

COMPETITION, CORPORATE GOVERNANCE AND SELECTION IN EMERGING MARKETS

ESRC Centre for Business Research, University of Cambridge
Working Paper No. 247

by

Ajit Singh
Queens' College
University of Cambridge, CB3 9ET
as14@econ.cam.ac.uk
Phone: +44 1223 350 434
Fax: +44 1223 740 479

December 2002

This Working Paper forms part of the CBR Research Programme on Corporate Governance, Contracts and Incentives.

Abstract

The paper introduces the three articles in this Policy Feature, concerned respectively with competition, corporate governance and selection in emerging markets. Apart from being important in their own right, it is shown how these topics have recently acquired urgent domestic and international policy significance. This overview also provides the intellectual background to the issues raised in the papers and examines their interrelationships in analytical, empirical and methodological terms. It outlines a research programme which would not only have direct policy relevance for both emerging and mature countries, but would also have broader analytical significance for many areas of economic theory.

Keywords: Competition, Corporate Governance, Selection, Emerging Markets

JEL Codes: G3, L1, O12

Acknowledgements

The author is grateful to Dennis Mueller, Bee Roberts and Ann Zammit for helpful comments. Financial support from the Research Committee of the World Bank is gratefully acknowledged as is the contribution of the Centre for Business Research, Cambridge where the research was carried out. The usual caveat applies. Please do not quote without agreement with the author.

Further information about the ESRC Centre for Business Research can be found on the World Wide Web at the following address: www.cbr.cam.ac.uk

1. Introduction: The Domestic and International Policy Context

As the title indicates, the three papers in this Policy Feature are concerned respectively with competition, corporate governance and selection in emerging markets. These topics are not only analytically and empirically important in their own right, but for the reasons outlined below they have also acquired in the recent period urgent domestic as well as international policy significance. The international prominence of these issues stems from the Asian crisis which during 1997-1999 devastated some of the world's fastest growing economies. This extremely sharp and unexpected downturn focused attention on the micro-economic behaviour of economic agents in the affected countries. Soon after it began, an influential view of the crisis emerged especially in policy-making circles. It asserted that, although macro-economic disequilibria might have provided a trigger for the economic reversal, the deeper underlying causes were structural and lay in the normal day-to-day interactions of corporations, banks and the government in these countries.^{1, 2} Thus, according to this analysis, the Asian crisis was a tragedy waiting to happen; its roots lay in the 'Asian way of doing business'. This account of the crisis emphasized particularly the deficiencies in (a) the prudential regulation of the financial sector, (b) the nature and degree of product market competition, and (c) the quality of corporate governance in emerging countries as the fundamental structural reasons for their economic misfortune.

Very briefly, the structural thesis suggests that the Asian crisis was in part caused by over-investment which in turn resulted from a poor competitive environment and disregard for profits in corporate investment decisions (owing to unsatisfactory governance mechanisms). It is further argued that the close relationship between government, business and finance, typical in these economies, led to high debt-equity ratios in the corporate sector. High gearing made the corporate sector financially fragile and vulnerable to interest rate and exchange rate (in the case of external corporate debt) shocks. Thus, over-investment was a consequence of crony capitalism and the lack of product market discipline. Excessive investment reduced profits and ultimately led to the crisis because of a financial system made fragile by relationship banking and a corporate sector which was vulnerable due to its high leverage.

Although as an explanation for the Asian crisis the structural theory is by no means adequate or accepted by most economists³, it has nevertheless helped concentrate minds on the nature of industrial structure and corporate organization in emerging countries. Quite apart from the crisis and its international dimensions, this emphasis was also required by important changes in the domestic economies of developing countries. Many of them undertook

market-oriented economic reforms in the 1980s and 1990s. They implemented widespread privatization, liberalized their economies as well as encouraged the establishment of, or greatly expanded market institutions such as the stock market⁴. These measures led to a significant growth of the private sector relative to that of the public sector. In that context, questions of competition, corporate governance, corporate finance and organization naturally acquired domestic policy importance. What the Asian crisis as well as the frequent crises in other emerging markets in the 1990s did was to bring these issues to the international agenda. The growing significance of emerging markets in the world economy, and the possibility of spill-over effects from the crises of these economies on to the global economy, led to calls in the late 1990s for a New International Financial Architecture. The latter suggests inter alia corporate governance and product market competition as important areas of reform to forestall future crises in these economies⁵. Corporate governance and competition are therefore today salient policy concerns at both national and international levels.

Although there exists considerable research on these subjects for advanced economies (ACs), there has until recently been very little work in these areas for developing countries (DCs)⁶. One silver lining of the Asian financial crises has been that international financial organizations have allocated more resources to research on these issues for emerging markets. Consequently there is much more primary data available now on corporate ownership patterns, corporate organization and finance, competition and competition policy than was the case before the financial crisis.⁷ There have also been some important recent contributions on these issues by academic economists as well as policy makers⁸. The collection of papers in this Policy Feature is intended to further extend research on these topics.

The first paper by Glen, Lee and Singh (2002) provides time series analyses of corporate profitability at the individual firm level in seven leading DCs and considers their implications for product market competition in these economies. It uses the uniform methodology of persistence of profitability (PP) studies to examine issues of the dynamics of the competition process. The DC results are systematically compared with the exactly corresponding results for advanced countries using the same methodology. The comparison yields surprising counter-intuitive findings; these suggest that on the normal interpretation of the observed persistency coefficients, the intensity of competition in DCs is no less, but probably greater, than that observed in ACs. An important part of the paper is concerned with a) confirming the statistical robustness for this anomalous finding, b) explaining it in economic terms, and c) examining the

broader issues of the interpretation of the parameters of the auto-regressive equation used in such exercises. The authors also report on time-series analyses of the two components of profitability, namely capital-output ratios and profit margins. Such analyses have not been carried out before for either developed or developing countries. The results in these cases also raise important general issues of economic interpretation for PP studies.

The second paper by Gugler, Mueller and Yurtoglu (2002) is concerned with issues of corporate governance in developed and developing countries. Using the huge Global Vantage data base and the methodology pioneered by Mueller and Reardon (1993), and developed further in Mueller and Yurtoglu (2000), the authors investigate efficiency of corporate investments from different sources of finance essentially in terms of "marginal Tobin's q ". This methodology turns out to be very fruitful as it enables the authors to help resolve several notable anomalies in the financing of corporations as well as with respect to rates of return to different sources of finance in both emerging and mature markets. Further, while other economists have sought to explain the differences in economic performance between AC and DC firms in terms of the legal system, basic legal philosophy and corporate laws of the country,⁹ Gugler, Mueller and Yurtoglu find that corporate governance institutions are a more important as well as more appropriate explanatory variable in accounting for inter-country differences in the rates of return. The nature and context of some these anomalies which this paper helps resolve will be elaborated in the next section.

The third paper by Aw, Chung and Roberts (2002) uses another methodology, that of turnover and mobility studies to examine competition and selection in two leading emerging markets, South Korea and Taiwan. The authors use microeconomic census data for seven comparable industries in the two countries to study these issues. They suggest that essentially because of higher 'sunk' costs of entry in Korea relative to Taiwan, the industrial structure in the former country is much less dynamic than that of Taiwan. Specifically, the authors show that compared with Taiwan, in Korea, the market structure is more concentrated, there is less producer turnover, greater 'within industry' cross-section productivity dispersion, a greater percentage of production units operating at low productivity levels and larger productivity differentials between survivors and failing firms. The authors also compare their results with those observed for the US and conclude that the pressures of product market competition are stronger in Taiwan than in the USA, whereas the competition forces in the latter country would appear to be more powerful than in Korea.

The previous discussion has indicated how the microeconomic issues of corporate governance, competition and selection - each of which individually are the subject of a separate paper in this Policy Feature - are related to current domestic and international policy concerns. All three papers take a comparative stance and where possible provide comparable information for DCs and ACs. While apparently using different methodologies each paper makes original contributions to the relevant literature. However as these contributions are included in more precise form in each of the respective papers, for reasons of space they will not be repeated here. To supplement the above examination of the policy questions, the following sections will outline some of the analytical and empirical connections between the three papers and thereby provide an essential background and the intellectual context for the issues examined in them. It will be seen that the papers and their respective topics intersect with each other in various ways at a number of different levels.

II. Competition, Corporate Governance and Selection: Analytical and Empirical Links

Seminal contributions of nearly fifty years ago by Alchian (1950) and Friedman (1953) indicated a close relationship between competition, selection and corporate governance. These studies suggested that regardless of the separation between ownership and control of the kind documented by Berle and Means (1933) for the US economy, the competitive selection process in the product markets would ensure that managers are obliged to maximize profits. A corollary of this analysis was that only the optimal ownership patterns and corporate governance structures would survive this 'natural selection' mechanism. A careful examination of this claim by Winter (1964) indicated, however, that it was not valid in all states of the world, but only under rather limited conditions of perfect competition and unfettered entry. Specifically, Winters' modelling of the selection mechanism suggested that if there were imperfect competition, barriers to entry and/or economies of scale, different corporate governance systems could co-exist and managers of large corporations would not need to maximize profits in order to survive.¹⁰

These findings shifted the argument to the capital market and to the market for corporate control. Early contributions by Alchian and Kessel (1962) and Manne (1965) suggested that notwithstanding the degree of competition in product markets, perfect competition in the capital market and in the market for corporate control would resolve Berle and Means's agency problem by forcing managers to maximize share-holders' wealth. Even if the product markets were wholly monopolized, those firms which did not maximize monopoly profits and preferred say, the easy life, would become takeover targets for those who were

willing to do so. The latter would potentially have higher share prices on the stock market than the former, providing an opportunity and an incentive for a takeover to occur. Thus the selection process, this time in the capital market, would again ensure *inter alia* optimum governance structures.¹¹

Subsequent research has indicated that for a number of theoretical as well as practical reasons - asymmetric information, transactions costs, Grossman and Hart's (1980) free rider problem, capital market imperfections - the takeover mechanism on the capital market may not be adequate for the task of resolving agency questions in the modern corporate economy. Further, empirical evidence for the advanced economies of the US and the UK¹² indicates that selection in the market for corporate control does not take place entirely on the basis of efficiency, that is, profitability or stock market valuation. Although profitability matters, absolute size matters more. A large, relatively unprofitable company has a much better chance of survival than a small profitable one. Moreover, almost invariably it is large firms that take over the small. Indeed, the acquisition process may operate in a perverse way since a large unprofitable company can increase its immunity to takeovers through the takeover process itself - by becoming larger through the acquisition of small firms¹³.

Most developing countries do not yet have an active market for corporate control in the Anglo-Saxon sense. Some of them, for example India and Brazil, have embryonic markets which may soon mature. However, these markets are likely to be even more imperfect and suffer from informational deficits than markets in the US and the UK. For these and other reasons, Singh (1998a) argues that such markets are unlikely to provide a satisfactory solution to the corporate governance issues in developing countries.

In view of these difficulties with the market for corporate control, the wheel has come almost the full circle in advanced economies. It has been suggested that it is the severe product market competition in a liberalized global economy which is more likely to constrain corporate managers in the pursuit of their own objectives at the expense of the firm's shareholders rather than the capital markets.¹⁴ Such competition however is likely to be oligopolistic and of non-price variety, which may not have the welfare enhancing properties of textbook price competition. Be that as it may, neo-classical economists now agree that, because of the many imperfections in the product markets and in the market for corporate control, there is indeed a governance problem in the modern corporation. This is usually modeled in the form of a principal-agent problem in which the separation of ownership and control imposes agency costs on the corporation's shareholders. This cost is assumed to vary inversely with the

intensity of competition in the product markets and with the efficiency of the selection process in the capital markets, Jensen and Meckling (1976); Jensen (1986).

III. Corporate Governance and Corporate Finance in Emerging Markets: Some Anomalies

Further insights into the nature of the corporate governance problems in DCs are provided by examining the relationship between corporate finance and corporate governance in these countries. The two are closely related almost by definition. As Schleifer and Vishny (1997) note in their comprehensive review article on the subject: “Corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment’. The two authors suggest that the central issue of corporate governance is, ‘How do suppliers of finance control managers?’.

In this context it is useful to enquire what would be the economists' a priori expectations about how DC firms would finance their growth; to what extent would they use external rather than internal finance; how would their financing patterns differ from those for advanced country firms. Economic analysis would suggest that DC firms, operating as they do in under-developed and imperfect capital markets, may be obliged to finance most of their growth from internal cash flow, i.e. retained profits. Moreover one would expect them to have little recourse, if any, to the stock market to finance their investment projects. This is due to three reasons. First, because of the informational and regulatory shortcomings of emerging stock markets, as well as the fact that as many firms in these markets will not have established market reputations, the pricing process is likely to be noisy and arbitrary (Tirole, 1991). One result would be considerable share price volatility especially compared with that in more mature markets. This volatility would tend to discourage firms from attempting to raise funds by new issues. Secondly share price volatility reduces the efficiency of market signals and that may also be expected to discourage risk-averse investors from raising funds, and indeed even from securing listings, on the stock market. Thirdly, as evidence suggests that typically large corporations in DCs are family-owned and controlled¹⁵, this may be expected to make them more reluctant to issue equity for fear of losing control of the corporation. These and other similar considerations suggest two important empirical hypotheses. The first is that DC firms may be expected to follow the typical 'pecking-order' pattern of finance that, for other reasons the finance theory suggests, may characterize AC corporations. According to this theory of a hierarchy of sources of finance, firms normally rely heavily on internal cash flow to finance their investment needs. To the extent that they require further

resources, they resort first to bank borrowings and long-term debt, and only as a last recourse go to the stock market to raise funds.¹⁶ Returning to the case of DC firms, the second prediction from the previous sequence of reasoning is that as many risk-averse deserving corporations may shun stock market altogether, the listings on the DC markets will, *ceteris paribus*, tend to be quite low, especially compared with the AC markets.

Myers and Majluf's (1984) classic paper attributed the pecking order for AC corporations essentially to asymmetric information between managers and outside investors. DC corporations are, of course, subject to the same kind of asymmetric information as their counterparts in ACs. There are, however, additional reasons above to expect, in the case of the former group, the greater use of internal finance and less resort to external finance, particularly to the issuance of new shares on the stock market. To sum up, if there are good reasons to expect a pecking order pattern of finance for corporate growth in ACs, there are even better a priori reasons to expect such a pattern in emerging markets.

With respect to empirical evidence on these issues, two of the first large scale studies of the financing of corporate growth in emerging markets were Singh and Hamid (1992) and Singh (1995a). The two studies arrived at surprising conclusions. The results indicated a comprehensive rejection of the pecking-order theory for the average large DC corporation in their samples of normally the hundred largest quoted manufacturing firms in ten leading emerging economies. This research suggested that contrary to the analytical considerations outlined in the previous paragraphs, in order to finance their growth the large DC corporations: (a) relied much more on external than on internal finance and (b) among the external sources of funds they used new share issues to a surprisingly large degree. It was also found that there was a very fast growth of stock market listings in many DCs in the 1980s, again in contradiction to the theoretical expectation outlined above.¹⁷ These empirical results led Schleifer and Vishny (1997) to ask: how can firms raise equity finance in countries with virtually no protection of minority investors, even if these countries are rapidly growing?

Singh (1995a) outlined a theory to explain these anomalous findings in terms of the special circumstances of the 1980s (including the role of the DC governments in stimulating stock market growth to facilitate privatization; external and internal financial liberalization which often led both to a stock market boom and to higher interest rates, thus lowering the cost of equity capital relative to that of bank finance). An implication of this theory was that

once this conjuncture of events is over, DC corporations will go back to the expected pecking order pattern of financing. Gugler, Mueller and Yurtoglu (2002) present a much more sophisticated theory to explain these anomalies. The main explanatory variable in their analysis, as indicated earlier, is the efficiency of corporate governance mechanisms in various countries. This framework also enables them to provide answers to other similar puzzles in the literature, including the classic question, why do investments out of different sources of finance earn different rates of return?

IV. Product Market Competition in Emerging Markets

Despite the policy importance and analytical significance of product market competition outlined in Sections I and II respectively, there are surprisingly few systematic empirical studies on this subject for DCs. Comparable data on three or four-firm concentration ratios are readily available only for a few countries and even that kind of basic information tends to be dated.

In the absence of hard evidence, there are divergent opinions about the nature and degree of competition found in DC product markets. Laffont (1998) suggests for example, that these markets tend to be small and segmented and suffer from a variety of imperfections. Many developing countries do not have any anti-trust or anti-monopoly legislation at all. Even when such legislation exists, governments are not always able to enforce it. Further, governments often subsidize large firms to develop national champions and thereby affect market structure, firm behaviour and performance in distortionary ways. In many countries, governments tend to discourage entry through bureaucratic regulations and similarly block exit to maintain employment [De Soto, 1990; Tybout, 2000].

With respect to the more advanced semi-industrial economies, such as Korea, India or Brazil, it is generally believed that their manufacturing sectors are dominated by large corporations and consequently tend to be monopolistic. Some available cross country evidence on three or four-firm concentration ratios for leading emerging markets provides some support for this view. For example, the average three-firm concentration ratio for Japan in 1980 was 56%; the corresponding figures for Korea in 1981 and for Taiwan also in 1981 were 62% and 49% respectively. Similarly, the average four-firm concentration ratios were recorded as being 43% in Argentina in 1984, 51% in Brazil in 1980, 67% in Turkey in 1976, compared with 40% in the US in 1972 (World Bank 1993).

There is however, also contrary evidence which indicates that many of these countries have a dualistic industrial structure with a substantial small firm sector existing side by side with the modern sector of large domestically owned conglomerate firms, as well as multinational corporations. Thus we find whereas small enterprises (employing less than ten workers) contribute only about 4 per cent of total employment in the US, their share in the DCs is many times larger. Enterprises with less than five workers account for 42 per cent of total employment in India, 56 per cent in Ghana, 84 per cent in Kenya, and 77 per cent in Indonesia (Tybout, 2000). If the informal sector were included in these statistics, the contrast between the US industrial structure and that of DCs would be even sharper.¹⁸ It remains, however, an open empirical question and an important subject for further research as to how much competition this vast small-scale sector brings to the large conglomerate firms in DCs. Or is it the case that most competition for these large modern sector firms comes only from imports or multinationals rather than from small firms?

A number of other scholars and policy makers, however, believe that despite extensive government involvement and guidance of corporate activities, and often weak enforcement of anti-trust laws, the domestic markets of many leading DC's are highly competitive. Thus World Bank (1993) in its seminal study of the East Asian miracle economies:

“Even though Japan and Korea have tended to have high levels of concentration in their manufacturing sector ... , domestic competition has usually been vigorous. The Japanese government has proceeded on the assumption that competition among fewer, more evenly matched firms is preferable to having one large firm competing with many smaller rivals, a principle that is well-recognized in athletic competitions (Nalebuff and Stiglitz (1983)).”

It is suggested that this competition is not always market-based but may be “contest-based”. World Bank (1993) notes:

“(East Asian Miracle Economies) developed institutional structures in which firms competed for valued economic prizes, such as access to credit, in some dimensions while actively cooperating in others; in short, they created contests.”

Porter (1990) endorses this characterization of the intensity of competition in Korea and Japan. In relation to Korea, for example, on the basis of detailed empirical studies of several industries, he suggests that Korean conglomerates

compete with each other far more than do the giant firms in most other countries. Indeed, Porter ascribes the outstanding success of the Korean economy to the high degree of competition among the large oligopolistic firms, though, as indicated in Section I, a number of economists attribute the crisis in Korea and other Asian countries, to the poor competitive environment and a disregard for profits in corporate decisions.

It is important to note that the comparative data reported in the previous paragraphs on the market structures of the US and Japan relative to that of DCs provides only static measures of concentration. These are widely acknowledged to be an inadequate guide to the relative extent of competition in an industry or a country. The static indicators need to be supplemented by dynamic measures of the competition process. This is done in this Policy Feature in papers by Glen, Lee and Singh and by Aw, Chung and Roberts. The former use the PP methodology to assess intensity of competition between ACs and DCs and between the DCs themselves. They argue in detail that their counterintuitive result that competition is at least as severe, if not more so, in DCs as in ACs, is fully plausible in economic terms. One of their essential points is that just as there are anti-competition structural factors in DCs (of the kind outlined above), there are also a number of pro-competition structural forces present, notably, the low sunk costs of entry. The authors' analysis suggests that for any particular DC the balance of pro and anti competition forces can be affected by economic policy, which may not always be against competition.

The paper by Aw, Chung and Roberts uses the different methodology of turnover and mobility (TM) studies to measure differences in the nature and intensity of competition between South Korea and Taiwan. Their analysis highlights the role of sunk costs of entry as the main determinant of the differences in competition dynamics between the two countries. Although Glen, Lee and Singh's paper employs in its main empirical work the PP methodology, it also appeals to concepts and evidence from TM studies in defense of its claims concerning the relative intensity of competition dynamics in DCs and ACs. Specifically, the concept of low sunk costs of entry in DCs compared with ACs is regarded by the authors as one of the main reasons for their counterintuitive result. Glen, Lee and Singh also use comparative evidence for ACs and DCs on turnover (entry and exit of firms) and mobility (the expansion and decline of surviving firms) to support their conclusions.

Apart from these conceptual and empirical links between the Glen, Lee and Singh and the Aw, Chung and Roberts papers, there is also a deeper connection between them at the methodological level. Despite the fact the PP and TM

studies use very different concepts and are empirically employed in very different ways, they do share a common intellectual ancestry. They may both be regarded as part of a broader research programme on stochastic modelling of firm performance and market evolution over time.¹⁹ The main basis of PP studies is usually regarded to be the Schumpeterian theory of "creative destruction" through competition.²⁰ The Schumpeterian vision is that of a competitive economic system in which there is an incessant stream of innovations - new products, new ways of organizing production and new means of production. Firms may gain temporary advantage through innovation-induced positive shocks, or by lucky chance, but these will be quickly eroded by competitors, through new entry or exit of firms, or through the expansion or contraction of surviving firms. The latter are part and parcel of the Schumpeterian selection processes through which creative destruction takes place; these are explicitly examined in TM studies.²¹ As Aw, Chung and Roberts note, the modern theoretical literature in which these latter type of studies are rooted are Jovanovic (1982), Lambson (1991), Hopenhayn (1992), and Ericson and Pakes (1995). The PP studies are not incompatible with the perspective of these contributions, although the former do not necessarily originate in the latter.²² Both types of studies are compatible with either the Nelson and Winter (1982) evolutionary modelling of entry, growth and exit of firms or with solving stochastic dynamic optimization problems by managers who have rational expectations but limited information (See further Tybout, 2000, Nelson and Winter, 2002).

There also exists an important conceptual connection between TM studies and those of corporate governance, which is of a different kind than the theoretical links between competition and corporate governance considered earlier. This connection is highly significant at an empirical level and concerns the role of the takeover mechanism in the selection process. As most disappearances of firms quoted on stock markets have occurred through takeovers during the last half century in the U.S. as well as the U.K, this process should be central to TM studies. It clearly constitutes an integral part of both the exit of firms and the mobility of surviving firms through restructuring. Moreover, it is significant that the emergence of takeovers and mergers as the dominant cause of death of quoted firms is only a phenomenon of the post-World War Two period, both in the US and the UK. Hart and Prais' (1956) classic paper suggested that between 1880 and 1950 only about one third of the disappearances of quoted firms on the London stock market were due to amalgamations, while liquidations accounted for 40%. However, while the question of takeovers now being the predominant cause of firm disappearances has been closely studied from the perspective of corporate governance and the efficiency of the market for

corporate control, it has generally received much less attention in TM studies. The latter research does examine, *inter alia*, changes in control of enterprises, but does so usually only at plant level and not at firm level. It is important that the results based on plant-level data from TM studies on control changes should be reconciled with the analysis of takeovers in the corporate governance literature which is invariably based on firm-level data. Caves (1998) suggests a reconciliation in terms of the theory of job-matching. This is a plausible hypothesis which needs to be explored in future research.²³

V. Competition, Corporate Governance and Long-Term Economic

Development: Issues for Research

The two papers on product market competition and selection processes (Glen, Lee and Singh and Aw, Chung and Roberts) focus on the important prior questions concerning the measurement of the comparative intensity of competition in DCs; they do not consider the further substantial issue of the relationship between competition and long-term economic development. Similarly, the paper by Gugler, Mueller and Yurtoglu examines the means of identifying the quality of corporate governance systems and relates these to the micro-economic performance of firms in terms of their stock market returns. However, this paper also does not consider the further question of the nature of the relationship between corporate governance and long-term economic development or that between the micro-economic performance of individual firms and the aggregate outcomes in terms of the long-term growth of production and productivity.

These issues are, of course, tremendously important analytically as well as from a policy perspective for DCs. However, they are very difficult to model and are subjects of great controversy even in ACs. In relation to competition, Nickell (1996) notes that economists are predisposed towards the view that competition enhances long-term economic growth and productivity growth. Such a case, he argues, is difficult to sustain in theoretical terms, particularly in the context of modern corporations with separation of ownership and control.²⁴ Although his own econometric study supports the positive case for competition, he suggests “... the broad-brush evidence from Eastern Europe and Japan is, if anything, more persuasive than any detailed econometric evidence.” (p.741.) Thus, he finds that qualitative and impressionistic evidence concerning Japan (high level of competition and fast economic growth) and that relating to Communist Eastern Europe (lack of competition and lack of dynamism) prove to be the best confirmation of a virtuous relationship between competition and economic performance.²⁵

It is important to take broad-brush evidence seriously, whether or not it is always more persuasive than detailed econometric studies. This is for the following reasons: first, in the absence of more detailed empirical analyses, such evidence is likely to form the basis of economic policy; second, at an academic level, it helps us formulate appropriate hypotheses for further investigation; and third, there is often a creative tension between the two kinds of evidence, investigation of which may lead to further development of the subject. In that spirit, it may be observed that although Nickell is right in his broad-brush characterization of Eastern Europe, his similar analysis of Japan needs to be seriously qualified. During its period of high economic growth (1950-1973) when Japan was more like a DC, the government implemented selective import controls; fostered close relationships between government, business and finance and helped co-ordinate investment decisions of firms; imported technology from abroad by other means while discouraging foreign investment. Instead of the dictum “the more competition the better”, the government strove to attain an optimum degree of co-operation and competition. During this period there was weak implementation of the anti-trust laws and the industrial policy interests of the Ministry of International Trade and Industry (MITI) invariably prevailed over those of the competition agency.²⁶

The experience of other East Asian countries, particularly Korea, has been broadly similar to that of Japan. As World Bank (1993) in its important study of the East Asian miracle countries, including Japan acknowledged these countries did not have unrestricted competition in product, capital and labour markets.²⁷ The experience of China, which for the last two decades has had one of the fastest growth rates in the world, is also consistent with the East Asian story of unfettered competition being not necessarily optimal for fast economic growth. The Chinese economy has been able to register double-digit growth rates over a long period despite its segmented product markets and highly imperfect capital and labour markets. Overall, in the light of the experience of Japan, China and other East Asian countries, as well as that of the erstwhile socialist countries in Eastern Europe, the following conclusions would seem to be warranted: some competition is better than no competition; unfettered competition is not necessarily optimal; nations with highly imperfect markets can achieve fast long-term economic growth and many economically successful countries have followed policies which combine competition with purposive co-operation.

Although this combination of co-operation and competition has worked very well under government guidance in East Asia, China and elsewhere in the developing world, it has also evidently failed in many developing countries.

Amsden (2000) suggests that a key factor is that successful countries have been able to build institutions which allow for governmental autonomy, permitting the state to impose socially necessary performance standards on corporations in return for its assistance.²⁸

Most of the above conclusions also find support in Carlin, Haskel and Seabright (2001b), an important large empirical study on the experience of the market economy and restructuring in Eastern Europe and Russia during the last decade. This research is based on both survey evidence and econometric analysis. One of its main results is that, controlling for other relevant variables, there is a non-monotonic relationship between competition and economic performance. The authors find that sales and productivity growth were higher in firms facing between one and three competitors in the market for their main product than in firms that either faced no competition at all or that faced more than three competitors. Thus the optimum level of competition does not appear to be zero or maximum competition.

In this context, Aw, Chung and Roberts' paper in this volume is highly instructive in that it compares systematically two of the world's most successful developing countries with regard to their competition dynamics in the product markets. The authors' finding that Taiwan has a greater intensity of competition than Korea in almost all dimensions (normally used in TM studies) raises the important question as to why the rate of long-term economic growth in these two countries has been broadly similar. Arguably, the answer may be that Korea's 'competition deficits' were compensated for by the close relationship between government and business and its vigorous industrial policy.²⁹ Such issues merit more research.

Similarly, Gugler, Mueller and Yurtoglu's paper suggests that improved corporate governance and supporting institutions would lead to better economic performance. They identify basic protection of property rights, law and order, a well-functioning judicial system and contract enforcement as being among the crucial elements of good governance. But here, however, there is some broad-brush evidence to the contrary which should not be ignored. In China there are acknowledged to be serious shortcomings from the conventional perspective of good corporate governance in terms of the legal system, in contract enforcement and in the definition of property rights.³⁰ Clearly, although the country has hardly been a model of corporate governance, it has been outstandingly successful in terms of long-term economic growth. This suggests that there are other factors, which may more than compensate for poor corporate governance. The evidence is also compatible with the notion that

corporate governance does not affect long-term growth or that there is more than one system of corporate governance that is conducive to economic growth, depending on a country's history and its other institutions. Such differing hypotheses on these issues require systematic theoretical and empirical research.

To sum up, the papers in this Policy Feature shed light on some of the basic prior questions about competition, selection and corporate governance in DCs. This overview has provided both the intellectual and policy background to the issues raised in these papers and has examined their interrelationships in empirical, analytical and methodological terms. In view of the relatively little research for DCs on these matters and of their immediate national and international policy significance they present themselves as prime candidates for further research. These include issues such as the relationship between corporate governance and long-term economic development - specifically, whether there exists more than one form of corporate governance which is conducive to long-term growth; national and comparative studies on the state of competition in its various dimensions for DCs; the appropriate combination of co-operation and competition to achieve maximum social welfare in countries at different levels of development;³¹ the question of dualism in the industrial structure of developing countries and the relationship between large and small firms in these countries; issues concerning the kinds of domestic competition policy which would be most appropriate for DCs, and, bearing in mind the changing nature of the relationships between multinational firms, DC governments and domestic firms, what sort of international competition policy should be formulated to promote the development potential of DCs,³² and the major issue of the relationship between corporate finance, corporate governance and long-term economic growth. This constitutes a formidable and exciting research agenda for students of emerging markets.

The analysis of these issues would have direct policy implications for emerging markets as well as for the management of the international economy. Judging by the examples of the theoretical and empirical anomalies revealed and resolved in the papers in this Feature and the new ones which emerge from them, this research programme is also bound to have broader analytical significance for economic theory - particularly the theory of the firm,³³ the theory of industrial organization, the theory of finance and the theory of economic development.

Notes

- ¹ For differing perspectives on the causes, consequences and remedies of the financial crisis in East Asian countries, see three recent collections of articles published by National Bureau of Economic Research: Feldstein (2002), Dooley and Frankel (2002), Edwards and Frankel (2002). For contributions which specifically attribute the crisis to the Asian model of capitalism see for example Greenspan (1998), Summers (1998, 2000), Frankel (1998), Phelps (1999), Johnson et al (2000a, 2000b). See also IMF (1997,1998) and the US Council for Economic Advisers (1998, 1999).
- ² Johnson et al. (2000a) argue that measures of corporate governance and in particular the effectiveness of protection for minority shareholders, explain the extent of the exchange rate depreciation and stock market decline in the Asian crisis countries better than standard macroeconomic indicators.
- ³ For an implicit or explicit critique of the structuralist thesis see Chang (2000), Sakakibara (2001), Stiglitz (1999), Wade and Veneroso (1998), Sachs and Radelet (1998), Singh (1999a), Singh and Weisse (1999) and Jomo (2001).
- ⁴ See Mullins (1993), Levine (1997) and Singh (1997, 1999b).
- ⁵ For a discussion of the New International Financial Architecture (NIFA) (a) in relation to corporate governance, see Singh, Singh and Weisse (2001), Iskander and Chamlou (2000); (b) in relation to competition and competition policy see Singh (2002) and World Bank (2002). On other aspects of NIFA see the three NBER collections of articles referred to in footnote 1.
- ⁶ The words ‘emerging markets’, ‘emerging countries’, and ‘developing countries’ are used inter-changeably throughout this paper.
- ⁷ See, for example, Iskander and Chamlou (2000) for the new primary data on ownership collected by the World Bank. See also Beck, Demirgüç, and Levine (2000).
- ⁸ See La Porta et al (1998, 2000a, 2000b), Claessens et al (2000), Levine and Zervos (1998). See also Rajan and Zingales (1998).
- ⁹ The classical reference here is La Porta et. al. (1998).
- ¹⁰ See further, Winter (1971, 1987), Stiglitz (1991), Singh (1992), Nelson and Winter (2002).
- ¹¹ See further Marris (1964), Meade (1968), Singh (1971).
- ¹² For the UK studies see Meeks (1977); Cosh, Hughes and Singh (1980), Cosh et al (1989, 1998); Frank and Mayer (1996), Dickerson (1997). For the

US, see Schwarz (1982), Mueller (1980), Warshawsky (1987), Ravenscraft and Scherer (1989), Auerbach (1988). For review articles, see among others Hughes (1991), Singh (1992), (1993a), and Mueller (1992, 1997).

¹³ Singh (1971, 1975); Greer (1986).

¹⁴ See further Cosh, Hughes and Singh (1990) and Singh (2000).

¹⁵ Claessens, Djankov and Lang (2000), Iskander and Chamlou (2000).

¹⁶ Myers and Majluf (1984); Myers (2001)

¹⁷ The mean quoted company in Singh's sample of ten emerging markets during the 1980s financed more than 60% of its growth of net assets from external sources and only about 40% from internal sources, i.e. retained profits. Among the external sources, again surprisingly, equity financing (40 percentage points) was relatively more significant than long-term debt (20 percentage points). 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. For more recent figures on corporate financing patterns, see Singh, Singh and Weisse (2001). For the controversy on empirical methodology, see Cobham and Subramaniam (1998), Singh and Weisse (1998), and Whittington, Saporta and Singh (1997). Further, contrary to *a priori* expectations, there was, during the 1980s, a large increase in listings on DC stock markets. By the early 1990s, India, admittedly an extreme case, had the distinction of having nearly 8,000 firms listed on its stock markets, and ranked just below the U.S. Its listings were several times larger than those of the European stock exchanges, even that of London. This anomaly also calls for an explanation. Singh (1994, 1995a).

¹⁸ Relative to advanced countries, the share of the small-scale sector in DCs in terms of employment would be larger than in terms of output because of the bigger differences in capital intensity of the two sectors in these countries. Tybout (2000).

¹⁹ See further Jovanovic (1982); Ericson and Pakes (1995); Geroski, Machin and Walters (1997), Pakes and Ericson (1998); and the recent review, Caves (1998).

²⁰ See Mueller (1990); Geroski (1990); and Carlin, Haskel and Seabright (2001a).

²¹ See further Carlin, Haskel and Seabright (2001a).

- ²² For a recent review article on TM studies and their relationship with other streams of thinking in industrial organization, see Caves (1998).
- ²³ Although the takeovers process is at present less relevant to DCs than to ACs, it will nevertheless be interesting to examine what kind of control changes take place in plants in DCs and what differences exist between quoted and unquoted firms in this respect.
- ²⁴ See further Vickers (1994) and Willig (1987).
- ²⁵ Economic performance in Nickell's (1996) econometric study is measured in terms of the level and the growth of firm productivity. He does not address the question of the link between micro-level economic performance and long-term aggregate economic growth.
- ²⁶ See further Amsden and Singh (1994); Okimoto (1989).
- ²⁷ There is a vast literature on this subject. See, among others, Amsden (1989, 2000); Wade (1990); Rodrik (1995); Singh (1995b).
- ²⁸ See Rodrik (2000) who also emphasizes the importance of appropriate institutions for sustaining economic success.
- ²⁹ It will be recalled from Section 1 that, in the structuralist view, industrial policy may be regarded as one of the causes of the Korean crisis. This interpretation is, however, at variance with facts. Korea had abandoned industrial policy in the early 1990s following its decision to apply to become a member of the OECD. It even abolished its planning office in 1993. The available evidence is more compatible with the alternative analysis that the crisis was caused mainly by other factors, including precipitate financial liberalization as well as the sudden reversal of international capital flows. See further references given in footnotes 1 and 3 on different perspectives on the causes of the East Asian crisis.
- ³⁰ See, for example, Singh (1996), Lardy (1998), Jefferson, Mai and Zhao (1999), Chien-Hsun and Hui-Tzu (2001), Gabriele (2001), Nolan (2001).
- ³¹ Not only is there support for this proposal in the historical experience of East Asian countries and China, but also in the experience of industrial districts in Italy and other countries. See Piore and Sabel (1984) and Best (1990). Further, recent theoretical developments in industrial organisation suggest that, in relation to innovation, "inter-firm coordination, even among horizontal competitors, can bring substantial welfare benefits." (Baumol, 2001, p.736.)
- ³² These issues have acquired added significance in the light of the Doha Ministerial Decision to include competition policy as a part of the WTO work programme with a view to eventual multilateral negotiation. See further Singh (2002).

³³ Aoki (1990) formalized the differences between Japanese and Anglo-Saxon firms to develop a distinct theory of the Japanese firm. Singh, Singh and Weisse (2002) note in this context in relation to DCs the ubiquitousness of large, privately owned conglomerate business groups on all developing continents. They further note the important differences between these DC groups and AC conglomerates both now and in the past. These considerations suggest the need to explore the possibility of a distinct theory for large DC firms which is compatible with their known characteristics and their critical role in late industrialization. For a recent review of DC business groups, see further Khanna (2000).

References

- Alchian, A.A. (1950). "Uncertainty, Evolution and Economic Theory", *Journal of Political Economy*, vol. 58(3), pp. 211-221. June.
- Alchian, A.A. and Kessel, R.A. (1962). "Competition, Monopoly and the Pursuit of Pecuniary Gain", In *Aspects of Labour Economics*. Princeton: N.B.E.R.
- Amsden, A. (1989). *Asia's Next Giant: South Korea and Late Industrialization*. New York: Oxford University Press.
- Amsden, A. (2000). *The Rise of "The Rest": Challenges to the West from Late-Industrializing Economies*. Oxford: Oxford University Press.
- Amsden, A. and Singh, A. (1994). "The Optimal Degree of Competition and Dynamic Efficiency in Japan and Korea", *European Economic Review*, vol.38(3/4), pp. 941-951.
- Aoki, M. (1990), 'Towards an Economic Model of the Japanese Firm', *Journal of Economic Literature*, March, Vol XXVIII, pp 1-27
- Aw, B. Y., Chung, S. and Roberts, M.J. (2002). "Productivity, Output, and Failure: a Comparison of Taiwanese and Korean manufacturers", Paper submitted for the *Economic Journal* Policy Feature on Competition, Selection and Corporate Governance in Emerging Markets.
- Baumol, W. 2001. "When is inter-firm coordination beneficial? The case of innovation", *International Journal of Industrial Organization*, vol.19, pp.727-737.
- Beck, T., Demirgüç-Kunt, A. and Levine, R. (2000). A New Database on the Structure and Development of the Financial Sector. *The World Bank Economic Review*, vol. 14(3), September.
- Berle, A. and Means, G. (1933). *The Modern Corporation and Private Property*. New York: The Macmillan Company.
- Carlin, W., Haskel, J. and Seabright, P. (2001a). "Understanding 'the Essential Fact about Capitalism': Markets, Competition and Creative Destruction", *National Institute Economic Review*, no. 175, (January), pp. 65-84.
- Carlin, W., Fries, S., Schaffer, M and Seabright, P. (2001b).). 'Competition and Enterprise Performance in Transition Economies: evidence from a cross-country survey', CEPR Discussion Paper Series No. 2840.
- Caves, R.E. (1998). "Industrial Organization and New Findings on the Turnover and Mobility of Firms", *Journal of Economic Literature*, vol. XXXVI, pp. 1947-1982.
- Chandler, A. D. (1977). *The Visible hand: The Managerial Revolution in American business*. Cambridge, Mass: Harvard University Press.
- Chang, H.-J. (2000) "The hazard of moral hazard - untangling the Asian Crisis", *World Development*, vol.28, no.4.

- Chien-Hsun, C. and Hui-Tzu, S. (2001). "Initial Public Offering and Corporate Governance in China's Transitional Economy", *NBER Working Paper Series*, September. www.nber.org/~confer/2001/ease/chien.pdf
- Claessens, S., Djankov, S. and Lang, L. (2000). "The Separation of Ownership and Control in East Asian Corporations", *Journal of Financial Economics*, vol. 58, pp. 81-112.
- Cobham, D. and Subramaniam, R. (1998). "Corporate Finance in Developing Countries: New Evidence for India", *World Development*, 26(6), pp. 1033-47
- Cosh, A., Hughes, A., and Singh, A.(1980). "The Causes and Effects of Takeovers in the United Kingdom: An Empirical Investigation for the late 1960's at the Microeconomic Level", in Mueller, D.C. (ed) (1980). *The Determinants and Effects of Mergers - An International Comparison*, Cambridge, Mass: Oelgeschlager, Gunn & Hain, Publishers, Inc.
- Cosh, A., Hughes, A., and Singh, A.(1990). *Takeovers and Short-termism in the United Kingdom: Analytical and Policy Issues in the UK Economy*, London: Institute for Public Policy Research.
- Cosh, A., Hughes, A., Lee, K. and Singh, A. (1989). "Institutional Investors, Mergers and the Market for corporate control", *International Journal of Industrial Organization*, March, pp. 73-100.
- Cosh, A., Hughes, A., Lee, K. and Singh, A. (1998). "Takeovers, Institutional Investment and the Persistence of Profits", in *Applied Economics and Public Policy* (eds) Begg, I and Henry, S. Cambridge University Press, Cambridge.
- DeSoto, H. (1990) *The Other Path*, New York: Harper and Row
- Dickerson, A.P., Gibson, H.D. and Tsakalotos, E. (1997). "The Impact of Acquisitions on Company Performance: Evidence from a Large Panel of UK Firms", *Oxford Economic Papers*, vol. 49, pp. 344-61.
- Dooley, M., and Frankel, J.A. (eds.) (2002). *Managing Currency Crises in Emerging Markets*. Forthcoming, The University of Chicago Press, Chicago
- Edwards, S. and Frankel, J.A. (eds.) (2002). *Preventing Currency Crises in Emerging Markets*. Forthcoming, The University of Chicago Press, Chicago.
- Ericson, R. and Pakes, A. (1995). "Markov-Perfect Industry Dynamics: A Framework for Empirical Work", *Review of Economic Studies*, vol. 62(1), pp. 53-82.
- Feldstein, M. (2002). *Economic and Financial Crisis in Emerging Market Countries*, forthcoming. University of Chicago Press, Chicago.

- Frankel, J.A. 1998. "The Asian Model, the Miracle, the Crisis and the Fund". Paper delivered at *the U.S. International Trade Commission*, April 16, 1998.
- Franks, J.R., and Mayer, C. (1996). "Hostile Takeovers and the Correction of Managerial Failure", *Journal of Financial Economics*, vol. 4(1), pp. 163-81.
- Friedman, M. (1953). "The Methodology of Positive Economics," in *Essays in Positive Economics*. University of Chicago Press, pp. 3-43.
- Gabriele, A. (2001). "Science and Technology Policies, Industrial Reform and Technical Progress in China", Discussion Paper 155, United Nations Conference on Trade and Development, Geneva.
- Geroski, P.A. (1990). "Modelling Persistent Profitability". In *The Dynamics of Company Profits: an International Comparison*, (ed) D.C. Mueller, Cambridge: Cambridge University Press. pp. 15-34.
- Geroski, P.A., Machin, S. J. and Walters, C.F. (1997). "Corporate Growth and Profitability." *Journal of Industrial Economics*, vol. 45, pp. 171-189.
- Glen, J., Lee, K. and Singh, A. (2002). "Corporate Profitability and the Dynamics of Competition in Emerging Markets: a Time Series Analysis". Paper submitted for the *Economic Journal* Policy Feature on Competition, Selection and Corporate Governance in Emerging Markets.
- Greenspan, A., (1998). Testimony before the Committee on Banking and Financial Services, US House of Representatives, January 30, 1998.
- Greer, D.F. (1986). "Acquiring in Order to Avoid Acquisition", *Antitrust Bulletin*, Spring, pp. 155-85.
- Grossman, J. and Hart, O. (1980). "Takeover Bids, the Free Rider Problem, and the Theory of the Corporation", *Bell Journal of Economics*, vol. 11, pp. 42-64.
- Gugler, K., Mueller D.C. and Yurtoglu B. B. (2002). "The Impact of Corporate Governance on Investment Returns in Developed and Developing Countries", submitted to the *Economic Journal* for a Policy Feature on Competition, Selection and Corporate Governance in Emerging Markets.
- Hart, P.E. and Prais, S.J. (1956). "The analysis of business concentration; a statistical approach." *Journal of the Royal Statistical Society*, series A, vol. 119(2): pp.150-81.
- Howes, C. and Singh, A. (2000). "The Anglo-Saxon Market for Corporate Control: the Financial System and International Competitiveness". In: *Competitiveness Matters: Industry and Economic Performance in the U.S.* (eds.) C. Howes and A.Singh, Ann Arbor, University of Michigan Press, pp. 89-105.

- Hughes, A. (1991). "Mergers and Economic Performance in the UK: A Survey of the Empirical Evidence 1950-1990" in J. Fairburn and J.A. Kay (eds), *Mergers and Merger Policy*, Oxford, 2nd edition.
- IMF (1998) "*World Economic Outlook and International Markets*," Washington DC.
- IMF (1997) "*World Economic Outlook: Crisis in Asia, regional and Global Implication. Interim Assessment.*" Washington DC, December.
- Iskander, M.R., and Chamlou, N. (2000). *Corporate Governance: A Framework for Implementation*. The World Bank Group. Washington DC.
- Jefferson, G., Mai L. and Zhao, Z. (1999). "Reforming property rights in China's industry". In: Jefferson G and Singh, I, eds. *Enterprise Reform in China - Ownership, Transition and Performance*. A World Bank Research Publication. New York, Oxford University Press: 107-126.
- Jensen, M. (1986). "The Agency Costs of Free Cash Flow, Corporate Finance and Takeovers". *American Economic Review*, Vol. 76, pp. 323-329.
- Jensen, M.C. and W. H. Meckling (1976). "Theory of the Firm: Managerial Behavior, Agency Costs and Capital Structure". *Journal of Financial Economics*, Vol. 3: pp. 305-360.
- Johnson, S., Boone, P., Breach, A. and Friedman, E. (2000a). "Corporate Governance in the Asian Financial Crisis", *Journal of Financial Economics*, vol.58, pp.141-86.
- Johnson, S., La Porta, R., Lopez-De- Silanes, F., and Shleifer, A. (2000b). "Tunneling." *The American Economic Review*. Vol.90, No.2, pp.22-27.
- Jovanovic, B. (1982). "Selection and the Evolution of Industry". *Econometrica*, vol. 50, pp.649-70.
- Jomo, K.S., (2001). "Growth After The Asian Crisis: What Remains of the East Asian Model?"G-24 Discussion Paper Series, No. 10, United Nation Conference on Trade and Development. Centre for International Development Harvard University. United Nations, New York and Geneva, March 2001.
- Lardy, N.R. (1998). *China's Unfinished Economic Revolution*. Brookings Institution Press, Washington D.C.
- La Porta, R., Lopez-de-Silanes, F., Schleifer, A. and Vishny, R. (1998). "Law and Finance", *Journal of Political Economy*. Vol. 106 (December), pp. 1113-1155.
- La Porta, R., Lopez-de-Silanes, F., Schleifer, A. and Vishny, R. (2000a). "Investor Protection: Corporate Governance". *Journal of Financial Economics*. Vol. 58, No.1-2, pp.3-27.

- La Porta, R., Lopez-de-Silanes, F., Schleifer, A. and Vishny, R. (2000b). "Agency Problems and Dividend Policies around the World". *Journal of Finance*.
- Laffont, J.-J. (1998). "Competition, Information and Development", *Annual World Bank Conference on Development Economics*, 1998, pp. 237-257.
- Levine, R. (1997). "Financial Development and Economic Growth: Views and Agendas", *Journal of Economic Literature*. Vol. 35 (June), pp. 688-726.
- Levine, R. and Zervos, S. (1998). "Stock Markets, Banks and Economic Growth", *American Economic Rev.* Vol. 88 (June), pp. 537-558.
- Manne, H.G. (1965). "Mergers and the Market for Corporate Control", *Journal of Political Economy*, Vol. 73, 693-706.
- Marris, R.L. (1964). *The Economic Theory of 'Managerial' Capitalism*, London; Macmillan
- Meade, J.S. (1968). "Is the 'New Industrial Estate' Inevitable?", *Economic Journal*, June.
- Meeks, G. (1977), *Disappointing Marriage: A Study of the Gains from Merger*, Cambridge, Cambridge University Press.
- Mueller, D.C. (ed) (1980). *The Determinants and Effects of Mergers - An International Comparison*, Cambridge, Mass: Oelgeschlager, Gunn & Hain, Publishers, Inc.
- Mueller, D.C. (ed.) (1990). *The Dynamics of Company Profits: An International Comparison*. Cambridge, Cambridge University Press.
- Mueller, D.C. (1992). "Mergers". In Newman, P., Milgate, M. and Eatwell, J. (eds) *The New Palgrave Dictionary of Money and Finance*. London: Macmillan.
- Mueller, D.C. (1997). "Merger Policy in the United States: A Reconsideration," *Review of Industrial Organization*, vol. 12(5-6), pp. 655-685.
- Mueller, D.C and Reardon, E. (1993). "Rates of Return on Corporate Investment", *Southern Economic Journal*, vol. 60, pp. 430-53.
- Mueller, D.C and Yurtoglu, B.B. (2000). "Country Legal Environments and Corporate Investment Performance", *German Economic Review*, vol. 1(May), pp. 187-220.
- Mullins, J. (1993). "Emerging Equity Markets in the Global Economy", *FRBNY Quarterly Review* (Summer) 54-83.
- Myers, Stewart C. (2001). "Capital Structure", *The Journal of Economic Perspectives* (Spring), pp.81-102.
- Myers, S. and Majluf, N. (1984). "Corporate Financing and Investment Decisions: When Firms have Information that Investors do not have", *Journal of Financial Economics*, Vol. 13, pp. 187-221.

- Nalebuff, B.J. and Stiglitz, J.E. (1983b). "Prizes and Incentives: Towards a General Theory of Compensation and Competition", *Bell Journal of Economics*, Vol. 14(1), pp. 21-43.
- Nelson, R. and Winter, S. (2002). "Evolutionary Theorizing in Economics", *The Journal of Economic Perspectives*, vol. 16(2), Spring, pp. 23-47.
- Nickell, S. (1996). "Competition and Corporate Performance", *Journal of Political Economy*, Vol 104, pp. 724-746.
- Nolan, P. (2001). *China and the Global Economy*. Palgrave Publishers Ltd., Hampshire.
- Okimoto, D.I. (1989). *Between the MITI and the Market*. Stanford University Press, California.
- Pakes, A. and Ericson, R. (1998). "Empirical Implications of Alternative Models of Firm Dynamics", *Journal of Economic Theory*, vol. 79(1), pp. 1-45. March.
- Palma, G. (1998). "Three and a Half Cycles of 'Mania, Panic and [Asymmetric] Crash': East Asia and Latin America Compared", *Cambridge Journal of Economics*, vol. 22(6), pp. 789-810.
- Phelps, E.S. (1999). "The Global Crisis of Corporatism", in *Wall Street Journal*, 25 March, 1999.
- Piore, M. and Sabel, C. (1984). *The Second Industrial Divide*. New York, Basic Books.
- Porter, M.E. (1990). *The Competitive Advantage of Nations*, The Macmillan Press Ltd.
- Rajan, R. and Zingales, L. (1998). "Financial Dependence and Growth", *American Economic Review*, vol. 58(June), pp. 559-586.
- Ravenscraft, D.J. and Scherer, F.M. (1989). "The Profitability of Mergers", *International Journal of Industrial Organisation*, vol. 7(1), March.
- Rodrik, D. (1995). "Getting Interventions Right: How South Korea and Taiwan Grew Rich". *Economic Policy*. 20.
- Rodrik, D. (2000). "Development Strategies for the 21st Century", *Annual World Bank Conference on Development Economics 2000*. The International Bank Reconstruction and Development / The World Bank. pp.85-123.
- Sachs, J. and Radelet, S. (1998). "The Onset East Asian Financial Crisis." National Bureau of Economic Research (Cambridge, MA). Working Paper No. 6680, August.
- Sakakibara, E. (2001). "The East Asian Crisis - Two Years Later." *Annual World Bank Conference on Development Economics 2000*. The International Bank Reconstruction and Development / The World Bank. pp 243-255.

- Shleifer, A. and R. Vishny. (1997). "A survey of corporate governance." *Journal of Finance*, vol. 52, pp. 737-783.
- Schwarz, S. (1982). "Factors Affecting the Probability of being Acquired Evidence for the United States", *Economic Journal*, vol. 92. June.
- Singh, A. (1971). *Take-overs, Their Relevance to the Stock Market and the Theory of the Firm*. Cambridge: Cambridge University Press.
- Singh, A. (1975). "Takeovers, Economic Natural Selection and the Theory of the Firm", *Economic Journal*, vol. 85(339), pp. 497-515.
- Singh, A. (1992). "Corporate Takeovers", in J. Eatwell, M. Milgate and P. Newman (eds), *The New Palgrave Dictionary of Money and Finance*. London: Macmillan, pp. 480-6.
- Singh, A. (1993). "Regulation of Mergers: A New Agenda", in Roger Sugden (ed.) *Industrial Economic Regulation: A Framework and Exploration*. London: Routledge, pp. 141-58.
- Singh, A. (1993b). "The Stock Market and Economic Development: Should developing countries encourage stock markets?", *United Nations Conference Trade and Development*, No.4, pp. 1-28.
- Singh, A. (1994). "How do large Corporations in Developing Countries Finance Their Growth?", In Richard O'Brien (Ed.) *The AMEX Bank Prize Essays: Finance and the International Economy*, no.8, New York: Oxford University Press, pp. 121-35.
- Singh, A. (1995a). *Corporate Financial Patterns in Industrializing Economies: A Comparative International Study*. International Finance Corporation Technical Paper no. 2, Washington, DC.
- Singh, A. (1995b). "The Causes of Fast Economic Growth in East Asia". *UNCTAD Review*, Geneva, 1995.
- Singh, A. (1996). "The Plan, The Market and Evolutionary Economic Reform in China", in *State Market and Development, Essays in Honour of Rehman Sobhan*, eds. Abdullah, A and Rahman Khan, A. The University Press Ltd., Bangladesh.
- Singh, A. (1997). "Financial Liberalisation, Stock Markets and Economic Development", *Economic Journal*, vol.107, pp. 771-782.
- Singh, A., (1998a). "Liberalisation, the Stock Market and the Market for Corporate Control: a Bridge too far for the Indian Economy?" In Ahluwalia, I.J. and Little, I.M.D. (eds) *India's Economic Reforms and Development: Essays for Manmohan Singh*. Oxford.
- Singh, A., (1998b) "Savings, Investment and the Corporation in the East Asian Miracle", *The Journal of Development Studies*. Vol. 34, No.6. pp
- Singh, A. (1999a) "'Asian Capitalism' and the Financial Crisis." In: J. Michie and J. Grieve Smith (eds.), *Global Instability: The Political Economy of World Economic Governance*, London: Routledge, pp.9-36.

- Singh, A. (1999b). "Should Africa promote Stock Market Capitalism?" *Journal of International Development*, vol. 11, pp. 343-65.
- Singh, A. (2000). "The Anglo-Saxon Market for Corporate Control: The Financial System and International Competitiveness". In: C. Howes and A. Singh (eds) (2000), *Competitiveness Matters: Industry and Economic Performance in the U.S.* The University of Michigan Press, pp. 89-105.
- Singh, A. (2002). "Competition and Competition Policy in Emerging Markets: International and Developmental Dimensions" Forthcoming as: G-24 Discussion Paper,. Centre for International Development Harvard University. Cambridge, Mass.
- Singh, A. and J. Hamid. (1992). *Corporate Financial Structures in Developing Countries*. Technical Paper 1, *International Finance Corporation*, Washington DC.
- Singh, A., Singh A., and Weisse, B. (2002). "Corporate Governance, Competition, the New International Financial Architecture and Large Corporations in Emerging Markets". Paper presented at the UNCTAD Workshop on Management of Capital Flows. Cairo, 2001.
- Singh, A. and Weisse, B. (1998)" Emerging Stock Markets, Portfolio Capital Flows and Long-Term Economic Growth: Micro and Macro Perspective." *World Development*, Vol.26, No.4, pp 607-622.
- Singh, A. and Weisse, B. (1999). " The Asian Model: a Crisis Foretold?" *International Social Science Journal*, No 160, pp.203-215.
- Stiglitz, J.E., (1991) "Symposium on Organizations and Economics." *Journal of Economic Perspectives*. Vol. 5, No. 2, pp. 15-24.
- Stiglitz, Joseph. (1999). "Reforming the Global Financial Architecture: Lessons from Recent Crises.", *Journal of Finance*. vol. 54(4), pp. 1508-21.
- Summers, L. H., (1998). "Opportunities Out of Crises: Lessons From Asia", Remarks to the Overseas Development Council, From the Office of Public Affairs, March 19.
- Summers, L.H. (2000). "International Financial Crises: Causes, Prevention and Cures", *American Economics Review Papers and Proceedings*. vol. 90(2), pp. 1-16.
- Tirole, J. (1991). "Privatisation in Eastern Europe: Incentives and the Economics of Transition", in O.J. Blanchard and S.S. Fischer (eds), *NBER Macroeconomics Annual 1991*, Cambridge, Mass. MIT Press.
- US Council for Economic Advisers (1998). Economic Report of the President. Washington DC: U.S. Government Printing Office.
- US Council for Economic Advisers (1999). Economic Report of the President. Washington DC: U.S. Government Printing Office.

- Vickers, J. (1994) "Concepts of Competition." An inaugural lecture delivered before the University of Oxford on 2nd November, 1993. Oxford University Press, Oxford.
- Wade, R. (1990). *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization*. Princeton University Press, Princeton N.J.
- Wade, R. and Veneroso, F. (1998). "The Asian Financial Crisis: The High Debt Model and the Unrecognized Risk of the IMF Strategy". Working Paper No. 128. New York: Russell Sage Foundation.
- Warshawsky, M.J. (1987). "Determinants of Corporate Merger Activity: a Review of the Literature", summarised in *Federal Reserve Bulletin*, April.
- Whittington, G., Saporta, V. and Singh, A. (1997). *The Effects of Hyperinflation on Accounting Ratios: Financing Corporate Growth in Industrial Economies*, IFC Technical Paper no.3, International Finance Corporation, Washington, D.C.
- Willig, R. (1987). "Corporate governance and market structure" in A. Razin and E. Sadka (eds.), *Economic Policy in Theory and Practice*, Macmillan, London.
- Winter, S.G. Jr. (1964). "Economic 'Natural Selection' and the Theory of the Firm", *Yale Economic Essays*, Spring
- Winter, S.G. Jr. (1971), "Satisfying, Selection and the Innovating Remnant", *Quarterly Journal of Economics*, May, pp. 237-61.
- Winter, S.G. Jr. (1987). "Competition and Selection", in *The New Palgrave Dictionary of Economics*, (eds.) Eatwell, J., Millgate, M. and Newman, P. pp. 545-548.
- World Bank. (1993). *The East Asian Miracle: Economic Growth and Public Policy*. New York: Oxford University Press.
- World Bank (2002). *The World Development Report*. The World Bank, Washington D.C.