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THE ROLE OF THE MARKET IN THE PROVISION OF PUBLIC GOODS AND SERVICES: BALANCING MARKET FAILURE AND GOVERNMENT FAILURE

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Abstract

One of the most important issues under debate in policy circles in recent years is the appropriate role of governments and markets in fostering economic development. Over the last two decades, governments have assumed a smaller role as privatization and de-regulation have led to more activities being undertaken by the private sector. As a result, many goods and services previously supplied publicly are now supplied privately.

The justification for expanding the role of the market is that government's are for less efficient in supplying goods and services, a doctrine known as "government failure." But the market also fails of some tasks and "market failure" is commonly referred to as a justification for expanding the role of the state.

The present report argues that market failure and government failure need to be analyzed together, and that effective policy formation needs to take account of both simultaneously. The report emphasizes that the issue is less whether market and state are alternatives, but rather that they are complements.

The report represents the ongoing work of the Division for Public Economic and Public Administration on the theme of evolving issues in economic governance. Future work will continue the discussion of important concepts, analyze issues in terms of evidence and experience, and seek to formulate directions for thinking about policies for development.

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Introduction

For a number of years now, the world economy appears to have been standing on or near the edge of a divide. The radical changes which have taken place in both developed economies and economies in transition have been evident, while the resolution of those changes still far short of evident. New certainties of development have been thrown into doubt by the Asian crises of the 1990s. “Competitiveness” has emerged as a major objective for companies and countries. And back on to the agenda have come issues of convergence and divergence, of welfare and basic needs as well as growth.

In the 'Golden Age' of a quarter-century of almost unbroken growth in the developed countries it became widely accepted that the state should have a broad and probably expanding role in the operation of the economy. This covered rising state responsibility for distribution in many of these countries, like the growth of the welfare state, but it also involved extensive government intervention in production. Before World War Two it had been taken as given that the state should be heard but definitely not seen in questions relating to production. States might be given a small role for protecting infant industries, especially in the countries starting later on the road to development; but beyond that it was dangerous to go. In the postwar world, much more extensive involvement in production on the part of the state was accepted by the people who voted for these governments. In some countries, government backed off from direct involvement in production but enhanced its role in regulating industry and providing supportive infrastructure, e.g. in the United States. In others a more interventionist role became the norm, though in democratic societies the extent of this role remained controversial. At the margin, the political battles came to be fought mainly over ownership of productive forces, in the form of nationalization of key industries (like coal and steel in the case of the United Kingdom). It was assumed that with ownership went control.

This new-found enhancement of the state was eroded in the face of mounting economic problems starting in the 1970s. How much the policies pursued by states were actually to blame for those problems, or alternatively how much they had simply become outmoded by external changes in events, is a matter of historical controversy. Whatever the case, there is no doubt that many critics turned on governments as the root cause of the economic difficulties, on the grounds either that their role had grown too powerful, or that their policies were misdirected (or both). In due course the work of dissatisfied academics and governmental opposition bore fruit, as democratic electorates voted the latter, with their new ideas, into power - although electorates probably began by voting against the perceived failures of existing governments rather than for the new ways of thinking.

In the 1980s, markets were seen as edging out and displacing states in running economic systems, especially in production and to some extent also in matters of distribution - 'rolling back the frontiers of the state'. Reversing the situation in the preceding era, the ways in which governments set about disengaging themselves from economic functions varied - in the United States, it was to come mainly through liberalization and deregulation, in the United Kingdom mainly through changes in ownership via privatization. The culmination of the success of market over state was seen in the toppling of the Berlin Wall and the remarkably rapid collapse of central planning in eastern Europe and central Asia.

Events in the 1990s have given a more sombre tinge to the supremacy of markets over states. In many developed advanced countries, governments carried to power by the enthusiasm for market omnipotence voiced in the 1980s have been ousted by others which have sought less dogmatic compromises. The collapse of hedge-fund schemes like Long-Term Capital Management in 1998, erected on the basis of the supposed inexorability of market mechanisms, and their rescue organized by state-supported organizations like the Federal Reserve System, has demonstrated the fragility of pure-market structures. Inequalities that had been fostered under market liberalization - the three developed economics with largest increases in inequality between 1977 and 1990 were New Zealand, the United Kingdom and the United States - were becoming unacceptable. The east Asian countries, some of them taken to be shining lights of development via market forces (somewhat misleadingly, as will be noted below), suffered serious setbacks in the mid-1990s, whose long-run impact it is too early to judge. The ex-planned economies at the beginning of the 1990s found free markets carried many problems of their own, and that carelessly replacing planning with market forces was no panacea for development.

As a result, there has been a more careful and less ideological search in recent years for assessing the desirable sorts of relationships between states and markets, eschewing all-or-nothing remedies in favour of better blending that involves both. This quest is very high on the political agendas of all countries just referred to. It turns out that the situation is in no way simple, in being reducible to any clearcut rule-of-thumb about how much more state or market to advocate. What is desirable varies hugely from one situation to another. Four types of country are assessed in this report: the developed economies, the intermediate economies (including the transition economies, especially in eastern Europe), the newly industrializing countries (like east Asia), and the less industrialized countries at an earlier stage of development.

Unlike most analytical studies, which seek to draw clearer boundaries of responsibility by redrawing the existing borderlines in one direction or the other, the task here will instead be to search for more positive sorts of interaction between states and markets, so that the expansion of each of them helps the performance of the other, and it is not just a question of pushing the borders forwards or backwards. The policy conclusions at the end of this report paper are directed towards sustaining a ‘creative symbiosis’ between states and markets.

Increasing the state vs. increasing the market: “market failure” vs. “government failure”

Arguments stemming from economists for more state or more market can be grouped into the 'market failure' views, which imply the need for a stronger state, and the 'government failure' views, which as mirror images of the former imply the need for a weaker state and bigger role for markets. These arguments have been refined analytically over time, but concentrate almost to exclusion on the *limitations* of either markets (the market failure perspective) or states (the government failure perspective). Thus the former do little to evaluate the weaknesses of the governments whose role they are asking to be strengthened, while the latter equally do little to evaluate the weaknesses of uncontrolled markets which they want to promote (Chang, 1994; Chang & Rowthorn, 1995). As a result, debate becomes polarized, which in its turn leads to the ebbs and flows of public opinion and historical practice. It does not require much insight to suggest that more should have been learnt from the about-turns in public policy than appears to be the case.

Market failure

Market failure views derive from welfare economics, and focus upon three types of failure: the provision of public goods, the existence of non-competitive markets, and the existence of externalities which markets themselves are thought to be poor at compensating for. As to the first, public goods are defined as those having two characteristics: non-rivalry and non-excludability. Non-rivalry means that possession of the good by one member of the public does not prevent its possession by others (for instance, one person can 'know' something through having knowledge about it, but that does not stop another from knowing it too). Non-excludability means that one member of the public possessing it cannot prevent others from also possessing it. Much public infrastructure has traditionally been supposed to be of these kinds, though this was questioned by those from the 1960s who espoused a return to markets, who believed that property rights could be redrawn so as to 'privatize' these characteristics in certain areas of public infrastructure.

On the second point, the classical argument for markets and the invisible hand, as originally formulated by Adam Smith, requires perfect information and perfect competition for their benefits to be realised. Imperfect or monopolistic competition allows one side of the market to exploit the other, as Smith himself famously recognised in his savage comment about “a conspiracy against the public”. With the failure to achieve perfect markets, a role is allowed to the state to intervene in order to level the playing field as between the two sides of the market, in particular to protect the public against rapacious corporations. Even countries with deep-seated beliefs in the beneficence of markets have encouraged strong antitrust legislation to moderate the latter, while others have gone to the lengths of nationalization and state ownership of monopolies to assist in this respect. This has been criticized on at least two fronts. First, some economists argue that markets may work to rein in monopolistic behaviour by very large firms which dominate the economic scene, if those markets are “contestable”. A pure monopoly in the sense of a single firm in the market may have to behave competitively so long as there is even the threat of entry, because any rapacious behaviour on its part may well turn that threat into a reality (Baumol et al., 1982). This argument has been used to defend monopolies by specific utilities in large countries, but also to defend the creation of apparent monopolies more generally - often under the state umbrella - in small countries. Second, market enthusiasts argue that the state may not act so neutrally in implementing legislation against imperfect competition, and may be even more likely to protect the strong against the weak (see under government failure below).

The third argument about externalities can encompass the other two, but adds particular dimensions of its own. Such externalities can be negative, as in the case of pollution and environmental damage, or positive, as in the case of education (human capital formation). Either way, the shortcomings of markets for reducing negative externalities or for promulgating positive externalities provides the basic argument for an increased role for the state. The state is expected to tax negative externalities and subsidize positive externalities. Critics like Friedman (1962) worried that this increased role for the state might harm individual freedoms, though without really questioning whether the original situation offered much freedom (Chang, 1994). Emanating in part from Friedman's school of thought came notions of redrawing property rights so as to create markets in these areas. Though these too were criticized for involving unrealistically high costs of implementation, they have been instituted with some success in certain areas such as pollution, not only in the United States but also in some transition economies like Poland. However, property rights are never going to be uncontroversial on distributional grounds; their success may thus depend on being embedded in a wider set of institutions and climates of opinion supporting them (North, 1990; Lin & Nugent, 1995). Yet the biggest losers from any reorganization of property rights that favours development are likely to be the existing rent-seekers (Olson, 1965), with whose plight it is often difficult to sympathise. This leads into considerations of government failure.

Government failure

The contrary view as expressed by economists was that markets would compensate for the deficiencies of the state. The main views here relate to informational problems, agency problems, rent-seeking behaviour and bureaucratic capture.

Since the early days of central planning in the former Soviet Union, there have been debates over whether a centralized state was or could be equipped to undertake the task of organizing the totality of production in an economy. The Austrian school of economists in particular argued that no state could amass and synthesise the huge amount of data required in order to be coherent central planners. This can be thought of as a “bounded rationality” problem - irrespective of whether the state wanted to act rationally or not, it could not hope to do so in real time because the task was too demanding on information. Hayek (1945) argued that a market-based price system economized on the information requirements by reducing all necessary informational dimensions to just one, the market price. The severe problems encountered by the Soviet Union in attempting to compute material balances and quantity-based planning exemplified what happened when one did otherwise. However it is not clear that market prices do sum up all informational requirements in just one number, except perhaps in the mythical perfectly competitive economy - and even there the proliferation of different qualities of goods during the present century makes price information alone of limited use. Moreover, bounded rationality exists everywhere even in an individualistic market-based system. It is not clear how far these arguments can be levelled against decentralized planning.

Informational problems also underlie the second argument, of agency problems. The orthodox representation of this argument assumes that there exists a person or group of people whose objectives should be maximized - these are the principals. However for a variety of reasons the principals have to entrust the achieving of these objectives to a second person or group - the agents. In a capitalistic firm, the shareholders are taken to be the principals and the managers are their agents. The problem is how to ensure the agents (managers) act in the best interests of the principals (shareholders), rather than in their own best interests. By analogy, the public/private issue becomes one of how to get governments to act in the best interests of the public, rather than their own. One form of this argument owes to Niskanen (1973), and holds that, just as managers of large companies may try to over-expand the size of their companies to secure their own power-base, so might bureaucrats over-expand their tax-financed budgets to increase their own importance. The principal-agent question is normally regarded as a development in modern neoclassical economics (Jensen & Meckling, 1976), but in fact was discussed at length by the classical economists Adam Smith and John Stuart Mill. Mill (1848) thought large companies would be able to rely on a combination of proper incentives to the managers not to put their own interests first, plus some reliance on their 'zeal' to work for the company and not themselves. Essentially the same answer is given by those modern scholars who believe that governments can be made to act in the public interest.

This becomes a key issue in considering the third type of government failure, namely rent-seeking behaviour, which can indeed be thought of as a special case of an agency problem. Government officials, according to this argument, too easily abandon their neutrality and public-spiritedness for the sake of self-enrichment through corruption. They do so by accepting bribes and other financial inducements in exchange for delivering what those bribing them desire (licences, policies, etc.). De Soto (1989), following Adam Smith, refers to this as mercantilism rather than market capitalism, not least because it normally benefits wealthy minorities. It seems particularly likely in a weak government, with little internal discipline (Chang & Rowthorn, 1995). Its extreme is the economics of kleptocracy, where the state actually erodes its own base, as has been alleged for some countries, e.g., in sub-Saharan Africa in recent times (Van Arkadie, in *ibid.*). Such arguments were used by opponents of foreign aid from the 1960s, e.g., Bauer (1971). Subsequently they were used in the World Bank to insist on market-based behaviour among borrowers in the 1980s. One difficulty with the argument is that bribery is another form of market, and despite its dubious moral and social undertones, it is not necessarily economically inefficient - indeed economists like Friedman use the existence of black markets as evidence of a partially functioning market system. Often the basic problem with black markets is political rather than economic - control by crime racketeers, etc., and their forging of implicit links with officialdom. In a country such as Mobutu's Zaire, regarded as a prime example of the failure of a predatory government, oddly the market ruled in the sense that everything including politics was for sale (Evans, 1995). Against this, one can but hope that strong governments staffed with career-minded officials might instead work in the way that Mill hoped large companies would work, and be above corruption.

The fourth argument contends that governments, or more narrowly the bureaucrats within them, are prone to capture. The capture, by groups in the community with strong self-interested motives, may take the form of bribery as just noted, or in less corruptible governments through lobbying and persuasion. The expected result is that particular offices, e.g. those responsible for regulating certain industries, may act in favour of large firms in those industries, and by doing so discriminate against small firms or consumers, who have much less voice.

Two conclusions can be drawn from this comparison between market failure and government failure arguments. The first is that neither is inevitably compensated by the strength of the other - that is, market failure cannot be relied on to be overcome by strong governments, nor can government failure be relied on to be overcome by strong markets. Much depends on the relevant power balances in both governments and markets. The second is that the balance of argument and counter-argument suggests that a less polarized and dogmatic viewpoint, which blends in many of the key points, may be more desirable. States can be induced to make markets work better in certain circumstances, and at the same time markets can be structured to make governments work better, e.g. by avoiding corruption and rent-seeking.

The functions of states: national systems

One extreme solution is for the state to take complete control of the functions of production. This was of course the policy followed with central planning in the former Soviet Union. This required an omniscient state to operate effectively, far beyond the capabilities of any real-world administration in a large country. Furthermore, although intended to meet the interests of a hitherto deprived group, namely the workers, the outcome was a system which in effect favoured the apparatchiks and party members. The centrally planned system declined into a condition of being both inefficient and somewhat inequitable.

While this is well known, there is a key lesson to be learned from this history of failure. The Soviet system is most widely regarded as failing because of ignoring the benefits of a market system. In terms of the advantages of markets as economizing on information (in the spirit of Hayek, 1945) this is no doubt part of the story. But from another point of view, the Soviet system can be regarded as a surrogate market. To be sure, it was one that relied on administered and controlled prices rather than free-market prices, and hence the over-burdening of bureaucracy. Nevertheless, it operated on the basis of attempting to install on the one side an industrial system based on very large enterprises, and on the other side a complex division of labour as between these giant enterprises. The enterprises were not, however, companies in the Western sense, because each was intended to focus on just one of the corporate functions detailed above - some just handled technological development, others just carried out production without developing their own technology, others again handled the marketing, while the centrally-planned state allocated the finance.

In other words, the Soviet enterprises acted like departments of a corporation, rather than like corporations proper. This separation of functions was a major source of retardation. Instead of interchanging between functions, knowledge remained trapped within each function (enterprise). Nor did knowledge spread horizontally between enterprises, because each ministry maintained its separate enterprises, divided according to function in this manner. Thus there was little effective *integration* of the Soviet system, either vertically (between functions) or horizontally (between different branches, i.e., industries). The extreme division of labour by its very nature counteracted the need to integrate the system into a functioning whole.

The lesson is thus that a market has to do more than permit extensive division of labour, in the way popularized long ago by Adam Smith. As Smith in fact recognised, when drawing attention to the job of circulating capital - i.e. networks of capital - the market also has to be integrated in some fashion to work effectively. In the world that is emerging today it may instead be networks of knowledge, involving human capital rather than physical capital.

The alternative, however, is to get powerful organizations to try to integrate the system. If the Soviet system is anything to go by, the central state is unlikely to succeed in so doing. An alternative is the system which has dominated in the advanced industrial countries for most of the 20th century, which is a more decentralized attribution of power to giant corporations. With globalization, these corporations are moving towards being systems integrators in the guise of multinational companies. The positive contributions that they can make will be detailed below, but they cannot necessarily be relied upon to integrate a national, still less a global economic system. In the first place, there is no reason why these firms should meet the criterion of equity needed for long-term sustainability. But even for the criterion of efficiency, problems are likely to arise.

Having pointed out what the state cannot reasonably be expected to do, it is time to assert some of the things it might be able to achieve. In regard to *production* facilities, states have not had a distinguished record in terms of their own contribution to production processes, except in military areas under the pressure of war. Privatization in the former socialist countries is a very obvious reflection of this fact. However states have normally been expected to provide the basic economic and social infrastructure. One major reason has been the scale of such operations, which has generally exceeded the capabilities of individual firms; a second reason has been the need to reap the benefits of "network externalities" obtainable from constructing coherent transportation, communication, energy and other networks; a third reason has been the need to avoid exploitation of users. These reasons have added up to the "natural monopoly" argument for state intervention, either through state provision or through intensive regulation. Such arguments are increasingly being regarded as losing some of their force, above all from the effects of technical progress which has given rise to multiple solutions to each area of infrastructure (various new forms of communication, of energy provision, and so on). The balance has thus shifted from state provision to state regulation. The new task of government is more one of ensuring that the system which develops retains coherence, when typically it is provided by a mixture of public and private initiatives.

Secondly, governments can act as *markets*. Procurement by government has been a major form of contribution in supposedly free-market economies such as the United States. States have generally used subcontracting as a means of procurement and in that sense long had some public-private mix in provision; the task here is to avoid corruption or bureaucratic capture through adequate transparency. In smaller countries there may be particular difficulties of guaranteeing enough competition in awarding government contracts, and it will be important to establish that the markets for tenders are sufficiently contestable. The scale of government procurement however has to be set against a growing tide of opinion urging the cutting back of government expenditure, as well as its redirection. Governments can be seen to have a broader *administrative* role to play in aiming to ensure that markets work relatively efficiently; this is indeed the basis of the 'new institutionalist' view of the role of government in consolidating property rights (March & Olsen, 1989; North 1990; Hodgson 1998).

Thirdly, states will no doubt continue to be the main sources for *finance* in areas where the state provides the production facilities. Here too a greater range of public-private mixes seems however to be emerging, such as the Private Finance Initiative in the United Kingdom. The success of such mixes remains in some doubt, but in less doubt is the growing power of global finance, such that it seems inevitable that the private sector will continue to expand its role in this field. The points made above about constraints on the expansion of government expenditure and the rising importance of private-sector involvement in provision obviously add weight to such predictions. For developmental purposes, many states will continue to wish to subsidize credit for the private sector - the main way in which government subsidized industrial growth in, for instance, the Republic of Korea. It is crucial that any such subsidies are heavily competed for. Otherwise the system can easily relapse into cronyism and corruption. A relatively effective way to achieve this is for the state to demand that any recipients of its subsidies meet objectively defined performance criteria. This meets the requirement of transparency and is what the Government of the Republic of Korea exacted in the guise of export performance at the time when its system was working well. This in turn requires that the state can exit from its commitments to unsatisfactory performers. In more advanced countries, the biggest problem typically encountered is that of exit from declining industries, where growth and equity considerations have to be delicately balanced.

Fourthly, *technology* has long been seen as an important domain for government, in view of the market failure case for government intervention, arising from the difficulty of appropriating the gains from innovation and the case in favour of widespread diffusion of the benefits. Arguably, readjustments of property rights can offset some of the potential for market failure. However, it is the human capital rather than physical capital element of technology which is becoming increasingly important in all types of country, from the early developing to the most advanced. Moreover, mobility of the human capital is a desideratum. Here, it seems difficult not to accept the argument that was made by all the classical economists from Adam Smith onwards, that the state must provide the bulk of the education and background training system. At the same time, firms need to be supported in efforts to upgrade the quality of their labour forces. The more efficient and mobile the labour market, the less the incentive for a firm to train its workers, since they can readily move on to another employer - here the market failure argument bites very deep.

Management of the national economic system therefore should involve, not a hierachical administration aiming at planning, but the handling of complex interactions between state, firms and markets - not a question of state or market, or markets versus hierarchies, but a governance process that brings out that most important type of managerial skill, namely interactive skills. Arguably this interactivity should extend back into the more traditional areas of macroeconomic management, in terms of maintaining adequate levels of aggregate demand and supply. Such macroeconomic management has most often been directed at maintaining full employment in the Keynesian era to about 1970, and at keeping down inflation during the subsequent period of supply side management. Neither are necessarily well attuned to objectives of growth and competitiveness, though both of course have some bearing on these. Macroeconomic instability itself has often been partly traced to lack of communication among individual agents and lack of their coordination (Koopmans, 1957; Leijonhufvud, 1981).

It is reasonable to ask what happens if any of the links in this chain are too weak. The solution proposed by Gerschenkron (1962) for a later developing country was for the state to provide a direct substitute, but that evidently runs all the risks detailed above. It would now seem more appropriate to see the role of the state as constructing the basis for more effective interaction - if markets are too weak, then not trying to provide a substitute market as in the Soviet case but providing the background institutions in which fair markets can flourish, and operating in parallel fashion if the deficiencies lie in the structure of firms.

For example, in the case of the Korean semiconductor industry studied by Kim (1998), the state was a late arrival in the industry, which had been spearheaded by one firm (Samsung), but it then acted to diffuse these capabilities to rival firms, and by so doing built up some depth in Korean competitiveness in this industrial field. In other countries, the type of firm structure (i.e. what economists call market structure) may be oriented towards small firms, or towards subsidiaries of multinational companies, in which cases one would expect other strategies to be pursued to gain from interaction.

An important issue is the level of government involvement, whether at the local, provincial, regional, national or higher level. Competitiveness has often been noted to lie at the regional or sub-regional level, and it is here that smaller governmental units may have particular strengths. In Italy, local government and local associations were able to pool detailed knowledge of the local environment, making the distribution of information more 'symmetric' and thus consolidating and underpinning the collective initiatives of dozens or even hundreds of small enterprises. National governments lack the omniscience to play such a role. Local and other administrations however have to be networked with national and supranational authorities. For instance, there is considerable evidence that citizens are increasingly identifying 'quality of life' issues, including education (human capital formation), with local rather than national government in a number of countries. Human capital models tend to concentrate on the supply side of education, pushing qualified people out into the industrial world, but it is the demand for engineering and commercial skills which is just as important.

For the purposes of growth and competitiveness, the evident need is for a system that will channel resources and surpluses to those who are best fitted to use them for these ends. Otherwise societies and their governments fall back into rent-seeking. But growth is not the only requisite objective for sustainability - equity considerations also apply. Perfect markets can be 'Pareto-optimal', in the welfare sense of not making any individual worse off, *only* relative to a given initial endowment of resources. If 5% of the population begin with 95% of the resources before markets are hypothetically introduced, then they will be rewarded with around 95% of the goods after the markets are set up. At the extreme, the work of Amartya Sen has shown that most famines are the outcomes of seriously inadequate resource 'entitlements', plus some bureaucratic bungling, rather than absolute deficiencies of food. Markets arising in such circumstances will not greatly improve the situation, even though governments have behaved poorly.

Similarly firms, as much as governments, may have to be restricted from indulging in rent-seeking behaviour. Traditionally governments sought to control monopolies either through direct government ownership (nationalization) or through indirect regulatory control (competition policy, e.g. antitrust). As the 'government failure' proponents however point out, each of these welfare-oriented controls runs the risk of setting up knock-on distortions of its own; for instance, antitrust policy, when pursued zealously in the United States, helped create 'conglomerates' which were powerful in many markets though not dominant in any of them (and not necessarily highly efficient, either). Building up effective competition may be a more positive strategy than trying to knock down a monopoly, though again there are risks of distortive subsidies etc. Changes in ownership other than nationalization may be one way of limiting private-sector excesses, like the 'mass privatizations' in the transition economies, though these have had varying success and often not much at all in redistributing financial power. Foreign multinationals also may have to be curbed from behaving exploitatively - ideally subsidiaries of multinationals ought to behave as 'good citizens' in their host country, in exchange for rights to market access and profit-making, though this can be difficult to achieve where there are sizeable imbalances in power as between big multinationals and small countries. Current Organization for Economic Cooperation and Development (OECD) guidelines are rather vague in their specification of what is good behaviour.

Problems for the 21st century

The new roles to be sketched out for the state are not derived from any change in ideology, although they may involve such a change. Instead, they come from long-term changes in economic and social circumstances, which necessitate the development of new sets of solutions. The basic driving forces are: 'globalization' and the economic and social interactions between nation states, and the rise of knowledge-driven growth and development.

The notion of globalization has generated an enormous literature, for the most part too familiar to need to recount here. Some care in defining globalization is however necessary in order to confront the two issues that are most directly relevant to us: how does the advance of globalization impinge upon the governance of nation states, and more deeply, what role (if any) does globalization leave for independent actions by nation states?

Globalization is usually thought of as a situation in which the institutions - such as the corporations - of one country actively *generate* a range of capabilities in other countries. Globalization in this sense increases interdependencies among countries, and thus contrasts with simple liberalization. In the sphere of production, which will be the main concern here, a globalized corporation will go beyond passively importing its functions from the headquarter country, to develop new aspects of its functions abroad. This contrasts with 'internationalization', which is the more passive role. Companies have been internationalized for almost as long as companies have existed, dating back certainly to medieval times. At least in their marketing function, they could operate in more than one country, and even allow some initiative for local development outside the home country. So-called 'multidomestic companies', expanding rapidly from the late 19th century, exported their finance, production process and technology to foreign subsidiaries, though the latter were kept largely subservient to how those operated in the home country. In the globalized corporation, the foreign establishments become substantially responsible for their activities in one or more of those additional functions.

There is considerable debate over how far the world has gone towards the globalized corporation in this sense. With deregulation, there has been an unmistakable increase in international mergers and acquisitions in the last few years (Prakash & Hart, 1999). But only a small number of companies really do seem to behave as 'stateless', and even they usually operate even-handedly in only two to four countries, almost invariably all advanced industrial countries. Nevertheless, as much as one-third of current international trade is reckoned to be *intrafirm* trade, i.e., between one plant of a corporation and another (United Nations Conference on Trade and Development, 1996). Another one-third is between linked corporations, and only one third is proper 'free trade'. Looking at it instead from the side of the functions, differences emerge between them. At one level, finance seems almost perfectly globalized, as finance corporations buy and sell large quantities of assets in seconds across continents, through the use of advanced information technology. The scale of such operations and the risk they pose to global economic stability have led to pressures for regulation of cross-border financial flows, such as the so-called Tobin tax. Industrial corporations, however, tend to act very hierarchically in their capital-related decision-making, seeing the internal allocation of finance within the corporation as perhaps the most important lever for their top executives. Of course they can also operate in globalized financial markets when treating their financial assets purely as matters of finance rather than capital formation, so here markets and hierarchies jostle for position. And modes of *regulation* of finance are still predominantly national, not international; hence there has been only a muted degree of convergence in financial systems despite the global operation of financial markets (Hollingsworth & Boyer, 1997).

In the arena of technology, a survey by Archibugi and Michie (1997) concludes that again care must be exercised in defining the situation one is describing. They consider three kinds of internationalization of technology. One is the global production of technologies - 'techno-globalism' proper - but for this they find little empirical support as for the most part countries develop their technologies rather separately. A second is global collaboration in developing the knowledge bases underlying technological development, and for this there is good evidence for expansion in recent times. A third is the global 'exploitation', i.e. use, of newer technologies, and for this there is strong supportive evidence.

It may be concluded that while ownership of firms has been becoming more globalized, the impact on specific functions of those corporations has been less consistent. So far as nation states are concerned, those states jostle with hierarchies (corporations) as well as markets. On the one side, there is mounting evidence to support the view of the relative powerlessness of small states when confronted by large multinational companies. A disquieting example is that of several Western automobile companies which have sought sites for production in the transition economies of central/eastern Europe. The companies concerned - which do not include all the companies active in this area - have been bargaining conditions out of the potential host countries, threatening to take their production to another transition economy if the one they are negotiating with fails to offer enough concessions and subsidies. Since there are more countries than companies, the bargaining strength of the former is rather weak. Similar situations have arisen in other industries as between developing countries.

On the other side, this very situation augments the case for national strategies. The global spread of markets and competition makes survival hazardous. A feasibly safer strategy is to differentiate from one's competitors and hence lessen the pressures. The quest for *competitiveness* is thus, paradoxically, a quest to *avoid competition*. To the extent that countries can build on their differentiated strengths they can hope to achieve both of these, and avoid the weakness of reliance on pure competition. Just as paradoxically, the context of growing globalization itself produces growing differentiation between countries (and companies) (de la Mothe & Paquet, 1996). This is why defining what one means by globalization is so important. There is some empirical evidence to support the view that companies have become more differentiated, and moreover that multinational companies have been differentiating their behaviour between the countries in which they operate (Granstrand et al., 1993).

For the nation state, this becomes an issue of establishing a resource base which will enable them to raise their competitiveness and reduce their risk profile from competition from rivals. What is wanted is a global division of labour that is not rejected but beneficial to *all* participants in it. In the past, natural resources were an obvious source of differentiation between countries, but with the relative decline of primary production, now only a fraction of total output in developed and many developing countries, this has become less and less valuable. The resources that are becoming crucial are not so much natural *endowments*, as those which can best be *enhanced* by the country concerned (Porter, 1990). This can come through adding value to natural endowments, but is increasingly arising through enhancing knowledge-based capabilities. Differing social and cultural contexts across countries provide the bases for differences in the ways that such capabilities are extended. Flows of knowledge are increasingly important for establishing a mutually beneficial global division of labour (and parenthetically one might point out that erecting barriers to flows of knowledge can benefit some at a cost to many others).

This leads into the second driving force for recent and future development - the growth of knowledge-based societies and economies. 'Knowledge-based' implies a productive system that is intensive in the use of conceptual skills (OECD, 1996). Two things need repeating in relation to the role of knowledge. The first is that knowledge is not just a matter of technology - it permeates all the functions described in this paper, of finance, production, marketing and management as well as technology. The second point is even broader, that it affects or will affect all societies, and not just the advanced industrial countries. Globalization in the sense of common developments across all the world's countries ensures that the growth of knowledge will impact upon all economies, although in different ways in different types of countries.

Markets as well as states can play a large part in disseminating information, and indeed - as implied above - perfect markets and perfect information are complementary. However markets are not very satisfactory for spreading knowledge. Knowledge, insofar as it departs from information, is embodied in people. Knowledge involves *knowing who* (whom to go to in order to find something out), *knowing where* (where to go to), *knowing what* (what things happen or exist), *knowing how* (how things happen), and above all *knowing why* (why things happen). Information can help with these, especially with knowing who and where, but it is people's stocks of knowledge that drive them to seek, and especially to interpret, information. The more a person knows about a certain subject already, the more they are likely to learn from an associated piece of information - contrary to what one might at first think. If they know how to drive a tractor, they are more likely to make a good decision about what tractor to buy than if they do not. If they know something about the performance of combustion engines and vehicles, they are more likely still to plump for the best tractor based on reading sales promotion literature. And if they are trained in mechanical engineering, they are yet more likely to assess some new characteristic of the tractor, and be able to act if things go wrong with it after purchase.

Knowledge is partly acquired by each individual through formal learning - reading books, attending school, etc. At this point there is an interface between information and knowledge. But most knowledge is probably acquired innately, through mechanisms which developmental psychologists argue over. Such knowledge is often called 'tacit' - it is difficult to codify, as in the classic example of trying to tell somebody how to ride a bicycle. Spreading such knowledge generally requires personal contact and hence mobility, associated with demonstration and practice. On different occasions, the people needing the knowledge travel to other countries to observe demonstrations and to practise, or people from abroad arrive to provide the demonstrations and deductions. In the case of nineteenth-century Japanese development, the first moves were mainly to bring in some foreigners, while the temporary migration overseas of the Japanese to learn came some years later, and this is probably the normal sequence. Nowadays, a significant part of the international transmission of ideas and practices comes about through international travel by business people, enough to have a sizeable impact on the observed distribution of earnings (Tang & Wood, 1998). Sending one's bright young people abroad may be less costly, but runs the risk of setting up a 'brain drain'. The main point, however, is that trying to develop by simply reading manuals or even tapping into the internet, i.e. by relying on information in its narrow sense alone, is never going to be enough.

The nature of knowledge implies that what is crucial is 'absorptive capacity', to use the term of Cohen and Levinthal (1990). Much of the literature, and even more of the policy-making, in the knowledge arena concerns the *production* of knowledge. According to the 'absorptive capacity' notion, it is just as important - and probably more important in the great majority of countries - to consider the use of knowledge, which in effect means developing one's indigenous knowledge base to 'absorb' information.

We can see this in the current state of development being reached by information and communication technologies (ICTs). It is obvious that only a few of the most advanced industrial countries can be at the forefront of, and hence competitive in, the *production* of major new ICTs. The ICTs are of course, by definition, the carriers of information. The information they carry is of potential benefit to everybody on this planet - to inhabitants of Lesotho as much as to Luxembourg, to people in Uganda as much as to the United States. Information service providers nowadays churn out highly detailed and daily updated information that spans the whole of Africa, as well as all other continents, on matters such as weather and climate or cropping. The ability to make use of this bombardment of information is open to all countries, but the capabilities to derive benefit from it vary enormously. One problem is the sheer magnitude of the information with which we are swamped - this is the bounded rationality problem again. In practice, this turns out to be often a particular aspect of the variations in the capacity to learn from information, which for the reasons stated above rests on the existing knowledge stock of the population, or of those entrusted with handling the information.

In the past, much of the consideration of knowledge has related to technological knowledge in high-tech industries. We have taken pains to underline that in the modern era, the knowledge which we are trying to call attention to spans all the functions - marketing, administration, production and management, and not just technology. Moreover it spans all activities. Just as the cave man used technology without knowing the term for it, so in the modern age all producers in all activities at all levels can benefit from using - if not necessarily producing - the products provided via ICTs. The limitation of use to the developed economies, will sharpen instead of blurring international differences, and lead to the division of the world and its societies into the 'information rich' versus the 'information poor'. Action is needed to gear ICTs more towards the currently 'information poor' and the developing countries, and the best way to do so appears to be focusing on customers and users, including marginalised groups (Mansell & Wehn, 1998; see also Mitter & Bastos, 1999). The point about the ICTs that makes them especially important is that they deal with information, and they do so in such a way that has only recently become - in principle - open to all, including the great majority of the world's population without specific and extensive training in technology.

Policies for creative symbiosis

The current and likely future context for development displays great variety of circumstance. Even the most likely outcomes differ in several respects:

- differences by type of country
- differences by level of activity
- differences by kind of function

These differences are of key relevance to each of the poles of governance - states, firms and markets.

Driving the changes observable in each are the worldwide forces of global economic and political interactions ('globalization'), and the growing importance of knowledge. Both of these affect all types of country, all levels of activity, and all kinds of function. Any set of policies not only has to work inside these driving forces but should also aim at converting them to best possible use for each context to which the policies are applied.

The different functions and the different countries work interactively with one another. An effective set of policies should not be considering one form - the state rather than the market, the firm rather than the state, etc. - but a framework that ought to work synergistically. While inevitably there will be situations in which one form steps in to remedy gross shortcomings in another - governments are necessitated to overcome serious 'market failures', markets are essential to overcome abject 'government failures', and so on - even in these cases the objective should be not replacement but reaffirmation. That is, governments need to be aiming beyond the short term to strengthen markets, markets need to be consolidating rather than undermining firms, etc. As Li (1988) remarked for the case of Taiwan, "[a] free market is not given in the social calculus. It must be constructed, slowly, through a process of changes in policy focus."

In such disparate systems, the most important strategy is that of integrating the multiple parts. Such system integration can be loosely described as network governance, and construed as operating between countries, between levels of activity, and between functions. The surrounding context of states, firms and markets acts to congeal these systems, but of course needs to do so in ways that are both productive in terms of efficiency and rewarding in terms of equity. Egalitarian strategies have been recommended, not only because they are fairer in humanitarian terms but also because, if well thought out, they are likely to be more productive, since they create greater incentives for all to be involved in the development process. In the 'global learning economy' it is brains which are the worldwide scarce resource, and the more brains working productively the better for development, other things being equal. Moreover, egalitarian communities tend to do better in social as well as economic terms, e.g. health or absence of crime (Wilkinson, 1996), and thus indirectly assisting development.

Policy recommendations at this juncture are expressed in general rather than specific terms. As was found in the heyday of monetarism in the 1980s, specific rules foster 'rational' behaviour on the part of the public to evade those rules - this became known as 'Goodhart's Law'. Of course, this is a waste of good brains as well as an undermining of the policy intentions. The policies also tend to favour carrots (incentives) rather than sticks.

First, concerning *technology*, it is evident that the production of key technologies will continue to be the domain of the developed economies, almost by definition. But the application of technologies affects all countries, even those at earliest stages of development. Few technologies are available completely 'off the shelf' and most require at least some adaptation to local circumstances. The growth of ICTs, which have powered growth in the developed economies in recent years, have reached a stage where multiple applications can be made at low cost to a great variety of industrial and developmental circumstances. The emphasis in catching-up countries needs to lie on policies to use technologies. In many developing countries, their fledgling science and technology systems are frequently geared to imitating advanced science in the developed countries. There needs to be a major refocusing towards the needs of *users* within these countries, and users means everybody - all industry, all agriculture, all services, all families, and so on. Equally, the users can voice their requirements better the more educated they are, even though the growing user-friendliness of the technologies is augmenting this process. So the role of the state is, on the supply side to reorient the country's technology system towards *application* rather than production of technology, and on the demand side to provide better training and education for all who can benefit from adoption of the technology, thus completing the integration. While the case of market failure has been made in regard to education for several centuries, the limitations of market mechanisms in regard to training are often underestimated, since training is inherently best practised within firms; but firms may not be willing to allocate resources to training if they fear to lose their trainees to a mobile labour market.

In terms of *production processes*, the main gains from ICTs are, on the one side, saving time and space, and on the other side, gaining 'functionality', i.e., ability to undertake a wider range of tasks. So far as heavy manufacturing is concerned, the integration of information technology with such manufacturing processes is still at an early and rather underdeveloped stage. For light manufacturing, primary production and especially services, it can be bolted on to existing methods more readily. Developing countries can continue to make use of their comparative advantages, e.g. in labour-intensive methods, while using the bolt-on IT to speed up the processes (as with construction in China) or improve the quality of output. The state may be directly involved in production itself, though the marked trend of recent times (and earlier for Japan etc.) has been away from government operation of industry. In the latter case, state support has to work more indirectly. For example, on the supply side the state can support the construction of an ICT infrastructure, following its long experience of involvement in energy networks, traditional communications, and so forth, thus helping to overcome the 'network externalities' problem. Simply providing access to a national or international telecommunication system is unlikely to be enough, however; methods such as demonstration projects need to be undertaken to promote take-up by private firms. A clear advantage of such new infrastructure is that, like electricity in earlier times, it can in principle support small firms as easily as large - scale is not a prerequisite. Policies to relax the red tape limiting growth of small firms are urgently required in a number of developing countries. Democratizing small-firm access to governments at all levels, and conversely directing government attention to the needs of small firms, is an evident way of aligning states with firms. A gain from doing so is helping to overcome bureaucratic capture, which tends to be practised by larger, more powerful corporations. If governments do have to work with larger firms, or with subsidiaries of multinationals, the relationships ought to remain competitive (or at least 'contestable').

Without losing all the many benefits of markets, the state can also be involved in efforts to organize *marketing*. Learning by interaction is most readily attainable in an organized market (Lundvall, 1992), even in the most advanced countries. At the same time, it may not be best for the (central) state to act as the organization. The objective again is a symbiotic relationship that will be creative rather than destructive. Distortive pricing instituted by, say, a state marketing board may not be the best way to achieve this. A better solution may be support for building 'bottom-up' marketing systems that represent producer interests more directly. Local government is an obvious resort for production systems that are based on local comparative advantages, as in the 'industrial districts' (or agricultural districts) context. Given that the primary objective here is to create value in marketing through learning, incentive systems that encourage value-added marketing (e.g. for exports) may be worthwhile, so long as entry and exit into the schemes is maintained to prevent capture. The secondary objective is not to overthrow the power of the market but to level the playing field as between producers and purchasers. The latter term is open to misuse in any number of ways, but here what is meant is that a system in which there is effectively a host of small producers on the one side facing monopolistic or oligopolistic buyers on the other (including the growing power of large retailers, domestic and international) is unlikely to represent a level playing field.

In regard to *finance*, the 'small is beautiful' argument has to be taken with great caution. Small-scale local finance is likely to be very expensive, though it is still the backbone of local production in vast areas of the world untouched by globalized high-tech finance. High-tech methods are indeed increasingly being adopted for assessing credit rating in developing as well as developed countries. But as with marketing, the prospects for consolidation at the local level, and greater vertical alignment with the national and international level, appear to offer the greater long-term rewards. Credit rating is so dependent on local knowledge that the benefits of local government taking or supporting action in this arena seem overwhelming. This ought to help overcome the limitations of 'adverse selection' and 'moral hazard', through a combination of better information and increased trust. The bridge upwards to cost-competitive national and international financial sources is of equal significance. National governments also need to pay attention to the implications of their macroeconomic policies for the cost of capital, together with the demand for capital. In almost every country and region, developed and developing, macroeconomic policy is constructed in a world remote from the needs of the local and national - let alone the global - learning economy. This represents a lack of what recent politicians have referred to as 'joined-up government'.

Finally in regard to *management*, direct management by the state has fallen into some disfavour. Where there exists a strong case for management by the state, such management needs to move away from political placement and patronage, and ideally become contestable in itself. That is, the posts ought to be held subject to an adequate managerial performance, preferably evaluated by an independent regulator or auditor. The objectives of management in the public sector equally need to be seen to be market-conforming wherever possible, if not fully market-led. McCraw (1997) has conducted an extensive historical analysis which reveals that growth is not correlated with government action overall, but is positively correlated with the adoption of market-conforming policies. Whether for its own managers or for those destined for the private sector, the state can of course indirectly support the institution of management training, though many countries seem to consider that the private incentives to individuals both to set up such institutions and to attend them are adequate enough. Such management training needs to be expanded beyond its common tie to accountancy and finance into broader familiarity with marketing, production and technology. A leading contribution from the state may be encouraging greater *mobility*. Whether people move or just ideas and information is debatable - there is little doubt that mobility can be taken too far and generate insecurity, to the point of becoming counter-productive (Deming, 1986). At the same time, there is growing evidence that mobility has been a key characteristic differentiating long-term success from long-term stagnation. In addition to the case relating to the state as management, Chang & Rowthorn (1995) also suggest the state as *entrepreneur*, especially in its ability to have a 'vision' of the future, and alongside that, its capability of constructing institutions (such as redefining property rights) that might help realise such a vision. They accept that the state's vision may not be the best possible, and that it may even be quite wrong from the beginning, but the state is usually in an unequalled strategic position to give focus to the directions taken by all private agents.

In such ways, the demands of *globalization* can be met by:

- drawing on a global range of competences and information;
- meeting the pressures of global competition through enhancing competitiveness rather than 'shutting up shop' and retreating into protectionism;
- orienting the economies to global standards of executing the various functions required without surrendering to capture by forces outside the nation's control.

In other words, a balance is to be maintained in governance between deriving the benefits from globalization and retaining some individual national autonomy. This includes maintaining a balance in policy-making as well as the actual operation of the economy.

The demands of *knowledge-driven development* can be met by:

- establishing that learning is required in all the functions required for production and distribution, and is not simply limited to advanced technology or advanced countries ('learning within');
- seeing the primary need as being for system integration, linking the functions to best advantage in order to drive development ('learning without'); and
- envisaging a major role for the state in coupling 'learning within' to 'learning without', which will probably involve boosting the development of interlinkages among organizations to achieve 'collective efficiency', and probably also involve seeing government itself as a learning organization.

Overall, the desideratum is evidently obtaining the best possible from a mix of state, firms and markets, rather than chopping and changing between state-led and market-led or business-led. It is this best mix which will generate the 'creative symbiosis' between them for which we are seeking. Stating this baldly however does little to hint at the complexity of the interactions that are likely to be required to achieve this.

Three somewhat overlapping kinds of 'market failure' were identified:

- *'Non-rivalry' and 'non-excludability' leading to the provision of public goods*. The forces of globalization would seem at first sight to be extending rivalry and excludability, while those from knowledge-based development equally appear the opposite. In reality, the situation is somewhat less clear-cut. Human capital and knowledge tend to fall into intermediate categories in these regards, albeit often towards the 'non' end. Property rights were seen above as a key issue, and it is in the arena of intellectual property rights that some of the most critical international battles are now being fought. Global international property regimes (IPRs) would seem to suit the needs of multinational corporate empires at the cost of freezing out the smaller and less developed economies. Purely national IPRs reward national knowledge development, but may encourage 'government failure' through rent-seeking and also discourage entry by multinational firms. As before, a balance needs to be struck.

- *'Imperfect competition' benefiting the few rather than the many*. Raising competition has been stressed as a means to raising competitiveness, but ought to be judged with such a criterion in mind. Creating many small firms in place of a small number of large ones will not necessarily raise overall efficiency. It is the competitive spirit rather than usual indicators of a 'competitive' market structure which is called for. Openness and transparency clearly assist this, but transparency has to be backed up by enforcement. Regulation on the part of government rather than direct intervention (e.g. trust-busting) may prove more satisfactory for these purposes. As previously pointed out, the supposed 'natural monopolies' in providing basic infrastructure (energy, communications etc.) are being challenged by autonomous technological advances, and governments face less crippling trade-offs than were valid in the past. The second criterion implied is that of equity alongside efficiency; here as elsewhere the implications of my study lean towards 'levelling up' rather than 'levelling down'. Again, regulatory change may be in order, e.g. changing systems of corporate governance. At the international level, debates over IPRs resound here too.

- *Inability to reap 'positive externalities' or deter 'negative externalities'*. Most emphasis in recent debates has been placed on rearranging property rights in order to internalize some of the externalities. Instead, or better still in association with this, more might be done to give voice to those disadvantaged by the externalities. In terms of negative externalities such as pollution, the participation of the disadvantaged in decision-making has clear merits. For rather evident reasons, currently participation even in very democratic societies tends to be particularistic, as in the NIMBY syndome (Not In My Back Yard). Broader means of participation will be noted below. The greatest of the positive externalities is growth itself, and the argument so far has tried to stress the new kinds of contribution to growth required in the globalized learning economy.

Conversely, four rather overlapping kinds of 'government failure' were identified:

- *Informational problems of 'bounded rationality' of governments*. Information knowledge are distinct, but both are of increasing importance for the next century. The practical impossibility of effective central planning of a medium or large country in view of the informational requirements has been confirmed, and supports the delegation of many governmental roles to the local or provincial level. At the same time, I would reject the ability of the price mechanism alone to carry the burden of all informational requirements needs to be rejected, much though it may help. On occasions, it may be necessary to 'get the prices wrong' (Amsden, 1989), in order to provoke structural change and dislodge stagnating incumbents. For providing jointly determined functions such as capital provision or marketing, the accumulation of knowledge in local administrations and local associations again seems an inescapable need. Though information technology does permit greater storage and forwarding of information at all governmental levels, and information technology is improving in all many countries at dizzying speed, the demands for information if anything outrun these improved technological capacities. Moreover, the governance of the ICTs themselves becomes a crucial issue - they too must be networked and decentralized for optimal results. Finally, it is crucially important not only that governments receives the best information but that citizens get the best information possible about what government is doing. This leads into the remaining aspects of 'government failure':

  - *'Agency problems' of ensuring that governments act in the public interest;*
  - *'Rent-seeking' problems of government corruption and exploitation of its power; and*
  - *'Bureaucratic capture' of governmental regulatory and other bodies by powerful private interest groups*.

These three are all to be met in similar ways. Governments themselves have to become part of a more competitive process. Reliance simply upon privatization will not usually solve the problems of 'government failure', since agency problems will remain when ownership is dispersed into private hands. To curb agency problems, management of public-sector or mixed public-private activities ought to become more contestable, as far as possible to be assessed on the basis of objective criteria. It seems inappropriate to rely on the state to be both judge and jury. Combined with extension of openness and transparency, this accountability should reduce opportunities for rent-seeking. Freedom of information and legislation to encourage it should be seen as a public duty on the part of the state (Stiglitz, 1989). The emphasis in the paper has lain upon 'levelling up' rather than 'levelling down', and this too would assist combatting rent-seeking through reducing confiscations by the state and increasing disbursements. At the same time, the disbursements need to be competitively sought, so the greater contestability within government needs to be matched by the greater contestability for government favours. Most important in any contest is the reward system attached to the outcome (Stiglitz, 1994). Along with this goes the need for a tight performance monitoring system to ensure that the 'prizes' are justly earned. In practice, subsidies from the state have often acted to increase inequality and aggrandize private power with rent-seeking becoming a characteristic of firms as well as of governments. If the subsidies themselves are made contingent upon targets being met, the risks of this are likely to fall. The targets can involve a broader and more imaginative range of objectives than traditionally pursued in export-oriented programmes, for instance increasing educational or vocational output, or attaining social goals. Finally, the delegation of power upwards towards supranational bodies and downwards to local bodies is likely to undermine undue exercise of central power - an objective of 'subsidiarity' in the European Union. However this is contingent upon a balance of interaction between central and local authority - too much subjection of local authority to centralized power can become another form of capture and patronage, too little can lead to quasi-independent warlords. No devisable system is immune from the temptation to agency manipulation, rent-seeking and capture; this was also Adam Smith's conclusion, other than to rely upon 'free trade' (nowadays globalization).

The need thus appears to be on the one hand for governments, as well as their private-sector counterparts, to act more 'democratically'; on the other hand, for more networking and interaction within the public sector and between public and private sectors. What Evans (1997) has termed the 'capacity gap' of governments makes it desirable to engage as much of the country's citizens as possible in carrying out its business. With regard to the former, it has been strongly argued that political freedom must run alongside economic freedom - that imposition of a liberal economy 'top-down' in isolation is likely to perpetuate or even exacerbate social inequality (Vargas Llosa, 1989). At the same time, the need to act more 'democratically' does not necessarily imply a more democratic regime on the orthodox Western model. Governments can easily win popular support by antisocial behaviour, such as attacking the country next door. The point here is the nature of the behaviour, not the nature of the structure; in other words, the judgement is by outcomes rather than by inputs. It has been shown by surveying studies of political regimes that there is no strong correlation between the structure of the regime (e.g. whether authoritarian or liberal democratic) and development - there are plenty of both successes and failures of each kind, even within particular geographic regions such as South-east Asia (Przeworski & Limongi, 1993; von Tunzelmann, 1995, p. 384). China as a one-party state has fared better than most in the recent 'Asian crisis', but the Democratic Republic of Korea appears to be an economic disaster area. The view of Lipset (1960) etc. that the Western democratic model is as much a product of development as its cause appears valid. But the view that it is policies which distinguish successes from failures (Przeworski & Limongi, 1993) can be rejected, since the same policies - at least outwardly - are often pursued by both successful and unsuccessful developing countries. Rather it is the *implementation* and exercise of policies which seems to distinguish the two.

Along with this, the nature of the respective institutions, rather than policies, may also be a significant discriminator (Streeten, 1987). There is substantial evidence that 'contestability' in government policy-making, while slowing things down in the short run, provides more effective long-term strategies (Schmitz & Cassiolato, 1992). The case of postwar Japan is instructive - long seen as either successful market-led development or more often as government-pushed development through, the Ministry of International Trade and Industry, more recent views indicate that success came from friction plus debate *within government* between market-led and state-led opinions (Best, 1990).

The situation here of governments almost exactly parallels that of corporate hierarchies, and for the same reasons. Some of the functions of firms are better carried out in decentralized fashion, such as technology, where more brains are better than few. Others need to be more centrally resolved, as often is the case for overall finance (with specific capital requirements being passed down to middle management). The differences arise from differences in the knowledge bases required. Moreover, the whole system of differing functions needs to be integrated. Precisely similar considerations obtain for government. In both cases, the drift in the balance away from physical capital and towards human capital is tilting the balance away from centralization and towards decentralization, but overall system integration still has to be maintained. Hierarchies must thus continue to play a key role - perhaps *the* key role if private and public hierarchies are to be lumped together - but even the hierarchies are bound to become more knowledge-based and directed to organizational learning, in governments as well as in business.

Mechanisms to give greater voice to a greater number in the governance of both companies and countries are still at a rather experimental stage. In controversial areas of technology, some countries (e.g. Denmark) or districts have set up consensus conferences to try to secure a broader base of support for any policies pursued. As in Japanese corporate management, there are grounds for arguing that some delays at this stage may be more than offset by savings in costs and time later on, as recently witnessed in instances such as genetically modified food. Genuine freedom of information is a concomitant of widening voice, and in the long run can only boost loyalty. Equally, market-based mechanisms encouraging exit without embarrassment need to be strengthened alongside, with the state perhaps having to support the banking system as lender of last resort by way of providing bedrock confidence in the recovery of the system as a whole. Without recovery the only levelling is likely to be downward, in contrast with consensus-building that aims more at levelling up between countries as well as between firms and between individuals.

Considerations regarding the labour market parallel those of the capital market in many ways. Policies in the postwar era have predominantly been aimed at preventing the rise and alleviating the extent of unemployment. As such they have been passive towards structural change, and even counteractive, rather than active. Labour market policies instead need to be reoriented towards extending employment in new areas opened up by the onrush of ICTs and avoiding the stacking-up of dead-end jobs - a point made after the Napoleonic Wars by the Duke of Wellington and reiterated many years later by Keynes. The fact that many of these new fields are rather labour-intensive is an advantage in this respect. But the new technologies, however user-friendly they are becoming, require some training and expertise, which firms in the private sector are frequently unwilling to provide on market failure grounds. Work experience comes from learning by doing, but unemployment then becomes unnaturally high among those who do not have the experience, as a glance at the composition of unemployment figures for many countries since the 1980s would testify. Those in work equally require retraining, and there is a growing acceptance of 'lifelong learning' though as yet little agreement about what is needed to carry this into effective practice. While paying due attention to the weaknesses of past retraining schemes, there is evidently substantial scope here for governments to interact with firms and market pressures to generate the human capital for development. Simply calling for more to be spent on education or training is not likely to be particularly helpful to financially strapped governments, but greater care in targeting the expenditures that can be undertaken seems achievable. By so doing, the welfare benefits of government support for those disadvantaged by technological change and globalization need not be so heavily obtained at the sacrifice of growth.

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