private corporate sector, and for three to four decades.

A significant long-term trend is a decline in share of internal finance in corporate physical investment. According to the Datta Roy Chaudhury series, gross internal finance as a proportion of (nominal) gross fixed capital formation at (GFCF) declined from a high of 126.5 per cent to 39 per cent between 1966-70 and 1985-87 (Table 3, column 1). In the RBI series (column 3), ratio of gross internal finance and (nominal) gross capital formation (GCF) also show a similar trend, though the extent of decline is less. The trend is broadly similar on a 'net' basis as well.<sup>30</sup> In the Datta Roy Chaudhury series, ratio of net retention (retained earning) and (nominal) net fixed capital formation peaked during 1971-75 and reached a low of 5 per cent during 1986-87 (column 2). Using *National Accounts Statistics* (NAS) also, the ratio shows a similar trend, though it improved by early 1990s (column 4). FOF data for four decades since 1951-52 confirms these changes.<sup>31</sup> This seems significant, as it is at variance with the trends in the developed economies. As mentioned earlier, Mayer showed that in all major OECD countries internal finance forms a high and stable proportion of capital formation.

In India, the share of internal finance fell, despite a secular decline in corporate tax provision as a proportion of gross profit, from about 40 per cent in mid-1970s to about 15 per cent by the end of 1980s (Figure 5). This perhaps questions the widely held view that tax reduction increases corporate sector's internal resource generation.

What happened to the composition of external finance with capital market growth? The RBI series show that the share of fresh paid-up capital (including premiums) in total external finance increased from 4.4 per cent during the second half of 1970s to 11.3 per cent a decade later (Table 4). This level of equity financing is comparable to that during 1960s.<sup>32</sup> A similar change in external finance's composition is evident as a proportion of corporate gross capital formation also.

However, the share of borrowing has remained stable at over one-half of external finance in 1980s. Therefore, increase in equity finance has compensated for the decline in the share of trade credit. However, composition of 'borrowing' has changed: shares of banks and fixed deposits have come down significantly, with a corresponding increase in the proportion of debentures (Table 5).

FOF data since 1951-52 are also consistent with these observations, suggesting that much of the growth of capital market represents substitution of securitised debt for bank credit, trade credit and fixed deposits (with a limited increase in equity financing) (Table 6).

In principle, greater reliance on external finance subjects firms to the constant scrutiny of capital market. If increase in share of external finance boosts corporate investment rate, it may be desirable since, as Singh and Hamid noted, many rapidly industrialising economies like South Korea display such a pattern. As Table 7 shows, in India, corporate GFCF as a proportions of (i) GDPmp and (ii) aggregate GFCF increased in the second half of 1980s.

However, is this association statistically significant? Over three decades since 1961-62, (nominal) annual growth rates of capital raised and corporate GFCF have a statistically significant positive correlation (Table 8). However, the correlation turns statistically insignificant for the period since 1980-81,

TABLE 7: GROSS FIXED CAPITAL FORMATION,  
1955-56 TO 1993-94

Year	Corporate GFCF as Per Cent of	
	GDPmp	Total GFCF
1955-56/59-60	1.6	12.3
1960-61/64-65	2.5	17.6
1965-66/69-70	1.4	9.5
1970-71/74-75	1.6	10.6
1975-76/79-80	1.6	8.8
1980-81/84-85	3.4	17.5
1985-86/89-90	3.5	16.3
1990-91/93-94	5.7	26.0

Note: All values at current prices.

Source: *National Accounts Statistics*, various issues.

TABLE 6: FINANCING OF CORPORATE BUSINESS SECTOR, 1951-52 TO 1991-92

Year	Deficit Financed by Sectors						Deficit Financed by Instruments				
	Banking	Other Fin Institution	Government	HH Sector	Rest of the World	Others	Currency	Securities	Loans	Trade Credit	Others
51-52/55-56	15.1	9.6	7.0	66.1	1.9	-	-11.5	47.8	57.5	5.8	-
56-57/60-61	38.6	8.7	10.1	29.9	6.5	6.2	-3.4	31.2	81.6	-7.5	-1.8
61-62/65-66	50.9	22.2	7.2	15.8	3.9	-	-3.8	28.6	80.8	-5.6	-
66-67/70-71	54.9	19.7	6.9	15.3	2.7	0.5	-5.1	19.7	85.6	-2.3	2.4
71-72/75-76	35.5	14.4	6.8	35.2	3.0	5.1	10.7	9.7	45.4	16.6	17.6
76-77/80-81	20.6	18.9	5.7	35.5	0.6	18.6	4.7	14.1	43.6	10.6	26.9
81-82/85-86	29.6	24.1	0.8	24.6	0.7	20.2	-2.8	18.6	47.5	4.0	32.7
86-87/89-90	37.4	48.7	-0.2	8.7	1.1	4.3	-1.4	30.7	43.5	1.0	26.2
90-91/91-92	10.7	77.9	-0.7	8.6	7.4	-3.8	-17.4	29.8	54.4	5.2	38.0

Source: *RBI Bulletin*, various issues.

when the capital market boomed. The same finding holds with one year lag also. Therefore, on the face of it, the hypothesis that capital market resource mobilisation could have favourably influenced corporate physical investment growth does not seem valid.

Arguably, capital market boom may have contributed to output growth by encouraging better use of existing capital stock. This does not seem to be true either. Growth rate of real net value added in corporate manufacturing is lower than that of registered manufacturing as a whole (Table 9).<sup>33</sup> This holds for 1973-74 to 1990-91 as well as for its sub-period, 1980-81 to 1990-91, when manufacturing output growth witnessed an upturn. This means (as noted earlier), small sized, non-corporate firms have contributed more to the improvement in manufacturing growth rate in 1980s than the corporate sector.

Is the capital market boom then associated with improved corporate profitability? Datta Roy Chaudhury data suggest that profitability (gross profit as percentage of capital employed) fell sharply by 7 per cent, from around 19 per cent during 1981-87 (Figure 6). This is consistent with Singh and Hamid's estimates for top 50 companies for 1980-88. During the three decades since 1960-61, corporate sector's profit margin (profit before tax as percentage of total income) has come down by more than half (Table 10). Profit before tax as percentage of net assets and profit after tax as percentage of net worth (representing return to investor) show a gradual decline since the mid-1970s. However, these trends may have changed somewhat in the 1990s, though the evidence is limited for two years.

One could argue that real efficiency gain in securities market is likely to come from contestability of managements through threat of take-over. This question is as yet largely hypothetical, since this route to possible efficiency gains is legally restricted in India.

To answer the questions that we posed (quoting Singh) in the last section: there is little association between capital market resource mobilisation and aggregate saving rate, and corporate physical investment and output growth rates. As Singh speculated, primary stock market growth seems to represent households sector's substitution of 'shares and debentures' for bank deposits. Firms securitised their debt, instead of getting it from banks, or as trade credit and fixed deposits. These developments represent financial disintermediation that many OECD countries witnessed about a decade ago.<sup>34</sup> No statistically valid relationship exists between growth rates of capital market mobilisation and corporate physical investment (and output) in manufacturing. Significantly, corporate profitability declined

in 1980s when capital market boomed.<sup>35</sup> In other words, with capital market growth, an increasing share of loanable funds have accrued to a sector that contributed relatively less to output growth and that did not improve its investment rate either.

#### IV Conclusion

In sum, India's capital market witnessed a rapid growth since around 1980. It accelerated by the end of the decade. This is also significant in comparison with other emerging market economies. Increases in nominal interest rates since early last decade, incentives offered on traded securities, and changes in related policies (and procedures) seem responsible for this development.

The financial liberalisation thesis posits its likely positive effect on the economy's saving, investment and efficiency. A well functioning stock market also has a screening and monitoring role. However, recent advances in analytical literature highlights the possible inefficiencies in financial markets due to imperfect information that could be acute in LDCs, and underscores the need for state intervention. Further, reviving the financing hierarchy hypothesis, the new evidence on corporate financial structure in major OECD countries shows that the stock markets contributed very little to fixed investment. Secondary market's role in improving corporate governance is also open to a serious debate both on theoretical and empirical grounds. In the light of these competing perspectives, this study examined the implications of the India's capital market boom for the economy and the corporate sector.

Capital market growth has changed domestic financial saving's composition from bank deposits to 'shares and debentures', without favourably influencing domestic saving rate, or its share in financial assets. Equity capital's share in the total capital market mobilisation declined, as bulk of such mobilisation is in the form of debt securities. However, growth rate of fresh equity capital raised is substantial. Promoters' contribution to it has more than doubled. This could possibly improve financial

performance as promoters have a greater stake in their firms.

Over the last two decades, the corporate sector that secured most of these resources witnessed a long-term decline in the share of internal finance in corporate physical investment. In mid-1980s, retained earning accounted for less than 10 per cent of gross internal resources. This happened, despite a steady fall in tax burden (tax provision as proportion of gross profits). These changes are quite at variance with the developed countries' experience, where internal finance forms the largest and stable source of finance for corporate capital formation.

In 1980s, composition of external finance shifted away from trade credit to equity capital (including share premium), while the proportion of borrowing remained high and increased somewhat. However, within borrowing, debentures replaced bank credit and fixed deposits.

There is no statistically valid association

TABLE 9: GROWTH RATES OF REAL NET VALUE ADDED IN REGISTERED MANUFACTURING AND CORPORATE MANUFACTURING SECTORS.  
(Per cent per year)

Years	Registered	Corporate
1973-74 to 1990-91	5.7	4.4
1980-81 to 1990-91	7.1	6.3

Note: Implicit registered manufacturing GDP deflators are used to compute real values.

Source: Annual Survey of Industries: Summary Results of Factory Sector, various issues.

TABLE 10: CORPORATE PROFITABILITY, 1960-61 TO 1991-92

Years	PBT as Per Cent of Total Income	PBT as Per Cent of Net Assets	PAT as Per Cent of Net Worth
1960-61/64-65	9.0	14.0	9.7
1965-66/69-70	6.9	11.5	8.3
1970-71/74-75	7.3	15.5	11.5
1975-76/79-80	5.9	15.0	10.2
1980-81/84-85	4.7	11.2	11.1
1985-86/89-90	3.7	6.8	7.7
1990-91/91-92	5.9	10.0	12.8

Note: PBT - Profit before tax; PAT - Profit after tax.

Source: RBI Bulletin, various issues.

TABLE 8: SIMPLE CORRELATION COEFFICIENTS BETWEEN NOMINAL ANNUAL GROWTH RATES OF CAPITAL RAISED AND GROSS FIXED CAPITAL FORMATION IN CORPORATE SECTOR

Year (1)	No of Observations (2)	Correlation Coefficient (3)	No of Observations (4)	Correlation Coefficient (5)
1961-62/91-92	31	0.361*	30	0.0
1961-62/79-80	19	0.446*	18	(-)0.424*
1980-81/91-92	12	0.246	11	0.0

Notes: 1 Columns 4 and 5 refer to a lagged relationship between capital raised in year 't' with nominal GFCF in year (t+1).

2 \* Statistically significant at 90 per cent confidence level.

Source: National Accounts Statistics, various issues.

between capital market resource mobilisation and growth in corporate fixed investment or growth in this sector's real value added. Thus, we have witnessed, mainly, financial disintermediation, with little effect on aggregate saving rate and corporate investment and output growth rates. This seems similar to what happened in many developed economies with financial deregulation about a decade ago. All indicators of corporate profitability show a decline in 1980s.

If our findings are valid, they appear significant. The widely held view of positive effects of stock market growth on the economy's real sector, perhaps, needs to be taken with caution. Moreover, the findings seem to raise many questions. How could corporate sector access such large resources when its profitability was steadily declining? Why did the share of retained earnings decline when the corporate tax burden fell? Is the fall in profitability related to decline in share of internal finance? Finally, and perhaps more fundamentally, if capital market has little relation to corporate investment rate and output growth rate, what does capital market growth mean for the economy? Is it, then, merely a side show?<sup>36</sup>

Capital market is not just an institution for resource mobilisation, but equally important, a market for corporate control that necessarily follows. Assume that, over time, widely perceived capital market imperfections are overcome with better regulation and technology. Are we, then, prepared for contestability of corporate management through mergers and take-overs in the secondary market? Assuming such a market is organised efficiently, does it necessarily improve corporate performance? These widely debated issues in developed economies seem to have an increasing relevance for India.

The Anglo-Saxon 'model' of corporate governance reportedly leads to 'shortism' as investors have arms length relation with managers. Threat of take-over apparently leads managers to resort to short-sighted policies, at the expense of long-term goal of growth and technical progress. In contrast, German and Japanese firms, that have close links with their banks, are said to be free from such pressures to show immediate results, and hence are able to take a long-term view of the firm's prospects.

In other words, the critical question is, what sort of a market economy we intend to move towards: is it the Anglo-Saxon 'model' with the primacy of capital market emphasising 'efficiency' and liquidity with the attendant shortism of corporate managements, or the German and Japanese styles of bank centric corporate governance with limited role for stock market but primacy to long-term growth and technical progress.<sup>37</sup>

These issues perhaps cannot be ignored any longer.

## Notes

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- 1 In this paper 'capital market' is used narrowly to refer to India's stock markets. Strictly, stock market refers to issuing and trading of equities. Since the bulk of resources mobilised in Indian stock markets are debt securities, we prefer, for convenience, using the term capital market.
- 2 Market capitalisation ratio, is the market value of all traded shares, as a proportion of current gross domestic product at factor cost (GDP<sub>fc</sub>). This is a widely used measure of stock market size.
- 3 Though the secondary stock market has grown substantially both in absolute and comparative terms, one has to recognise its narrow base. In 1992-93, top 50 firms account for over two-thirds of trading volume in Bombay stock exchange that does over 70 per cent of trading in all stock exchanges in India [CMIE 1994; Machiraju 1995].
- 4 A convertible debenture is a debt instrument, which is (or can be) partially or fully converted into equity share(s) at predetermined time and ratio, as specified in the initial public offer.
- 5 Increased promoters' contribution could partly be an illusion, as those eligible for contributing to promoters' share may have been enlarged. One suspects that in a regime of licensing and capital controls with booming securities prices, promoters' quota could have been used to dispense favours, similar to Japan's 'Recruit scandal' some years ago.
- 6 In 1980s a number of financial services firms like merchant bankers, underwriters, mutual funds, custodial services, etc, came into existence, mostly by existing public sector banks and financial institutions. Some of them were discredited in the 1992 stock market scam. However, since 1991 private sector firms including many with foreign origin also entered these newer industries. Instruments are convertible debentures, variety of mutual funds, etc. See Machiraju (1995) for descriptive details.
- 7 This is an overestimate due to double counting. We know, a significant proportion of firms is listed in more than one stock exchange in India. Bombay stock exchange, oldest and busiest of all, listed 2,601 companies in 1992 [CMIE 1994]. This figure, we guess, is more accurate.
- 8 Demircug-Kunt and Levine's (1995) stylised facts seem to underestimate size of India's stock market. In their set of 41 countries, India ranks 31st in market capitalisation, with 16 per cent of GDP, during 1986-93.
- 9 Documenting India's financial development up to 1977, Goldsmith (1983) said: "The open capital market has been only a secondary source of funds for corporate business... Thus, the market for corporate issues seems not to have developed since independence, and, in

addition, to have lost considerably in importance" (pp 204-06).

In describing India's financial system and structure, Raj (1992) perhaps did not find capital market significant enough to mention it.

- 10 Foreign Exchange Regulation Act (FERA), 1973, required all foreign-controlled rupee companies to dilute foreign equity hold to 40 per cent, though the law's implementation depended on the firms' relative bargaining power *vis-a-vis* the government. However, in most cases, these firms did not disinvest their holding. Instead they issued fresh equities to Indian public, thus reducing their share in the paid-up capital, without losing their controlling interest in most cases.
- 11 Rao's (1980) conclusion aptly reflects the dominant opinion before the capital market boom, "...industrial units have relied heavily for finance on the public financial institutions and banks, and have raised relatively little capital from the market...with reordering of priorities over the last decade, an increasing proportion of resources of the commercial banks are channelled to other uses such as meeting increased reserve requirements and credit to priority sectors... Industrial expansion, therefore, must rely on raising more capital from the market...industrial units can be...encouraged to meet their financing requirement from a wide range of investors through marketable securities that can assist in the development of capital market" (pp 153-54).
- 12 Observing that firms depend on banks and DFIs for finance, and households invest in bank deposits, Patil (1979) argued for greater participation of household sector in financing firms' equity capital. This led to an interesting debate, mostly by practitioners of finance, on the need to develop capital market as a source of risk capital. See also, Chitale (1980).
- 13 Lall (1983) offers a critical comment on the assumptions underlying the Committee's recommendation that seem relevant even now.
- 14 CMIE (1986) documents these changes in policies and procedures.
- 15 *World Development Report, 1989* highlighted success of India's capital market reforms [World Bank 1989: 108].
- 16 To quote Cho, "In a credit market with imperfect information, liberalisation of the banking system...would not, by itself, be sufficient to achieve full efficiency... This is due to the adverse selection effect (and also the moral hazard effect) that occurs when debt contracts are used in the presence of asymmetric information...Equity contracts, however, are free from adverse selection effects and could thus overcome inefficient allocation of capital when the same degree of imperfect information on borrowers exists as in the case of debt contracts" [Cho 1986:198].
- 17 To quote Keynes' well known remark on Wall Street, "...In one of the greatest investment markets in the world, namely, New York, the influence of speculation...is enormous... 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 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. The measures of success attained by Wall Street, regarded as an institution of which the proper purpose is to direct new investment into most profitable channels in terms of future yields, cannot be claimed as one of the outstanding triumphs of *laissez-faire* capitalism..." [Keynes 1936].

18 To quote Gerschenkron, "Depending on a given country's degree of economic backwardness on the eve of industrialisation, the course and character of the latter tended to vary in a number of important respects. Those variations can be readily compressed into the short hand of six propositions...The more backward a country's economy, the greater was the part played by institutional factors designed to increased supply of capital to the nascent industries..." [Gerschenkron 1962].

19 Dore (1985) says, "The senior British manager, it is said, is bothered about the bottom line in his next half-yearly results: the Japanese manager about his market share in five years time. The Japanese manager is more concerned with long-range planning, more assiduous in gathering information about the probable state of markets and the directions to be taken by technological development over the long-term" (p 10).

20 Quite at variance with the WDR view, Mayer's background study for the report cautions against a benign view of stock market development. Tilting it provocatively, *Myths of the West* Mayer (1989) makes following 10 observations, based on his studies using corporate balance sheet data:

Retentions are the dominant source of finance in all countries (p 9)

There are some marked variations in self-financing ratios across countries. In UK and US more than three quarters of investment is funded from retentions. In France, Japan and Italy, appreciably more is raised externally. Canada and Germany lie somewhere between the two groups (pp 9-10).

In no country do companies raise substantial amount of finance from securities market (p 10).

Banks are the dominant source of external finance in all countries.

Bank finance is particularly pronounced in France, Italy and Japan. It represents a surprisingly small proportion of German corporate financing.

UK investment has been consistently financed from retentions (91 per cent on average). Bank finance has contributed close to zero (3 per cent on average) on a net basis.

There is a strong inverse relation between the proportion of expenditure financed from retentions and bank credit.

Securities markets have declined in significance as source of finance for British industry. Trade credit increased in importance at the end of 1960s and early 1970s.

Small and medium sized firms are considerably more reliant on external finance than large firms. A smaller proportion of small than large company

finance comes from securities market. Bank (and short-term) finance account for approximately two-thirds of UK companies total debt but more than five-sixth of small companies debt.

21 Demircug-Kunt and Levine (1995) is the other significant study that collects and compares stock market development indicators in a cross-country perspective, from 1986 to 1993. This study's focus is on the characteristics of secondary market and relates them to financial development.

22 Singh is very circumspect on the implications of this findings. However, on their basis IFC seems to justify its efforts in promoting stock markets in these economies.

23 This is estimated using CMIE (1994) and Datta Roy Chaudhury (1992).

24 These estimates are based on Datta Roy Chaudhury (1992) and *National Accounts Statistics*.

25 These numbers should be interpreted cautiously. Private limited companies should not be simplistically viewed as 'independent' and/or 'small' firms doing better than large ones. As Hazari had revealed long ago, a sizeable proportion of private limited companies are closely related to large firms, in terms of ownership and management - often called 'satellite' companies in popular parlance. Moreover, many holding companies that control India's large business houses are private limited companies. Very often, newer entrepreneurial groups that emerge in capital market usually do so after their success with a number of private limited companies and family owned business.

26 The average for the second half of 1980s is extended by a year to include 1990-91 as this marks an end of a certain policy regime. In this and subsequent graph, we avoid interpreting the trends since 1990-91, as the saving estimate is disputed.

27 Interestingly, the period of rapid rise in the share of financial saving ratio is associated with rapid geographical expansion of banking services, though offered negative real interest rates.

28 During 1989-90 and 1991-92, public sector tax-free bonds formed 40 per cent of capital market mobilisation.

29 RBI's surveys of medium and large non-financial public limited companies, using uniform definitions and concepts since 1949, accounting for over four-fifths of private corporate sector's paid-up capital and sales forms the basis of this study.

Using RBI company finance data, Datta Roy Chaudhury (1992), has arrived at 'population' estimates for the non-financial private corporate sector and relate them to national income aggregates. Thus we have consistent time series for about three decades since the mid-1950s.

We also use RBI's flow of funds table for 'private corporate business'. This includes non-financial private corporate sector plus non-financial co-operative sector. Since the latter is very small, private corporate business can be proxied for the corporate sector.

30 These, we guess, are strictly comparable to Mayer's estimates as we use company balance sheet data, and on a 'net' basis.

31 Gross saving financed two-thirds of gross capital formation in private corporate business

during the First Plan (1951-52 to 1955-56). The ratio came down to a little over one-third in the Seventh Plan (1986-87 to 1987-88) [Ramachandra Rao 1989].

32 But, unlike then, when DFIs used to subscribe much of it as underwrites (as Goldsmith suggested), in 1980s public seems to hold bulk of the fresh equity.

33 Following Shanta's (1992) method, using *Annual Survey of Industries*, we estimate private corporate manufacturing value added by subtracting proprietary and partnership firms' share from that of 'wholly privately owned' firms.

34 According to Goodhart (1992), "disintermediation is...said to occur when some intervention, usually by government agencies for purpose of controlling, or regulating, the growth of financial intermediaries, lessens their advantages in the provision of financial services, and drives financial transfers and business into other channels. In some cases the transfer of funds that otherwise would have gone through the books of financial intermediaries now pass directly from saver to borrower" (p 683).

35 We are very circumspect in interpreting this trend, since 1980s also witnessed an increase in competition in industrial goods markets in response to gradual loosening of investment licensing and import restrictions.

36 This is a widely debated issue in recent literature developed country context. For a brief review of the literature and fresh evidence for the US, see Samuel (1996b).

37 *The Economist*, (May 5, 1990) in a perceptively titled survey, 'Capitalism: In Triumph, In Flux', raised some of these issues, for a wider audience.

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