

THE ROLE OF GOVERNMENT IN OVERCOMING MARKET FAILURE
TAIWAN, SOUTH KOREA AND JAPAN *

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Governments ought not give more incentives to some industries than to others, except to overcome inherent market failure. Inherent market failure is uncommon, even in developing countries. Most apparent market failures are policy induced; they arise from government action or inaction--action to restrict market access, or failure to establish a capital market, for example. The appropriate role of government is therefore to help create and sustain an economic environment in which price signals drive industrial change. This it can do by adopting a neutral policy regime, the core of which is a free trade (or almost free trade) regime and a small public sector, unable to impose 'political' prices.

Powerful empirical evidence for the validity of this proposition comes from the contrast between the East Asian developing countries and Japan, on the one hand, and most of the rest of the developing world, on the other. The superior economic performance of the East Asian capitalist countries has gone with a relatively neutral policy regime; the inferior economic performance elsewhere went with varying degrees of distortions.

* This paper is based on parts of a book-length manuscript, called Sweet and Sour Capitalism: Industrial Policy Taiwan-style. The views expressed are my own and are not to be mistaken for the views of the World Bank. Taiwan is referred to as a 'country' purely for expositional convenience. Acknowledgements: For commenting on the first draft, Fred Bienefeld, Colin Bradford, Ron Dore and Paul Streeten; for discussions on certain of the themes, Stephan Haggard, Chalmers Johnson, Larry Westphal and Frank Veneroso.

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The causality is from distortions, or lack of them, to results.

That, I take it, is a fair summary of the central interpretation of the East Asian experience by neoclassical development economics. While it is correct in some respects, it is also, I argue, wrong in others. In particular, neither Japan, Taiwan, nor South Korea have maintained a close approximation to a neutral policy regime over the post-war period. They have all actively fostered the development of many new industries, and successfully so, in the sense that many of those industries have become internationally competitive. If this argument is accepted, the implication is that a neutral policy regime is not a necessary condition for rapid (or 'best attainable in the circumstances') growth.'

A basic weakness of neoclassical development economics is its inattention to the idea that governments differ in their capacities to guide the market. The argument against selective government fostering is made in universalistic terms; and it has recently been strengthened by an equally universalistic theory of nonmarket failure (Wolf 1979). The latter makes the eminently sensible point that while market failure may establish a motive for government intervention, the benefits of the proposed intervention have to be assessed against the likelihood that the benefits will actually be realized (that the intervention will be implemented as intended), and against the additional costs generated by that intervention. Wolf provides a whole series of reasons why one would expect extensive nonmarket - or governmental -- failure. The thrust of the argument pushes us back to the prescription of 'getting the prices right' and letting market signals drive resource allocation.

My argument is that the governments of Taiwan, South Korea and Japan (TKJ for short) have an unusually well developed capacity for selective intervention; and that this capacity rests upon (a) a powerful set of policy instruments, and (b) a certain kind of organization of the

state, and of its links with other major economic institutions in the society. The East Asian three show striking similarities with respect to

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both instruments and institutions. They also, of course, show striking similarities with respect to (c) superior economic performance—notably with respect to rapid restructuring of the economy towards higher technology production. The question is: what are the causal connections between (a), (b), and (c)?

The short answer is that we don't know: there is a dramatic paucity of empirical evidence on this question, and especially for the country with the best economic performance of all, Taiwan. This is only partly because of the practical difficulties of collecting relevant data; it is also because the perspective of neoclassical development economics tends to occlude these questions from serious consideration. In this paper I can give only a few components of my own tentative answer. I shall first establish that the governments do have powerful instruments of selective promotion at their disposal. I then discuss the argument that the use of these instruments has in fact contributed to superior economic performance. Finally I ask about the conditions which have allowed these potential net benefits to be realized in the East Asian cases, though they may well not be realized in other conditions.

I. INSTRUMENTS

For a government to lead industrial restructuring, it must be able to wield instruments capable of discriminating between industrial sectors, and it must be able to check the influence of foreign-owned firms in the domestic economy. Can TKJ governments do this? We begin with financial instruments, then consider those of trade and foreign investment.

Financial Instruments

Let us start from Zysman's distinction between capital market-based and credit-based financial systems (1983). The two types of systems have very different implications for the potential influence of governments and/or banks over business. In a capital market system, securities (stocks and bonds) are the main source of long-term business finance. There is a wide range of capital and money-market instruments, and a large number of specialised financial institutions competing strongly in terms of price and service. Prices are determined in large part through the interplay of supply and demand. Financial institutions have arms-length relations with particular firms. The US and British financial systems are clear examples of the type.

In a credit-based system the capital market is weak, and firms depend heavily on credit for raising finance beyond retained earnings. A cut-off in credit raises the prospect of immediate liquidation. Firms are therefore heavily dependent on whoever controls credit - on banks, to the extent that banks are the main suppliers. The banks may be relatively autonomous of the government, as in Germany, or they may themselves be dependent on the government. In this latter case, the government sets financial prices, and both through prices and the government's ability to influence the allocation of bank lending more directly, the government can exercise a powerful influence over the economy's investment pattern.

The East Asian three all have credit-based financial systems, with government-administered prices. Firms' dependence on credit is seen in the high debt-to-equity ratios typical of the corporate sector: using official figures (not inflation-adjusted), corporate debt/equity ratios have been in the 300-400 percent range in Japan over the 1950s through the 1970s, much same in South Korea over the 1970s, and 160-200 percent in Taiwan over the 1970s. US and UK debt/equity ratios have been around

Securities markets are weak in virtually all developing countries (van Agtmael 1984), so a simple distinction between capital-market-based and credit-based financial systems does not differentiate those of Korea and Taiwan from those of other developing countries. Direct comparison of corporate debt/equity ratios might be one criterion. By this standard many other industrializing countries have much lower ratios than Korea and Taiwan: Brazil and Mexico, for example, had a ratio of 100-120 percent over the 1970s. But such comparisons are hazardous, especially because of differences in accounting for inflation. Another criterion might be the percentage of total credit subject to government credit controls on sectoral allocation. This too is problematic, because when the government has much influence over the banks and the banks are the major source of credit, the government may exert influence over credit allocation by informal 'jaw bone' control, in ways impossible to quantify.⁴ Having stated some of the difficulties in comparing TKJ's financial systems with those elsewhere, I shall bypass them by using a first approximation argument in what follows, recognizing that it should be made explicitly comparative.

In all three countries firms depend heavily on credit for financing, and the banks are by far the most important source of credit.⁵ All three governments have been wary of allowing a rapid growth of non-bank financial institutions, which might pose a challenge to the dominance of the banks. In Taiwan, virtually the entire banking system is government-owned. In Korea the same was true until 1980-83, and the government still reaches far down into the now officially denationalized banks in terms of personnel policies, appointment of senior managers, range of services, and the like. In Japan the banks are mostly privately owned, but depend on the central bank for access to supplementary deposits on which to expand their lending. They borrow enormous amounts from the

central bank, not as a right but as a privilege against the obligation to respect the central bank's conditions for the allocation of lending. In all three cases government sets interest rates and limits on collateral requirements.

So the three governments seem to have been more than happy to do little to overcome capital market failure, even to encourage it.' Are there advantages to the alternative credit-based model, despite its being less market-driven?

The first advantage is that a credit-based system permits faster investment in developing country conditions than would be possible if investment depended on the growth of firms' own profits or on the inevitably slow development of securities markets. Increases in the deposit rate of interest can effect a faster increase in investible resources than is possible through the growth of equity. Also, the government is able to restrict the use of investible resources for mergers, speculation, paper entrepreneurship, and consumer borrowing; savings have a better chance of being translated into productive investment, and productive investment is less affected by speculative stock exchange booms (Matthews 1959:148).

The second advantage is that a credit-based system encourages more rapid sectoral mobility, and permits the government to guide that mobility. Even small changes in the discount rate or in concessional credit rates between sectors can have a dramatic effect on resource allocation, because the effect of such changes on firms' cash flow position is greater than where firms have smaller debt/equity ratios. Thus, where the government is not just trying to promote rapid growth in aggregate, but is doing so by means of selective fostering of 'key' sectors, a credit-based financial system gives it a powerful mechanism for inducing firms to enter sectors they would otherwise not.

Third, the credit-based system helps to avoid the bias towards short-term company decision-making inherent in a stock market system. The creditor needs the borrowing company to do well: it is concerned about the company's market share and ability to repay loans over the long term, and these depend on how well the company is developing new products, controlling costs and quality, and so on. So these become the criteria which managers are concerned with, rather than stock market quotations (Johnson 1985, Dore 1985).

The fourth advantage is more directly political. Industrial strategy requires a political base. Control over the financial system, and hence over highly leveraged firms, has been used in all three countries to build up the social coalitions needed to support the government's objectives—thus helping implementation of the industrial strategy. Firms are dissuaded from opposing the government by knowledge that opponents may find credit difficult to obtain.

These are four major potential advantages of a credit-based, administered-price financial system. However, such a system contains certain inner imperatives for government action which must be met if these advantages are to be realized, and which have profound implications for the government's overall role in the economy (Wade 1985).

The first is that the government must help to socialize risk. Increases in deposit interest rates can increase the flow of financial savings; but at the new rates the private sector may not be prepared to borrow the savings unless the government intervenes to socialize some of the prospective private losses. Even if in the short run the savings are translated into loans, the higher savings and investment made possible by the higher rates will not be sustainable in the longer run without measures to socialize risk. This is because highly leveraged firms are vulnerable to declines in current earnings to below the levels required by debt

repayment, repayments on debt being fixed (whereas payments on equity are a share of profits). With firms vulnerable in this way, so are the banks which carry the 'non-performing' loans. So where debt/equity ratios are high, there is an ever-present danger of financial instability in the economy: meaning bankruptcies, withdrawal of savings, a fall in real investment, and slower growth. To ease such dangers, firms are likely to borrow less, and banks to lend less, than if the government were to socialize some of the risks of private loss—to shift onto government some of the risks to which lenders and high debt/equity producers are exposed. If the government does socialize some of the risk of losses, the supply and demand of loanable funds will be greater, so investment and hence growth can be higher.

This advantage applies especially in the case of highly correlated risks, to which most firms in major sectors are exposed. So it applies especially to interest rate changes, or economy-wide recession, or changes in major export markets, or political risks. Therefore the impetus for government to shoulder some of the risks of investment and saving in an economy with high debt/equity ratios is especially strong in trade-dependent economies, like Taiwan and South Korea, and in policies under external or internal threat, again like Taiwan and South Korea. The impetus is reinforced where, as in all three of our cases, the economy is investing heavily in large lump projects, where entry takes long and exit also takes long.

This impetus then leads the government to provide a battery of ways to reduce the risks of financial instability: not only lender of last resort facilities and deposit insurance, but also subsidies to banks imperiled by loan losses, product and credit subsidies to firms in financial difficulties, banks' share-holding in companies, government share-holding in banks and in lumpy projects, and even government ownership

of the banks; plus, of course, government control of interest rates and exchange rates, to dampen firms' exposure to market fluctuations in these two important sources of correlated risk. In short, the logic of high debt/equity ratios forces the government to become involved in corporate financing.

The second imperative is for the supplier of credit to become intimate (not arms-length) with company management. The supplier of credit may for this purpose be the government (Korea) or the banks (Germany), or some of both (Japan). In any case, the reason for involvement with management is that the creditor cannot simply withdraw when a company runs into difficulties by selling the securities in the secondary capital market—for the reason that the secondary capital markets are little developed. Given that the 'exit' strategy of the capital market model is not available, the alternative is 'voice' and 'loyalty', to try to restructure company management so as to make it more competitive, and to take the long-term view.

Nevertheless the government and/or the banks must—as the third imperative—develop an institutional capacity to discriminate between responsible and irresponsible borrowing, and to penalize the latter. That is, firms which borrow without due commercial caution and run into trouble must not expect the government or the banks to continue to bail them out (the moral hazard problem).

Once market signals are blunted by administered pricing and socialized risk, the government must—the fourth imperative—create a central guidance agency capable of supplementing market signals by its own signals as to which sectors will be most profitable.

Finally, the government must maintain a cleavage between the domestic economy and the international economy with respect to financial flows, so as to be able to control these flows in and out. Without such

control, with firms free to borrow as they wish on international markets, government's own control over the cost of capital to domestic borrowers is weakened, as is its ability to guide sectoral allocation.

These five imperatives are reflected in readily identifiable features of the financial systems of all of our countries (Wade 1985). For example, the central guidance agencies in each country are well known: Japan's MITI; South Korea's Economic Planning Board; Taiwan's Council for Economic Planning and Development, and its Industrial Development Bureau. Again, banks are only too well aware of the restrictions on their foreign transactions, and in all of the countries foreign banks are only allowed into those pockets of business which the local banks cannot do well. Taiwan's banks must report all foreign transactions weekly to the central bank, its foreign banks must report all transactions daily. Central allocation of foreign exchange has been a powerful instrument of control over firms and sectoral growth in all three countries (because of common dependence on imports of raw materials).

For all the similarities in the structure of the financial system and the financial instruments available to policy makers, there are also important differences between the three countries. It has been said that 'The Japanese banking system is among the most centralized and controllable in the world' (Pempel 1978:152). But Japanese banks are mostly privately owned, and have some autonomy with respect to criteria of lending and response to 'bad' loans. Involvement in company management is shared between bank creditors and government (e.g. MITI). Korean and Taiwanese banks, on the other hand, are state-owned (Korea's until 1980-83), and have less autonomy than Japan's.

Korean banks operate as direct instruments of government policy (at least with respect to big loans): their criteria of lending are set by government, and in cases of bad loans the government directs them to

continue lending or not. (Korea's high inflation of the 1970s was related to a government policy of lending many firms out of difficulties.) Hence collateral requirements are not a major requirement (except for small companies), so the banks are not, in that sense, 'pawnbrokers'. Yet neither do the banks have the capacity to undertake independent analysis of company balance sheets, market prospects, and cash flow projections; or at any rate, they are not able to make such analysis a basis for lending decisions. So not only are the Korean banks not pawnbrokers, they are not venture capitalists either. Instead of the banks having intimate ties with (big) company management, it is the government itself which has these ties.

As for Taiwan, collateral requirements are higher for private firms than in Japan or Korea, and banks are commonly known, pejoratively, as 'pawnshops'; conversely, they have no more of a venture capitalist capability (in the above sense) than the Korean banks. As in Korea, it is the government, more than the banks, which is involved with company management. But this involvement seems to be less than in South Korea, as far as the private sector is concerned; government-(private) business relations are somewhat more arms-length than in either Korea or Japan.

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This may be because Taiwan has fewer giant companies than Korea or Japan ; also because of the ethnic tensions between the mainlander-dominated government and the islander-dominated business sector; and also because the public enterprise sector in Taiwan is bigger than in Korea and much bigger

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again than in Japan , so government-business relations which in Korea and Japan involve crossing the public sector-private sector boundary are in Taiwan already contained within the public sector, and hence do not appear to represent 'government interference' in (private) business management. There are close (which is not to say always friendly) relations within the triangle of central decision-makers, government-owned banks, and public enterprises.

So the Korean and Taiwanese cases represent distinct sub-species of the credit-based model. But all three cases have in common that, because of firms' high debt/equity ratios, governments can wield a great deal of influence over (big) firms and over the economy's investment pattern more generally via their influence over the sources of credit. As Zysman puts it, 'Selective credit allocation is the single discretion necessary to all state-led industrial strategies' (1983:76). Governments in economies with capital-market-based financial systems do not have anything like the same degree of steerage capability.

Trade Instruments

Trade controls have been important instruments of steerage in all three countries (Japan pre-1970ish, if not later). The governments have not allowed the domestic market for tradables to be directly integrated into the international market: they have not allowed the use of foreign exchange, the composition of imports, to be decided by domestic demand in relation to prices set outside the country. They have influenced the volume and composition of imports by a combination of selective controls on trade, both (non-discretionary) tariffs and (discretionary) quantitative controls. I shall concentrate here on Taiwan because less is known about its trade controls, and because the most familiar reason for trade controls - the need to save scarce foreign exchange - has not been a reason for maintaining Taiwan's elaborate apparatus of trade management: Taiwan (unlike South Korea) has run balance of payments surpluses most years since 1970. The reason is more directly to do with building up technological and supply capacity within Taiwan.

Taiwan's tariff structure is minutely differentiated by product, with tariffs ranging from zero to well over 100 percent. It is quite inconsistent with the modified neoclassical prescription for a 10-15

percent uniform rate of effective protection for all manufacturing other than the infant industries, which should get a uniform rate of no more than double the normal rate (e.g. Balassa 1977). I have no evidence on how closely the structure of tariff protection corresponds with the government's sectoral development priorities.

The situation with respect to quantitative controls is clearer. For the most understandable of reasons the government is anxious not to be seen to be doing anything which might provide a pretext for other countries to put up barriers to its exports, and takes care to keep most of the quantitative controls out of sight. The public classification of imports into 'prohibited', 'controlled', and 'permissible' does not capture the scope of the system, for many items on the 'permissibles' list are in fact not freely imported (Westphal 1978, Wade 1984, forthcoming). The 'permissibles' list is covertly divided into two parts, one part containing items which really are freely imported (though they may be subject to restrictions as to origin, and as to what kind of agency can import them), the other part containing items for which special permission must be obtained. When a would-be importer applies to a bank for a license (all imports and exports must be covered by a license), the bank checks to see whether the item is on the 'covertly controlled permissibles' list. If so, the request is referred back to the government (normally the Industrial Development Bureau). Typically the would-be importer will be asked to provide evidence that the domestic supplier(s) cannot meet his terms on price, quality, or delivery. He may be asked to furnish a letter from the relevant producers' association to that effect.

This could be called the 'referral' mechanism of import control, or the 'law of similars' (but it's not a law). It has almost certainly—I know of no direct evidence—been an important instrument of secondary import substitution. Petrochemicals, chemicals, steel, other basic

metals—these sectors, characterised by standardised, basic products with high capital requirements, are covered by the referral mechanism. So also are some machinery and components, including some machine tools, forklift trucks, and bearings. (The present tense refers to 1978-1983.) At the least, the mechanism serves the useful function of stimulating—in fact forcing—increased contact between purchasers and potential local suppliers (Westphal 1978); which has to be balanced against the cost of delays, on which I have no information. For machinery, the referral mechanism provides only weak protection in general, because the planners are well aware of the importance of allowing industrialists to use the equipment they think best suited to their particular market. For more standardized capital-intensive products like chemicals, importing can be much tougher once local capacity exists. A manufacturer who needs a higher percentage purity in his caustic soda than the local supplier can match may become so fed up with delays in his requests to import that he decides to help one or two local producers to upgrade to the point where he can buy his requirements from them. Which is just what the Taiwan government wants.

Because the government is able to control quantities of goods crossing the national boundary, it can use international prices to discipline the price-setting of protected domestic producers. It is very sensitive to the point that there must be good reasons why domestic prices of protected items are significantly higher than international prices, especially in the case of items to be used for export production. (There are some glaring exceptions to this rule, notably in the automobile assembly industry.) So the threat of allowing in imports if the prices of domestic substitutes get too far out of line can be sufficient to hold prices to near international levels, without there being a free flow of goods across the national boundary.

When little is known about the referral mechanism today, it is all the more difficult to judge how important it was during the 1960s and 1970s. Ian Little and Maurice Scott both claim that progressive trade liberalisation occurred through the 1960s 'until in the 1970s Taiwan was virtually free of trade controls' (Little 1979:474, also Scott 1979:327). One hypothesis is that all quantitative controls were indeed lifted by the early 1970s, only to be reimposed just after the time when Little and Scott were writing, in 1976-77. Certainly the referral mechanism was well established by 1978, when Westphal described it (1978). The second hypothesis is that the controls were in place through the 1960s and 1970s, as in the 1950s and as in the 1980s. All through the 1950s the planners had justified quantitative controls in the face of economists' criticism, on the grounds of their greater accuracy and flexibility than tariffs for managing trade quantities. But the official system of 'controlled' and 'permissible' items was then, and is now, cumbersome in terms of the procedures needed to get items onto and off the lists. What may have happened in the liberalisation of trade controls was a switch of items from the formally controlled to the de facto controlled list, so as to permit the planners more flexibility to manage trade quantities while appearing to liberalise. This is not to say that the whole of the increase in the share of import items on the 'permissible' list was illusory; only that part of it was, and a fluctuating part depending on the priorities and needs of the moment. If so, the easing of quantitative restrictions during the liberalization of 1958-62, which bears so much of the weight of the neoclassical explanation for Taiwan's subsequent rapid growth, may have been less real than the official figures suggest.'°

What is the import position of exporters? In the neoclassical story the most important reason for Taiwan's boom in manufactured exports (after the availability of cheap labour) is that exporters faced a virtual

free trade regime; they could buy inputs for exports at world market prices, and hence have not had a net incentive to sell on the domestic market rather than on the international market (unlike in the textbook import-substituting trade regime).

It is true that exporters pay no tariff duty on intermediates used for export production. However some very important intermediates are not freely importable, because they are subject to the mechanism of quantitative import control just described. In principle, items can only be put on the list subject to this control if the price of the domestic substitute is equal to the c.i.f. price of imports when the imports are to be used for export production, or equal to the c.i.f. price plus all tariffs and other charges when the imports are to be used for domestic market production. In practice there is scope for negotiation in favour of the domestic producer.

As for capital goods, exporters *do* have to pay duty - unless they produce products which appear on a list of specific items to be encouraged (e.g. high voltage insulation tape with working tolerance of 6.6 kv or more), and unless a domestic substitute for the capital good is not available (again there is room for negotiation on what constitutes a substitute). And a variety of capital goods are subject to quantitative import controls, even if they are to be used for export production. Exporters are, however, exempt from indirect taxes on input purchases. They have also in the past been given an incentive through the specification of side-conditions on the lists of items to be given fiscal incentives, which said that the fiscal incentive would only be given if a certain minimum share of the output was exported.

The fact that exporters have to pay duty on many capital goods (often of 20+ percent in the late 1970s) and cannot freely import some very

important intermediates as well as some capital goods, must qualify the proposition that exports have faced a free trade regime.

Little quantitative evidence is available on the magnitude of protection. The only comparative study for Taiwan and Korea uses data from the late 1960s. It suggests that while the economy-wide average level of protection was relatively low for both Taiwan and Korea by the late 1960s, parts of the manufacturing sector were heavily protected, giving high variance around the average. Hsing, using 1966 data for Taiwan, calculates an effective protection for home market consumer goods of 126 percent (1971:144). In Balassa's classification, the 'import-competing' industries (those in which less than 10 percent of domestic production is exported, and in which imports account for more than 10 percent of domestic consumption) received an effective protection rate of 133 percent in Taiwan in 1969 (Lee and Liang 1982:325), and 64 percent in Korea in 1968 (Westphal and Kim 1982:246). For the same industries net effective subsidy rates strongly favored domestic market sale over export sale: 61 against 15 percent for Taiwan, and 100 against 39 percent for Korea (Balassa 1982:35). To interpret these figures one needs to know how much of the economy's activity is included in the highly protected sectors¹¹, as well as the degree of correspondence between the highly protected sectors and the infant industries that the government was trying to promote. One then needs corresponding data from other countries. Lacking this, I conclude with a proposition in need of careful testing, that parts of the manufacturing sector have received relatively high levels of protection in Taiwan and South Korea (a fortiori in Japan), and that the industries which the government has tried to promote are included in these parts.

In all three countries import controls have had the central function of reducing the risk to which investors in new, especially capital-intensive industries, are exposed, thereby encouraging the

expansion and deepening of domestic supply capability. They have encouraged domestic manufacturers to invest on a scale sufficient to generate the increasing returns to which manufacturing is subject; and they have then helped to provide strong and reliable domestic demand for the products of the protected industries, so that these industries can spread overheads over larger output and thus lower their unit costs. At a more aggregative level, import controls have served the function of retaining within the domestic economy more of the growth in demand from the export market, so providing domestically based firms with a more expansive economic environment than if more of the additional demand generated by exports leaked abroad in the form of imports. With a more expansive economic environment, domestic firms are more likely to keep their productivity driving forward, and hence increase their international competitiveness at a later stage.

Direct foreign investment controls

If the domestic economy is dominated by multinational companies, the development consequences of the above logic will be different than if the firms are predominantly nationally-owned. In much of Latin America and Sub-Saharan Africa, multinationals control most firms producing for the upper income levels of the domestic market. In TKJ, by contrast, multinationals have had a small presence in relation to the economy as a whole. (In Taiwan over the 1970s, foreign investment accounted for about 8 percent of investment in manufacturing, less in South Korea and Japan.) More importantly, they have had restricted access to the domestic market. By one means or another the governments have directed them towards exports (though export requirements are less the more the government wants their technology).

This particular interference with the international market has advantages in terms of the development of national production capabilities and income distribution. It means that government efforts to promote the growth and restructuring of domestic production capacity do not have to go through the multinationals, whose objectives may not wholly coincide with the development of national production capability. The government is able to use investible funds according to specific priorities designed to further integrate the domestic market, through having more influence over the firms that produce for the domestic market than if those firms were predominantly multinationals. Second, multinationals operating on the domestic market tend to follow marketing strategies that have little to do with average incomes or traditional consumer behavior; which may tend to accentuate income inequalities. In TKJ, the diversification of goods made available to consumers is a gradual and controlled process geared to the population's purchasing power. So in South Korea, the most modern of consumer goods, manufactured chiefly by multinationals, were for a long time restricted for export. Only gradually have some of these products become available for domestic purchasers, as basic needs in food and clothing have been met (Ikonicoff 1985).

Other Instruments

Other instruments of industrial steering are also important to varying degrees in the three countries. Japan is known for its 'administrative guidance', a practice of governmental consultation with and persuasion of company management without the backing of law; but the same thing occurs routinely in South Korea and Taiwan, and is, indeed, a potential instrument in any credit-based financial system where the government has much control over the banks (as we have seen). Japan and South Korea have made much use of market structure policy, not of the

anti-trust kind but of nearly the opposite: to promote the development of large-scale firms and trading companies, able to compete against the US and European giants. Taiwan has done much less to foster the development of

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agglomerates. But it does have a large public enterprise sector,

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unusually large even when compared to South Korea's ; and an array of 'special status', ostensibly private firms linked to the party or the military which, given the centralised nature of the state, are also available as instruments of selective intervention. Taiwan has, in addition, an elaborate scheme of fiscal incentives for the production of tightly specified products. (The specifications change over time, so as to keep the incentives pressing against production frontiers.) Like Korea, Taiwan has a forest of R&D organizations under state auspices; though their name in Taiwan translates as 'Research and Service' rather than 'Research and Development' organizations, for they are intended to be an industrial extension force as much as a research staff. In Japan the government has relied more on encouraging groups of private firms to form their own R&D cartels. However, neither R&D organizations nor technology licensing have been the main sources of new industrial technology in Taiwan and Korea. These have been: imported capital goods; students sent overseas for higher level education and attracted back by vigorous government efforts; and foreign experts employed to work locally alongside locals (Westphal, Kim and Dahlman 1984). All three flows of 'embodied' technology have been subject to government influence.

Aggressivity

There is no need to labour the point: all three governments have the means to intervene powerfully in markets, to set constraints on the scope of market decision-makers, with the object of bringing about certain market outcomes. Japan's and South Korea's industrial policies have been

more aggressive than Taiwan's, in the sense that the government has put more pressure—more incentives, more penalties for non-compliance—behind its attempts to shift the economy in certain directions. The reasons may have to do with the following differences: (a) In savings: Taiwan's domestic savings rate has been much higher than Korea's, so the government has been able to favor certain sectors without the tight rationing of other sectors which Korea has had to undertake in order to do the same (even though Korea has borrowed heavily abroad to make-up some of the difference). (b) In degree of openness of the economy: Japan's domestic savings are also high, so the first consideration does not serve to explain the difference between Taiwan and Japan. Part of that difference may be due to the fact that Japan's economy is less exposed to the international economy, and so the government can, with the same amount of administrative effort, more aggressively rig markets than in a more open economy. (c) In the public enterprise sector: Taiwan's large public enterprise sector gives the government an instrument of industrial strategy whose use does not involve crossing the boundary between the public and private sectors, and which is therefore less likely to generate a sense of aggressive interference. (d) In the organization of the private sector: Japan and South Korea both have more highly centralized private sectors than Taiwan (the result, in part, of government intention in each case). With the Japanese and South Korean governments both facing larger private agglomerates, themselves well organized into peak associations, stronger instruments of governmental inducement and penalty are sometimes required to shift firms in desired directions than in Taiwan. Moreover, the ethnic conflict in Taiwan, running close to the public sector-private sector divide, enjoins on the government a more subtle approach to private sector steerage than the Japanese and Korean governments need take. (e) In foreign economic policy: Japan and South Korea have both planned head-on

confrontation with other countries (notably the US) in key industries; their production capacity decisions only make sense on the assumption that they could knock out-capacity in other countries. Taiwan has been more circumspect, seeking market niches more complementary than competitive with those of the US, and the government has had to be correspondingly less active in orchestrating and supporting the activities of firms who would challenge the US and European giants.

II . EFFECTS OF INDUSTRIAL STRATEGY

A common response of neoclassical development economists to the proposition that TKJ have had a vigorous industrial strategy is to say that the various sectoral policies amount to no more than 'hand-waving'; or even that economic performance would have been still better without them. Ian Little is more careful: he admits that if by planning is meant any promotion of industries that would be unlikely to start in response to price signals, there was a lot of planning in Taiwan in the 1950s, again in the latter part of the 1960s, and all through the 1970s (1979:489). Yet in an 18,000 word paper on Taiwan he makes no attempt to describe or assess the impact of this planning. Whether the promotion of industries that would be unlikely to start in response to price signals helps development or not is, he says, 'a futile question' because of the absence of a counterfactual. Futile question or not, his own implied answer is that deliberate industrial steering has been a minor enough element for it to be completely ignored in a long account of Taiwan's success. Gustav Ranis, in an equally long account of Taiwan's industrial development, does more or less the same (1979). Hosomi and Okumura allege explicitly that it was Japan's high economic growth which allowed industrial policy and the consensus mechanism to work, not the other way around (1982:150)—with no evidence either way. David Henderson, an economist attached to the US

Council of Economic Advisors, has no doubt that 'The real explanation for the Japanese economic miracle is the country's laissez-faire policies on taxes, antitrust, banking, and labor. Japan teaches a lesson ... about the vitality of the free market' (1983, cited in Johnson 1985:3). The idea that Japanese industrial policies actually hindered economic performance is caught in the assertion that 'Without MITI Japan would have grown at 15 percent per annum instead of only 10 percent' (unnamed Japanese economist quoted by Little 1979:491). Saxonhouse (1983) and Trezise (1983) make more serious arguments to the effect that selective industrial steerage has been a very minor element in Japan's success.

There is indeed a colossal identification problem. How can one tell that market liberalisation (coupled with general infrastructural and educational investment) was the most important factor by far? What kind of evidence is needed to show that industrial strategy made a difference too important to ignore?

The question is complicated by the need to distinguish two levels of industrial strategy—the generic level, on the one hand, including policies on the exchange rate, finance, taxation, and so on, which together establish the broad thrust of government policy towards industrial growth and competitiveness vis-a-vis redistribution and consumption; and the sectoral level, on the other (Scott 1985). The effect of sectoral policies can be expected to depend partly on the net effect of generic policy. Separating out the relative impact of policies at these two levels is clearly a major undertaking in itself. Putting that aside, how might one assess impact at sectoral level?

One might study a set of industries to examine the connection between promotion measures and subsequent growth. In practice, such an exercise would be fraught with difficulty. Complete information on the amount of assistance, even if measured only in terms of financial

disbursements or exemptions, would be difficult to find (much information on the use of concessional credit in Taiwan is confidential, for example). Worse, promotional measures cannot be limited to financial disbursements or legal directives. In all three countries, the pilot agencies lack large funds and firm statutory powers; so it is virtually impossible straightforwardly to connect manufacturing successes with financial help or clear directives. Many of the channels of transmission of influence are difficult to detect, let alone quantify. For example, development bank loans may trigger a greater volume of commercial bank credit in the same directions than would otherwise have followed - this 'announcement effect' might be used to explain why the Japan Development Bank, although a relatively small source of loans, has still been important in industrial steerage.) There is the further difficulty of holding other things constant for high assistance and low assistance sub-sectors. But beyond all this the question remains of how to interpret the results: if sub-sectors which received a lot of assistance grew more slowly than those which did not, does this indicate the failure of assistance measures, or does it indicate effective targetting on industries that need assistance as a condition of subsequent fast growth?

Even if such studies show effectiveness at the industry level, however, they leave open the question of whether the country would not have been better off doing things other than developing those particular industries. 'Local' optimality does not establish 'global' optimality (global in the sense of the national economy). It is tempting to use aggregate production function analysis to estimate the extent of 'global' optimality, with the size of the residuals indicating the maximum possible extent of the government's contribution. The problem is that the size of the residuals depends on how the production function is specified, which is a matter calling for a large element of subjective judgement. The 'global'

issue can be got at another way, by comparing countries which in many important respects are similar but where the role of government has been significantly different: Japan and Italy in the post-war period, for example (Boltho 1981). The hazards are obvious.

At best one can make a circumstantial case that industrial strategy has made a positive contribution. For example, we have Yusuf and Peters' conclusion that for analysing investment in South Korea, a model based on government policy objectives and planners' preferences gives better results than a standard neoclassical market-determined model (1984). We have Taizo Yakushiji's study of the Japanese automobile industry from 1900 to 1960, which shows how each government intervention changed firms' behavior, and how the changed behavior in turn gave rise to changes in the nature of the subsequent intervention (1984). We have Magaziner and Hout's study, which shows for several Japanese industries the connection between government promotion or non-promotion and subsequent performance (1980). We also have Westphal's work on Korean infant industries, which suggests that many of the promoted industries have become internationally competitive, able to compete internationally and domestically without subsidies; 'many' in the sense of a high ball-park average, which includes some much publicized failures, especially in the late 1970s and early 1980s (1982:264). He would be the first to admit that his evidence is not conclusive; but in the context of the other evidence cited it is suggestive. I have not seen data for Taiwan on what has happened subsequently to those highly protected import-competing industries of 1969, but it could be found.

Several studies examine the issue comparatively. For example, Enos studies the adoption of the same petrochemical technology supplied by the same U.S. supplier in South Korea, Chile and Hong Kong, and finds that South Korea's lead on all of several measurable indices of adoption can be

related to specific actions of the Korean government (1984). Mody asks why in the 1980s Korea has taken a commanding lead over Taiwan in microelectronics, even though by conventional measures of comparative advantage Taiwan should be well ahead. He finds the reasons are related to the Korean government's determination to build large agglomerates (in part through the aggressive rationing of credit which has come in for much neoclassical criticism), and its closure of the domestic market to direct foreign investment (1985).

A number of papers question the neoclassical argument more directly. Some say that the neoclassicals have some of their crucial facts wrong about individual country cases (e.g. Wade forthcoming, Amsden 1984, Luedde-Neurath 1985, Haggard and Moon 1983, Cumings 1984, Boltho 1984, Pack and Westphal forthcoming). Others argue with evidence that price distortions do not in fact correlate closely with inward or outward oriented trade regimes or with measures of national economic performance (Bradford 1984, Aghazadeh and Evans 1985); which questions the proposition that market liberalization could have been the driving force behind JKT success.

All these studies can be challenged. But it is not enough for neoclassicals to query their validity; they must themselves provide counter evidence. This evidence cannot be limited to economy-wide averages like 'outward' and 'inward' oriented, but must also address the issue of dispersion around the average. So in the comparison between Taiwan and Korea on the one hand, and India and Latin America on the other, the first important fact about trade regimes is that the East Asian type is more 'liberal' in the sense that the average level of protection is much lower. But the second important fact, which the neoclassical argument has tended to ignore, is that dispersion around the average is much higher in East Asia, because the selective promotion of some industries requires high

protection to a small number. The fact of high variance takes on all the more importance-given the low average.

I can find little empirical support for the proposition that the sectoral industrial strategies of TKJ amounted to mere hand-waving, or that their overall economic performance would have been superior if they had had a more neutral policy regime. Can it be seriously argued that if the Governor of the Bank of Japan had got his way in the mid-1950s, and prevented a targetting of steel and automobiles on the grounds that Japan's comparative advantage lay in textiles, Japan would now be economically better off (Hofheinz and Calder 1982:130)? South Korea in the late 1970s may be an exception; but this is because the objective of intervention shifted away from fostering economic competitiveness towards attaining military self-sufficiency. At the least the evidence on industrial strategy supports the proposition that active and selective government intervention in a market economy can coexist with outstanding economic performance.¹⁴ A neoclassical might then argue that the intervention simply 'mimicked' the market, helping to reach results that an 'ideal' market would have produced. Whether this is so or not, it is beside the point: which is that the unguided market would, in reality, not have produced the same result. To claim otherwise is to claim extraordinary ability to forecast extraordinary performance.

However, the force of empirical evidence also depends on the adequacy of the underlying theory, and it is true that the theoretical basis for a selective industrial strategy is less well developed than that which supports a non-interventionist approach. This reflects the neoclassical emphasis on trade rather than technological change as the central process of industrialization. When technological change is taken as the center piece, an economic rationale for selective industrial promotion follows from two propositions.

The first is that national comparative advantage is not simply the result of given endowments of capital, labor, and natural resources, but is also "the result of government promotion; because comparative advantage rests on accumulated capital and skills ('technological mastery', in Westphal's phrase: 1982), which can be enhanced by a long-term national strategy. The second is that some sectors and products are more important to the economy's future growth prospects than others. These sectors have major 'externalities', in the sense that the people affected by a decision about production and price go far beyond the immediate buyer and seller. The externalities argument for public provision of physical infrastructure is well recognized in neoclassical theory. But externalities are treated as aberrations from normal economic behavior. The governments of TKJ have acted as though externalities were very important in some sectors, which have then been treated as part of the industrial infrastructure.

The industries so treated are especially those where a large commitment of time or capital is required in production. Any complex economic system encounters a source of instability arising from the uncertainty inherent in the attempt to match supply decisions now with demand decisions at some time in the future. If prices and profits are left to the vagaries of the market (the international market as well as the domestic market), investment in industries which require a large commitment of time or capital may not be made, and a higher than desirable proportion of the economy's investment will go into quick return projects. Also, individual firms on their own may be more inclined to stick within a narrow range of familiar product lines than branch into new industries and products. An exogenous (non-market) force is needed to favor such shifts, to lead economic agents from shorter to longer term investment and marketing strategies, to channel profits from currently profitable

activities into investment in those likely to become profitable in the future.

In these same large-lump, long-gestation sectors, production economies of scale are likely to be important. Competitive advantage can be gained by firms if they are encouraged to develop a scale large enough to capture the cost advantages. Learning-curve economies, to do with the acquisition of technological mastery, may also be important; costs per unit of output typically fall sharply as (and if) firms acquire technological mastery over a newly introduced technology (Westphal 1982, Pack and Westphal 1985, Fransman 1985).

Where external economies, economies of scale, and learning-curve economies are important, the market structure is unlikely to generate socially desirable outcomes - rapid growth and shifts in economic structure towards higher value-added products. In TKJ, government policy has played an important role in stimulating their realization, and hence in improving domestic ability to compete against other countries' suppliers, the object has been to encourage investment on a scale sufficient to capture economies of scale where these are important to coordinate the development of backwards and forwards linkages so that external economies from any one activity are captured within the national unit; and to encourage domestic producers to upgrade their technological capability by tying some of the incentives to such upgrading. If one accepts that external economies, economies of scale, and learning-curve economies are major sources of technological advance and productivity growth, the efforts of the state to make sure that market conditions do not obstruct their realization within the national unit take on great significance in explaining the superior economic performance of TKJ.

I I I . THE CONDITIONS OF SUCCESSFUL INTERVENTION

We come now to the question of how and why the TKJ governments were able to reap the potential benefits of an industrial policy, when many other governments, one can be confident in saying, could not (e.g. Wade 1979, 1982, 1982a, 1984). What is it that defeats the sorts of expectations that go under the rubric of 'nonmarket failure'?

Of course the demand side is important. With the opening of the US market to imports of cheap labor manufactures in the 1960s, Taiwan, Korea, and Japan had a huge range of profitable production possibilities open up for them. This, coupled with a responsive production system, pulled the economy powerfully along. The question is what made the production system highly responsive?

I have focussed on one of several components¹⁵ of an answer: the industrial leadership exercised by the three governments. What characteristics of the exercise of leadership have been most important for the success of the government's interventions? Three stand out: (a) interventions were (generally speaking) aimed at promoting competitive production¹⁶, (b) they were selective between industries, and (c) they were cumulative in their impact.

(a) The central economic bureaucrats of all three countries seem to have realized that mere protection was not sufficient to generate rapid growth. They have sought to couple protection with competition, so as to ensure that the lethargy-inducing effect of protection was swamped by the investment-inducing effect. In Japan, with its large domestic market, the policy has been to keep out imports (other than raw materials and high technology) and rely on a partly government-created market structure to induce 'cut-throat oligopoly' (Hadley. 1970). South Korea and Taiwan, with smaller domestic markets, have allowed more monopolistic production in heavy and chemical industries. But the South Korean government has

strongly encouraged the infants of these industries to start exporting very soon (Westphal.1982), thus exposing them directly to international competitive pressure.- even when exports had to be sold at a loss, recouped by the firm from profits on imports tied to export performance. In other words, the Korean definition of competitiveness emphasized export success to an unusual degree. The Taiwan government seems to have put less pressure on the infants to export, and relied more on the threat of allowing in imports if the prices of domestic substitutes moved much above international prices. This may be part of the reason why, even though they export little, Taiwan's public enterprises are more effective than those in many other countries; they supply to downstream firms which do export, from whom comes pressure to match the costs of overseas competitors.

Just why the central economic bureaucrats saw the need to couple protection with competition, when their counterparts in many other countries did not, is an open question. In any case the outcome was a form of protection quite different to the typical form in Latin America: where there was little encouragement either for competition between foreign firms and domestic firms on the domestic market, or for domestic firms to export.

(b) Interventions have been selective. Large parts of the economy are more or less ignored in terms of government promotion. The discriminatory nature of state intervention is taken for granted as much as the opposite is taken for granted in the US or Britain, where the declaration that an economic policy is discriminatory is an act of condemnation. Pack and Westphal (forthcoming) argue that the axis of discrimination is between 'well-established' industries (in the sense of being internationally competitive) and 'infant industries'. The former face a largely neutral policy regime, the latter (or some of them) face positive industry bias. But the governments also seem to be quite interventionist with respect to 'commanding heights' kinds of industries

(those that by their links with other sectors can affect the entire economy's growth), even if well-established. We certainly need more evidence on the criteria of selection, the degree of selectivity, and on how temporary infant industry protection is. But in any case, given that intervention is selective and that the criteria of selection have something to do with future competitiveness, this serves to differentiate East Asian intervention from much of Latin American, Indian, and New Zealand intervention, where the assumption has tended to be that controls on trade, coupled with unselective support of any domestic market industrial investment, would be sufficient to promote the right kind of industrialization. ¹⁷

(c) Interventions have a high degree of coherence, in the sense that their impact is cumulative. The activities that get help through trade controls also get help through preferential investment finance and/or fiscal incentives too. Taiwan's fiscal incentives, to take a small example, are targeted at three lists of products to be promoted: items on the first and most inclusive list receive the least incentives; those on the second list, a sub-set of the first, receive additional incentives; those on the third list, a sub-set of the second, receive still more. Again, however, the question of how cumulative the promotional measures are, and the logic of the pattern of cumulation, is in bad need of empirical research.

What are the organizational requirements for such a pattern of intervention to be realized? One is a credit-based financial system in which government exercises influence over the allocation of significant amounts of credit: it can support more rapid growth than would be possible in developing country conditions through a capital-market system or one based on retained earnings; it also gives the government a powerful lever for promoting particular sectors and influencing the balance between

investment and consumption; and itself can be a discipline on government interventions, because the other side of firms' dependence on government and the banks is the government's and the banks' need for the firms to do well.

The second organizational characteristic could be described as a centralized decision-making structure within the state. There needs to be a point where relative priorities can be decided, where the externalities facing private agents can be internalized, and judgements can be made about how to encourage the transfer of resources from currently profitable activities to those which are promising for the future (the same judgements as the management of a large firm must make, but taking account of externalities, and based on an exercise of foresight which the ordinary businessman could not afford to cultivate). South Korea's version of this centralized decision-making structure is contained in the links between the Blue House, the Economic Planning Board, the Ministry of Commerce and Industry, and the Ministry of Finance. Taiwan's is built on the links between the Cabinet, the Council for Economic Planning and Development, the Industrial Development Board, and the central bank.

It has been argued by Chalmers Johnson amongst others that a third organizational requisite is a high degree of public-private cooperation between the managers of the state and the managers of private enterprise. 'This cooperation', says Johnson, 'is achieved through innumerable, continuously operating forums for coordinating views and investment plans, sharing international commercial intelligence, making adjustments to conform to the business cycle or other changes in the economic environment, deciding on the new industries needed in order to maintain international competitive ability...' (1981:13). The implication seems to be that the private sector, like the state, needs to be arranged into peak associations through which representation to these 'continuously

operating forums' can be made: so that a centralized state faces a centralized private sector, and negotiation takes place between them. This certainly corresponds to Japan, and it corresponds to what is emerging in South Korea. It is further away from Taiwan, however, where the private sector remains strikingly decentralized, and where Johnson's continuously operating forums are not much in evidence. This is not to say that all or most government-private sector relations in Taiwan are 'arms-length'. It is to say that these relations do not, in the main, involve representatives of large aggregations of business interests, as they do in Japan and to an increasing degree in South Korea. On the other hand, Taiwan does have an active business press through which is built up a consensual identification of the problems facing the economy and the direction in which they should be solved; which perhaps matters more than the existence of coordinating organizations.

How then is the use of this concentrated mass of public power kept disciplined? Why is there not extensive non-market failure?

Six points are important. First, the central decision-making structure is staffed by the best managerial talent available in the

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system. Second, the central decision-makers are relatively insulated from all but the strongest of pressure groups. Consequently it makes no sense in these countries, as it does in some others, to see public policy as the vector of particularistic interests bearing on the state, or to see government agencies as the fiefdoms of particular private interests.

Third, the insulation of the central decision-makers, in turn, is based on an authoritarian, executive-based political structure, in which the executive jealously guards the feebleness of the legislature.

Political and civil rights are much more fully developed in Japan than in the other two. But even in Japan, the most that the legislature can do to influence the direction of policy is to threaten to withhold authority.

The weakness of the legislature ensures that, even in Japan, popular participation in elections does not translate into the exercise of real power. Which matters especially because any government with a powerful elected legislature will find it difficult to hold the line against unbalanced increases in consumption at the expense of investment. As it is, the state has been left free to justify itself and negotiate with a narrow constituency on particular issues and tactics. However, the authoritarian character of these regimes should not be exaggerated. Compared to other middle-income countries, Taiwan and South Korea come about half way down a ranking by civil and political rights; so many middle-income countries (and more low-income countries) have a worse state of civil and political rights than these two.¹⁹

Fourth, none of these countries has a powerful labor, or left-wing movement. In South Korea and Taiwan such a movement scarcely exists, due partly to government repression. In Japan it exists but is excluded from politics. This may help explain why state-provided economic security schemes are little developed even in Japan. Yet the extraordinarily rapid rise in mass living standards (compared to other countries) suggests that governments which exclude 'labor' do not necessarily follow anti-labor policies. The East Asian capitalist experience suggests that if a rapid reinvestment occurs, the rate of employment can rise so quickly toward full employment that government-imposed constraints on the operation of the market are not needed: welfare guarantees can be provided by firms and families. It is big 'if', however.²⁰

Fifth, none of the three countries experience the conflict, chronic in many other countries, between powerful natural resource owners and manufacturers. In countries with substantial natural resource wealth, the natural resource owners typically want a close approximation to free

trade; they want to be able to export and use their export earnings to purchase the best manufactures available on the international market; they do not see why they should have to buy the second-rate products of domestic manufacturers. The domestic manufacturers, on the other hand, want state help for domestic manufacturing. The conflict between these two sets of interests tends to make it difficult in many developing countries to sustain a long-term view of the nation's best economic interests.

These five points relate to the effect of state organization and the structure of politics on the use of public power. There is finally the matter of the goals sought by the central decision-makers, a matter of much greater importance in this kind of state than where power is more dispersed. The central point is that in all three countries the political elite sees a pattern of growth which makes sense in the long run as essential to its own survival. Political legitimacy is to an unusual degree based on economic success (compare for example Italy or Egypt: Wade 1979, Mason 1984). Especially in Taiwan and South Korea, the geo-political situation of the country has made it simply too risky for the elite, in its own perception, to take an umpiring, 'let the market work', view of its responsibilities. So the elite has needed success for the perpetuation of its own power, and has been relatively insulated from pressures. Beyond this are factors more cultural than situational. The central decision-makers are the kind of people who identify with the objectives of their organizations and of the state and do have some sense of moral responsibility for achieving objectives other than the use of public power for private enrichment. They have demonstrated an unmitigated confidence in the need for the state to be a leading player in the market (Pye 1985).

Little is known about how the public service organizations work in these countries: about management control systems, learning from errors, or negotiation and competition between bureaus. It appears that,

contrary to orthodox public administration precepts, Taiwan derives great benefit from an overlapping of economic bureaus in the public sector, competition-between which serves to keep bureaus on their toes - or else by-passed (Wade 1985a). I suspect that the standard image of East Asian bureaucracies as tightly integrated, top-down control systems needs major qualification (Michell, 1984, Wade 1982b). Yet somehow there does seem to be a closer than normal correspondence in these countries between, on the one hand, the goals that apply within non-market organizations to guide, regulate and evaluate agency personnel and performance (what Wolf calls 'internalities': 1979:116), and the national goals enunciated by central decision-makers on the other. Explaining how this occurs is a very important topic for research; for it relates directly to how government interventions can be oriented mainly towards growth, competitiveness and

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restructuring concerns.

So we arrive at the great East Asian capitalist synergism, between a public system oriented towards developmental and national security goals, and a private system geared towards long-terra profit maximization. The interaction between the two systems affects the decisions made in each. The intent of the public system is to manipulate the inputs into private (or public enterprise) decision-making so as to secure development goals; but the content of the public system's actions is modified by feedback on profit and loss conditions, market prospects, and raw material costs (Johnson 1983, Inkster 1983). The market and private property are not displaced, only modified.

The public system takes the form of a 'competitively-oriented strong state' (COSS). 'Competitively-oriented' serves to differentiate it from many other 'strong' states, notably those of a communist variety. A corollary of competitively-oriented is that the state intervenes selectively, paying attention to some industries more than others, and

paying much more attention to capital and technology markets than labor markets. Much is left to private sector initiatives feeding off the base provided by the public system; indeed, the area left to private initiatives tends constantly to expand, without going so far as to erode public control over the vital aspects. 'Planning' in this arrangement does not involve any (serious) attempt to coordinate the whole economy, except at the level of macro balance. It focusses on a relatively small number of sectors chosen for special emphasis. So these countries fit both the 'Japan Inc.' image and the 'laissez-faire' image to the extent that they fit either: but in different sectors and different factor markets. The point of interest is not which image fits better, but how their processes interact. Somewhere in this interaction lies the reason why East Asia's abundant 'social coalitions' or 'cartels' do not have the stagnation-inducing effects that Mancur Olson's theory (1982) would predict; quite the contrary.

If we have evidence that these governments take growth and competitiveness as primary goals (such evidence can be independent of growth and competitiveness outcomes), and that the governments are organized in such a way as to have the means to intervene in pursuit of these goals, then this feeds back to the earlier argument about the effects of industrial strategy. It adds another piece of circumstantial evidence to the argument that industrial strategy in Taiwan, South Korea and Japan has been effective.

In the future one can expect that forms of selective intervention will change in Korea and Taiwan, and perhaps decline overall as has already happened in Japan over the 1970s. It may be argued that after twenty to thirty years of rapid post-war development, markets are less likely to fail now; that the growing economic strength of private agents will be translated into greater political power and thence into greater corruption

of the intervention process; and that selective promotion now produces higher cost reactions from trading partners (Westphal 1985). On the other hand, it can be argued that in a severely competitive international environment, with volatile exchange rates, interest rates, and capital flows, long-term decisions focussed on a national interest will only be taken in a context of deliberately created stability. The art of government intervention is then to create this stability in key sectors without removing competitive pressures, and without incurring the wrath of trading partners.

NOTES

1. This is the weakest implication. The strongest is that a non-neutral policy regime - systematic intervention in search of dynamic gains in comparative advantage - is a necessary (but not sufficient) condition for rapid growth and restructuring.
2. Whether one emphasizes similarity or difference depends on the question and the comparator. Pye (1985) emphasizes differences between Japan, Korea and Taiwan in terms of concepts of power and hence political structure. My emphasis on similarity follows Johnson (1981, 1983). Note that my references to Japan are primarily to Japan of the 1950s and 1960s.
3. I thank Peter Wall, of the International Finance Corporation, for the above debt/equity figures. The numerator includes short-term debt. The samples on which the figures are based are not fully consistent either across time or across countries, and must be taken as rough orders of magnitude only.
4. A third criterion is the variance in bank interest rates and collateral requirements between industrial sectors. Another is the importance of retained earnings in relation to credit; in some developing countries returned earnings are so important as to warrant calling their financial system 'retained-earnings-based'.
5. The curb market, an unregulated, semi-legal credit market, supplied some 20 to 30 percent of total borrowings in Taiwan over the 1970s and

very roughly the same in Korea (Wade 1985). Two other important sources of finance are foreign loans and disbursements from the government budget - both controlled by government. In Korea, the National Investment Fund has accounted for about 10 percent of total borrowings in recent years, and is targetted at heavy and chemical industries; another 35 percent is covered by quotas for commercial bank loans to small and medium enterprises (whose sectoral composition is not clear). Taiwan has a variety of special funds at concessional rates (such as the Sino-American Fund, the Development Fund); and also uses the mechanism of the loan guarantee to encourage more lending to certain sectors.

6. Also, firms themselves have tended to resist going public, for fear of losing control.
7. The implications of high debt/equity ratios also depend on profitability at the firm level: in an economy where profitability is higher and more secure the danger of economy-wide financial instability is less. The same applies to the implications of high debt/equity ratios for the relationship between banks and business.
8. Of the 500 largest (by sales) non-financial non-US companies in 1981, Taiwan had 2, South Korea 10, Japan 130 (Fortune 1982).
9. Using the percentage share of public enterprises in gross fixed capital formation (the only index for which information on many countries is readily available), Taiwan is in the top quintile of developing countries (in a sample of 51: Short 1983). In the period

1965-1980 Taiwan has averaged about 31 percent, Korea 23 percent, Japan 11 percent.

10. For an excellent account of Korea's overt and covert import controls see Luedde-Neurath, forthcoming.
11. Even if the amount of value-added from these sectors equals only 10 percent, say, of the total, this does not mean that protection to these sectors can be treated as quantitatively trivial in the overall picture. If there is, roughly speaking, a positive relationship between the government's selectivity with respect to promoted industries and the effectiveness of that promotion, one would expect effective intervention to go with a rather small share of total value-added.
12. See note 8.
13. See note 9.
14. In Hong Kong an unguided market produced roughly similar performance. Hong Kong, however, is the exception, not only because of its city-state size but also because its commercial firms have had ready access to British mercantile skills and connections over many decades.
15. In a wider treatment I would also emphasize the widely diffused entrepreneurial drive; the sheer will to do better, reinforcing, but independent of, the desire to become richer. That drive is related to the very high levels of education in the population at large. The education system emphasizes engineering and other technical subjects,

so much so that of the middle-income countries Taiwan has one of the highest number of engineers per 1,000 people employed in manufacturing; in Zymelman's 14 middle-income countries the average is 4.6, Taiwan has 8, only Singapore is higher with 10 (1980, using data from early to middle 1970s). Korea is not given.

16. A lot of Japanese intervention has been motivated by redistributivist objectives, though the overall balance is (in contrast to the US) clearly on the side of competitive production. There has been, not only in agriculture, a good deal of easing of decline by protection and subsidy. Showing some concern for the losers has had important political effects, reinforcing a sense of fairness which has gained support for the general thrust of growth and restructuring policies.
17. With respect to Latin America there are two alternative propositions: one, that even the planners made this assumption; two, that the planners (those using the CEPAL approach, for example) wanted to exercise selectivity in much the same way as the East Asians, but their principles were not translated into policies.
18. This proposition is well established for Japan, less well established for Korea, and still less well established for Taiwan, where information on recruitment to such agencies as the Council for Economic Planning and Development, the Industrial Development Bureau, and the Research and Development Evaluation Commission is almost wholly lacking.

19. This is based on data in Gastil 1973 and 1984, taking the middle income countries as those so classified in the World Development Report 1978 (World Bank 1978).

20. See note 16.

21. A comparative study of forms, scale and causes of corruption in these countries and other developing countries remains to be written. Corruption in parts of the civil service is common in Taiwan (e.g. public works, police, customs). My impression is that it is kept away from matters which are seen as important for national welfare (e.g. within the customs, it is concentrated away from imports of important export inputs); and takes the form of cost inflation for well-built public works, rather than sub-standard construction of properly priced public works. Compare Wade 1982, 1982a.

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