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# **The Stockmarket, the Financing of Corporate Growth and Indian Industrial Development**

by Ajit Singh<sup>1</sup>

## **I. Introduction**

In the General Theory, Keynes was stringent in his criticism of the role of the stockmarket in relation to industrial investment and the real economy. In a famous passage, in chapter 12 he wrote: "As the organisation of investment markets improves, the risk of the predominance of speculation does, however, increase. In one of the greatest investment markets in the world, namely, New York, the influence of speculation (in the above sense, ie. 'the activity of forecasting the psychology of the market') 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."

That was yesterday. Today the stockmarkets are the 'toast of the town' - new ones are being established and existing ones being expanded around the globe, from Kingston, Jamaica to Ulan Bator in Outer Mongolia. The fast expansion of the Indian stockmarkets during the last decade or so, and particularly under the present government's programme of economic reform over the last two years, is therefore a part of a world-wide phenomenon.

In terms of the number of companies listed on the stockmarket, the Indian stockmarket today is the second largest in the world, only slightly behind the United States. In 1992, there were 6,700

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companies quoted on the Indian stockmarkets, compared with 7,014 in the US, 1,874 in the UK, 665 in Germany, 668 in Korea, 585 in Brazil and 185 in Mexico. The average daily trading volume on the Bombay stockmarket is about the same as that in London - about 45,000 trades a day. At the peak of stockmarket activity, trading occurred at double that rate. Any large Indian city worth its name can now boast of a stock exchange. There are functioning stock exchanges in twenty two cities, the latest one being Coimbatore.

Although this evident Indian fascination with the stockmarket is a part of a world wide trend, it deserves critical examination. This is not just because of Keynes's scepticism, but more significantly because the role of the stockmarkets is being seriously questioned today in the very citadels of these markets, namely the US and the UK. There currently rages an important debate in these countries about the efficacy of stock markets for long term industrial investment and international competitiveness. It is being increasingly argued by industrialists and business leaders, as well as by academic economists, that the operations of the stockmarket are leading to the phenomenon of "short-termism" (through speculation, leveraged hostile takeovers, etc). The stockmarket is thereby thought to be harming these economies and putting them at a competitive disadvantage with respect to countries like Japan and Germany where such markets play a much less prominent role in relation to industrial activity. Thus Professor Michael Porter of the Harvard Business School, reporting recently on the results of a large research project on various aspects of the US financial system: "..the change in nature of competition and the increasing pressure of globalization make investment the most critical determinant of competitive advantage. ... Yet the US system of allocating investment capital both within and across companies is failing. This puts American companies at a serious disadvantage in global competition and ultimately threatens the long term growth of the US economy."<sup>2</sup>

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<sup>2</sup> Porter (1992, p.65). This paper reports the findings of a large research project sponsored by the Harvard Business School and the Council on Competitiveness, a project that included 18

In this overall intellectual context the present paper concentrates on exploring some aspects of the relationship between the stockmarket and Indian industrial development. Sections II-IV present analysis of Indian corporate finance in a comparative international context. Specifically these sections explore the role of the equity market in financing the growth of the hundred largest Indian manufacturing corporations. Section V considers various indicators of stockmarket development in India and other newly industrialising Asian economies. Section VI examines the implications of these developments for long term economic growth and industrialisation of the country in the light of theoretical analysis and empirical evidence from countries where the stockmarkets play a leading role. Section VII concludes and briefly considers policy issues.

## II. Corporate Financial Structures and the Financing Patterns in India, 1980 - 1990

### II.1 The Large Indian and Third World Firms

How do large Indian corporations finance their growth? Do they rely more on internal or external sources of finance? How do the corporate capital structures and financing patterns in India compare with those in other industrialising economies or in advanced countries? How has the fast growth of the Indian stock markets during the last decade affected corporate financing patterns?

Relatively little work has been done on such questions not only for the Indian corporate economy, but for industrialising countries in general. This in part reflects the fact that development economists have not paid sufficient attention to the critical role of large third firms in late industrialisation<sup>3</sup>. Yet even casual observation cannot fail to indicate that in the newly

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research papers by 25 academic experts.)

<sup>3</sup>There are honourable exceptions. See Amsden (1989), Leff (1979)

industrialising countries such firms spearhead technological development, adapt foreign technology to local requirements and play a major role in third world's manufactured exports.

Moreover, large third world firms share certain important common characteristics which distinguish them from advanced country corporations both today as well as in the past (when advanced countries were undergoing their own industrial revolutions). It is a remarkable fact that like the Tatas and the Birlas in India, large privately owned third world firms in a wide range of industrialising economies tend to be organised in the form of 'groups' which are diversified in a large variety of unrelated activities. Amsden and Hikino (1994) and Singh (1994, 1995) suggest that these seemingly irrational third world conglomerates differ in very significant ways from the contemporary advanced country conglomerates.

The important point is that in India, as in many other NICs, the large firms dominate the economy. In the following empirical analysis, we concentrate on the hundred largest Indian manufacturing corporations quoted on the stock markets during the period 1980-1990. As a rough indication of their significance, in 1990, the aggregate sales of these hundred largest corporations accounted for 43% of the total manufacturing value added in the economy as a whole. To the extent that sales are being compared with the value added, this figure overstates the degree of aggregate concentration in the economy. However, it is also understated in a significant way since some industrial groups have more than one corporation listed on the stock market. In the following analysis, if such corporations belonged to the top hundred, they would be treated as separate independent entities (rather than as part of the single industrial group).

## II.2 Capital Structures and the Financing of Corporate Growth

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and Pfeffermann (1983).

Using the IFC data bank<sup>4</sup> on corporate finance in industrialising economies, tables 1 to 4 report on the main economic and financial characteristics of these hundred largest manufacturing corporations for the decade 1980-1990. For each corporation the following four groups of variables were calculated on the basis of accounting and stock market information available in the IFC data bank:

- A. Firm size (indicated either by 'Net-Assets' or Sales) and Measures of Corporate Performance (Pre and Post-Tax Profitability and Growth).
- B. Financing of corporate growth: Retention Ratio and Internal (Retained Profits) and External Financing (Debt or Equity) of growth.
- C. Corporate Capital Structures: Stock and Flow measures of Gearing.
- D. Stock market valuation and Dividend Return.

The tables present quartile distributions of a small selection of variables from each of the four groups above. In order to reduce the influence of stochastic short-term fluctuations, only long-term values of these variables, averaged over the whole period 1980-1990, are reported in the tables. In table 1, firm size (see column 1) is measured by the value, in local currency, of the firm's net-assets, i.e. total assets minus current liabilities. The table shows, as one would expect, a highly skewed size distribution of firms. Although the sample consists of the largest listed corporations, the range of variation in the top hundred is still enormous. The biggest corporation in the sample is more than one hundred times as large as the smallest.

Corporate growth is measured in table 1 either by the rate of growth of net assets or sales, normally over the period 1980-1990. Column 3 indicates that the median corporation recorded a growth in sales of 16% per annum during the last decade. As the average rate of inflation during

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<sup>4</sup> For the description of the IFC data bank, as well as for a full discussion of the variables used here, see Singh and Hamid (1992) and Singh (1994).

the decade was about 8% per annum, the average growth rate of the top Indian manufacturing corporations, even in real terms, at 8% per annum, was quite fast. However, corporate growth rates display wide dispersion, with the highest growth rate being almost eight times the value of the first quartile. The post-tax rate of return on net worth for the median Indian corporation during the 1980s averaged 16% per annum. Although the inter-firm dispersion in post-tax profitability is not as large as that in the growth of corporate sales, or net assets, it is still considerable. The last column provides information on the time variability of the rates of return for the sample corporations during the 1980s.

Table 2 presents data on the financing of corporate growth. The average large Indian firm retained about two-thirds of its after-tax profits in the business and distributed the rest. The 'mean' corporation financed the growth of its net assets between 1980 and 1990 in the following proportions: a little over 40% from internal sources, i.e. retained profits; a little over 20% from the issues of new equity shares and about 40% from long-term debt and other long-term liabilities. Although the proportions are much the same for median corporation, the accounting identity, that the internal and external financing of growth should add up to a hundred (i.e. total growth), holds only for the (arithmetic) mean corporation.

Table 3 provides information on the capital structures of the top Indian corporations. The first two columns give stock measures of gearing (the long-term debt to net-assets ratio and debt-equity ratio); the last two columns present alternative flow measures - interest as a proportion of earnings before interest and taxation, and interest as a proportion of total cash flow. The table shows the median debt-equity ratio to be little over half, but there is again a wide range. The interest payments of the average top Indian corporation in the 1980s amounted to almost half of its total cash flow.

Table 4 reports on stock market performance (measured either by Marris's (1964) valuation ratio

(stock market value of the firm's equity / book value of its assets) or the price earnings ratio) of the top corporations. The last column gives dividends as a proportion of the book value of net assets. During the 1980s, the average price-earnings ratio of these corporations was about 10, but with a range of 1 to 52. Similarly it would appear from col.1 that in more than a quarter of the corporations, the stock market value of the firm was considerably below the book value of their assets. Column 3 shows that the average dividend return was about 5% in the 1980s.

Table 5 presents time series for a selection of variables for the Indian corporations. This is simply another way of organising the basic panel data information contained in the IFC data bank. The data in this table complements the cross-section results presented in tables 1 to 4. Table 5 indicates generally falling rates of return for the Indian corporations in the second half of the decade. Similarly it would appear that the large Indian corporations issued more debt as the decade progressed - the debt to net asset ratios in the second half of the 1980s are markedly greater than those in the first half. The last column of the table brings out the remarkable stability of the average dividend return between 1982 and 1991.

### **III. Financing of Large Corporations and Corporate Capital Structures in India and In Asian NICs - A Comparison**

How do the financial characteristics of the large Indian corporations compare with those of their counterparts in other NICs? Some important features of the comparative corporate financial structures in developing countries emerge from a simple visual examination of the univariate distributions of the few of the main variables. Graphs 1 and 2 portray such distributions for three countries, India, Korea and Malaysia<sup>5</sup> for a small number of variables. Broadly speaking,

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<sup>5</sup> As in the case of India, the corporate samples for both Korea and Malaysia comprise the hundred largest listed manufacturing corporations in each country. In line with the Indian case, the corporate data for Malaysia and Korea normally pertains to the period 1980-1990.

the graphs indicate similar shapes of distributions although the scales of the variables are different between countries. The graphs also suggest reasonably well behaved distributions of corporate characteristics for the Asian corporations<sup>6</sup>. Moreover, these distributions exhibit much the same kinds of regularities as you find in the corresponding data for advanced countries. On the face of it, this is surprising since the economic environment in which the developing country corporations operate varies greatly between the developing countries themselves, let alone between the developed and developing countries. The economic explanation for this phenomenon must lie in the operation of market forces which despite the huge inter-country differences in tax-structures, the political nature of the regimes, government policies, etc. manage to impose a certain order on the behaviour of these corporate entities.

Instead of displaying the entire distributions, table 6 provides in a summary form an international comparison of the relevant corporate characteristics in five Asian countries: India, Malaysia, Korea, Thailand and Pakistan<sup>7</sup>. This table reports only median values of the main variables (which are the focus of attention in this paper) for each country.

Table 6 shows that the Indian corporations typically retained a marginally greater proportion of their profits than the corresponding firms in Korea and Pakistan. However, the average Indian

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<sup>6</sup> One reason that these distributions are well behaved is that in accordance with the standard practice in this type of analysis for advanced country corporations, extreme values of variables are constrained. This becomes necessary when the denominator of a ratio is nearly zero; the value of the ratio then tends towards infinity. Unconstrained observations of this kind produce nonsense results from an economic point of view. Foster (1986). However, the constraints used in the present exercise are exactly the same as those employed by Singh and Whittington (1968) in their analysis of UK corporations.

<sup>7</sup> For each country the sample normally consists of the hundred largest listed manufacturing corporations which continued in existence throughout the period, normally 1980-1990. See further, Singh (1994).

retention ratio during the 1980s was considerably larger than that in Thailand and Malaysia. More significantly, col.2 indicates that the top Indian and Pakistani corporations financed their long-term growth of net assets from internal sources i.e. retained profits, to a far greater degree than their counterparts in Korea and Thailand. Equally important, the Korean and Malaysian corporations financed nearly half of their growth from new equity issues on the stock markets, whilst the corresponding figure for the median Indian corporation, at 16.3%, was very much lower. Indian companies, however, used relatively more long term debt to finance their growth than their Korean and Malaysian counterparts. The last column suggests that among the sample Asian NICs, the Thai corporations have the highest debt to net assets ratio, followed by Korea and India. The corresponding ratios in Pakistan and Malaysia were much smaller.

#### **IV. Corporate Financing Patterns In India and In Industrial Countries**

We have seen in the last section that there are important differences in corporate financing patterns among the Asian NICs. Nevertheless it is important to note that these differences are not as pronounced as those between the corporations in the NICs and their advanced country counterparts. Thus for example, although the Indian companies compared with say the Korean corporations, finance a much smaller proportion of their long term growth from (a) external sources and (b) new equity on the stock market, these proportions are nevertheless much larger than those typically observed for US and UK corporations. Mayer's (1990) data shows that the typical Anglo-Saxon corporation during the period 1970 to 1985 financed almost whole of its investment from internal sources<sup>8</sup>. The stock market, on Mayer's figures made a net negative contribution to the financing of corporate growth during this period in these countries. (The

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<sup>8</sup> Mayer's analysis for advanced country corporations is based mainly on flow-of-funds data. The results are not therefore strictly comparable with those for developing country corporations presented here. See further Singh (1994, 1995).

negative contribution arises from the fact that the value of new issues in the stock market was lower than the shares which were redeemed or retained as a consequence of takeovers). Mayer found that even in the non Anglo-Saxon industrial countries like Germany and Japan, the stock market's contribution to total sources of corporate finance was very small - barely 2 to 3 per cent.

In comparison with these industrial country figures, the Indian companies, as indeed, those of other Asian NICs, would appear to use both (i) external finance and (ii) equity finance to a far greater degree. The relatively much greater use of both (i) and (ii) by developing country corporations is extremely surprising. It is both counter-intuitive and goes against the predictions of economic theory. In view of the low level of development of the LDC capital markets and their much greater imperfections, one would have expected developing country corporations to rely more on internal finance. A priori, one would also expect them to resort far less to the stockmarket to raise finance than, for example, firms in industrial countries with well developed capital markets.

More specifically, following Singh (1994, 1995), the implications of the relevant theoretical models for the developing country stock markets and financing of corporate growth in these countries may be summarised as follows. First, because these countries do not as yet have the accounting standards, or possess in sufficient numbers information-gathering and disseminating private firms or public organisations of the kind found in developed countries, the share prices in these emerging markets are likely to be dominated by 'noise' and speculation. Second, the fact that not many listed companies in these young markets will have a long enough track record, or sufficient time to establish reputations, will tend to produce market volatility and arbitrary prices. Third, apart from reducing the efficiency of the pricing signals emanating from the market, such volatility and arbitrary pricing will also discourage firms from seeking a stock market listing or attempting to raise funds by new issues. Other inter-related market

imperfections such as asymmetric information which, a priori, will be greater in emerging markets than in the mature ones, will also act in the same direction.

The world clearly does not correspond to the predictions of these theoretical models. As noted earlier, the Indian stock market is the second largest in the world in terms of the number of companies listed on the stock market, just a short distance behind the US. There were many more companies listed on the Indian stockmarkets than on those of advanced country markets such as the UK, Germany or Italy.

#### **V. Stock market development in the Asian economies**

Tables 7 and 8 provide quantitative indicators for stockmarket development in Asian NICs in the 1980s. Although India is a clear outlier in terms of the numbers of listed companies, the data in the two tables show the fast growth of these markets during this period in most countries in various dimensions (the number of listings, market capitalization as a proportion of GDP, value traded as a proportion of market capitalization or of GDP).

How are these anomalous phenomena of heavy reliance on new share issues and the fast development of stockmarkets in the industrialising economies in the recent period to be explained?<sup>9</sup>

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<sup>9</sup>In contrast, in the course of industrialisation of Italy during this century, Pagano(1993b) reports a long-run secular decline in the growth of the stockmarket relative to that of the economy as a whole. The ratio of stockmarket value to GDP in Italy in 1906 was 23% compared with 12.6% in 1991. The numbers of listed companies do not appear to have changed much either. Pagano(1993b) observes: "After a steep rise around the turn of the century, the number (of listed companies) has stagnated around the same value for over seventy years. It is striking that while the rise at the start of the century coincided with the first spurt of Italian industrialisation, no comparable increase accompanied the tremendous growth in manufacturing and GDP during Italy's 'economic miracle' of the 1950s and early 1960s. The number of companies traded

Singh (1994, 1995) has argued that unlike the situation in the past in the advanced countries like the UK or the US during the course of their industrialisation, stock market development in the contemporary industrialising countries is not a spontaneous or an evolutionary response to market forces. Rather for various reasons, the developing country governments have played a major role in the expansion and development of these markets.

The motivation for this prominent role of the government has come from a variety of sources, some of which are country specific. However there are certain important, often interrelated, common factors which have influenced governmental concerns and actions in this area in a wide range of countries. First, the privatization programmes in many countries has been an important stimulus to stock market development.(Pfeffermann,1988). Secondly, in the wake of the debt crisis, developing country governments have been urged to foster stockmarket development to attract non-debt-creating foreign portfolio investment<sup>10</sup>. Thirdly, related to the first point, another macroeconomic factor which has motivated several countries has been the desire to tap private savings to finance industrial enterprises which have not been privatised and are still under state ownership. For example, the governments in countries like Korea and Malaysia have sold small proportions of equity in the existing public sector enterprises on the stock markets to raise funds for investment.

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started growing only in the late 1980s, concomitantly with the introduction of mutual funds". (Parenthesis added; pp.1106-7).

<sup>10</sup> See, for example, the influential report of the WIDER (World Institute of Development Economics Research, Helsinki) Study Group chaired by Sir Kenneth Berrill (WIDER,1990). The Study Group argued that, because of the debt crisis, banks are unlikely in the foreseeable future to again become major sources of foreign finance for the debtor countries. In the Study Group's view, the best avenue for getting such finance for these countries is to attract portfolio investment from the advanced countries. For this reason, the Study Group urge stockmarket development as well as removal of capital controls (a withdrawal of Article VI, Section 3 of the IMF Articles of Agreement, which have traditionally allowed developing countries to exercise exchange controls).

Fourthly, there has been a world wide trend towards deregulation and globalization of stock markets which started in the advanced countries in the mid-1970s<sup>11</sup>. Many developing countries have responded to these developments, as well as to pressures from advanced countries to open up their financial markets, by first taking steps to encourage and to strengthen these markets and then to liberalize them in stages. Fifthly, international financial institutions have also favoured stockmarket development in the LDCs. This is in part because of the failings of the so-called development finance institutions (DFIs) which hitherto have been the main providers of finance for long-term industrial development in many countries. (World Bank, 1989).

The measures to stimulate stock market development in industrialising economies during the 1980s have not been confined to the removal of restrictions on market activities. Rather, the governments have pursued a number of policies to actively promote these markets. In Korea the government has attempted to educate the general public in stock ownership through a country-wide drive. [Amsden and Euh, 1990]. In India, the non-resident persons of Indian origin (the so-called NRIs), have been given special incentives to invest their foreign money on the stock market. With respect to the fast expansion of the Indian capital markets during the 1980s, Kar(1989) notes: "An important conclusion that emerges is that much of the capital market growth has been policy induced and has yet to be fully reciprocated by the corporate performance".(page 24, emphasis added).

With the liberalisation of the Indian economy since 1991, the government has provided a number of additional fiscal and other incentives to foster stock market development. The result has been an explosive growth of the market. Notwithstanding the stock market scam of 1992,

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<sup>11</sup> See further Cosh, Hughes and Singh(1992) for an examination of these global financial developments.

the total market capitalization on the Indian stockmarkets reached Rs. 250,000 crores in 1992-93 which amounted to 40 percent of GNP (compared with 5 percent in 1980-81 and 13% in 1990). Similarly, the number of shareholders and investors in mutual funds rose to 30 million by 1992-93 compared with only 2 million in 1981. [Mayya, 1993].

Apart from this government-induced growth of stock markets in many developing countries in the 1980s and into the 1990s, Singh (1995) has argued that an essential reason why the developing country corporations have been going to the stockmarket so much during this period to raise new equity issues is because the relative cost of equity capital has fallen significantly as a result of large rises in share prices. This, together with the increase in the cost of debt capital, made equity issues relatively more attractive for financing corporate growth<sup>12</sup>.

In addition to the above, Singh's explanation for the observed general heavy reliance on the stockmarket by large Asian firms and for the fast growth of these markets in the 1980s and into the 1990s, contains the following elements:

- (a). The supply curve of securities in these countries would appear to be reasonably elastic. In some countries this was the result of deliberate policy measures.
- (b). There were domestic and international factors involved which helped raise share prices and the P/E ratios in this period.

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<sup>12</sup>In the Indian case, the Bombay index of share prices rose ten fold between 1979-90 while consumer prices rose on an average at single digit rates during this period. The average real capital gain on Indian shares was nearly 20% p.a. in the period 1980-85 and almost 15% p.a. during 1986-90. However, unlike many other semi-industrial countries, because of the relatively higher rate of inflation in the 1980s, the real interest rates in India fell in the 1980s, compared with the period 1975-79. [See further Singh (1994), tables H5 and H6].

## VI. Stock market and Industrial Development

How does the development of stock markets, bank and other financial institutions, affect industrial development and economic growth? Following the earlier historical contributions of Goldsmith, (1969), Cameron (1976) and Gerschenkron (1962), and the theoretical work of Mckinnon (1973) and Shaw (1973), there has been in recent years a large and a growing amount of research on this subject.

One strand of literature, which draws its inspiration from the endogenous growth models of Roemer (1988) and Lucas (1988) argues that financial intermediation, as well as the stockmarket, helps economic growth by (a) increasing the rate of investment and (b) improving the productivity of investments<sup>13</sup>. The markets and the intermediaries carry out the functions of screening and monitoring investment projects, which individual investors on their own will find too uneconomic to undertake. These intermediary and market functions help diversify systemic risk and enable individuals to participate in investment projects which otherwise they may not have been willing to do. Thus the economy experiences a higher rate of investment than would otherwise have been the case. Further, to the extent that the financial intermediaries (eg. Banks) directly, and the financial markets (through for example the take-over mechanism) are actually successful in carrying out these monitoring and screening tasks, this should lead to an increase in the marginal efficiency of investment.

In this paradigm the effect of the growth of financial intermediaries and financial markets on private household savings is ambiguous. This is because as Pagano (1993a) notes one effect of financial intermediation is more efficient risk sharing, which depending on the individual's utility function can have a negative effect on his or her savings. Adje and Jovanovic (1993)

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<sup>13</sup>For a recent overview of these contributions, see Pagano (1993a).

provide a model in which financial markets have a greater stimulating effect on economic growth than financial intermediation. This is because it is assumed that stockmarkets are more conducive to the development of venture capital and hence technical progress than the banks. Their cross-country empirical analysis suggests that countries that finance their investments more with equities and less with debt tend to grow faster - by a large margin, as much as 2.5% per year. This leads them to enquire why "more countries are not developing their stockmarkets as quickly as they can as a means of speeding up their economic development".

This positive analysis of the effect of stockmarkets on economic growth stands in sharp contrast to the contribution of another very important school of thought (referred to in the Introduction), which stresses the negative impact of these markets on the rate of investment, the time horizon of firms, on international competitiveness, and on economic development. It is ironic, that this School is increasingly influential in the US and the UK, countries with the most developed stockmarkets and where such markets play a critical role in the economy. The basic thesis of this school is that even with well organised and complex stockmarkets such as those found in the Anglo Saxon countries, the market does not in practice perform at all well its monitoring, screening and disciplinary functions.

The ability of the stockmarket to carry out these tasks depends crucially on the efficiency of two mechanisms: (a)the pricing process; and (b)the takeover mechanism.(Singh 1992b). There is a growing amount of theoretical as well as empirical work which suggests that the real world share prices, although they may be reasonably efficient in Tobin's (1984) 'information arbitrage' sense (ie. any new information about a stock or the market in general percolates quickly and speedily to all players), do not reflect fundamental values. Research by this school suggests that the actual share prices generated even by the fully developed stock markets of London and New York are often dominated by speculators, the so called 'noise-traders', by whims and fads, and

are therefore not efficient in Tobin's 'fundamental valuation' sense.<sup>14</sup> There is also evidence that, as Keynes had suggested, investors give disproportionate attention to near-term events and therefore do not have long time horizons.(Miles,1993).

This 'short-termism' arising from the pricing mechanism is compounded by the failings of the take-over process. Empirical studies suggest that selection in the market for corporate control does not take place simply on the basis of efficiency (as measured for example by rates of return or by stockmarket valuation) but also very importantly on the basis of size.<sup>15</sup> Thus a large relatively unprofitable corporation has, other things being equal, a much smaller chance of being taken over than a small, relatively much more profitable firm. A large firm can make itself further immune from take-overs by becoming bigger still through the process of take-over itself.(Greer,1979). Apart from this perverse outcome for the take-over disciplinary mechanism, there are both analytical arguments and empirical evidence which suggests that take-overs themselves contribute significantly to market myopia.<sup>16</sup>

The economists of the critical school further argue that these failures in the pricing and take-over mechanisms and the consequent short-termism, puts the stockmarket dominated US and UK economies at a competitive disadvantage with respect to countries like Japan and Germany. In the latter two countries, the stockmarkets, for historical reasons, have not been so

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<sup>14</sup> There is a large literature on this subject. See for example, Modigliani and Cohen(1979); Schleifer and Summers, (1990); Schleifer and Vishny(1990); Nickell and Wadhvani(1987); Poterba and Summers(1988). For a survey of the theoretical literature, see Camerer(1989)

<sup>15</sup> Again there are a host of studies on the subject. See among others Singh(1971,1975); Meeks(1979); Ravenscraft & Scherer(1987); Scherer(1988). For an opposite point of view see Jensen(1988). For recent reviews see Singh(1992a,1992b).

<sup>16</sup> Cosh, Hughes & Singh(1990); Froot, Scharfstein & Stein(1990); Stein(1989). For an alternative perspective see Marsh(1990).

significant in relation to industrial development. It is also notable that neither Japan nor Germany have a market for corporate control in the Anglo-Saxon sense of hostile take-overs, leveraged buy-outs, etc.<sup>17</sup>

To sum up, the above analysis suggests that even with well organised and complex stock markets, such as those existing in the US and the UK, the stock market is unable to perform well its disciplinary and allocative tasks. Nor, as the evidence provided in Section V on the financing of corporate growth in industrial countries suggests, is the stock market conspicuously successful in providing new resources for corporate growth. To the extent that in developing countries, the pricing process is likely to be more volatile and less efficient than in the industrial countries, the analysis of the critical school suggests that the monitoring, screening and disciplining functions of the stock markets are likely to be better and more efficiently performed by financial intermediaries, i.e., the banks.<sup>18</sup>

The exponents of the stock market can, however, still point out to two important ways in which in the present context of developing countries, the stock market may be expected to help industrial and economic developments. Firstly, as seen earlier, unlike the case of the industrial country corporations, the corporations in India, as in other Asian NICs, do finance a considerable proportion of their growth by new issues on the stockmarket<sup>19</sup>. Secondly, there is

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<sup>17</sup>See further Mullins and Wadhvani (1989); Odagiri and Hess (1989).

<sup>18</sup>Tirole (1991) makes this argument most persuasively in relation to the transition economies of Eastern Europe.

<sup>19</sup>It is important to note that in the India case, this is very much a phenomena of the 1980s. As Balasubramanian (1993) notes, "Compared to the roughly Rs. 100 crores figure around which capital issues of equity and debt securities were hovering until the sixties, the numbers began to climb upwards in the following decade. In many ways, 1980 could be described as the take-off year for capital issues: for the first time, capital raised in that year crossed the Rs. 200 crore mark. Since then, capital issues market has come a long way, with the figures for 1988-89 and 1989-90

the important issue of foreign portfolio investment which a developing country with a well organised stock market may be able to attract.

Singh (1993) has carefully considered these arguments and found them not fully convincing. On the first question of the provision of additional resources, although it is true that in the stock market boom of the 1980s and the 1990s, the market has been a genuine source of finance for corporate expansion in India and in other Asian NICs, the important question is whether the fast growth of the stock markets in these economies has led to an increase in **aggregate** savings. Or is it the case that what has happened is simply the substitution of one form of saving (say bank savings or government bonds) for another (purchase of corporate shares on the stock market). These issues have not been systematically investigated for most LDCs. Nagaraj (1996), however, provides some useful evidence for India. This shows that financial liberalisation and capital market growth in the 1980s in that country led to portfolio substitution from bank deposits to tradeable securities rather than greater aggregate national or financial savings.

Nagaraj notes that despite the stockmarket boom of that decade and the substantial resources raised there by Indian corporations, corporate investment in fixed assets declined. Nor does he find evidence of increased output growth in the private corporate sector. The sector apparently used the new stockmarket funds to alter the corporate capital structure by increasing the proportions of equity capital and substituting securitised debt for bank loans. Both Singh (1995) and Nagaraj report a secular fall in corporate profitability in India during the 1980s, which could in principle be due to product market liberalization. However, it then becomes difficult to explain the stockmarket boom except in terms of market psychology and speculation.

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crossing Rs. 3000 crores and Rs. 6000 crores respectively.

Turning to foreign portfolio investment, it is again very much the case that because of the generally low observed correlations between the emerging and the industrial country stock markets, portfolio investment in emerging stock markets has become attractive for pension funds and other institutional investors in advanced countries seeking diversification and risk spreading. Such investment has evidently been important in raising PE ratios and hence reducing the cost of capital to the Indian and other LDC corporations in the recent period. However, such capital inflows can be quite volatile and cause serious problems for macro-economic management of the economy. As Akyuz (1993) points out external liberalisation through opening stockmarkets to non-residents leads to close links between two inherently unstable markets even when the capital account is not fully open - the stock and currency markets. Faced with an economic shock the two markets may interact with each other in a negative feed-back loop to produce even greater instability for the markets and the whole financial system. Moreover, the gyrations in these markets may discourage aggregate investment through various channels, e.g. depressing business expectations because of greater uncertainty; greater instability in aggregate consumption because of wealth effects caused by large fluctuations in stockmarket prices. These factors contribute to the instability of the real economy and may also reduce long-term economic growth. The Mexican debacle of December 1994 has painfully brought home the difficulties caused by volatile portfolio capital flows.

## VII. Conclusion

This paper has argued that the fast growth of stockmarkets in India in the 1980s and into the 1990s is not an isolated phenomenon. Similar developments have occurred in other industrialising economies. These are a part of a worldwide trend towards deregulation of financial markets and the greater role of the market forces in the allocation of resources. However, it has also been suggested here that this stockmarket development is not a spontaneous or evolutionary response to market forces, but instead has generally been policy

induced.

Nevertheless, the liberalisation of the financial sector and the vast expansion of stockmarkets in India and other industrialising economies in the 1980s and 1990s has had a major impact on corporate finance. The new issues on the stockmarket, whether of ordinary shares or of debentures, have during this period made a significant contribution to corporate growth in the semi-industrial countries. However the important issue is whether this greater reliance on the stockmarket by large firms has led to, or will in future promote faster industrialisation and long-term dynamic efficiency (in the sense of raising the trend rate of growth of productivity). Specifically will it increase the overall rates of savings and investment in the economy, or raise the productivity of investments by more efficient allocation of investment resources.

There is no evidence to suggest that either of these positive developments have actually occurred in India or in the other NICS. The experience of the advanced countries with well organised stockmarkets and wide share ownership does not provide any great hope in these respects for the future either. On the contrary, notwithstanding the supposed theoretical advantages of stockmarkets, the actual workings of the pricing and the takeover mechanisms in the stockmarket dominated economies of the US and the UK suggest that these countries may be put at a competitive disadvantage in comparison with Japan and Germany, where traditionally the banks rather than the stockmarket have played the key role in industrial development.

However, despite the dubious merits of stockmarkets for industrialisation and for the promotion of dynamic efficiency, it is today politically unrealistic to expect that stockmarkets in India or in other NICS can either be abolished or significantly rolled back. The policy question then is how to minimise the harmful effects of these markets (speculation, price volatility, short-termism) for industrial development. Singh (1993,1994) has argued that inter alia one

important step which industrialising economies should take at this juncture is to nip in the bud the development of a market for corporate control. As noted in section VI, there are strong analytical reasons as well as evidence to suggest that such a market, instead of being beneficial, greatly increases the likelihood and the significance of the negative consequences of stockmarkets referred to above.

Up to now takeover bids and mergers have played a relatively small role in the expansion of large firms in India as well as in other NICs: most of corporate growth has been organic and based on new investment. However, the very existence of huge conglomerates in developing countries - which must be regarded as potentially predatory - means that the further evolution of the stockmarkets and greater institutional share ownership is bound to lead to the development of a market for corporate control. Countries like India need to undertake strong purposeful measures to stop such institutional changes which are likely to harm the growth of smaller firms, reduce competitiveness and dynamic efficiency. This kind of preventive action is likely to be far more useful than subsequent regulation of a full blown market for corporate control.

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