13

The Political Economy of Industrial Policy in Asia and Latin America

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Industrial policy—in the definition we adopt here—consists of sector- and industry-specific policies that aim to direct industrialization in line with some definition of the national interest. Whatever the broader national goals of development are, achieving them is more likely if industrialization achieves rapid productivity growth by absorbing and learning to use the best possible technologies. Indeed, sustaining productivity growth in line with international competitors is a fundamental condition for the sustainability of any industrialization strategy. In this chapter, we focus on some very specific problems of achieving and sustaining productivity growth in late developers as *one* of the conditions for a successful industrial policy. We draw a fundamental distinction between sustaining productivity growth in sectors that are *already* market competitive, where the role of industrial policy is limited to regulating the market to ensure sustained compulsions for productivity growth, or maintaining what the World Bank refers to as the 'investment climate,' and achieving rapid productivity growth in sectors or firms that are catching up to become market competitive *in the future,* for which policies target specific firms or sectors. We argue that for late developers, rapid catching-up with more advanced countries is the key. Merely sustaining market competition in the former role of industrial policy creates poor second-best conditions for ensuring rapid productivity growth, as the latter's policies, which accelerate the absorption and learning of advanced technologies, can deliver much more rapid development possibilities. To engage in this debate, we will refer to the non-targeted, investment climate type of industrial policy as 'weak' or 'horizontal' industrial policy and the type of industrial policy that

* The authors would like to thank Jonathan DiJohn for helpful comments on an earlier draft.

aims to accelerate technology acquisition and productivity growth in particular areas as 'strong' or 'targeted' industrial policy.

The case for horizontal or weak industrial policy is that if the state can create general conditions for investments to be secure and profits to be high, this will attract the most profitable technologies to the developing country. However, with current technological capacities, only low-technology and low value-added activities are profitable. Building up technological capacity can yield very high returns in the future but because the 'risk' of failure is uninsurable, private investors are unlikely to play a big role in making investments in learning at early stages of development. Rapid catching-up therefore requires strong industrial policy, described as *some* strategy of targeted technology acquisition that allows the follower country to catch up rapidly with leader countries. While technical progress is possible along the trajectory set by a market-driven strategy, the climb up the technology ladder is likely to be much slower than with an active technology acquisition and learning strategy.

An obstacle for strong industrial policy is that while there is a credible theoretical case for intervention in late developers to assist them to move rapidly up the technology ladder, the institutional and political problems raised are quite different from those faced by earlier developers. If non-market incentives are required for catching-up, the effective implementation of such strategies typically also requires institutional systems of compulsion to supplement the discipline imposed by the market. When states intervene in markets to assist technology acquisition, by definition, they create new incentives and opportunities, and the market on its own may well not suffice as a disciplining mechanism for the resources allocated by the state. The precise nature of the institutional compulsions required depends on the specific mechanisms through which the state attempts to accelerate technology acquisition and investment. The key point that we want to make is that the diversity of the Asian experience tells us that the *compatibility* of the institutional compulsions that industrial policy strategies require to be successful with the organization and structure of political power in that society may or may not allow the effective enforcement of the requisite strategy.

It is not surprising that the institutions required for weak industrial policy should be substantially different from those required for strong industrial policy. Further, the institutions that are appropriate for strong industrial policy can differ substantially between countries depending on the technology acquisition strategy. In principle, we can imagine a number of different strategies that could create both opportunities and compulsions for rapid and effective technology acquisition and learning. But not all strategies are likely to work in every country, and in some countries, the implementation of *any* strategy is likely to require other preconditions.

The strategy that is most likely to be effectively implemented and enforced in a country can depend amongst other things on its internal distribution of

organizational power. If the enforcement of critical conditions required for a particular strategy fails, sticking with industrial policy *may* deliver worse outcomes than abandoning it, even though failed attempts at industrial policy may have useful unintended consequences for building up technological capacity that may later be effective in market-based weak industrial policy strategies. This can explain why (i) many *different* strategies have apparently assisted industrial catching-up in East Asia, and (ii) some countries like India have done better by apparently abandoning strong industrial policy regimes. There is some evidence of a similar experience in Latin America, with some countries achieving growth in new sectors that already enjoy international comparative advantage.

This chapter primarily draws on the evidence from Asia, which provides a wide range of industrial sector policy experiences. Success stories such as South Korea and Taiwan are well known, but Asia also provides examples of moderately successful cases such as Malaysia, where foreign multinationals led industrial upgrading. Asia also provides the interesting example of India in recent years, where after a limited liberalization, high-technology sectors that had already achieved the *capacity* to attain international comparative advantage played an important role in driving economic growth, together with the low-technology sectors in which we would expect a country like India to have comparative advantage. There are also cases of moderate growth in Asia, such as Bangladesh where the abandonment of the industrial policy that patently failed in the sixties and seventies has been associated with growth led by low-technology sectors. The conventional interpretation of the Asian experiences by the World Bank and other international agencies has been to identify the successful industrial policy countries as cases of exceptional state capacity, not replicable elsewhere, and to treat the more moderate cases of growth as the norm, proving the efficacy of abandoning industrial policy and following comparative advantage. This interpretation has been a justification for economic reforms in the vast majority of developing countries that have not performed very well.

Our argument is that this interpretation fails to identify the importance of industrial policy in achieving rapid development in the successful Asian countries in a number of important respects. First, although the role of the state in the successful developers is increasingly recognized, the role of industrial policy in the successful developers is underplayed. Secondly, the distinctive feature of successful East Asian developers was *not* that they had exceptional state capacities that are not achievable anywhere else. Rather, the distinctive feature of the success stories was that the particular variant of industrial policy that each tried was *compatible* with internal power balances that allowed the state to create incentives and compulsions in critical areas. Thirdly, the policy conclusion that less successful countries should come away with is *not* how to abandon vestiges of their failed industrial policies at the fastest possible rate,

but to identify the type of industrial policy that is implementable in their particular context given critical internal and external political constraints. In many cases, the feasible industrial policy may yield less dramatic results than in the most spectacular of the Asian cases. In others, one must address some of the critical political constraints in order to allow implementation of even limited industrial policies. In both cases, the long-run results are likely to be better than if policy only attempted to create general market conditions for industrial growth using the good governance or good investment climate approaches.

The subsequent argument makes the following points. In the first section, we look at the central argument that makes state assistance so critical in late developers trying to catch up. While there are many reasons why the state has to play a role in the acquisition or development of technology, we only look at the simplest and yet most powerful one to develop our case. This is the problem of organizing learning-by-doing and the uninsurable risks that arise during this process. The second section discusses in similarly simple terms a number of different strategies of coordination and support that states in different Asian countries have used to promote catching-up. The third section looks at our core issue of the compatibility of the institutions of catching-up with the organization of political power and discusses a number of variants in different Asian countries and in Latin America that help to explain the very different experiences of a number of different Asian countries and the difference between them and Latin America. We argue that the coincidence of liberalization with a growth spurt in some Asian countries can be better explained by our alternative analysis that identifies some of the limits of the previous industrial policy regime in these countries. We also extend this analysis to Latin America and argue that the failure of import-substituting industrialization across Latin America, and the consequent liberalization policy shock led to a similar process of shifting to technologies that were already profitable given technical capacities as well as to widespread technological downgrading.

Catching up and the state

Catching up with advanced countries requires rapid and sustained *productivity growth*, which, this volume argues, depends on the creation of new technologies. Markets by themselves may have a role in better resource allocation, but are not sufficient to ensure that productivity growth will be rapid unless appropriate incentives and compulsions exist to induce the creation of new technologies or, in the case of developing countries, learning to use existing technologies effectively. It is possible to analyze these incentives and compulsions in terms of the existence and management of specific rents.

The existence of rents for innovation or to allow learning creates the incentives for particular activities, but we also require institutions that can manage these rents to ensure that they do not last for too long, and that non-performers do not succeed in retaining their rents. If these conditions hold, the appropriate rents and rent-management systems can ensure productivity growth through technological progress or learning (Khan, 2000a).

In late developers, the role of non-market institutions has been critical in explaining success. As mentioned in Cimoli et al. (2009), this volume, the historical evidence suggests that a market economy is necessary but not sufficient for rapid catching-up. If that is so, too much emphasis on developing the conditions for efficient markets can make us lose sight of the other institutional conditions critical for economic success. This is the problem with the focus on good governance and good investment climate conditions in developing countries, which focus primarily on creating conditions for investors exploiting existing comparative advantages. The puzzle for the market-driven view of growth is that England was *not* the area of the world with the most developed markets. Why did rapid productivity growth associated with modern capitalism first take off in England and not in China, India, the Middle East, or other parts of Europe, which at different times were more advanced than England in terms of markets and technology? Marxist historians in the West have put forward two sorts of explanations, and the divide between them is still relevant for understanding contemporary debates on the determinants of and obstacles to the transition to high-productivity economies in developing countries today.

The first explanation argued that capitalism was essentially the *freeing up of market opportunities,* with production growth accepted as an extension of the market economy (Dobb, 1946; Sweezy, 1950; and North, 1990). For instance, feudal obstacles to markets, such as barriers to labor, capital, and the free sale of land, were first overcome in the Western European transition to capitalism because internal and external factors weakened these feudal restrictions and allowed the market to grow. The modern neoclassical economics position, and indeed the US-led international policy consensus generally championing the spread of democracy as a precondition of development have roots here. The policy conclusion that follows is that if political, cultural, and institutional obstacles to competitive markets can be removed, economic growth will accelerate.

In contrast to this position, the argument more closely associated with Marx's own analysis points to the specific institutional conditions of early capitalism that ensured rapid productivity growth in England. The market had existed for thousands of years without leading to rapid productivity growth, so something much more special must have been involved in the relatively rapid growth associated with the development of English capitalism. Rapid productivity growth in England was associated with the emergence of a new system of property rights (a 'mode of production') that required the

imposition of a new structure of rights and institutions that *forced productivity growth* in England in a way that did not happen elsewhere.

If this view is correct, it has enormous significance for current debates on the institutional conditions for rapid productivity growth in developing countries. Dynamic economies are unlikely to emerge simply by removing obstacles to the market and trying to make markets more efficient. Rather, we have to ask what rights and institutions are necessary in the context of the contemporary world economy for rapid productivity growth, and we need to examine how these can be introduced. This perspective suggests that development involves a *social transformation* and opens up the possibility that far from market-enhancing strategies being sufficient, the state may have to play a leading role in organizing this social transformation.

Classical capitalism versus late development

Even if we agree that the establishment of capitalism in the early developers required important non-market processes, it is not clear that the property rights and institutions that were appropriate for the early developers are appropriate for late developers. In early developers' 'classical capitalism', the creation of a property-less class of workers and a class of asset owners competing amongst themselves to survive was sufficient to ensure relatively rapid productivity growth. A similar structure of rights in contemporary developing countries may not have the same effect, as developing countries must *catch up* to advanced countries with significantly higher productivity. A catching-up country under free trade would likely be stuck with low-technology production. Though developing countries have much lower wages, they also have much lower productivity in producing high-technology products, due to the absence of appropriate labor and management skills that their schools and universities cannot teach. These skills must be learned on the job, a process described by economists as learning-by-doing (Arrow, 1962; Khan, 2000a). This problem can condemn countries to very slow progress up the technology ladder.

The importance of learning is progressively less the lower the sophistication of the technology involved in production, and the wage advantage of the developing country is more likely to kick in for low-productivity technologies where the unit cost of production in developing countries is likely to be lower than with *potentially* high-productivity technologies. As a result, the developing country appears to have a 'comparative advantage' in producing low-technology products. The developmental state literature (White, 1988 and many others; Aoki, et al. 1997; Woo-Cumings, 1999) and case studies of countries such as South Korea (Amsden, 1989) and Taiwan (Wade, 1990) show that in this context, successful catching-up has required a range of institutions and interventions that are quite different from classical capitalism. The challenge

for late capitalism is to address the problem that competitiveness and pr uctivity are both a function of the technology embodied in capital equipme as well as social institutions that impose incentives and compulsions achieving rapid learning. If these institutions and the associated social co pulsions are missing, productivity could be low even with high-technolc machinery, and low wages by themselves will not attract investment. Hc ever, as we shall see, these incentives and compulsions can vary significan across countries, even if we look at the limited number of successful Asi developers of the last 50 years (Khan, 2000a).

These considerations mean that the social transformation in late develop is likely to be quite different from that of the early developers. Not only wo late developers have to organize a different type of primitive accumulation, take account of the fact that the scale and capital-intensity of high-productiv production was now much greater, they would also have to organize catchi up strategies to acquire high-productivity technologies that would eventua allow them to compete with advanced countries in high-wage industries. ' will see that this imposes new challenges to the state during the social tra formation required in late developers.

Strategies of catching up

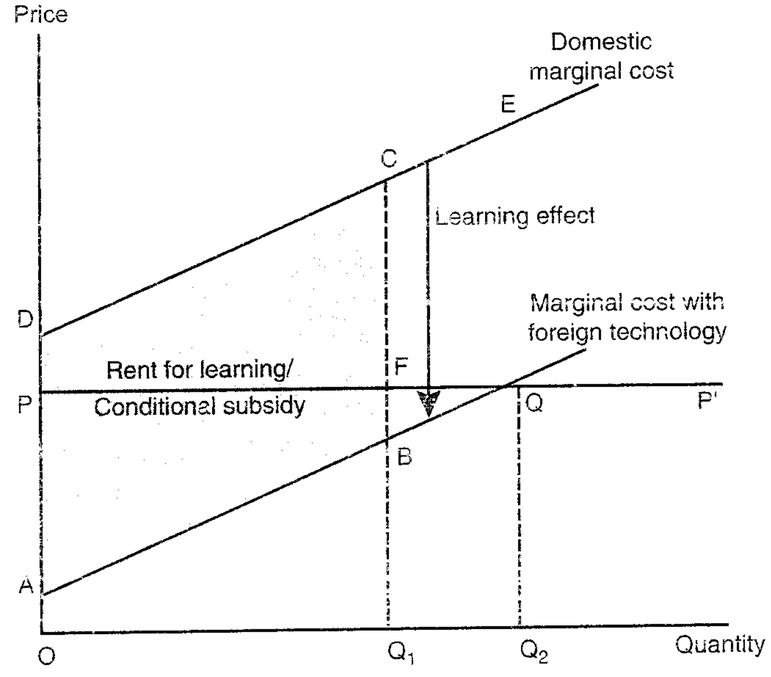
The conventional explanations of why some countries have been more s cessful in sustaining high-technology investments have focused on infrastr ture and education, but, though important, these aspects of industrial pol do not take us far enough. Investment in infrastructure must simply keep p with growth: countries such as Taiwan and South Korea in the sixties or Ch today faced persistent shortages of infrastructure but managed to keep inv ing at the appropriate pace. So, while infrastructure in general is importa pre-existing levels of infrastructure cannot fully explain why some count have been much faster in moving up the technology ladder. Similarly, wh education and skills can be a constraint in the long run, most develop countries in Asia have a surplus of skilled labor, and many even suffer fr the emigration of skilled workers, suggesting that the failure to attract n investment in these countries cannot be explained by shortages in skil labor.

Infrastructural and educational explanations miss a key factor that de mines whether high value-added industries will be successful. That is, *learn* to use high-technology machines, and setting up the internal and exter systems that are required to maximize productivity, *takes time*. This means t unless there is some institutional system that can create both the incenti and the compulsions for rapid learning to take place, investment in hi productivity sectors is likely to fail. Since private investors know this, t

are unlikely to invest in high-technology industries in a country that lacks the institutions that can induce and compel rapid learning.

The basic problem can be shown using the very simple diagram shown in Figure 13.1. It shows that domestic productivity in the developing country is initially so low, that if it imports the potentially high-productivity foreign technology, it can initially have *higher* domestic marginal costs (line DCE) than the international price PP' set by marginal costs in the advanced country. But this is only because productivity is low because of the absence of learning, not because it is permanently going to be low. Given the lower wages in the developing country, if the advanced technology was used at even a fraction of the productivity achieved in advanced countries, domestic marginal cost could fall to ABQ, allowing the developing country to compete in international markets. How does the developing country overcome this hurdle? The simplest way to acquire the learning is the classical infant industry strategy of providing a conditional subsidy or 'learning rent' for a fixed period, with the condition that the subsidy will be withdrawn at the end of the period, or even earlier if performance is poor. In our diagram, a subsidy of ABCD to the domestic industry allows it to produce OQ_1 of output.

This subsidy need not be a direct financial transfer but could be a combination of hidden benefits that allows the new industry to start 'learning-by-doing'.



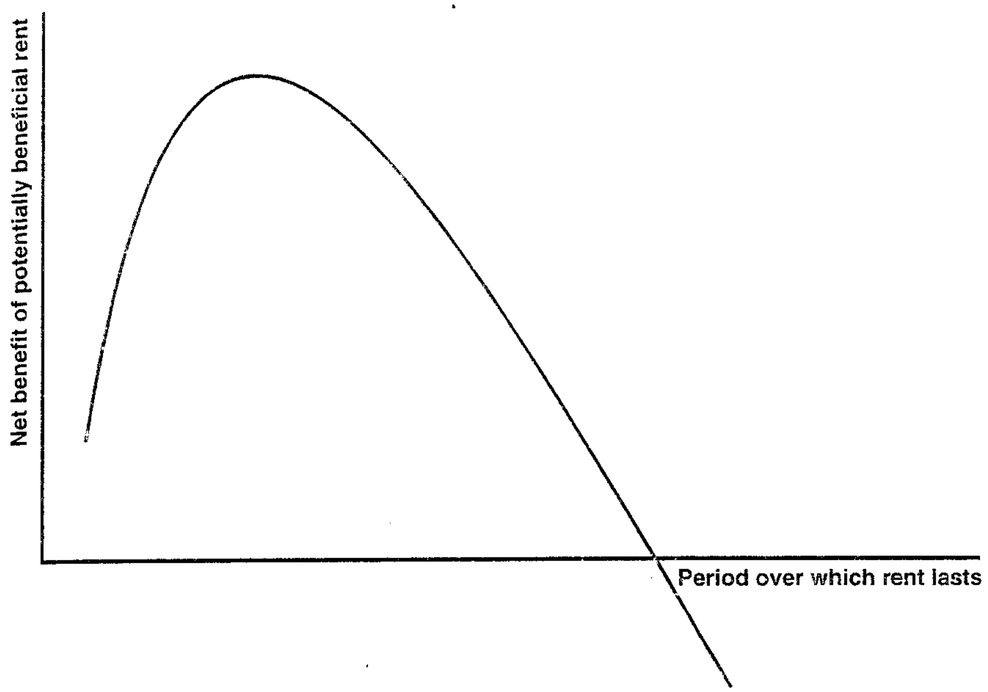
Source: (Khan 2000a: Figure 1.8).

Figure 13.1. Conditional subsidies and rents for learning

If learning can be successfully induced, marginal cost can be reduced t advanced-country level or even below, given the wage advantage of the c oping country. But in the short run, these strategies have a cost, because allow static inefficiency by allowing a loss-making industry to survive. short-run cost will only be worthwhile if the subsidy or benefits provid allow learning actually succeed in generating long-term productivity gr and the country can enjoy higher living standards as a result. In fact, developing countries that attempted these strategies in the past failed to ac this productivity growth, and their infant industry strategies ultimately fa But a few did succeed, and these countries graduated to become the n industrializing countries especially of East Asia.

The widespread failure of developing countries to catch up with advar countries is at least partly attributable to the failure of their institution compel productivity growth in learning industries, which requires instituti that can manage provided rents and provide credible compulsions and co tions for rapid learning. Thus, the institutions for inducing learning must b provide the incentives for learning and have the credibility to impose c and sanctions on industries and firms that fail to achieve the required rat learning. If the state does not have the credibility to withdraw a subsidy w there is underperformance, there will be a short-run cost as well as a perm ent cost, because infant industries will never grow up. These conditions particularly demanding because the optimal period of rent allocation learning will vary from sector to sector, and across countries depending the initial capacities of capitalists, managers, and workers.

Figure 13.2 shows that a conceptually optimal period of rent allocati exists for any particular sector and country, but for state institutions to d cover this through trial and error requires fairly demanding conditions. C ical conditions for success include a capacity of the state pragmatically *monitor* and make judgments about performance, and the capacity to *realloc the subsidies and assets* of non-performers. Inevitably, mistakes are likely to made, even in the most dynamic countries, but fortunately, all that we requ is that state institutions can learn from their mistakes and rapidly corre them. But this in turn requires critical *political capacities*; in particular, t organization of power in society must be compatible with the rent manag ment that state institutions are trying to implement. Otherwise, rent realloc tions are likely to be blocked by groups or factions that would lose out fro such reallocations, and if this happens frequently enough, the optimal ren allocation targets are not going to be discovered by any form of trial and erro However, direct subsidies to infant industries have not always been the rout through which late developers have climbed up the technology ladder. Asia countries have used a number of other mechanisms to direct rents to high technology industries to ensure rapid progress up the technology ladder, an in each case, success has required appropriate institutions to manage thes



Source: based on (Khan 2000a: Figure 1.7).

Figure 13.2. Rent-management with learning rents

rents, and a corresponding political settlement that allowed this management to be implemented. For example, in the Taiwanese case, state involvement in technology included licensing from abroad, with the state paying for some of the overhead costs of technology acquisition and providing licensed technology to domestic producers at a lower cost. The rent management required in this case was the ability to reallocate licenses and to ensure that the search for technologies driven by the public sector did not get captured by specific interests in manufacturing. A combination of political factors allowed the Taiwanese state to achieve this rent management, as outlined in Wade (1990), and discussed further below. In Malaysia, technology acquisition depended to a significant degree on attracting high-technology multinationals as well as the credibility of the state in providing rents that were implicitly conditional on technology transfer. In this case, rents were available to high-technology foreign investors, but conditional on their ability to bring in superior technologies not otherwise available. The mechanisms through which rents were offered involved prioritization in infrastructure provision, the subsidization of training, and the protection of multinational profits by ensuring that redistributive demands within the country would be satisfied without affecting multinational profits (Jomo and Edwards, 1993; Khan, 2000b).

With the advent of the WTO, organizing direct subsidies to infant industries will be more difficult in the future. Therefore, indirect subsidies, and other benefits for learning industries, and industries bringing in high value-added technologies must be considered. Even industries in advanced countries receive massive implicit subsidies in the form of differential taxation, prioritized infrastructure provision, public subsidies that provide them with an educated and healthy workforce.

States possessing the capacity to manage the rents that are involved in the learning process will inevitably appear different from states whose capacity is limited to maintaining the horizontal competitiveness of markets. In the next section, we will examine some of the diverse ways in which states have managed learning rents during the catching-up period in successful late developers. Here, we present some evidence showing that the crude cross-country data do not support the hypothesis that economic growth in developing countries has been dependent on the achievement of a good investment climate defined by stable property rights, a good rule of law, low corruption, and low expropriation risk. These variables are summarized in Knack and Keefer's consolidated property rights index. Plotting this crudely against the economic growth rates of countries for the 1980s and 1990s (in Figures 13.3 and 13.4) shows that the advocated positive relationship is based on a misreading of the data. While there is a positive relationship when we pool all countries, a closer look at developing countries shows that rapidly growing (converging) and less rapidly growing (diverging) developing countries both

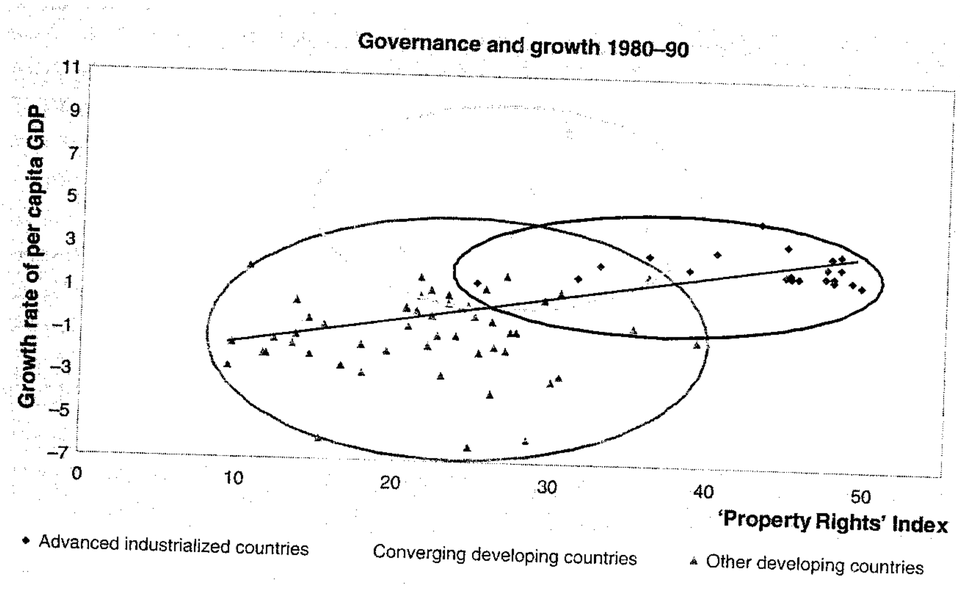


Figure 13.3. The weakness of investment climate explanations of growth 1980–90

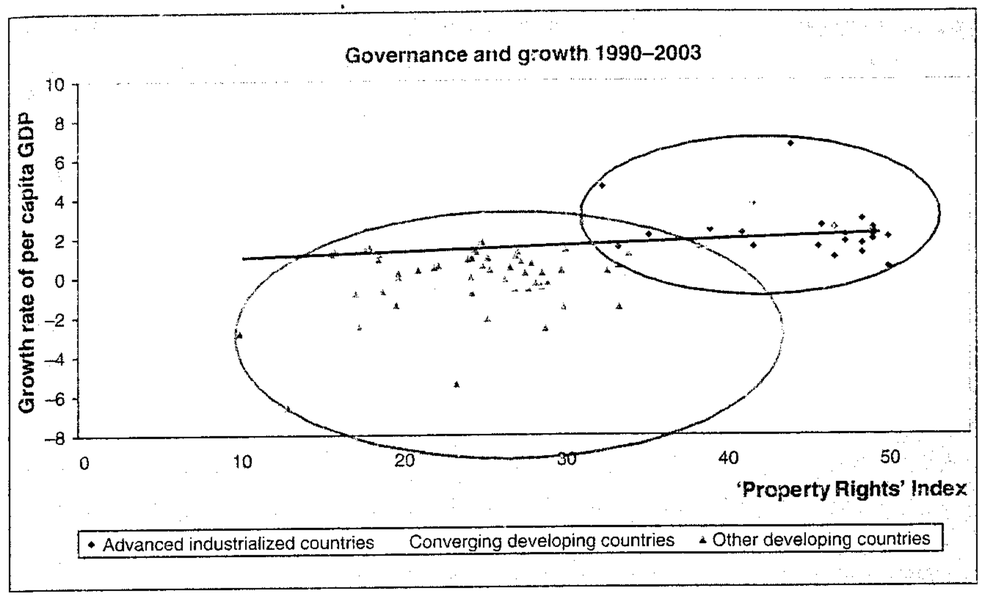


Figure 13.4. The weakness of investment climate explanations of growth 1990–2003

display an almost identical range of variation in terms of their investment climate defined in the conventional way. However, because the number of countries in the converging group was typically smaller, the regression line appears to have a positive slope, even though the goodness of fit is typically very weak (cf. Figure 13.3 and 13.4). The lesson to be learned here is not that investment conditions defined in the conventional sense are unimportant, but rather that rapidly growing countries had institutional capacities for catching up that are not captured in the conventional theoretical models.

Identifying and developing rent-management capacities on a country-by-country basis must be a critical part of any moves towards setting up a developmental state that can organize a strategy for catching up. It follows that assisting developing countries to develop appropriate rent-management capacities can be an important way to help raise living standards more rapidly. While developing countries are often advised to let the market take its course, it is worth noting that rent-management capacities are recognized as extremely important in advanced countries. When the US courts considered whether to allow Microsoft to continue making monopoly profits or to break it up, regulators effectively considered the effects of Microsoft's rents on its rate of innovation and that of its competitors. These are sophisticated state capacities, and while mistakes are occasionally made, advanced countries do not rely on the market alone to ensure rapid innovation and productivity growth. The need for state rent-management capacities is if anything even greater in developing countries. Here the challenge is not the acceleration

of innovation but rather the acceleration of learning. However, as in advanced countries, states in developing countries have rent-management systems of varying capacity, and these determine the likelihood of making mistakes and the likelihood of timely rectification. Of course, developing country states can make mistakes, and past interventionist attempts have often gone wrong. However, it does not follow that developing countries should therefore abandon the development of rent-management capacities and rely on the market.

The compatibility of rent-management institutions and political settlements

Our core argument is that managing rents for technology acquisition is not just constrained by state capacities, but also and often primarily by political constraints that prevent specific strategies of rent management from being implemented. The complexity here is that a number of quite different strategies of rent management can be observed in the Asian context, and we argue that this explains why a group of countries with quite different internal political configurations have performed well. Our explanation for this is that while their internal political configurations were different, each of these configurations allowed the effective implementation of different and quite specific strategies of rent management for technology acquisition. At the same time, other Asian countries did far worse when they tried to implement rent-management strategies that were superficially similar to the strategies in one or other of the successful countries, but these strategies were in fact incompatible with their specific internal political configurations. In these cases, which were more numerous, the rents intended to create incentives for technology acquisition became damaging rents that in some cases were much worse in their effect than if they had never been created.

We would like to emphasize an advantage of looking at industrial policy through the lens of rent management: while some rents are critical for enhancing growth prospects in developing countries, others are very damaging (Khan 2000a provides a discussion of different types of rents). From a policy perspective, potentially growth-enhancing rents can become growth reducing if the rent-management capacities of the state are missing. For instance, potentially dynamic infant industry subsidies can become growth reducing for the economy if they are allocated without proper conditions and without the state capacity to monitor and withdraw subsidies in underperforming industries. The configuration of rights and powers that enables emerging capitalism in a developing country to catch up with that in advanced countries is in our view the modern equivalent of the system of compulsion that was created for early capitalism by the distribution of property rights brought

about by the primitive accumulation described by Wood (2002). Our argument is that the additional institutional conditions for compulsion, the rent-management strategies discussed earlier and necessary in late developers, can themselves vary significantly given different internal political configurations of power, and their relative success depends on the 'compatibility' of these institutions with these pre-existing distributions of power.

Table 13.1 points out that when we look at the difference between more and less successful examples of learning rents, the critical differences lie in the rent-management capacities of the state. The same is true of redistributive rents, the transfers and subsidies that maintain political stability in all countries. If transfers and subsidies to redistribute incomes are managed well by the state, the result is political stability. If they multiply out of control, the result can be economic stagnation. This too is obvious, but it is often not recognized that effective rent-management capacities are critical for the success of the social transformation that developing countries are experiencing.

Following this framework, we examine actual rent-management strategies in different Asian countries and we look for the institutional and political conditions that allowed the effective implementation of the specific strategy. Conversely, in countries where technological upgrading was relatively much slower, we look at the attempted rent-management strategies and the specific institutional and political capacities that may have prevented the proper implementation of the strategy. This is particularly useful when the rent-management strategies in the successful and less successful countries were superficially quite similar.

Table 13.1. Rents and corresponding rent-management capacities

Type of rent	Rent-management	Economic outcome
Monopoly rent	Created in response to special interest group pressure	Negative
Successful learning rents (infant industry subsidies, prioritization of infrastructure, temporary monopolies)	Benefits conditional on performance, institutional and political capacity for monitoring and rent-withdrawal	Very positive
Failed learning rents	Powerful groups can protect rents, state lacks capacity independently to allocate rents, or monitor or withdraw rents from underperforming enterprises	Very negative
Viable redistributive rents	Extent of redistribution effectively controlled, lobbying for these rents kept separate from management of learning rents	Mildly negative but positive if benefit of political stability included
Damaging redistributive rents	Growing redistribution, unstable coalitions, redistributive coalitions protect inefficient learning rents	Very negative

South and East Asia—diverse industrialization experiences

SOUTH KOREA 1960s TO 1980s

In the South Korean case, technological catching-up was led by large holding companies, the chaebol, who were given various forms of protection and subsidies to allow them to engage in learning and thereby catch up with advanced countries. In a sense, this was the classic infant industry strategy. For this system of rent allocation to work, the state had to operate a rent-management system that involved the setting of export and other performance targets, and making pragmatic judgments about performance based on observed results. The success of the South Korean rent-management system depended critically on a balance of power between the chaebol and the state that prevented inefficient firms from protecting their subsidies if the state decided to withdraw them. The absence of social factions such as the intermediate class factions observed in South Asia or factions led by the landed elites denied the chaebol the opportunity of offering to share rents with powerful social forces in exchange for their support in protecting inefficient rents (Kohli, 1994; Woo-Cumings, 1997; Khan, 1998, 1999). The state on the other hand had no incentive to support inefficient capitalists because it could get bigger economic benefits (and kickbacks) by supporting the dynamic capitalists and weeding out the less dynamic ones (Amsden, 1989; Khan, 2000b). This route of social and economic transformation would be difficult to replicate in many contemporary developing countries where capitalists can easily buy themselves political protection by paying factions within or outside the state to protect their inefficient rents even if other state agencies try to remove them. Moreover, explicit subsidies to large companies like the chaebol would be difficult to organize in the contemporary consensus against explicit subsidies, supported by the WTO and other organizations. Thus, far from being the paradigmatic case of industrial policy, the South Korean success was based on rather unusual conditions. It depended on the compatibility of a specific rent-management strategy with an internal distribution of factional power within the groups that could potentially have offered to make alliances with individual capitalists in exchange for a share of the rents they were getting from the state.

MALAYSIA 1970s TO 1990s

In the Malaysian case, technology acquisition was accelerated by providing incentives for high-technology multinational companies to invest in Malaysia and provide backward linkages to domestic producers. In stark contrast to the experience of many other developing countries, the multinationals that came to Malaysia were mainly high-technology companies. This was not an accident. Malaysia was offering incentives that most developing countries would find very difficult to offer, and even more difficult to manage with credibility

without multinationals free-riding on the hidden subsidies and failing to bring in and transfer advanced technologies. The incentives the Malaysians offered took the form of prioritized provision of infrastructure to suit the needs of foreign investors, and the credible protection of foreign investors from internal redistributive demands. The latter was particularly important because Malaysia's internal redistributive needs were entirely met by taxing domestic capitalists. The political arrangements that were arrived at in the early seventies through the National Front government credibly resolved Malaysia's internal redistributive conflicts through internal redistribution. Investors could easily perceive that Malaysia's claim that multinational rents and profits would be protected was a credible promise. Contrast this with the unstable political situation in most developing countries and we can easily see why the typical developing country would not have any bargaining power with multinationals over the type of technology they were offering to bring in. It is not surprising that multinationals in the typical developing country bring in mundane technologies to produce relatively low-quality consumer goods for the domestic market. These technologies offer rapid cost recovery and expose the multinational to the lowest degree of political risk from large sunk costs and lengthy local learning horizons. But equally, for such a strategy to work and for multinationals actually to deliver, the state would also have to have a credible threat of withdrawing privileges from specific companies that failed to meet expectations. The centralized organization of UMNO, the dominant political party in Malaysia, prevented the construction of alliances between particular multinationals and factions within the state whose support could be purchased to protect low-technology investments. These Malaysian conditions were similar to the credible threat that the equally centralized KMT could use in Taiwan in the 1950s to ensure that foreign partners in joint ventures did not free ride on the incentives provided by the state (Wade, 1988). The Malaysian state also ensured that domestic learning would take place by insisting on technology transfer to subcontractors and on local content. But in the end, the Malaysian state could do all this because the platform that Malaysia offered to multinationals was much better than that offered by most of its competitors. Thus Malaysian success too was based on very specific political conditions that a) allowed multinationals to be offered very attractive incentives; b) credibly protected them from internal redistributive threats; c) prevented them from free-riding. These conditions included the isolation of the predominantly ethnic Chinese capitalists in the domestic society who could be taxed to maintain domestic political stability and who could then be rewarded by ensuring their participation in the backward and forward linkages opened up by multinational investment. At the same time, the centralized organization of the politically dominant intermediate classes ensured that rent allocation to multinationals could be managed without descending into wasteful and unnecessary transfers to foreigners without

any technological payback (Jomo and Edwards, 1993; Khan, 2000b). Clearly, it may be difficult for other countries to repeat the Malaysian experience without internal political conditions that allow them to achieve similar things.

TAIWAN 1950s TO 1980s

In the Taiwanese case, an important element of technological progress was the rapid acquisition of advanced technologies by small-scale industries in the private sector. This was driven by a very specific rent-management strategy that deployed the state to acquire high-productivity technologies through state-led technology licensing and subsidizing the provision of this technology to the private sector. At the same time, key intermediate inputs were provided to the private sector through a well-run and efficient public sector. The rent management involved here was in the coordination of acquiring the most appropriate technologies. Once these technologies were made available to the private sector, learning was enforced by ensuring that a relatively large number of firms in the private sector would have access to these technologies, and competition would favor the firms that were better at raising productivity rapidly through learning (Wade, 1990). For this rent-management system to work, the state needed to be able to distance itself institutionally and politically from a competitive private sector, so that rent-seeking by individual firms within this sector did not affect state decisions on technology policy. This too can be difficult to repeat in other countries where the state is not artificially separated from the private sector as it was in Taiwan. Because of historical accidents, the Taiwanese state was led largely by mainland Chinese following their expulsion from mainland China in 1949 and the business sector was composed largely of local Taiwanese. This political distance proved to be very useful in operating this rent-management system because local business interests could not influence state-led technology acquisition to favor particular groups at the expense of national interests, nor could any group use political power to acquire monopoly power in the domestic market. At the same time, the centralized organization of the KMT and the ability of the leadership to override all internal factions (in a context of martial law throughout this period) prevented coalitions from protecting inefficient capitalists or public-sector enterprises.

INDIA 1950s TO 1980

The Nehruvian strategy of catching-up through licensing investments in the private sector, the provision of implicit subsidies to key sectors through protection and subsidized inputs, and technology acquisition driven by significant investments in the public sector had elements of many of the strategies followed in East Asia. Yet the results of the Indian experiment were far less significant in terms of growth of output and productivity, and the attempt was

almost entirely abandoned in 1991. But a decade or more before that, the licensing system had effectively collapsed. From 1980 onwards, Indian growth took off led by niche private-sector activities that began to exploit the capacities built up by Indian industrial policy in ways that the industrial policy regime itself could not achieve. If we look at the period prior to 1980, the lackluster results of the Indian strategy can largely be explained in terms of a failure of rent management by the Indian state. Despite the Indian state being aware of its failure at least as early as the mid-sixties (as the Dutt Committee that reported in 1968 outlined in detail), licenses were being used by big business groups to acquire monopoly power and excess capacity, and attempts to reallocate licenses were consistently failing. In addition, in the public sector, subsidies were effectively captured by privileged managers and workers as redistributive rents rather than serving as learning rents that could accelerate catching-up. Ultimately, domestic consumers paid the price by being forced to buy relatively low-quality products in protected domestic markets. A number of political factors in India made these rent-management strategies unworkable. First, business groups in India could rapidly acquire autonomous political power by forming alliances with any of the many numerous political factions that dominated the Indian political process. The availability of a large number of possible protectors of inefficient rents in India in turn reflected the fragmented nature of the intermediate class factions, and their availability for protecting and capturing rents that they saw as redistributive rents. The failure to construct disciplined national organizations that could separate learning rents from redistributive rents is the immediate manifestation of the fragmented clientelism that characterizes Indian politics (Khan, 1998, 2000b). A similar linkup of public-sector employees with broader political factions made restructuring of the public sector just as difficult. Thus while the Nehruvian system was very effective in building up a base of heavy industries and human capital to service these sectors, it failed to generate rapid productivity growth and quality improvements that could have made this industrial policy system viable.

BANGLADESH AND PAKISTAN 1960 TO 1970

Pakistan and Bangladesh provide an example of a somewhat different South Asian rent-management strategy in the sixties that was superficially closer to the South Korean system. But once again, the problem was that this rent-management system was incompatible with the internal power balances that eventually made it impossible to discipline non-performers. In the end, this industrial policy strategy also proved to be unsustainable. The institutional strategy consisted of a combination of import barriers and directed subsidies to a small number of big business groups with an explicit aim of acquiring technology rapidly and turning the Pakistan economy (which included

Bangladesh at that time) into an export-oriented one. Initially, the Pakistan economy was a star performer in the early sixties, with growth rates of output and exports matching those of the East Asian economies. But once the easy import substitution was over and pressure had to be created on the new industrialists to improve productivity and quality, the system ran into trouble. The Pakistani state discovered, like the Indian one, that subsidy recipients in industry had formed alliances with politically powerful factions and reallocations of resources were not possible. This was despite the fact that Pakistan was at that time formally a dictatorship (Khan, 1998, 1999, 2000b). Nevertheless, the power of factions led by the intermediate classes could not be overridden, particularly as these factions began to challenge the pro-capitalist strategy of the state by mobilizing broad social groups on ideologies of socialist populism in both East and West Pakistan. Rational capitalists could not but form mutually beneficial alliances with particular factions whereby the capitalist and the faction shared the state-created rent, and the faction protected the capitalist from rent reallocation even though learning and productivity growth was not proceeding according to plan.

INDIA AND BANGLADESH AFTER 1980

While the Indian subcontinent struggled with industrial policies, their implementation and efficacy became increasingly compromised. A series of reforms began in the subcontinental countries that proceeded along different routes towards liberalization. In India, the process formally took off only after the 1991 balance of payments crisis, which was seized on by the reformist Rao government to push through a gradual reduction of the scope of licensing and a gradual reduction of tariff protection. However, India's growth had already taken off around 1980 *before* much of these relatively minor changes had been announced. This, together with the fact that the scope of the liberalization was relatively minor, and could not explain the significant acceleration in growth that had taken place, led economists to suggest that the most important factor was the change in the policy stance of the state. The collapse of industrial policy by the early eighties and the growing number of policy statements in favor of the private sector apparently created new confidence and animal spirits that could explain the acceleration of private investment that triggered the growth spurt (Rodrik and Subramanian, 2004). As Rodrik (2004) later also points out, this is an incomplete explanation because it ignores the capacities that were built up during the industrial policy stage that private entrepreneurs were later to exploit when market opportunities emerged. Thus, India's global comparative advantage in outsourcing, software, and in some sectors of generic pharmaceuticals did not just emerge overnight once licensing disappeared. Rather, these critical capacities had been built up precisely during the industrial policy period. But, the licensing

stem, while it failed to provide compulsions for productivity growth across e economy, inadvertently also prevented sectors that had acquired some pacity from taking off under private initiative. Liberalization, or rather the llapse of the licensing system that preceded it, thus worked by allowing iches of capacity to take off even while the overall industrial policy structure ad failed.

To a lesser extent, a similar story was unfolding in neighboring Bangladesh. ere the industrial policy regime initiated by Pakistan had collapsed as early as 971. There followed an interlude of socialist populism that led to a deepening f the crisis as the dominant clientelist factions sought to capture rents by ationalizing the entire manufacturing sector. Liberalization began under nilitary governments, in this case through privatizations and a gradual cutting back of tariff protection as in the Indian case. As in India, the growth spurt hat began in Bangladesh in the 1980s was driven by the private sector developping new niche markets. In this case, given the much lower levels of industrial capacity that had been built up during the industrial policy period, the drivers of growth were low-technology sectors like garments, cosmetics, and pharmaceuticals aimed at the domestic market and low-technology primary-sector exports like shrimps. Despite the very vulnerable technological base of the new growth, a decade of rampant primitive accumulation had resulted in the growth of a broad-based emerging small capitalist sector, and these new capitalists have been driving a bottom-up variant of capitalism that has produced growth without rapid technology acquisition.

The preceding analysis has some important implications for the analysis of the liberalization-led growth in India and to a lesser extent in Bangladesh. Rodrik (2004) rightly points out that Indian growth in particular cannot be understood without factoring in the capacities that were built up during the industrial policy phase. However, our analysis suggests that it would be wrong to interpret this as an indication of the success of Indian industrial policy. It is exactly the reverse. The failure of the industrial policy regime to sustain itself meant that capacities were built up that could not be utilized, and it was the collapse of the industrial policy regime that has allowed the exploitation of these capacities in new niche activities. University graduates staffing call centers are the most dramatic indicators of the potential waste that has now become manifest. But more serious is the fact that with the withdrawal of state strategies of subsidizing potential high-productivity sectors, the growth of future capacity is now highly vulnerable. This does not mean that Indian growth is doomed to decline. If growth continues rapidly in such a large economy, multinational-led technology transfer could begin, and could sustain growth in the foreseeable future. But growth could have been even higher and more broadly based if a viable industrial policy could have been implemented. The policy challenge is to identify the sources of industrial policy failure in countries like India and to devise technology acquisition strategies

that are compatible with pre-existing political configurations. Alternatively, such an analysis can also open up domestic political debates about how to change political configurations through political activity (as in Malaysia in the late seventies) that may then allow the implementation of other variants of accelerated technology acquisition strategies.

The Asian experience thus provides a range of institutional approaches to industrial policy as well as quite different outcomes. We have tried to make sense of these outcomes by looking at the compatibility of the rent management required under each of these strategies with the evolving political configuration of each country. The relative power of different groups and factions that could intervene in the effective implementation of industrial policy explains for us much of the variance in both industrial policy approaches and their relative success. Some of the important points discussed above are summarized in Table 13.3.

Latin America—a resounding failure?

Unfavorable comparisons of the Latin American industrialization experience with that of East Asia are commonplace (e.g. Chan, 1987; Lin, 1988; Fishlow, 1989; Gereffi, 1989; Gereffi and Wyman, 1990; Harberger, 1988; Jenkins, 1991; Palma, 2004; Ranis and Orrock, 1985; UNCTAD Trade and Development Report 2003). This is not surprising: With the exception of Ecuador and Paraguay that did not begin to industrialize until the late 1960s, Latin America embarked on industrialization many decades before the East Asian NICs. Yet, despite initial successes that saw some of the core countries, such as Brazil and Mexico, forge ahead of the East Asian NICs in the 1960s and into the 1970s, the pace of Latin American industrialization has now fallen far behind the few successful East Asian cases of catching-up. If, between 1945 and 1980, Latin American GDP grew on average at 5.6 percent per annum, and its manufacturing output at 6.8 percent per annum, (Cárdenas, Ocampo, and Thorp, 2000; Haber, 2005), the picture has changed drastically ever since. In the last two decades of the twentieth century, manufacturing value added grew by 9.1 percent in East Asia, 6.5 percent in South Asia, 4.8 percent in the Middle East and North Africa, 1.7 percent in sub-Saharan Africa, and 1.4 percent in Latin America and the Caribbean.

Table 13.2 summarizes basic comparative indicators of growth and productivity performance in the two regions.

Even a cursory glance at the data suggests that Latin America experienced a rupture in its industrialization process in the early 1980s, precisely at a time at which the East Asian NICs managed to transform their initial catching-up efforts into a dynamic and sustainable process of capitalist expansion and development. As Weisbrot notes, '[t]o find a growth performance in Latin America that is even close to the failure of the last 25 years, one has to go

Table 13.2. GDP per capita and per worker relative to the US, gross fixed capital formation in East Asia and Latin America 1960–2004

	Proportion of US GDP per capita (current international $)			Proportion of US output per worker (constant 1996 prices)			Gross fixed capital formation (average growth rates, constant 2000 US $)	
	1960	1980	2000	1960	1980	2000	1965–1980	1981–2004
East Asia								
Hong Kong	0.23	0.58	0.78	0.19	0.46	0.80	6.9	3.8
Singapore	0.17	0.50	0.80	0.21	0.56	0.67[1)]	14.2	4.8
Malaysia	0.19	0.24	0.26	0.20	0.28	0.43	11.5	5.1
South Korea	0.12	0.22	0.42	0.15	0.28	0.57	17.9	8.0
Taiwan	0.11	0.27	0.55	0.13	0.32	0.60[2)]	n/a	n/a
Thailand	0.09	0.13	0.19	0.07	0.12	0.20	9.6	4.7
China	0.05	0.05	0.11	0.04	0.04	0.09	8.9	12.2
Philippines	0.17	0.15	0.11	0.17	0.20	0.13	7.9	1.3
Latin America								
Argentina	0.60	0.50	0.33	0.62	0.66	0.40	5.1	0.5
Uruguay	0.46	0.36	0.29	0.48	0.46	0.38	8.4	−2.7
Venezuela	0.35	0.39	0.20	0.83	0.55	0.27	4.9	0.7
Mexico	0.33	0.38	0.27	0.44	0.54	0.38	9.4	1.2
Chile	0.31	0.26	0.29	0.38	0.36	0.39	2.4	4.3
Peru	0.26	0.24	0.13	0.33	0.36	0.16	3.6	1.0
Brazil	0.19	0.30	0.22	0.24	0.39	0.30	6.4	0.7
Colombia	0.19	0.20	0.16	0.27	0.31	0.18	[12.9]*)	[4.6]*)
Paraguay	0.15	0.20	0.13	0.24	0.31	0.16	14.2	−1.8
Bolivia	0.17	0.15	0.08	0.22	0.22	0.10	2.1	2.1
.Ecuador	0.17	0.22	0.14	0.20	0.32	0.17	8.4	0.3

[1)] Most recent figures from 1996, [2)] 1998; [*)] Figures for Colombia in current US $.

Sources: Calculations from Alan Heston, Robert Summer, and Bettina Aten, Penn World Tables Version 6.1., Centre for International Comparisons at the University of Pennsylvania (CICUP), October 2002 and from World Development Indicators, World Bank, April 2006.

back more than a century, and choose a 25-year period that includes both World War I and the Great Depression' (2006: 2).

This rupture has mostly been attributed to two main factors: first, heterodox and orthodox economists alike criticized the process of heavy (or second-stage) import-substituting industrialization in core Latin American countries, mostly initiated in the 1960s, for having created undesirable and unsustainable macroeconomic imbalances. The mostly heterodox Latin American critics of *cepalismo*—the industrialization strategy advocated by Prebisch and CEPAL (Comisión Económica para America Latina) at the time—scrutinized what they regarded as a distorted and dependant pattern of industrial growth resulting from an incomplete or wrong-headed industrial strategy. *Dependistas* and nationalists alike lamented the bias of industrial development towards the capital-intensive production of consumer durables, underpinning and entrenching inequitable consumption patterns, and the increasing domination of manufacturing by foreign TNCs. The latter were seen not only to

siphon off profits freely to their advanced home economies, but also increasingly to expand their activities downstream into the production of wage goods in competition with already hard-pressed domestic producers, rather than to have their technological potential leveraged in favor of the formation of viable national capital good sectors (e.g. Colin, 2004). In addition, both heterodox and (neo-) liberal commentators grew increasingly worried about the monetary and balance of payment crises associated with the second phase of Latin American import-substituting industrialization policies (Cardoso and Fishlow, 1992). Differently from their heterodox colleagues, neo-liberals attributed these latter distortions not to mistakes and imbalances in the chosen industrial strategies, but to the very existence of any such strategy: *cepalismo* had been mistaken in its pessimism about the limited developmental potential of world trade that had grown rapidly after World War II, and Latin America was paying the price for having tampered with free markets through excessive over-regulation and ineffective protectionism, engendering unproductive rent-seeking, corruption, and macroeconomic instability.

Second, external factors are widely regarded to have played a crucial role in the difficulties and decline of the Latin American industrialization experience (e.g. Singh, 1993). Other than much of continental Western Europe after World War II, and East Asia—especially South Korea and Taiwan—in the 1950s and 1960s, Latin America never collected any windfall Cold War funding or soft loans from the US. Quite the contrary—what US-based funding went to Latin America systematically served to undermine the kind of structural changes, such as thorough land reforms, that were essential to successful transformations in East Asia (Kay, 2002). Nor were advanced economies prepared or in a position, in the 1940s, to grant the same market access to light-manufacturing consumer products from Latin America that, two decades later, they provided for very similar export products from what were to become the East Asian NICs.

It is true that had the timing of the Latin American industrialization process been different, and had Latin America occupied a geostrategic frontier position in the Cold War rather than constituting the 'backyard' of the anti-communist US, we might perceivably now be contemplating a success story rather than pondering over the reasons for failure. Similarly, the internal criticisms of the path of forced industrialization in much of Latin America in the post-World War II period certainly pinpointed important problems.

Even so, these observations leave a number of pertinent questions unanswered: Why, for example, have Latin American economies been unable to mobilize their resources under *any policy and political regime* to the same extent as their East Asian counterparts? As is well known, the prolonged and certainly varied Latin American industrialization experience has been characterized by much lower savings rates than in East Asia (Gavin, Hausmann, and Talvi, 1997): the average Latin American savings rate in the period 1960–2005

peaked at 22.5 percent in 1977, compared to performances of 35 percent and above since the early 1980s in the first-tier East Asian NICs, and since the mid 1990s in the second-tier East Asian NICs, such as Malaysia and Thailand.[1] Yet, at one time or another, the majority of Latin American economies adopted very similar industrialization policies to those that played out so favorably in the East Asian NICs: vertical policies to select strategic targets (winners) and concomitant nationalizations, high import tariffs followed by import licensing regimes, a supplementary arsenal of supporting policies including selective and subsidized credit access, tax exemptions, favorable access to foreign exchange, regulations on national content requirements, stimulation of technology transfer and complementary FDI, and export subsidies. If the heterodox critiques of *cepalismo* are correct, and this produced a distorted and dependent pattern of industrial growth, why did the same policies produce such a different outcome in Latin America compared to East Asia? If, on the other hand, liberalization policies were the superior policy choice, as neo-liberal commentators have claimed and many Latin American governments of the 1980s and 1990s have chosen to believe, why did the liberalization shock not yield better results? If South Korea and Taiwan were particularly favored by external factors, such as massive US aid flows, easy market access for manufacturing exports, and political tolerance of radical land reforms, why have second-tier East Asian NICs, such as Thailand and Malaysia that could not count on these factors, recently been more successful than any Latin American economy?

The approach developed in this chapter suggests that the success or failure of rent-management strategies for industrialization is largely determined by the *compatibility* of technological and institutional strategies for late development with political constraints arising from inner-societal power constellations as well as from transnational—external—influences. The East Asian NICs succeeded because their various rent-management strategies to promote industrialization did not lead to political destabilization. In the South Asian subcontinent, a political configuration favorable to highly fragmented clientelist alliances between industrialists and the organizationally powerful middle classes led to the breakdown of more or less classic infant industry strategies.

In Latin America, less fragmented, but no less powerful alliances between strong landed elites and emerging industrialists led to a similar breakdown. Moore (1966), in his seminal work on different routes to industrialization and modern (capitalist) transformation in Western Europe and Asia, characterizes in particular the Japanese and German route to industrialization as an authoritarian/fascist revolution from above. The essential characteristics of this route are the persistence of strong landed elites and the continued use of political rather than market-based mechanisms to ensure an adequate supply of (agricultural) labor and the concomitant failure of emerging industrialists to achieve political emancipation from landed oligarchies on their own.

Instead, the state takes on the task of mediation between landed and industrial interests and, eventually, that of social transformation. In the early stages of industrialization this takes the form of semi-parliamentary 'oligarchic' systems of government. In the later stages of industrialization, the emergence and rapid growth of an urban working class and a growing requirement of state and administrative modernization lead to a 'revolution from above' through inclusive populist-authoritarian regimes, whether of a fascist or a conservative-military nature that 'oversee' capitalist transformation and the eventual decline of landed elites through co-option as well as repression of working-class interests and their middle-class allies. Apart from Germany and Japan, Greece, (to some extent) Italy, Spain, and some Balkan countries are examples of this transition route (Mouzelis, 1986). Latin America shares many of these characteristics, but is different in important aspects: Its colonial history as an exporter of natural resources meant that its landed elites were comparatively much stronger than their European or Japanese counterparts. Importantly, this meant that, other than in many successful late developers, land reforms did not precede industrialization, but were only initiated half-heartedly at late stages of industrialization with the primary goal of creating larger internal markets (Kay, 2002). Furthermore, the timing and external environment of industrialization in Latin America were different: working-class opposition to 'oligarchic' rule and authoritarian transformation emerged later and was weaker than in Europe, not least because of later and dependent industrialization, but was much more premature relative to the formation of an urban middle class. This, in turn, was at least partly a consequence of the minimalist and mercantilist state structure Latin America inherited from colonial domination, which impeded, or at least slowed down, the evolution of a modern and professional state apparatus (Rueschemeyer, Huber Stephens, and Stephens, 1992; Mahoney and vom Hau, 2005).

Together, these and other political factors meant that Latin America, rather than undergoing a successful 'revolution from above', experienced unstable political cycles, alternating between urban populism—of both an authoritarian as well as a more more truly popular kind—and narrowly elitist clientelist regimes. Whereas urban populism refers to attempts by the state to resist the power of landed elites through the mobilization and co-option of working-class and middle-class interest in support of capitalist industrialization, elitist clientelism in the Latin American context refers to alliances that aligned the interests of industrialists, parts of the urban middle classes and landowners against perceived threats from the subaltern classes, including urban and agricultural workers as well as peasants (Mouzelis, 1986). In the South Asian subcontinent, big business groups could form alliances with middle-class factions that, while shifting and fragmented across multiple ethnic, religious, tribal, and political lines of division, ultimately allowed monopolists to build up fairly reliable power bases. While these alliances undermined the state's capacity to

impose a national infant industry strategy, they at least rendered possible relatively successful ad hoc private-sector strategies of capital accumulation in niche markets, profiting from previous state-led investments. By contrast, in Latin America, the century-old stalemate between strong landed interests, on the one hand, and gradually consolidating urban and industrial interests, on the other, prevented a *stable* power base for private-sector industrial accumulation from establishing itself. As industrialization proceeded to the more large-scale and capital-intensive second stage of import-substituting industrialization, neither populist states nor clientelist *pactos* could, in the longer term, respond effectively to the growing demands on coordination, planning, and adaptation capacities required for a high-value added large-scale technological strategy. Populist state control as well as clientelist alliances increasingly disintegrated through fractionalization.

BRAZIL 1930s TO 1980s

Following the detrimental impact of the Great Depression on Brazil's coffee-based agrarian export economy, the country embarked on a strategy of state-led industrialization that lasted until the early 1980s. Of the Latin American NICs, the Brazilian industrialization strategy and experience, although much longer drawn out, comes closest to that of South Korea. In both cases an early phase of light import-substituting industrialization, directed mainly at domestic markets, was rapidly followed by a strongly state-controlled 'Big Push' strategy that sought to promote heavy industrialization through the allocation of learning rents to target sectors and industries. In both countries, industrial transformation unfolded under the auspices of exceptionally autonomous states, governed and controlled for most of the relevant periods by authoritarian military regimes. Many of the policy tools employed were similar, including initial high import tariffs, import licensing, directed credit policies, and direct state investment in industry and supportive infrastructure. Initially, at least, results also were comparable: In the period 1900–1987, Brazil was the largest growing economy in the world (Maddison, 1993), with the highest growth performance following a massive build up of productive capacity since the 1950s, in the energy, capital goods, and heavy industry sectors. Between 1950 and 1980, growth rates of up to 10 percent per annum were not exceptional.

There are however important differences with the case of South Korea: Above all, the superficial similarity between the two states in terms of their high degrees of autonomy from society was, in fact, of a very different kind: The South Korean state was not only autonomous, but also very much 'embedded' through close links with the private business sector, ensuring efficient information flows and bargaining mechanisms between these (Evans, 1995; Chang and Cheema, 2001). By contrast, the Brazilian state was autonomous without any such

'embeddedness' in that it represented a centralized, often well-organized, but isolated structure without strong anchors in any section of society. Like the shell of an empty egg, it would crack whenever sufficient pressure came to bear on it. Whereas the South Korean state successfully wedded economic with political exclusion and repression of the 'subaltern' classes whenever industrial transformation caused social tensions, and thus gained a reputation of credible commitment to national and international industrial interests, the Brazilian state was never in a position to wean domestic industrial interests off their fallback alliance with regional oligarchies and their clientelist networks. The reason is, of course, that these networks existed, in the first place, while in South Korea Japanese colonialism had basically eliminated the power of landed elites. In Brazil, private business interests were, at times, co-opted by the state through the appointment of business leaders to cabinet positions; but sustained direct channels of lobbying, bargaining, and interest representation between private business associations and the state remained very fragmented and tied to sectoral rather than national levels (Ross Schneider, 2004). Without such direct 'embeddedness' with the industrial elite, the Brazilian state, autonomous, repressive, and controlling as it became, was left in a technocratic limbo from which to try to promote industrial policies, forever frustrated by stalemates between oligarchic-clientelist networks of landed and industrial elites, on the one hand, and popular demands, that over the long drawn-out process of a relatively early industrialization became increasingly vocal.

COLOMBIA 1930s TO 1980s

Colombia provides a useful contrast to Brazil in the Latin American context. As in Brazil, a very labor-intensive and largely coffee-based agrarian export economy had, by the late nineteenth century, created powerful landed elites operating local and regional clientelist networks that dominated politics and the state. Similarly to most other Latin American economies, Colombia underwent successive stages of easy and heavy import-substituting industrialization, lasting from 1930 to1945 and 1945 to 1967, respectively. Differently from Brazil and many other Latin American experiences, though, the industrialization process remained largely private-led with the state playing a much more indirect role than, in particular, in Brazil, Argentina, and Mexico. The main reason was that following two, even by Latin American standards, very violent periods of civil warfare (The War of the Thousand Days 1899–1902 and La Violencia at the end of the 1940s), the two main clientelist parties, representing a mix of landed and growing industrial interests, took effective control of the state. While tensions between urban industrialists, landed trade and business interests and, to some extent, the military, remained and produced shifting power balances, domestic capitalists, often descended from European

immigrants, gradually emerged as the main clientelist 'patrons', running their own networks and influencing state policy-making. Thus, other than in Brazil, private business associations developed relatively strong national channels of direct lobbying and bargaining with the state (Ross Schneider, 2004). This somewhat resembles the Thai process of private capitalist-led industrialization 'from below', that was dominated by a combination of relatively passive industrial policies, a domination of rent-seeking processes by competition between emerging capitalist factions, and a technology acquisition strategy that focused on low-value added, labor-intensive technologies with low adaptation and coordination costs (Khan, 2000b). Industrial policy and state-created rents, in this context, serve the limited purpose of initial support for relatively small-scale private accumulation processes, but are then ideally bid down through private-sector competition.

As in Thailand, an important feature of the Colombian polity post-1950s has been that redistributive factions with effective access to the state were limited to elitist groups, many of which were capitalist-led and -controlled, rather than by organizationally powerful non-capitalist middle- and working-class factions. In both countries, clientelism was thus much less fragmented than, for example, in India, and the redistributive pressure on the state from non-capitalist interest groups less than in more populist and inclusive Latin American states. One indicator of the lower incidence of redistributive claims in the Colombian economy are the, by Latin American standards, relatively low rates of inflation that have also remained fairly stable over the past 50 years (World Bank, 2006). This industrialization 'from below' has, however, been less successful in Colombia compared to Thailand, for a number of reasons: First, competition between capitalist-led factions has been less intensive in Colombia than Thailand. This is, at least in part, explained by the much larger weight of landed elites and interests in the Colombian clientelist settlement. This made entry into high-rent markets more difficult for industrial newcomers who, in contrast to older incumbents, often did not have long-established ties with the landed oligarchy and were thus at a disadvantage in terms of their political bargaining power vis-à-vis the state. Second, the larger role of landed interests in Colombia also meant that the state's capacity to allocate rents to industrialists was more limited by the need to find compromises between industrial and landed interests. Third, key to the relative efficiency of the Thai rent-seeking system was the focus on low value-added labor-intensive technologies that did not require long learning or strong centralized planning efforts. While this was also the case in Colombia during the first phase of import-substituting industrialization in the 1930s and 1940s, the Colombian state did embark, in the 1950s and 1960s, on the promotion of more large-scale capital-intensive industries, such as petrochemicals, basic metals, machinery, transport equipment, and chemical products. This attempt at heavy industrialization was more short-lived in Colombia than in

many other Latin American states, and in 1967 was replaced by a mixed strategy of import-substitution, technology acquisition through joint ventures with foreign investors, and export promotion (Ocampo, 1994; Vejarano, 2002). But the earlier attempt at promoting capital-intensive heavy industries was highly unsuitable to the limited rent-allocation and -monitoring capacity of the Colombian state and undermined the relatively low competitiveness of capitalist-led factions even further. In addition, the state's reliance on FDI to promote technology transfer was even less than in Brazil matched by its ability to impose conditionalities conducive to high-productivity technology transfer from TNCs. Despite a moderately successful 'assembly regime', introduced in 1969, that made concessions to foreign 'assemblers' conditional on a rise in domestic components and technical assistance to local suppliers of parts and accessories (mainly in the automobile and electrical appliances industries), the 'Malaysian route' certainly was not open to the Colombian state. Apart from the inability and unwillingness of the clientelist elites to prevent alliances between foreign investors and domestic factions, a fourth and final factor was relevant in this respect: The absence of populism in Colombia and the high degree of exclusion of subaltern and middle classes from the political settlement did not mean that the state was not affected by contestation from outside this settlement. Instead, political contestation by excluded sectors of society took the form of (mostly) rural guerrilla warfare that, while largely confined to remote regions with little government presence, increasingly undermined the political stability of the elitist–clientelist pacts. While elements of such violent contestation 'from outside the political settlement' are also characteristic of Thailand, the extent and longevity of rural warfare in Colombia, as well as the expansion of the drug trade outside the control of the state, have increasingly compromised the state's ability to attract foreign direct investment as an important conduit of technology transfer.

Overall, the Colombian industrialization process was much slower and 'lackluster' compared to that in Brazil: on average, savings rates increased, at best, to only half of those achieved in Brazil between 1950 and 1980, as did the share of manufacturing in GDP. Similarly, average GDP per capita growth rates remained in the 2–3 percent bracket (Maddison, 1992). By contrast, the collapse of state-led industrial policy, when it came, was much less dramatic than in Brazil.

PERU 1950s TO 1980s

A brief mention of Peru serves to highlight a third constellation of power in Latin America that has probably been the most detrimental to the prospects of successful capitalist-led industrial development. Ever since the nineteenth century, this has seen a coalition of heavily foreign-dominated mining and

agricultural export interests at loggerheads with a large unionized native workforce. In the case of Peru (as well as Bolivia), the divide between these two sectors is very sharply defined, in racial as well as geographical terms, with a racially mixed middle class playing only a minor role. This constellation of powerful (national and foreign) landed and mineral export interests, on the one hand, and an early mass radicalization *before* the emergence of a viable domestic industrial accumulation process, could not have been less favorable to a state-led catching-up industrialization project. When in 1968, under the combined pressure of popular discontent with foreign ownership, rising costs, limited supplies of some natural resources, and population pressure on land, the military regime of Velasco came to power with a radical agenda of import-substituting industrialization and agrarian in form, it stood little chance of political survival: High import tariff protection, tariff exemptions on imports for manufacturing industries, and general tax exemptions did induce a strong rise in domestic investment and aggregate demand, but they also contributed to a rising public-sector deficit—the fiscal benefits paid out to domestic industrialists between 1971 and 1975 amounted to 92% of total internal financing of industrial investment—and inflationary pressures. Ultimately, the Velasco government lacked allies amongst local industrials whom it distrusted because of their close ties with foreign companies and the landed elite, and it could therefore only opt for nationalization. This not only over-stretched the limited planning and coordination capacities of the Peruvian state (Thorp, 1991)—as late as 1962, taxation in Peru had been contracted out to private firms and until 1969 central bank directors were appointed by private business associations (Cameron and North, 1998)—but it was a doomed strategy given strong US interests in Peru's export sectors. The fate of Allende's Chile did not leave much room for doubt in this respect. While some progress was made with regard to the belated land reform, the powerful opposition of foreign capital and landed elites meant that the only alternative path to late industrialization, given the weakness of domestic capital—a socialist revolution from below—could not succeed. Velasco's regime factionalized and was eventually toppled by a military coup in 1975. No active industrial rent-management regime has been pursued since.

LATIN AMERICA AFTER LIBERALIZATION (1980–2000)

Once state-led catching-up industrialization in Latin America had failed—not necessarily in terms of economic performance during the duration of active industrial policy regimes, but rather in the sense of the compatibility of these regimes with given political settlements outlined above—Latin America underwent a radical liberalization shock. Even though it goes without saying that there were considerable differences in the design, execution, and the

impact of these policies between different Latin American countries, the fairly radical shift towards neo-liberalism was sufficiently uniform to allow us to abstract from country particularities and to treat Latin America as a region for the purpose of this brief section.

In these general terms, high levels of external debt and large-scale capital flight—themselves a manifestation of the incompatibility of institutional and technological strategies with political settlements—had made Latin America more vulnerable than most other developing regions to international policy changes, such as the Volcker shock. While the 1980s were dominated by comprehensive free-market reforms, trade liberalization, deregulation, and privatization, the 1990s saw the emergence of passive industrial policies aimed at improving international competitiveness through regional trade integration, mitigating market failure through the provision of public goods, and stimulating productivity growth through the promotion of industries with positive technological externalities (Peres, 1997; Kosacoff et al. 1998; Melo, 2001).

By now, it is clear that the outcome of this policy change has been very disappointing. On the positive side, there were successes in terms of macro-economic stabilization and significant increases in export performances (e.g. Taylor, 2000; Palma, 2005a; Dutrénit and Katz, 2005). More important from a development perspective, however, are the clearly negative effects on productivity growth and domestic technological capabilities (as well as an already highly unequal income distribution), indicating that the increase in exports in many countries has failed to translate into backward linkages to the domestic economy and has, instead, occurred alongside a trend of de-industrialization (see Table 13.2 above; Palma, 2005a and 2005b). In other words, Latin America has returned to its underlying static comparative advantages of natural resources and unskilled labor with detrimental effects on its productivity and growth performance. More specifically, the change in Latin America's productive structure combines specialization in fairly capital-intensive resource-processing industries, mainly in Argentina, Brazil, Chile, and Colombia with a predominance of assembly industries, in particular in Mexico and some Central American countries (Peres, 1997; Dutrénit and Katz, 2005). This has come at the expense of high-technology sectors, such as electronics, semiconductors, and computers (with the possible exception of the medium-technology automobile industries of Argentina, Brazil, and Mexico and the aerospace and computer projects in Brazil) and some more traditional labor-intensive industries (Peres, 1997).

While static efficiency gains did occur, through the weeding out of blatantly inefficient companies (e.g. Ffrench-Davis, 2000 and 2002 for Chile) in the context of greater import competition, and additional resources were freed up through the reduction of some state activity, these additional resources clearly did not translate into productivity increases based on accelerated

learning-by-doing. Thus, Cimoli and Katz (2004) show that the major mechanism through which liberalization is argued, by mainstream economists, to entail productivity as opposed to mere (one-off) efficiency gains—the availability of cheap(er) capital goods imports—achieved the direct opposite: In Argentina, Brazil, Chile, Colombia, and Mexico, *all* of five central divisions in the manufacturing sector (metal-working industries, automobiles, food processing, natural-resource processing, and labor-intensive manufacturing industries) actually shrunk during the period of liberalization. Ocampo (2004) adds the observation that the process of technological downgrading through the availability of cheaper capital imports was reinforced by a 'disarticulation' (or fragmentation) of the production base into a small group of world-leading, mostly foreign-owned, companies, on the one hand, and a large and increasing number of firms engaged in low-productivity and low-skill activities that by now absorb about 60 percent of the urban workforce. Importantly, there are virtually no technological spillover effects from world-leading to low-skill sectors, or any other macroeconomic linkage effects (Ocampo, 2004; Gwynne 2004 for Brazil; and Palma 2005a for Mexico). Where technological progress is taking place this remains insulated in 'de-linked' or 'disarticulated' MNC-dominated firm clusters that not only fail to engage in significant technology transfer, but partly destroy hitherto productive and viable domestic firms in the supplier chain (e.g. auto-parts industry in Brazil). The case of Mexico's maquila industry is perhaps the prime example, in Latin America, of linkage-less manufacturing (export) growth (Palma, 2005a).

More specifically, Palma (in Chapter 8) provides ample evidence for the fact that the main effect of liberalization, across virtually all of Latin America, has been to reinforce Latin America's commodity bias in the absence of any attempts at 'Schumpeterian' dynamic upgrading into higher-technology, higher-value added *processes* and/or *products*. Put differently, technological improvements have been limited to certain basic commodities, such as copper concentrates in Chile or iron in Brazil, but no attempts have been undertaken to *upgrade* to *different processes* (copper smelting) or product (steel). In fact, in the cited example for Chile, technological downgrading (from smelting back to concentrates) took place. Instead, where high levels of world competitiveness have been achieved within the given production process of commodities, horizontal diversification into other low-value added commodities has taken place. This provides the explanation for export-driven growth (recovery) since the late 1980s/early 1990s, not a 'Schumpeterian' shift to manufacturing exports (especially if one discounts the much-hailed Mexican maquila case as a form of 'fake' upgrading to manufacturing with little or no backward linkages).

The Latin American picture provides a stark confirmation of the argument that catching-up economies, if exposed to international market pressures

without any accompanying system of incentives and compulsion to ensure that these market pressures are translated into learning and technology rents, may end up downgrading their technological capabilities. The social costs of this process are also only too well known: the other side of the coin of low inflation and supposed macroeconomic stabilization across all Latin American countries with fiscal deficits below 2 percent of GDP over the past 20 years (with the exception of Brazil and Argentina for particular reasons) has been widespread urban unemployment, increased income inequality, and high and increasing segmentation of labor markets.

Differently from the Asian experience, the Latin American experience thus highlights a situation in which *similar* institutional approaches to industrial policy lead to *differing* outcomes. Not only were the import-substituting industrialization policies of the pre-1980s differently successful, but the recent reactions to the high social and economic costs of the neo-liberal shock therapy applied to virtually all Latin American economies also led to different outcomes: while some countries, such as Chile, Colombia, most Central American economies, and, to some extent, Mexico, remain committed to a neo-liberal policy agenda, at least in purely economic terms, the high social cost of these policies led to regime changes in Venezuela, Bolivia, Ecuador, and, most recently, Paraguay. As with the Asian experience, we argue that these differing outcomes are best explained by analyzing the compatibility of rent-management strategies with underlying political settlements and configurations of power balances. This also means that the new, largely state-led industrial policy regimes in Venezuela and Bolivia, amongst other Latin American countries, may fail, unless they manage to break through the firm grip that constellations of clientelist *pactos* have had on these economies for the best part of two centuries.

Conclusions

In this chapter we have examined the compatibility of the institutions of catching-up with the organization of political power and discussed a number of variants in Asia and Latin America that help to explain their very different experiences. Table 13.3 summarizes these key features of our argument.

We argued that the coincidence of liberalization with a growth spurt in some Asian countries can be better explained by our alternative analysis, which identifies some of the limits of the previous industrial policy regimes in these countries. Extending this analysis to Latin America we argued that the failure of import-substituting industrialization across Latin America, and the consequent liberalization policy shock, led to a similar process of shifting to technologies that were already profitable given technical capacities as well as to widespread technological downgrading.

There are many features which differentiate the Far Eastern and Latin American experiences. First, South Korea and other East Asian NICs proceeded from the first 'easy' stage of import-substituting domestic industrialization to an intermediate phase of 'export-substituting industrialization', replacing their agricultural and resource-based exports by manufactured consumer products, before moving on to the final and heavy stage of industrialization. By contrast, Brazil switched directly from domestic light industrialization to domestic heavy industrialization, skipping the 'export-substituting' phase. This was not for want of trying: subsequent Brazilian governments offered a wide range of export subsidies to domestic and transnational manufacturing producers, and some success was achieved in the 1970s with the share of

Table 13.3. Compatibility of rent management and political configurations

	Industrial policy institutions (rent-management strategy)	Corresponding political configuration	Economic outcome
South Korea 1960s	Targeted learning rents	Limited political power of intermediate class factions to protect inefficient capitalists	Rapid growth and capitalist transformation
Malaysia 1980s 1990s	Public sector and MNC-led technology acquisition	Powerful intermediate classes but centrally organized after 1980 Centralized transfers delink redistributive rents from learning rents	Rapid growth and capitalist transformation
Indian subcontinent 1960s 1970s	Targeted learning rents, public sector technology acquisition	Powerful and fragmented intermediate class factions protect inefficient rents Learning rents regularly become redistributive rents	Many infant industries fail to grow up Moderate growth and slow pace of transformation
Indian subcontinent 1980s 1990s	Liberalization and slow withdrawal of subsidies for learning	Powerful and fragmented intermediate classes remain Growing political fragmentation	Growth led by niche sectors. Higher growth than before but limited to already existing technological capacities
Latin America 1950s to 1980s	Targeted learning rents, public sector and MNC-led technology acquisition	Alternating political cycles of populist regimes and oligarchic clientelism Learning rents rapidly become redistributive rents	Many infant industries fail to grow up Initial rapid growth undermined by foreign debt and balance of payment crises
Latin America 1980s onwards	Rapid liberalization, market-friendly competition policies	'Old' clientelist elites remain powerful, growing political fragmentation Resurgence of populism	Export growth but low productivity growth Technological downgrading and reliance on traditional comparative advantage

manufacturing exports in overall exports reaching levels of 30–50 percent and including some more capital-intensive industries (automobiles, chemicals, aircraft, electrical machinery). But this performance decidedly lags behind that of East Asian NICs and even South Asian economies with shares of 70–80 percent at similar stages of industrialization. Consequently, Brazil lacked an important comparable source of foreign exchange earnings. Second, Brazilian industrialization was not led by large domestic holding companies, as was the case of South Korea. Rather, it came to be led by a combination of state-owned enterprises (SOEs) and TNCs (including joint ventures) (e.g. Gereffi and Wyman, 1990). Despite fairly stringent requirements imposed by the state on joint ventures by TNCs with both SOEs and private capital, the Brazilian state could not successfully impose the Malaysian route: It did not have the overall political credibility nor sufficient effective control of domestic capital to deter TNCs from free-riding through alliances with particular factions. Nor was the Brazilian state in a position to follow the Taiwanese route of state-led technology acquisition in SOEs combined with an efficient technology transfer to a competitive private sector of medium-sized firms, since its relationship with the private sector was certainly characterized by a high degree of structural autonomy, but not therefore also the same degree of *political* autonomy that would have allowed it to impose a competitive structure on industrials without alternative power bases. Put differently, while the Brazilian state employed elements of all successful—South Korean, Taiwanese, and Malaysian—strategies, it could not carry any of these through to their conclusions. Third, the failure, for all these reasons, to mobilize domestic resources to the same extent as the East Asian NICs, by raising the saving rate and earning foreign exchange through manufacturing exports, entailed a growing reliance on foreign borrowing and debt, with a concomitant high vulnerability to the volatility of international, and in particular US, financial capital flows and policy-making.

These differences, we have argued above, have their deeper roots in the underlying political economy.

The three Latin American paths outlined above highlight essential obstacles to late industrial development in Latin America. The institutional approaches to industrial policy were not fundamentally different from those of East Asia. Rather, they consisted of different combinations of successful elements of strategies employed in different East Asian countries (South Korea, Malaysia, and Thailand). As in East Asia, the outcomes were nevertheless different, reflecting different degrees of compatibility of the rent-management strategies adopted and the evolving political configurations in each country. Similar stories to that of Brazil unfolded in Argentina, Uruguay, and Mexico; Chile and Bolivia are closer to the case of Peru; and Venezuela, Colombia, Paraguay, and Ecuador constitute hybrid cases. It goes without saying that the differences in the exact power configurations, and the consequences of their

precise incompatibility with institutional approaches to industrial policy are often huge, especially from an inter-Latin American comparative perspective. Thus, for example, in Argentina populism took a less authoritarian turn than in Brazil, mainly because landed elites were less reliant on the supply of cheap agricultural labor, and the urban working classes mobilized earlier than in Brazil. Mexico differed fundamentally from Brazil (and Argentina) in that the traditional oligarchies were overshadowed by an all-inclusive state structure, emanating from an early revolution 'from below', with clientelist networks evolving within this state structure rather than from outside. Similarly, Chile was less dominated by foreign capital than was Peru and a much closer link between landholders and urban entrepreneurs had evolved, mainly in the form of multiple holdings and closer kinship relations. At the same time, radical mobilization was even more virulent than in Peru, not least because of faster urbanization. Finally, Venezuela constitutes a hybrid case between Brazil and Colombia, in that its state became much more inclusive than Colombia's with the consequence that it embarked on more challenging state-led industrialization projects than Colombia and factionalized with a more destructive impact on the effectiveness of industrial policies than in Colombia (DiJohn, 2004). This said, there was, in all its different manifestations, one main obstacle to East Asian style catching-up development in Latin America: the colonial inheritance of strong landed elites and early urbanization. Whether these landed elites allied themselves with emerging industrial interests (as in Brazil and Colombia) or not (as in Peru), or whether early urbanization led to the emergence of radical mass parties with a potential to undermine indigenous capitalist development (as in Peru, and in Colombia until 1949, but not in Brazil), it was ultimately the interplay between these two forces that determined the fate of late industrialization in Latin America. It is worth noting that the only East Asian economy whose performance resembles that of the poorer Latin American countries—the Philippines—shares many of the characteristics that have beset Latin American industrialization, primarily strong landed elites and very belated land reforms.

The hallmark of Latin American liberalization policy—apart from increased income inequality—is a creeping process of technological downgrading, rather than Schumpeterian dynamic upgrading to higher-value added *processes* and/or *products*. In fact, in some countries like Chile, technological downgrading (from smelting back to concentrates) took place. A higher degree of international competitiveness has, instead, been achieved through horizontal diversification into other low-value added commodities. The recent optimistic outlook for exports and overall growth in Latin America (ECLAC, 2004) confirms this trend: it is explained mainly by increased international demand (in particular from China) for low-value commodities, combined with favorable commodity price developments.

From the perspective developed here, this outcome is not surprising: The removal of obstacles to market opportunities does not automatically deliver high(er) productivity growth (other than perhaps in Ricardian commodities) or create dynamic capitalist economies in late developers. Instead, we have argued, what is needed is a system of compulsion that, at least initially, replaces the role played by the market mechanism in early developers to compensate for high private risk and to help overcome structural socio-political obstacles to capital accumulation. To function in this sense, such transitory systems of compulsion must be based on *mutually compatible* technology acquisition strategies and political settlements. Under import-substituting industrialization, formidable obstacles to such compatibility in Latin America meant that (i) the considerable growth in size of industry did not translate into productivity increases to the same extent as it did in some East Asian NICs (e.g. Reynolds 1970 for Mexcio; Díaz Alejandro 1970 for Argentina) mainly because state-created rents deteriorated into redistributive rather than learning rents, and (ii) the political alliances underwriting state-led industrialization factionalized.

Liberalization did nothing to tackle these obstacles in Latin America's various political settlements, described above. Instead, it reinforced existing structural and political obstacles to catching-up industrialization and their main symptoms, namely a weak and risk-averse indigenous industrial class and a domination by foreign capital that operates in its own rather than Latin America's interest. Other than in India, liberalization has thus not even led to a 'niche strategy' based on the exploitation of high-productivity assets created under state-led industrialization by local capital, but has instead resulted in technological downgrading and decline by sending local entrepreneurs scrambling for cover in 'niches' of low-risk, low value-added horizontal diversification of resource-processing industries and leaving the exploitation of high-productivity assets, inherited from import-substituting industrialization to foreign interests. In addition, the failure of liberalization in addressing the underlying socio-political factors that have impeded Latin America's industrialization from the start is confirmed rather starkly by the current stand-off between resurging transformational projects in Latin America: Chavez's populist route in Venezuela, Alan Garcia's and Alvaro Uribe's oligarchic clientelist alternatives in Peru and Colombia, and Evo Morales' renewed attempt at a 'revolution from below' in Bolivia.

Note

1. There have been exceptions to the 'eternal Latin American ceiling' of a 20% savings rate: Brazil in the 1950s–1970s, Argentina in the 1960s and 1970s, Chile in the 1990s all registered savings rates of between 25% and 30%, with oil-exporting Venezuela achieving an average savings rate of over 40% between 1950 and 1975. However, whether or not exceptional circumstances such as the discovery of oil in Venezuela

came into play, even those above-average performances all show a downward trend over time in stark contrast to the sharp upward trend in the East Asian NICs since the 1980s. Nor did they translate into a *sustainable* upward trend of GDP per capita growth rates despite promising performances in Brazil, Mexico, and Colombia in the 1970s (Maddison, 2003).

References

Amsden, A. H. 1989. *Asia's Next Giant: South Korea and Late Industrialization*. Oxford: Oxford University Press.

Aoki, M., H. K. Kim, and M. Okuno-Fujiwara (eds). 1997. *The Role of Government in East Asian Economic Development: Comparative Institutional Analysis*. Oxford: Clarendon Press.

Arrow, K. J. 1962. The Economic Implications of Learning by Doing, *The Review of Economic Studies* 29 (3): 155–73.

Brenner, R. 1976. Agrarian Class Structure and Economic Development in Pre-Industrial Europe, *Past and Present* 70: 30–75.

—— 1985. The Agrarian Roots of European Capitalism, in Aston, T. H. and C. H. E. Philpin (eds), *The Brenner Debate: Agrarian Class Structure and Economic Development in Pre-Industrial Europe*, Cambridge: Cambridge University Press.

Bresser-Pereira, L. C. 1984. *Development and Crisis in Brazil 1930–1983*. Boulder, Colorado, US: Westview.

Cameron, M. A. and L. L. North. 1998. Development Paths at a Crossroad: Peru in the Light of the East Asian Experience, *Latin American Perspectives* 25 (5): 50–66.

Cárdenas, E., J. A. Ocampo, and R. Thorp. 2000. Introduction, in: E. Cárdenas, J. A. Ocampo, and R. Thorp (eds), *An Economic History of Twentieth Century Latin America*, vol. III: Industrialization and the State in Latin America. The Postwar Years, London: Palgrave.

Cardoso, E. and A. Fishlow. 1992. Latin American Development: 1950–1980, *Journal of Latin American Studies*, 24 (Quincentenary Supplement: The Colonial and Post Colonial Experience. Five Centuries of Spanish and Portuguese America): 197–218.

Chan, S. 1987. Comparative Performances of East Asian and Latin American NICs, *Pacific Focus* 2 (1): 35–56.

Chang, H.-J. and A. Cheema. 2001. Conditions for Successful Technology Policy in Developing Countries—Learning Rents, State Structures and Institutions. Maastricht: The United Nations University, INTECH, Discussions Paper Series, 8.

Cimoli, M. and J. Katz. 2004. Reformas Estructurales y Brechas Tecnológicas, in J. A. Ocampo (ed.), *El desarrollo económico en los albores des siglo XXI*. Bogotá: Alfaomega: 242–59.

Colin, M. L. 2004. State and Market in Latin America: The Rise and Decline of Economic Intervention, in Lears J van Scherpenberg (ed.). *Culture of Economy. Economics of Culture*, Universitätsverlag Winter, 32–58.

Connif, M. 1981. *Urban Politics in Brazil: The Rise of Populism 1922–1945*. Pittsburgh: University of Pittsburgh Press.

Díaz Alejandro, C. 1970. *Essays on the Economic History of the Argentine Republic*. New Haven: Yale University Press.

DiJohn, J, 2004. Mineral Resource Rents, Rent-Seeking and State Capacity in a Late Developer: The Political Economy of Industrial Policy in Venezuela 1920–1998. Unpublished Ph.D thesis, Cambridge University.

Dobb, M. 1946. *Studies in the Development of Capitalism*. London: Routledge.

Dutrénit, G. and J. Katz. 2005. Introduction: Innovation, Growth and Development in Latin-America: Stylized Facts and a Policy Agenda, *Innovation: Management, Policy & Practice* 7 (2–3), April–August: 105–30.

ECLAC (Economic Commission for Latin America and the Caribbean). 2004. *Preliminary Overview of the Economies of Latin America and the Caribbean*. Chile: UN Publication, December.

Evans, P. 1995. *Embedded Autonomy. States and Industrial Transformation*. Princeton: Princeton University Press.

Fishlow, A. 1989. Latin American Failure against the Backdrop of Asian Success, *Annals of the American Academy of Political & Social Science* 505: 117–28.

Ffrench-Davis, R. 2000. *Reforming the reforms in Latin America. Macroeconomics, Trade, Finance*. New York: St. Martin's Press.

—— 2002. *Economic Reforms in Chile. From Dictatorship to Democracy*. Ann Arbor: The University of Michigan Press.

Gavin, M., R. Hausmann, and E. Talvi. 1997. Saving Behaviour in Latin America: Overview and Policy Issues, *Inter-American Development Bank*, WP 346, May.

Gereffi, G. 1989. Rethinking Development Theory: Insights from East Asia and Latin America, *Sociological Forum* 4 (4): 505–34.

—— and D. L. Wyman (eds). 1990. *Manufacturing Miracles: Paths of Industrialisation in Latin America and East Asia*. Princeton, NJ: Princeton University Press.

Gwynne, R. 2004. Clusters and Commodity Chains: Firm Responses to Neoliberalism in Latin America, *Latin American Research Review*, 39 (3): 243–55.

Haber, S. 2005. Development Strategy or Endogenous Process? The Industrialization of Latin America, Working Paper, Stanford University, September: <http://www.stanford.edu/~haber/papers/Development_Strategy_or_Endogenous_%20Process-The_Industrialization_of_Latin_America.pdf>.

Hagopian, F. 1994. Traditional Politics against State Transformation in Brazil, in: J. S. Migdal, A. Kohli, and V. Shue (eds), *State Power and Social Forces*, Cambridge: Cambridge University Press.

Harberger, A. 1988. Growth, Industrialization and Economic Structure: Latin America and East Asia Compared, in H. Hughes (ed.), *Achieving Industrialization in East Asia*, Cambridge: Cambridge University Press.

Heston, A., R. Summer, and B. Aten. 2002. *Penn World Tables Version 6.1.*, Centre for International Comparisons at the University of Pennsylvania (CICUP), October.

Jenkins, R.O. 1991. The Political Economy of Industrialisation: A Comparison of Latin America and East Asian Newly Industrialising Economies, *Development and Change* 22 (2): 197–231.

Jomo, K. S. and C. Edwards 1993. Malaysian Industrialization in Historical Perspective, in K. S. Jomo (ed.), *Industrializing Malaysia: Policy, Performance, Prospects*, London: Routledge.

Katz, J. and B. Kosacoff (2000), Technological Learning, Institution Building and the Microeconomics of Import Substitution, in E. Cárdenas, J. A. Ocampo, and R. Thorp (eds), *An Economic History of Twentieth Century Latin America* 3: 154–76.

Kay, C. 2002. Why East Asia Overtook Latin America: Agrarian Reform, Industrialisation and Development, *Third World Quarterly* 23 (6): 1073–102.

Khan, M. H. 1998. Patron–Client Networks and the Economic Effects of Corruption in Asia, *European Journal of Development Research* June 10 (1): 15–39.

—— 1999. *The Political Economy of Industrial Policy in Pakistan 1947–1971*. SOAS Department of Economics Working Paper No. 98, School of Oriental and African Studies, University of London.

—— 2000a. Rents, Efficiency and Growth, in Mushtaq H. Khan and K. S. Jomo (eds), *Rents, Rent-Seeking and Economic Development: Theory and Evidence in Asia*, Cambridge: Cambridge University Press.

—— 2000b. Rent-seeking as Process, in Mushtaq H. Khan, and K. S. Jomo (eds), *Rents, Rent-Seeking and Economic Development: Theory and Evidence in Asia*, Cambridge: Cambridge University Press.

Klarén, P. F. 2000. *Peru: Society and Nationhood in the Andes*. New York: Oxford University Press.

Kohli, A. 1994. Where Do High Growth Political Economies Come From? The Japanese Lineage of Korea's 'Developmental State', *World Development* 22 (9): 1269–93.

Kosacoff, B., C. Bonvecchi, and G. Yoguel. 1998. Argentina: la economía en los años noventa. Contexto macroeconómico, desempeño industrial e inserción externa, in L. J. Garay (ed.), *Argentina, Brasil, México, Venezuela: apertura y reestructuración productiva*. Programa de Estudio. Bogota. Colombia: Study Program 'La Industria de América Latina ante la Globalización Económica'.

Lin, C. 1988. East Asia and Latin America as Contrasting Models, *Economic Development and Cultural Change* 36 (3): S153–S198.

Maddison, A. 1992. *Brazil and Mexico. World Bank Comparative Study: The Political Economy of Poverty, Equity and Growth*. Oxford: Oxford University Press.

—— 2003. *The World Economy. Historical Statistics*. Paris: OECD.

Mahoney, J. and M. vom Hau. 2005. Colonial States and Economic Development in Spanish America, in M. Lange and D. Rueschemeyer (eds), *States and Development. Historical Antecedents of Stagnation and Advance*. New York and Basingstoke: Paigrave Macmillan.

Meio, A. 2001. Industrial Policy in Latin America and the Caribbean at the Turn of the Century. Inter-American Development Bank. Research Department Working Paper Series No. 459.

Moore, B. 1966. *Social Origins of Dictatorship and Democracy*. London: Penguin Group.

Mouzelis, N. P. 1986. *Politics in the Semi-Periphery. Early Parliamentarism and Late Industrialisation in the Balkans and in Latin America*. Basingstoke: Macmillan.

North, D. C. 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.

Ocampo, J. A. 1994. Trade Policy and Industrialization in Colombia 1967–1991, in G. Helleiner (ed.), *Trade Policy and Industrialization in Turbulent Times*. London: Routledge.

—— 2004. Introducción, in J. A. Ocampo (ed.), *El desarrollo económico en los albores des siglo XXI*. Bogotá: Alfaomega, pp. 13–41.

Paiva Abreu, M de. 2000. Import Substitution and Growth in Brazil, 1890s–1970s, in E. Cárdenas, J. A. Ocampo, and R. Thorp (eds), *An Economic History of Twentieth Century Latin America* 3: 154–76.

Palma, G. 2005a. The Seven Main 'Stylized Facts' of the Mexican Economy since Trade Liberalization and NAFTA. *Industrial and Corporate Change*, November: 1–51.

—— 2005b. Four Sources of 'De-Industrialisation' and a New Concept of the Dutch Disease, in J. A. Ocampo (ed.), *Beyond Reforms: Structural Dynamics and Macroeconomic Vulnerability*. Stanford University Press and World Bank.

Peres, W. 1997. El resurgimiento de las políticas de competitividad industrial, in W. Peres (ed.), *Políticas de competitividad industrial. América Latina y el Caribe en los años noventa*. Mexico, D.F.: Siglo Veintiuno Editores.

Pérez, C. 2004. Cambio Tecnológico y Oportunidades de Desarrollo como Blanco Mobil, in J. A. Ocampo (ed.), *El desarrollo económico en los albores des siglo XXI*. Bogotá: Alfaomega, pp. 205–40.

Ranis, G. and L. Orrock. 1985. Latin America and East Asian NICs: Development Strategies Compared, in E. Durán (ed.), *Latin America and World Recession*, Cambridge: Cambridge University Press.

Reynolds, C. W. 1970. *The Mexican Economy: Twentieth Century Structure and Growth*. New Haven: Yale University Press.

Rodrik, D. 2004. Industrial Policy for the Twenty-First Century. Draft Working Paper Available: <http://ksghome.harvard.edu/~drodrik/UNIDOSep.pdf>.

—— and A. Subramanian. 2004. From 'Hindu Growth' to Productivity Surge: The Mystery of the Indian Growth Transition. Draft working paper Available: <http://ksghome.harvard.edu/~drodrik/IndiapaperdraftMarch2.pdf>

Schneider, R. 2004. *Business Politics and the State in Twentieth-Century Latin America*. Cambridge: Cambridge University Press.

Rueschemeyer, D., E. Huber Stephens, and J. D. Stephens. 1992. *Capitalist Development & Democracy*. Chicago: University of Chicago Press.

Shapiro, H. 2006. Diversity, Growth and Development, *World Economic and Social Survey* 2006, UN DESA Development Policy and Analysis (DPAD).

Singh, A. 1993. Asian Economic Success and Latin American Failure in the 1980s: New Analyses and Future Policy Implications. *International Review of Applied Economics* 7 (3): 267–89.

Sweezy, P. M. 1950. The Transition from Feudalism to Capitalism, *Science and Society* 14 (2): 134–57.

Taylor, L. 2000. External Liberalization, Economic Performance and Distribution in Latin America and Elsewhere. *WIDER UNU Working Papers* No. 215. December.

Thorp, R. 1991. *Economic Management and Economic Development in Peru and Colombia*. Pittsburgh: Pittsburgh University Press.

UNCTAD 2003. *Trade and Development Report*, New York and Geneva: United Nations.

Vejarano, C. P. 2002. Industrialization and Industrial Policy in Colombia: A Tale of Economic Development. Universidad del Rosario, Facultad de Economía. *Serie Documentos*. Borradores de Investigación 31, November.

Wade, Robert 1988. The Role of Government in Overcoming Market Failure: Taiwan, Republic of Korea and Japan, in H. Hughes (ed.), *Achieving Industrialization in East Asia*, Cambridge: Cambridge University Press.

—— 1990. *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization*. Princeton: Princeton University Press.