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Singh, Ajit

University of Cambridge

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**Corporate Financing Patterns in Emerging Markets in the 1980s and the  
1990s**

Ajit Singh  
Professor of Economics, Cambridge University  
Senior Fellow, Queens' College, Cambridge, CB3 9ET  
Email: [Ajit.Singh@econ.cam.ac.uk](mailto:Ajit.Singh@econ.cam.ac.uk)  
Fax: 44 1223 740479

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I am greatly indebted to Dr. R. Matthias for his help in preparing this paper. However, I alone am responsible for the views expressed and the errors which remain.

Corporate Financing Patterns in Emerging Markets in the 1980s and the 1990s

**I     Introduction:**

This paper addresses the following main issues:

- (1) What is the nature of corporate financing patterns (i.e. how corporations finance their investments and growth) in emerging markets, and how have these evolved during the 1980s and 1990s?
- (2) Are there significant differences in financing patterns (a) between emerging and mature markets, and, (b) between emerging markets themselves.
- (3) Can economic theory adequately explain the observed inter-country differences in financing patterns as well as the changes in these over time?
- (4) How do corporate financing patterns affect corporate governance? How does the latter in turn influence the former?

The paper builds on the author's previous work in this field. [Singh and Hamid (1993), Singh (1995), Whittington, Singh and Saporta (1997), Singh (1997) and Singh and Weisse (1998)]. The former two studies were among the first large-scale comparative empirical analyses of corporate financing patterns in emerging markets (hereafter referred to as SH)<sup>1</sup>.

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<sup>1</sup> The sample frame of Singh and Hamid(1992) was the fifty largest manufacturing corporations quoted on the stock markets in nine emerging countries, Thailand, South Korea, India, Turkey, Pakistan, Mexico, Jordan, Zimbabwe and Malaysia. Singh(1995) extended the coverage normally to the one hundred largest quoted manufacturing firms in each country and included Brazil in the sample of emerging markets. The

SH arrived at surprising and quite unexpected conclusions. This research showed that although there were variations in corporate financing patterns among developing countries, in general, corporations in the sample countries used more external than internal funds, to finance the growth of their net assets. Further, within external sources, the average developing country corporation used new share issues on the stock market to a surprisingly large degree. Even at an elementary level these conclusions are quite contrary to a priori expectations. In view of the low level of development and myriad imperfections of developing country capital markets, one would have expected these corporations to use more internal rather than external finance. For similar reasons, one would not expect immature and small stock markets to be a prominent source of funds for developing country corporations.

An important task of the present paper is to examine the robustness of the SH findings in the light of the evidence for the 1990s. The SH studies analysed the individual corporate accounts of normally the hundred largest manufacturing firms quoted on the stock market and covered the decade of the 1980s. However, before reporting on the robustness exercise and other empirical results, it will be useful to review what economic theory has to say on corporate financing patterns in developed and developing countries.

## **II Corporate Financing Patterns in Emerging and Mature Economies: Analytical Considerations**

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latter study, while broadly confirming the conclusions of the earlier research, also qualified them in some important ways. (See further Singh and Weisse (1998) and also below).

During the last fifteen years there has been an avalanche of theoretical literature on the financing of corporate growth and the associated question of the capital structure of firms<sup>2</sup>. The literature points to a number of reasons why financing patterns (based on flow variables) or the capital structure (based on stock variables) may differ between firms. As suggested by Myers(2001), these reasons lead broadly to the following four theories:

- (1) The trade-off theory which emphasises the role of taxation.
- (2) The pecking-order theory which is based on the concept of informational asymmetries.
- (3) The agency theory which is based on the separation of ownership and control in modern corporations in mature economies. This theory emphasises the role of corporate financial choices in aligning the interests of shareholders and managers.
- (4) Modigliani and Miller's 1958 classic irrelevance theorems which long dominated the field of corporate finance and which asserted that it made no difference how firms financed their growth.

The first three theories represent attempts to reconcile empirical evidence for the real world that financing patterns do seem to matter with the Modigliani and Miller propositions. It is now recognised that the latter only hold in a rarefied neoclassical world in which there is no provision for bankruptcy.

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<sup>2</sup> The seminal review article on the theoretical issues is Harris and Raviv (1991). An authoritative recent contribution is Myers(2001)

For the purposes of the present paper which is in part concerned with the differences in financing patterns between emerging and mature markets the most important of these is the pecking-order theory.

## **II.1 The Pecking-Order Theory**

This theory suggests that firms follow a hierarchical pattern in their choice of various sources to finance their growth: they rely largely on internal finance (i.e. retained profits) to meet their investment needs. Should these requirements exceed the available internal finance, firms will attempt first to raise resources through debt and only as a last resort go to the stock market. The pecking-order theory has a ready rationale if one assumes that managers' interests differ from those of shareholders as, for example, in corporations where there is a separation of ownership from control. This would make the controlling managers prefer internal finance over which they have discretion (because of the inability of dispersed shareholders to exercise effective control due to the difficulties of collective action). External finance on the other hand involves scrutiny by the stock market or by banks. However, in a classic contribution Myers and Majluf(1984) showed that under conditions of imperfect and asymmetric information, even profit maximising managers, i.e. those who are trying to maximise share holders value, will find that the optimum financial choices are still best represented by the pecking-order theory.

## **II.2 The Case of Emerging Markets**

It will be interesting to consider in this context whether at a theoretical level the pecking-order theory may be expected to apply also to emerging market corporations. Here we

must first note some specificities of emerging markets. These are in part related to the level of overall development of a country and that of its capital markets. At low levels of development where the stock market is either non-existent or exists only in a rudimentary form, and there is a banking system which is also not fully developed, corporations would be obliged to rely basically on internal resources and seek external funds rarely, if at all. In practice, however, the banking system in such economies is likely to be relatively more developed compared with the stock market, even though it would still be far from being perfect. This will mean that firms will be able to raise external funds more from the banks than from the stock market. In other words this would lead to a “pecking order” of the same kind as is suggested for advanced economies but for entirely different reasons. The pecking order in the case of the developing countries would be further reinforced by the fact that business owning families would like to maintain control of their firms and would therefore prefer debt to equity.

Another characteristic of developing country firms which is relevant, particularly for small and medium size companies, is that of family connections. For such firms, the normal sources of external capital are equity from extended family and friends and loans from the “kerb” market. It is not clear in this regard whether these firms would borrow more or use more equity. Kerb borrowing and informal credit markets tends to be very costly but are often required by small and medium sized firms for short-term working capital. While for long term purposes, equity finance from families and friends is likely to be preferred. This implies that the growth of small and medium sized firms would be restricted by financial constraints unless there are government schemes to help them. Governments in many developing

countries have established direct financing institutions (DFIs), essentially development banks, to provide finance for industrialisation. Typically, however, these institutions have tended to provide funds for large rather than small companies. To the extent that such finance is extended to large firms in the form of loans rather than equity, this would also lead to the consolidation of the pecking-order pattern of finance for the large corporations.

Turning to the case of emerging countries at a relatively higher stage of development with better developed banking systems and established stock markets, there will be further reasons to expect the pecking-order to prevail. In these semi-industrial countries although there are likely to exist reasonably sophisticated banking systems, the stock markets, until the 1980s, in most of these countries were quite small and relatively immature (Singh (1997) Mullins (1993)). In these circumstances there would be further a priori reasons for expecting the pecking-order pattern of finance. Specifically, imperfections of the stock market may lead to speculation and arbitrary pricing as well as large volatility in share prices (see further Tirole, 1991 and Singh, 1997). These conditions may discourage risk-averse firms, even those with very good projects, from seeking funds from the stock market or even from obtaining a stock market listing at all. Further, due to the lack of clear-cut bankruptcy laws, or their lax enforcement, particularly for large firms in many semi-industrial countries, such firms may be expected to resort to bank financing more than to the stock market.



To sum up the above discussion suggests that although conditions differ between emerging countries at various stages of development, as well as between small and large firms, there are good reasons to suggest that the pecking order theory would be applicable at least for large firms. For semi-industrial countries with reasonably well-developed banking systems and established equity markets (such as those included in SH studies- see note I), large corporations would follow a pecking order pattern of finance not only because of the informational asymmetries emphasized by Myers and Majluf, 1984, but also due to the institutional specificities of emerging markets outlined above. Thus, if there are good reasons to expect a pecking order pattern of finance for corporate growth in developed countries, there are even better reasons for expecting such a pattern in emerging markets.

### **II.3 Research on Law and Finance and Emerging Markets**

Apart from the pecking order theory, the recent pioneering work by Laporta *et al.*, (1998) also has useful application to developing countries. The authors (hereafter referred to as LLSV) suggest that a country's legal system determines its pattern of corporate finance as well as corporate governance and other variables. LLSV distinguished essentially between two ideal type legal systems: the French civil law system and the Anglo-Saxon common law system. It is argued that common law countries would have better protection for minority shareholders, as well as superior corporate governance in other ways (e.g. have regular board meetings and have independent non-executive directors). This would enable corporations in those

countries to be able to raise more external finance at cheaper terms than corporations in civil law countries. In this framework the country's legal system is an exogenous variable determined by history and circumstances. In the case of emerging markets, it is suggested that their respective legal systems were often imposed on them by the colonial power which had ruled the country. The LLSV theory is controversial but it has the virtue of having clear-cut testable predictions concerning financing patterns in different emerging as well as mature markets.

### **III Empirical Evidence**

Singh and Hamid's results for the corporate financing patterns in ten emerging markets for the 1980s are reported in Table 1. As mentioned earlier, these results are based on individual company accounting data for normally the hundred largest manufacturing firms in each of the sample countries. The results indicate a comprehensive rejection of the pecking-order hypothesis for several countries. The average quoted company in the ten emerging markets during the 1980's financed marginally more of its growth of net assets from equity (39.3%) than from internal sources i.e. retained profits (38.8%). Long term debt contributed a little over 20% to the average sample firm's growth. These were the average figures: in some countries the significance of external finance was considerably greater. Thus, for example, in South Korea nearly 80% of corporate growth came from external sources (nearly 50% equity and 30% long-term debt) and only about 20% from retained profits.

#### **III.1 The Anomalous Financing Behaviour of Emerging Market Corporations and Investors.**

The results reported in Table 1 are striking and anomalous for other reasons as well. Not only would it seem that large emerging market corporations finance a great part of their investment needs from external rather than internal funds, they also use the stock market for new issues to a surprisingly large degree, much more so than the corporations in advanced countries. (See Table 2). Tables 2 and 3, which report on the financing of corporate growth in advanced countries for the periods 1970 - 1989 and for 1988 - 1997 respectively, suggest that in these countries the stock market provides relatively little fresh capital to the corporate sector. Indeed the contribution of new equity to corporate investment was negative in the U.S. and the U.K. (see Table 2), indicating that more company shares were retired either through take-overs or through share buy-backs than were added by new issues during the relevant period. However, even in Germany and Japan where new equity makes a positive contribution to corporate growth, the proportions are quite small. To find that compared with these well-organised stock markets in advanced countries, the considerably smaller less developed and immature emerging markets make a sizeable contribution to financing corporate investment, certainly calls for an explanation.

It is all the more so since developing country stock markets suffer not just from market imperfections (for example, a comparative lack of private information-gathering and monitoring organisations and firms) but also from serious regulatory deficits (including insider trading, lack of protection for minority shareholders). In addition, as the conceptual analysis of the last section suggested, the share prices on these emerging markets are likely to be much more volatile than in well-developed and mature stock markets. This particular prediction is supported by evidence which indicates that there is indeed a greater share

price volatility on emerging markets.<sup>3</sup> One would have expected such volatility to discourage developing country firms from raising capital on the stock market, or even to seek a market listing at all. However, as Table 1 suggests, not only did these companies tap the stock market for large amounts of fresh capital, but further data (not reported in Table 1) indicates that there was a big increase in listings in many emerging markets in the 1980s. Singh (1995,1997).

Even though India is an extreme case, by the late 1980's the relatively small Indian stock market (by international standards) had become one of the largest in the world in terms of the number of listed companies.<sup>4</sup> Shleifer and Vishny (1997) point to another anomaly, looked at this time from the perspective of the investing public rather than the corporations. They rightly ask "Who are the buyers of this equity? If they are dispersed shareholders, why are they buying the equity despite the apparent absence of minority protections?"

A still further anomaly arises when the results for advanced countries reported in Tables 2 and 3 are considered. These evidently fully conform to the pecking order theory of financing corporate growth, indicating that firms in these countries overwhelmingly finance their investments from internal sources. When external sources are used debt is much more important than equity. The analytical discussion of section II suggested that compared with the advanced country corporations, there are even stronger a priori reasons to expect corporations in emerging markets to follow the pecking order. Yet evidence suggests that the former do so and the latter do not.

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<sup>3</sup> See further El-Erian and Kumar (1994).

<sup>4</sup> See further Singh and Weisse (1998) and Singh (1999)

### III.2 Accounting for the Anomalies

How does one account for these anomalies? Singh (1995) and in subsequent papers with his colleagues referred to earlier, offered the following analysis for explaining these contrary findings. First he pointed out that a large part of the difference between the results for the emerging and advanced markets reported in Tables 1 and 2 arises from methodological differences between the two types of studies. The following differences are particularly significant:

- The sources of basic data used in the two studies are rather different - Table 1 is based on corporate accounting data and Table 2 (as well as Table 3) on the flow-of-funds data. More significantly, an important part of the differences in the empirical results could arise from the fact that in tables 2 and 3 depreciation is included as a major component of internal finance, whereas in Table 1 it is excluded from both the numerator and denominator in the relevant ratios. The purpose of the SH exercise in Table 1 is to measure the sources of finance for corporate growth of “net assets”. It is therefore necessary to focus on the net increase in corporate assets, because depreciation provision for replacement is normally required to merely maintain the stock of assets. Prais (1976) provides the classic discussion of this issue.
- Equally importantly, the results reported in tables 2 and 3, using the flow of funds data, relate to the corporate sector as a whole, rather than to a typical individual firm. In this methodology, intra-corporate sector transactions are usually netted-out and “external finance” means finance from outside the corporate sector. Therefore the question being addressed by the information presented in tables 2 and 3 is: how is “gross physical investment” in the corporate sector as a whole financed, by internal sources (within the corporate sector) and by external sources (from outside the sector, e.g. the financial or the household sector). This is a rather different question than that addressed in Table 1 by the SH methodology. The latter uses firm-level accounting data to

enquire how individual corporations rather than the corporate sector as a whole finance the growth of their net assets, net of depreciation.

- The differences between the two methodologies is best illustrated by considering the case of takeovers. If a corporation, for example, within the non-financial sector takes over another corporation within that sector, and pays for the acquisition with its own shares, this is regarded by SH as a new investment by the acquiring firm, financed through the issue of fresh equity. The rationale for this approach is that, from the point of view of the individual firm, growth by acquisition is an alternative to the creation of new productive capacity. From the standpoint of the corporate sector as a whole, however, there is no increase at all either in “physical investment” or in the shares issued. Thus in the methodology used in tables 2 and 3 such intra-sectoral transactions are netted out.

Singh (1995) provided indirect evidence to suggest that the differences between the financing pattern of advanced and developing country corporations are very much smaller when the same methodology is used for both groups of firms.<sup>5</sup> The next section provides direct evidence on this point.

Quite apart from the methodological differences noted above some of the anomalous results could, however, also arise from the possible measurement biases in SH studies<sup>6</sup>. The latter were fully acknowledged in Singh (1995) and examined more closely in Whittington, Saporta and Singh (1997). Two of the possible biases are particularly relevant: a) the use of the historical cost method of accounting in periods of high inflation; and b) in the absence of the necessary data, the bias in the indirect method used to assess the contribution of the equity variables in SH research.

As is well known, inflation could distort the historic cost accounts to give a misleading picture of corporate performance and financing patterns. For example, a priori it could

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<sup>5</sup> This qualified an important conclusion of Singh and Hamid (1992). See further Singh (1995),p.21 and also Singh and Weisse (1998).

<sup>6</sup> See also Cobham and Subramaniam (1998) and Samuel (1996).

either understate or overstate corporate profits (and consequently the amount of retained profits) unless an appropriate adjustment has been made. With respect to (b), in SH studies, in the absence of readily available data, the variable "equity finance" was measured indirectly from the accounting identity which equates growth of net assets with the sum of that of internal and external finance respectively. Further in these studies the growth of long-term liabilities was proxied by growth of long-term debt and the growth of internal finance by retained profits. Whittington et al's (1997) analysis of these biases indicated that although significant in some cases they do not vitiate the surprising central empirical findings of SH studies, ie that large developing country corporations use more external than internal finance and employ equity finance to a rather large degree.

Singh (1995) provided an economic explanation for these anomalous findings, essentially in terms of conjunctural factors which were specific to the 1980s and were expected eventually to peter out. He ascribed the relatively high use of external finance by developing country corporations to their fast growth rates. He then concentrated on the question of the large reliance of these corporations on equity finance. He attributed this phenomenon to financial liberalisation, de-regulation and privatisation which many developing countries implemented in the 1980's. Specifically he called attention to the following factors:

- a) the direct role of the governments in stimulating stock market development through measures such as tax incentives and regulatory changes. In many emerging countries an important purpose of these policies was to facilitate privatisation.
- b) external and internal financial liberalisation which often lead both to a stock market boom and to higher real interest rates; the former lowered the cost of equity capital whilst the latter increased the cost of debt finance. These changes in relative prices, which were quite dramatic, are likely to have contributed to the observed greater use of equity compared with debt by large corporations in a number of these economies during this period.<sup>7</sup>

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<sup>7</sup> These issues are of course more complex; for a detailed discussion see Singh (1995).

#### **IV Empirical Evidence for the 1990's**

This section provides a unified analysis of corporate financing patterns in emerging and advanced economies during the 1990s using the same methodology and the same data source - the Worldscape Data Bank. This data bank is more comprehensive than the accounting information used in SH studies. Apart from its intrinsic interest in describing the corporate financing patterns for the 1990s, the results of this analysis also have a bearing on the issue of measurement biases outlined above. It also enables us to assess Singh's conjunctural explanation in terms of data for a longer period.

Tables 4 - 7 analyse corporate financing patterns in four emerging markets (India, Malaysia, Thailand and Korea), and two mature economies (the US and the UK), during the period 1992 to 1996 using the same methodology, essentially that of SH studies in Table 1 (but see below). The results reported in Table 4 provide fascinating information which may be summarised as follows:

- i) The differences between the corporate financing patterns for mature and of emerging economies are much less marked, when the same methodology and the same information, that is the corporate accounting data, are used to examine financing patterns.
- ii) The pecking order pattern of finance is not supported either for emerging markets or for mature economies<sup>8</sup>.
- iii) There are marked differences between the two mature economies. In the UK, internal finance provides only 12.6% of the total sources of finance. Of the external finance (87.3%) more than one third is provided by equity issues, which is very considerably more than in the US (8.4%). It is also notable that short term debt, including trade credit, comprises 48.9% of the total financing for the UK firms and only 28.1% for the US firms. Indeed the pattern of financing for the UK companies seems similar to those for developing countries.

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<sup>8</sup> In the case of the UK, the rejection of the hypothesis is unequivocal. For the US the results are more marginal especially if the information in Table 5 is also taken into account. The latter which excludes short



iv) The results for developing countries indicate their continuing heavy reliance on external sources (ranging from 76% for India to 94% for Korea). However, the composition of external finance is different from that of the 1980s: there is greater use of debt finance, particularly short term debt, than that of equity issues.

It is useful to note that although it employs the same type of methodology as that in Table 1, the table 4 analysis is more comprehensive. The results are also less subject to some of the possible measurement biases, which as noted earlier could affect the analysis presented in Table 1. Differences between the analyses of Tables 1 and 4 may be summarised as follows:

- Table 4, using the World Scope data set, measures the contribution of equity finance directly, as this data base provides that information, whereas in table 1 SH used an indirect residual method for estimating this variable because of data limitations;
- The “external sources of finance” in table 4 includes all types of finance, long term as well as short term, including working capital, whereas table 1 did not include short term finance, that is bank loans of a duration of up to one year. As subsequent events revealed this was not a good method: long term debt is not an adequate reflection of the normal indebtedness of developing country corporations. This is because the latter typically use large amounts of short term debt for long term investment purposes. Such debt is normally rolled over, turning it into the functional equivalent of long term debt. Creditors may, however, refuse to roll over these debts in times of crisis, as exemplified by the Asian crisis of 1997-1998;
- Table 4 includes a separate category for revaluation reserves, minority interests, preferred shares and non-equity reserves. This category is usually quite small for most countries.

Table 5, however, provides the same information as table 4 except that it only examines long term sources of finance. This makes it more comparable to the

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term external financing indicates that marginally more finance came from internal sources than from long

data reported in table 1 except for the differences already noted above in the first and third bullet points above.

The results of Tables 4 and 5 raise three substantive economic issues in the context of the previous discussion:

1. The results do not provide for either the US or the UK corporations, especially the latter, robust support for the pecking order theory. However, economic analysis as well as evidence in Tables 2 and 3 indicated otherwise. Why should this be so?
2. Why are the results reported for the US so different from those for the UK in other respects, particularly as these countries have similar legal and financial institutions and well-developed stock markets?
3. Are the apparent changes in equity financing in the 1990s compared with the 1980s in emerging markets "genuine" or simply a consequence of the measurement biases in the 1980s benchmark figures?

The answer to the first question is implicit in the methodical discussion of the last section. Different methodologies are being used in the two sets of tables and the main question therefore is, which method is more appropriate? There are good reasons to suggest that the SH type methodology used in Tables 4 and 5 is more suitable, essentially because it is considering the issue of financing corporate growth from the perspective of an individual firm rather than that of the corporate sector as a whole. The theoretical discussion of the pecking order hypothesis in Section II, it will be recalled, is conducted in terms of the behaviour of the individual firm rather than that of the whole of the corporate sector.

With respect to the second question, the differences in the sources of finance for corporate growth in the US and the UK appear to arise mainly from the fact that the World Scope data set for the US relates to the top 200 or so corporations, whereas for the UK, it covers 700 corporations. (In this whole exercise, all available relevant information from the World

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term debt. However long term external finance as a whole greatly exceeded internal finance.

Scope data set for each country has been used.) It is therefore likely that the main reason for the differences between the US and the UK arise from the fact that the financing patterns of large corporations are different from those of small corporations. This hypothesis will be examined in subsequent work.

Turning to the third question, since the World Scope data set does not go back into the 1980s, this question cannot be answered directly. However, the data set does provide information for an indirect test of the effects of possible measurement errors in the treatment of equity financing variable in the benchmark SH studies for the 1980s. Tables 6 and 7 use Worldscope Data for the 1990s for a sample of four countries (India, Korea, Thailand and Malaysia) to analyse financing patterns using the direct method for measuring the contribution of equity finance (Table 6) and the SH residual method in Table 7<sup>9</sup>. A comparison of Tables 6 and 7 indicates that for both India and Korea, the residual method slightly underestimates the contribution of equity finance, while in the case of Malaysia it considerably over-estimates it. Both methods give the same results for Thailand. Thus in three out of four countries, this analysis suggests that the SH method is unlikely to have over-stated the contribution of equity finance. Thus the balance of evidence (including that of Whittington et al 1997 discussed earlier) suggests that the observed changes in corporate financing patterns from the 1980s to the 1990s for these countries are likely to be genuine rather than simply reflecting measurement biases of the earlier period.

It is interesting to consider further the Indian case where there appears to be a modest increase in equity financing in the 1990s compared with the benchmark figure for the 1980s. Unlike the other sample countries, where most reforms occurred somewhat earlier, financial liberalisation and related measures were implemented at an accelerated pace in India only in the early 1990s following the balance of payments crisis in 1991. These reforms produced among other things, a stock market boom which reached its peak in 1995. This greatly lowered the cost of equity finance relative to that of debt and consequently several hundred Indian companies, existing as well as new ones, resorted to the stock market to raise finance. However, by the late 1990s, with the fall in share prices

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<sup>9</sup> This exercise for the 1990s is a much simpler version of the analysis of the measurement biases on the basis of the 1980s data carried out by Whittington et al 1997.

there was a sharp reduction in equity financing.<sup>10</sup> Thus the increase in equity financing for India in the first half of the 1990s was quite in accord with the SH hypotheses as is the subsequent fall recorded in other studies (see Pal (2001)).

Finally, the relatively high use of equity financing by emerging market corporations in the 1980s and into the 1990s is also confirmed by the data reported in Table 8. This information comes from a completely different data set which provides aggregate levels of new equity and debt issues relative to various macro-economic benchmark variables for a group of developing and developed countries. The data reported in table 8 gives new equity issues as a proportion of total stock market capitalisation. The table shows higher levels of equity issues for a number of emerging markets compared with those for advanced countries. The Korean case with extremely high levels of new equity issues is clearly an outlier.

## **V. Summary, Conclusions and Implications for Corporate Governance**

The main conclusions of the above analysis of corporate financing patterns in emerging and mature markets during the 1980s and 1990s may be summarised as follows.

1. Contrary to *a priori* expectations and theoretical analysis, the observed corporate financing patterns in several leading emerging markets comprehensively reject the pecking order theory. The conceptual discussion in Section II concluded that while there were good reasons to expect a pecking order for firms in mature markets, the reasons for expecting such a pattern for emerging market firms are stronger still. Yet the results for the 1980s and 1990s are quite unequivocal: emerging market firms use far more external rather than internal finance, and within external finance employ equity finance to a surprisingly large degree.
2. These results cannot be attributed to possible measurement biases arising from the inadequacies of the available data for the 1980s. The more comprehensive data for the 1990s confirms these conclusions.

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<sup>10</sup> The Worldscope Data Set analysed in this paper covers only the period 1992 - 1996. For a study of the evolution of financing patterns in the following years see Pal (2001).

3. The large observed differences between the financing patterns of emerging and mature markets arise mainly from the different methodologies which have been used for examining these issues. When the same methodology is used to study financing patterns in both groups of countries, the financing patterns are seen to be much closer.
4. Indeed, when the SH methodology is used for studying corporate financing patterns in advanced economies, the widely held belief that these corporations implement a pecking order is no longer necessarily valid. At a minimum, the analysis of this paper suggests that this conclusion is not robust. With a different methodology which, it is argued here, is conceptually more suitable, the results change quite considerably. The pecking order pattern in advanced economies is observed most clearly when flow of funds data is used and the question of financing is considered from the perspective of the corporate sector as a whole rather than that of the individual firm. The SH methodology embodies the latter perspective and is therefore analytically preferable. It will be recalled that theoretical foundations of the pecking order theory is the individual firm rather than the corporate sector as a whole.
5. There is considerable evidence from different kinds of data, both at the aggregate and at the micro-economic levels, that the large emerging market firms have raised substantial amounts of funds on the stock market during the 1980s and 1990s. In proportional terms during this period, equity financing of firms from many emerging markets was greater than that of firms from advanced economies.

What are the implications of the above results on corporate financing patterns in emerging markets for corporate governance? In the LLSV analysis corporate governance affects financing patterns directly. Other things being equal, a company with superior corporate governance will be able to raise external funds more cheaply and in greater amounts than a company with a poor governance mechanism. This suggests a positive relationship between external finance and corporate governance. This hypothesis has not been examined here and will be taken up in future work.

However, there are other ways in which corporate finance may affect corporate governance. In the context of the results of this paper which suggest that emerging market corporations have resorted significantly to the stock market to raise funds, corporate governance would be much influenced by stock market activity<sup>11</sup>. There are two main inter related channels through which such activity can affect corporate governance: the stock market's allocative and disciplinary mechanisms respectively. Whether or not this would help improve corporate governance depends on one's views about the efficiency of the two mechanisms.

The market performs its allocative task basically by its pricing of corporate securities. In orthodox textbook analysis stock market pricing process helps bring about a better allocation and utilization of resources as well as promote technical change. This is achieved through the pricing mechanism favouring the well managed, fast growing and efficient firms with higher share prices, and hence a lower cost of capital, and punishing poor managements and the inefficient companies by according them lower share prices. The take-over mechanism in textbook analysis similarly selects for survival only the efficient companies which maximise shareholder value, while the inefficient firms are taken over.<sup>12</sup>

There is however an alternative critical perspective associated with Keynes which regards the stock market as essentially a gambling casino where the pricing process is dominated by speculation, fads, fashions and herd behaviour. Modern economic analysis provides both theoretical and empirical support for Keynes' strictures. If one takes the Keynesian view of the operations of the stock market, the latter can hardly be expected to improve corporate governance or resource allocation. As Keynes noted in a famous passage if the capital development of a country is left to a casino the job is likely to be ill-done. There are many modern day economists who make similar negative assessments about the efficacy of the take-over mechanism (which did not really exist at the time Keynes was writing) in being able to replace bad management by good management.

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<sup>11</sup> Corporate governance would also in addition be affected by the rules and regulations of the stock market itself, ie by stock market governance. Developing countries generally suffer from many deficits in this area. See further Singh (1997)

<sup>12</sup> For full references to the literature in this and the following paragraph, the reader is referred to Singh (1999).

These are of course subjects of much controversy which is unlikely to be resolved soon.<sup>13</sup>

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<sup>13</sup> For recent authoritative expositions of rival positions on stock-market pricing see Hall (2001) and Schiller (2000).

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