Bringing the State Back In: Lessons from East Asia's Development Experience*

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Since the end of communist regimes in Eastern Europe, policy makers and policy analysts in these »transition« states have resolutely turned away from learning about East Asia's development experience. They have been very keen, on the other hand, to learn about Western European and North American experience – for this is the world they wish to join, or rather, re-join after the communist hiatus. With few exceptions, they understand the causes of the prosperity of Western Europe and North America through the lens of »liberal« economics – as due, in large part, to the combination of (a) liberal markets for goods and financial assets only lightly restrained by public policies, (b) well-defined and well-enforced property rights allowing secure profit-taking by owners, and (c) the rule of law, which makes government, and all other economic agents, subject to a common set of rules. This is the combination they wish to copy, in the expectation that it will yield »catch-up« growth. To the extent that they pay attention to East Asia's catch-up experience, they understand it to validate the same model. To the extent that they acknowledge the existence of pro-active industrial and technology policy in either Western Europe or East Asia, they treat it as an aberration or decoration on the central thrust for largely free markets.

The last thing Eastern European policy makers and policy analysts want is a state that intervenes to alter the composition of economic activity within their borders; for this is what the communist state did, to disastrous effect. Therefore, a society organized around the free market is the only choice, they think. Hence the Eastern European consensus about catch-up development strategy involves:

a) market liberalization and accompanying institutional reforms, with a special accent on »getting the state back out« of the economy;

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b) privatizing state-owned enterprises, and privatizing the provision of public services to the extent possible;
c) becoming members of the European Union, or for those currently not eligible, entering a preferential trade arrangement with the EU;
d) attracting lots of foreign direct investment (FDI), in anticipation that it will produce for export and help upgrade the low quality of the existing capital stock;
e) attracting lots of aid (regional funds for the new EU members).

What is wrong with this consensus? Several things. First, liberalization exposes their producers to direct competition with China and other East Asian producers in sectors with diminishing returns. Second, foreign direct investment (FDI) is not likely to be an important means of catch-up. Not much FDI has entered the region since 1998: between 1998 and 2003 Eastern Europe, the Commonwealth of Independent States (CIS), and ex-Yugoslavia received only three percent of world FDI. And most of that was motivated by domestic market sales, not by the use of low-wage, low-tax platforms for producing exports to high-income markets, because Eastern European wages are far above those in much of East Asia while labor productivity is no higher.[1] Third, in these conditions radical liberalization may yield immiserizing growth, a »race to the bottom«. On the other hand, some sort of delinking strategy based on integration among groups of near-by countries outside the EU is not a promising alternative.

Sooner or later these bad choices may induce Eastern European policy makers and policy analysts to reconsider the thrust towards free markets as the route to catch-up development, and then to engage in a more open-minded way with the East Asian experience of the developmental state. The start of wisdom is to recognize that central planning is not the same as central allocation. Communism used and discredited central allocation. But central planning in the broad sense – public authorities intervening to alter the composition of economic activity within their borders, in line with an economy-wide exercise in foresight about the economy's future growth, in the context of a *capitalist* economy – has been alive and well in East Asia. And it should – this is my subtext – be seen as an opportunity in Eastern Europe. Though it must never be called »central planning«, because the term is automatically illegitimate in the eyes of the powers that be. »Governing the market« sounds more acceptable.

1. Stefan Collignon, Investing in the new member states, PowerPoint presentation, European Investment Bank Forum, Warsaw, 14–15 October, 2004.

This paper summarizes my understanding of *some* of the roles of the state in economic development in capitalist East Asia (South Korea, Taiwan, Japan), first in the post-Second World War decades, then in the last decade or so.[2] It should be emphasized that (a) a lot of the sectoral industrial policies and programs used in East Asia were of a rather modest kind, yet in aggregate probably very effective in accelerating the transformation of the economy into higher value-added activities; (b) they did not require sophisticated calculations and a highly skilled bureaucracy; and (c) other developing countries can and should adopt the same *norms* of industrial policy, even if with still more modest, blunter instruments. This is to reject the view of an economist as sophisticated as Howard Pack, who concludes from his study of Japanese and Korean industrial policy from the 1960s onwards that the benefits to Japan and Korea were modest, even in the 1960s when the benefits were highest, and that, »countries attempting to extract the benefits from an industrial policy that Japan and Korea obtained [NB: this implies that they did obtain some benefits] have to possess not only *an exceptionally capable bureaucracy* but also the political ability to withdraw benefits from non-performing firms … [Thus, developing] countries should be *exceptionally cautious* before embarking on such policies«.[3]

If Pack is right, industrial policy should not be on the agenda of Eastern European governments. But he misses a whole swathe of East Asian industrial policy of a different kind to the big-scale, picking the winners kind that he concentrates on.

Why the Liberal Explanation of East Asia's Catch-Up is Wrong

The conventional liberal explanation of East Asia's catch-up growth is wrong – not entirely wrong but substantially wrong. Recall that the mainstream economics literature does present the catch-up as due in large part to steady liberalization of markets: first, liberalization of the trade regime, then, liberalization of capital movements in and out; both accompanied by a steady lightening of the hand of the state in the domestic economy, a steady deregulation and privatization of state-owned enter-

2. Fuller argument is given in the new edition of my book *Governing the Market*, Princeton University Press, 2004.
3. Howard Pack, »Industrial policy: elixir or poison?«, *World Bank Research Observer*, 15, p. 1, emphasis added.

prises. All the attention is focused on the retreat of the state from the »import-substitution industrialization« phase, when the state tried to change the composition of economic activity.

In the conventional liberal explanation the liberalization of the trade regime receives central importance, as the key condition facilitating the rapid growth of exports. According to a major World Bank study,[4] countries with »outward oriented« trade regimes have shown very much better performance on a range of indicators than countries with »inward oriented« trade regimes. The Bank concludes that the causality is from trade regime to economic performance, and that the correlation between outward orientation and better performance holds not just across countries but for one country across time: the cross-sectional evidence strengthens our confidence that countries will experience improved economic performance as they liberalize their trade regimes. But the argument is full of holes. To give just a few illustrations:

First, the World Bank study's conclusion that outward oriented trade regimes have better performance than inward oriented ones obscures a contrary finding. The study took two time periods, 1963–73 and 1973–85, and for each period classified 41 developing countries in terms of four categories of trade orientation: strongly outward oriented and moderately outward oriented, and strongly inward oriented and moderately inward oriented. The moderately *inward* oriented countries had better performance, by most measures, than the moderately *outward* oriented cases. The result that the Bank celebrates – outward oriented trade regimes have better performance than inward – comes from aggregating the two sub-categories. The »strongly outward oriented« cases have such good performance indicators, and the »strongly inward oriented« ones such bad performance indicators, as to reverse the results for the »moderately oriented« cases.

Second, the sub-category of »strongly outward oriented« includes just three cases, Hong Kong, Singapore and South Korea. They are all East Asian, which raises the possibility that their outstanding performance has more to do with »East Asia« than with »liberal trade«. Moreover, the performance of the sub-category is mostly Korea's, which swamps the other two cases. Without the one case of Korea, the overall conclusion about outward oriented regimes having better economic performance than inward oriented ones would not hold.

4. World Bank, *World Development Report 1987*, Washington DC, 1987.

TABLE 1

Trade Regimes, Incentives to Sell on Domestic Market or Sell Abroad, Developing Countries Around 1969 (%)

	Taiwan	*Korea*	*Colombia*	*Argentina*
Effective protection to manufactured goods	14	13	35	112
Intersectoral dispersion	23	47	56	35

Source: Robert H. Wade, *Governing the Market,* tab. 3.2, p. 56, based on Balassa 1982.

Third, to describe Korea's trade regime in 1963–73 and in 1973–85 as »strongly outward oriented« is in any case a gross mischaracterization, given that the sub-category is defined as one where »trade controls are either non-existent or very low … There is little or no use of direct controls and licensing arrangements«. The study adds another criterion when defining the »moderately outward oriented« regime, namely, low variation of effective protection rates to different sectors of the economy; and we may presume that this criterion should also apply to the strongly outward oriented cases. There is plenty of evidence that these criteria do not fit Korea's trade regime in either period.[5]

One piece of evidence comes, ironically, from the *locus classicus* of the belief that Korea got rich by having a liberal trade regime, and it is worth citing in order to see how the liberal conclusion has been reached by selective inattention to data that would upset the liberal way of seeing things. The long-term World Bank consultant, Bela Balassa, coordinated an intensive study of the trade regimes of six developing countries based on data from around 1969. The study defined a liberal trade regime as one with two basic characteristics: (1) low average protection; (2) low variation (or dispersal) around the low average – that is, uniform protection across all sectors. The study found that for Korea and Taiwan, the average level of protection of manufactures in 1969 was relatively low. This was the key finding that supported the picture of a liberal trade regime. Strangely, the study did not draw attention to another finding that can be drawn *from the same data*. Dispersion of protection around the rela-

5. See Wade, *Governing the Market*, chapter 1 and 11.

tively low average was quite high. Korea and Taiwan did not have a uniform level of protection. Within manufacturing, different sectors had quite different levels of protection (see table 1).

It is likely that these differences were deliberate, the result of government intention reflecting the wider industrial development strategy. In contrast, where the level of average protection is high (Colombia, Argentina) it is more likely that a given degree of dispersion around the high average is not intentional but accidental.

In short, even the study regarded as the *locus classicus* of the image of East Asian capitalist economies as having liberal trade regimes provides evidence that disconfirms its own conclusions.

The observed sequences in East Asia better fit the hypothesis that »as countries grow richer they liberalize trade« than the hypothesis that »trade liberalization propels countries to become richer«.

Furthermore, the conventional neoliberal explanation is wrong about timing, and therefore about the causality from trade liberalization to growth. Recall that it says that trade liberalization gave a strong propulsive boost to the growth of exports and thus to broader economic growth. Dani Rodrik has shown that this is not the observed sequence. One does not find a big improvement in incentives to export preceding the take-off in exports, but one does find a big improvement in investment incentives thanks in large part to government policy changes. First came a surge of investment (in the case of Taiwan, around 1958–60) while trade incentives remained largely unchanged, then rapid growth of exports, then faster growth, then accommodating liberalization of trade. »The lesson from East Asia is clear«, says Rodrik. »[T]he three East Asian ›dragons‹ with low investment rates in the early 1960s – South Korea, Taiwan and Singpore – would not have been nearly as successful had their governments not given capital accumulation a big push by subsidizing, cajoling and otherwise stimulating private investors. The evidence from East Asia and elsewhere shows that investment booms produce economic growth as well as greater export orientation [and higher imports]«.[6]

6. Dani Rodrik, *The Global Economy and Developing Countries: Making Openness Work*, Overseas Development Council, Washington DC, 1999, p. 63. The argument applies only to capitalist economies.

The observed sequences in East Asia better fit the hypothesis that »as countries grow richer they liberalize trade« than the hypothesis that »trade liberalization propels countries to become richer«. The priority to investment is not specific to East Asia: a step-up in investment seems to be a nearly-necessary condition of a step-up in growth rates. Rodrik concludes: »Countries that are able to engineer increases in their investment efforts experience faster economic growth«.[7]

What about the World Bank's »East Asian Miracle« study, published in 1993?[8] It examined eight high-performing East Asian economies (not including China), and applied a range of tests to examine the impacts of industrial policy. About the impacts of *sectoral* industrial policy (targeted at specific sectors, such as chemicals or semi-conductors) the study says, »industrial policies were largely ineffective« and: »We conclude that promotion of specific industries generally did not work and therefore holds little promise for other developing countries« (p. 312, 354).

It also concluded that even had they been effective in East Asia, their administrative/political conditions are so demanding (for example, in terms of the sophistication of the calculations for identifying sectors for special promotion) that few other developing countries could achieve the same success. »[T]he prerequisites for success [such as it was] were so rigorous that policy makers seeking to follow similar paths in other developing countries have often [read, usually] met with failure« (p. 6). If this sounds like Howard Pack, quoted above, it is no accident; for he was the consultant who wrote the chapter in the »Miracle study« about the impact of industrial policies.

But the »Miracle's« evidence is not convincing.[9] To give just one reason: the problem of capturing »externalities«, or spillovers from one sector to another. It turns out to be very difficult to track the effects of spillovers across sectors. Yet they are real. Some critics of industrial policy have pointed to the lack of correlation between the amount of subsidies and protection given to sector X and the growth of productivity in sector X, or even to a negative correlation, as evidence of industrial policy failure

7. On the other hand, the cross-country correlation between decade-average investment rates and decade-average GDP growth rates (1950–1990) is not particularly strong. World Bank, *World Development Report 1999/2000*, *Entering the 21rst Century,* World Bank, 2000, figure 9.

8. World Bank, *The East Asian Miracle*, Washington DC, 1993.

9. Albert Fishlow et al., *Miracle or Design? Lessons from the East Asian Experience*, Overseas Development Council, Washington DC, 1994.

– or even of »picking losers«. But the test ignores the point that East Asian government gave various kinds of resource help to »infrastructural« sectors like steel and basic chemicals not mainly to promote productivity growth in those sectors but to have spillover benefits on the users of steel and basic chemicals.

The World Bank has been a leading proponent of the idea that East Asia got rich because it liberalized markets and followed the policy mix later called the »Washington Consensus«. »The East Asian Miracle« was a Bank research report; and the Balassa et al. study was sponsored by the Bank, while Balassa worked as a de-facto Bank staff member (de facto, because formally he was a long-term consultant). In appraising the evidence of these and other Bank studies, it is important to bear in mind that the staff see themselves as – like it or not – speaking for the organization.[10]

To its credit, though, the »Miracle study« does recognize that its evidence is hardly conclusive. »… we cannot offer a rigorous counterfactual scenario. Instead we have to be content with … analytical and empirical judgments« (1993:6).

A Closer Look at East Asian Industrial Policies

The Catch-Up Phase

To think constructively about industrial policy, one has to distinguish at least three types. First, economy-wide »functional« policies, that include exchange rate policies, macroeconomic balance and competition policies (including average level of protection). Second, multi-sectoral »horizontal« policies, that include incentives for R&D, incentives for »small and medium enterprises«, investment in port infrastructure, and the like. Third, sectoral policies, to promote specific sectors or sub-sectors or firms (the Proton auto firm in Malaysia, for example).[11] Most of the de-

10. The External Affairs Department instructs staff (including research staff) as follows: »Crucially, staff contemplating a speech, article, opinion/editorial, or letter to the editor must realize that a disclaimer that the speaker or writer is expressing personal views is unconvincing and usually ineffective. It also does not exempt the staff member from following procedures, or from recognizing that they speak for the institution«. Quoted in David Ellerman, *Helping People Help Themselves*, University of Michigan Press, 2004, p. 151.
11. I am indebted to an important paper by Justin Barnes, Raphael Kaplinsky and Mike Morris, »Industrial policy in developing economies: developing dynamic compar-

bate concerns the latter – did it matter in East Asia and could it work elsewhere? Immediately one can intuit how difficult it is to separate out the effects of the latter from the effects of the first two, because of the mutually-supporting relationships among them.

No industrial policy champion would claim that the third type, sectoral policies, can work with inhospitable policies of the first and second types.

Part of the problem of getting evidence specifically on sectoral policies' impacts is that the policies entered into the assessment tend to be of the kind »The Ten Year Plan to Develop the Petrochemical Industry«. What this misses is a great deal of activity »below the radar screen«, which may have rather small public expenditure costs but which in aggregate probably has had a powerful effect in raising the average level of technological and production capacity of East Asian firms.

The nudging of firms into higher value-added products – and jolting of transnational firms and domestic firms to establish domestic supply relationships – has been going on across many sectors, case-by-case, for many decades in Taiwan.

Taiwan, for example, had an Industrial Development Bureau (IDB) comprising, in the 1980s, some 200 engineers and allied professionals, and a sprinkling of economists. Much of the work was organized by input-output chains. The specialists in the chain that included, say, glass, monitored carefully the imports of glass, the buyers of imports, the production capacity of Taiwanese glass makers. As part of their job they were required to spend several days a month, at least, visiting firms in their sector. The aim of their monitoring and visits was to find opportunities to »nudge« the process of import replacement and export promotion, by using various kinds of administrative methods of »encouraging« the big buyers of imports to switch from importing to local sourcing once they judged that domestic suppliers could meet the quality and price of imports, provided they had a long-term supply contract and some technical help.

In the case of a transnational company, Philips, importing specialized glass for its televisions, the IDB officials informed Philips of the potential

ative advantage in the South African auto sector«, *Competition and Change* 8, 2, 2004, pp. 153–72.

for switching, and indicated that they would look favourably on other Philips' requests if it saw its way to switching. Philips said no. Then Philips began to experience longer and longer delays in its applications to import the specialized glass, which had previously been granted immediately. Philips protested to the minister, who apologized profusely, said he would look into it. The delays continued. Eventually Philips got the message and switched. The domestic suppliers undertook the needed investment in quality, and later were in a position to start exporting.[12]

The point is that this sort of nudging of firms into higher value-added products – and jolting of transnational firms and domestic firms to establish domestic supply relationships – has been going on across many sectors, case-by-case, for many decades in Taiwan. It has required an honest, competent cadre of public officials with skills in engineering and finance – though not a particularly large one; and an array of instruments on which to draw, which may include some capacity to manage trade (as in the Philips example) but also a wide range of non-trade measures for encouraging and discouraging. It has *not* required the sort of subtle strategic trade calculations that seem to be required – according to conventional strategic trade theory – in the case of cutting-edge hightech industries in the advanced industrial economies.

There is no question that it is difficult to pin down the quantitative effects of this sort of below-the-radar intervention by public officials – whether positive or negative. All we can be sure of is that a great deal of it was going on over decades, all the time, with a dedicated cadre of public officials to do it.

Forging Ahead

Today Taiwan has reached the technological level of middle-ranking OECD countries – which is an astonishing, almost unprecedented achievement given its starting point around 1950. But it remains well behind the world technology frontier in most sectors. For all its commitment to WTO principles the state continues to exercise economy-wide foresight, continues to shape the composition of activity within its borders, does not let »the market« take its course.

12. Wade, *Governing the Market*, 2004, p. 285.

Linda Weiss and Elizabeth Thurbon remark that »the practice of governing the market is not just about policy – GTM [governing the market] is also, and perhaps more importantly so, about the normative environment that sustains the *will* to govern the market, and the *legitimacy* of governing the market as perceived by actors in the polity. This is a point often overlooked in the mainstream literature …, which typically bases its claims on observed *policy* changes since the [financial] crisis [of 1997–98 – that is, claims that the Taiwan government has given up governing the market since the crisis]. The assumption is often that if a state has relinquished certain pre-crisis policies … it must also have abandoned a commitment to GTM and be acting in ways broadly consistent with the norms of competitive liberalism.«[13] They relate that the entrance to the Industrial Development Bureau is emblazoned with a quote from Goethe, that captures the difference at the level of *norms* between a government role based on strategic economics and one based on liberal economics: »the most important thing in life is to have a goal, and the determination to achieve it«.

The Taiwan state continues with the organizational structure of the developmental state:[14]

- A pilot agency located in the very heartland of the state and chaired by the third ranking political leader in the state (the vice premier), called the Council for Economic Planning and Development;
- An operational agency that does the »nuts and bolts« of industrial policy, the Industrial Development Bureau described earlier, located within the Ministry of Economic Affairs;
- Industry associations by sector, membership of which is obligatory, whose secretary is semi-appointed by the government and is responsible for *two-way* interaction between the member firms and the government (and hence not likely to let the association become a center of political resistance to government);
- Public R&D laboratories, notably the umbrella agency, the Industrial Technology Research Institute (ITRI), with a staff of some 10,000 sci-

13. Linda Weiss and Elizabeth Thurbon, »›Where there's a will there's a way‹: Governing the Market in Times of Uncertainty«, *Issues and Studies*, 40, 1, March 2004, pp. 61–72, at p. 63.
14. On the organizational structure of the developmental state (with specific reference to Korea) see Vivek Chibber, *Locked in Place*, Princeton University Press, 2003.

entists (by the mid 1980s) organized in more sector-specific labs; and an even bigger military-oriented counterpart.

The essence of the political process of national development is intense dialogue between these organizational components of the developmental state. Earlier, the first two tended to call the tune and the others responded; since democratization in the late 1980s the balance of power has shifted towards the labs and the industry associations. In particular, much of the brainstorming takes place between ITRI labs and industry associations, which helps to build inter-firm networks with *reliable* collaboration between members.

Commonly, an ITRI lab incubates a specific technology (e.g. Radio Frequency Information Devices, a type of chip), gets it to pre-commercial stage, takes out patents, and then spins off a sort-of private firm, to which it gives the patents in exchange for equity. Often the senior managers of the firm are ex-ITRI, or part-time ITRI. This technique has been used for many initiatives, including the import-replacement of bottleneck components whose recurrent delays in importing are impairing Taiwan's entry into advanced sectors. In this and many other ways, the state helps to assume a large part of the risks of research and development of technologies to commercialization stage.

Emphasis is given to promoting *nationally-owned* firms, with limits placed on the operation of foreign firms (e.g. foreign service firms). All the time, the apparatus of the developmental state is looking for ways to maximize technology spillover from foreign firms (abroad or in Taiwan) into the heads and hands of local firms. Equally, however, the apparatus is actively involved in building up a large stock of Taiwan-owned firms operating abroad – building up *outward-FDI* – so that Taiwan is more of a reciprocal partner than if it were only playing the role of a periphery welcoming inward-FDI from the center. Taiwan's outward FDI in China is well known; but it has also built up a large stock in other developing regions as well as in the core regions of the world economy (Japan aside).

The underlying competitive strategy for the nation is based on recognition that its firms, being some way off the world technology frontier, must seek to capture second-mover advantages. Its firms are mostly unable, yet, to capture the brand-name advantages of first movers. They must be able to chase hot products developed by first movers, push up production of specified items quickly, and exploit scale economies before profit margins become paper-thin. For this strategy large firms, not networks of small and medium enterprises, are increasingly needed – large firms which are able to produce in large volumes and which are big enough to be of interest to first-mover firms as subcontractors.[15]

The government's role is to push on with industrial policy of *all three* of the types distinguished earlier. In particular, to promote »industrial complexes« or »urban economic commons« or »growth poles«; and to promote moves in many industrial and service sectors – but often with sector-specific and even firm-specific instruments – into higher value-added parts of global value chains (such as into manufacturing-related service industries, MRSIs, as part of which the Radio Frequency Information Device mentioned earlier was developed).[16]

Besides Taiwan, Singapore, Japan and China also retain major features of the developmental state. South Korea, on the other hand, has gone some way to dismantling what used to be a model of the type. The dismantling began in the late 1980s, with democratization and the discrediting of military rule – and by the same token, discrediting of bureaucratic rule. Like a swing in fashion, many Korean economists and public officials converted to neoliberal economics of a fundamentalist kind, with US-trained Korean economists in the role of modern missionaries. Their ideas acquired power from their resonance with the interests of the large Korean conglomerates, like Samsung, which by the late 1980s had reached the point of organizational and technological sophistication where they saw the state as more of an obstacle than a help. And the G7 states particularly focused on Korea with demands that it open its markets, to avoid »another Japan«. By 1995 the Economic Planning Board – the pilot agency since the early 1960s – had in effect been abolished, and the capital market had been largely opened up for foreign borrowing and foreign financial service firms.

Yet even in Korea things are not what they seem to be. Norms of »governing the market« continue. That is, the government continues to have a legitimate role in steering and coordinating the strategies of the private sector – it coordinates a governance arrangement spanning government and autonomous but interdependent firms, though not (as before) a commander of specific outcomes.

Take telecommunications liberalization, for example. Before the early 1990s telecommunication services in Korea were provided by a public

15. Alice Amsden and Wan-wen Chu, *Beyond Late Development: Taiwan's Upgrading Policies*, MIT Press, 2003.
16. Weiss and Thurbon, above.

enterprise, backed by a history of heavy government regulation in equipment and telecom services. Then in the late 1980s and early 1990s a new technology, digital mobile telecommunications, appeared on the world frontier. This promised a much higher demand for mobile services and accompanying infrastructure. The conglomerates wanted to diversify into telecoms. The US government pressed Korea to open its telecom market to US firms; as did the prospect of GATT/WTO membership.

For all these reasons the Korean government had to privatize and liberalize the sector.

The overall result illustrates the virtues of gradual liberalization orchestrated by the state in line with national development objectives, where those objectives give weight to national ownership in important sectors.

But the government recognized that telecoms would be a »leading sector« on a world scale in the coming decades, and that Korea had to maintain a strong presence of Korean-owned firms. It began to liberalize by creating another public enterprise to compete with the first; then privatized them; then invited a small number of other Korean firms to apply for licenses; then invited some foreign telecom firms to enter in *minority* partnership with Korean firms (to get their technology); and only then did it allow some wholly-owned foreign firms to compete, under conditions restricting their suppliers of equipment and their technology standards to government-approved ones. The whole process was aimed at developing a strong indigenous telecom capacity before full liberalization, quite contrary to what the US government had in mind.[17]

At the same time, a parallel project was under way to use a public-private partnership to do the R&D for CDMA (Code Division Multiple Access) digital transmission technology, especially because the leading foreign telecoms firms would not sell advanced technology to the Koreans. The Ministry of Industry and Commerce formed a technology development network with the government-sponsored Electronics and Telecommunications Research Institute (ETRI) linked to the former public telecom company and a number of private Korean manufacturers, each

17. This account of Korea's telecommunication strategy is based on information in »Liberalisation as a development strategy: new governance in the Korean mobile telecom market«, a paper under journal review whose author remains anonymous.

with an assigned task. Much of the funding for this network came from the sale of shares in the privatized public enterprises. The proceeds were also used to subsidize the uptake of demand for telecommunications services, including internet access, making a virtuous circle between supply and demand.

The overall results have been spectacular: Korea jumped from being a nobody in world telecommunications in the early 1990s to being a major player in the early 2000s. It has the highest broadband penetration in the world. It illustrates the virtues of gradual liberalization orchestrated by the state in line with national development objectives, where those objectives give weight to national ownership in important sectors.

The Theory of Governing the Market

It is one thing to say that governments in East Asia remain committed to governing the market; but is there any theory which might suggest why such actions might be effective at promoting rapid economy-wide development?

Conventional economic analysis stresses that any attempt by public agents to change the composition of economic activity away from that which results from well-functioning markets is bound to be ineffective, bound to thwart the expansion of comparative advantage along whose path sustainable development lies. Measures such as protection, or domestic content or export performance requirements, withdraw resources from more productive uses and reduce consumption. Export requirements, for example, may worsen the trade account by reducing the export potential of *other* industries.

But once the underlying assumption of perfect competition is replaced with an assumption of oligopoly – a small number of firms and barriers to the entry of competitors – the argument changes. In particular, the argument changes when there are increasing returns to scale such that only some of many potential production sites can be established, and when there are learning-by-doing economies which give advantages to firms which establish production early. In these conditions there is scope for states, not to »create« comparative advantage or »pick winners« out of thin air, but to shape and direct comparative advantage. These conditions occur frequently in the mid-tech industries of Eastern Europe and the mid-tech and high-tech industries of East Asia.

For example, states can intervene in order to accelerate the move of chunks of productive activity from existing high-cost sites abroad to host country sites, faster than »the market« would. Case studies of transnational corporations show clearly that corporations operating in conditions other than perfect competition – which is the normal case – are often *slow* to react to price signals at the margin, even when they are well-informed about profitable opportunities to shift locations. This is especially so when rearranging intra-firm operations as in re-locating production out of the core regions to a cheaper-labor site, or switching suppliers from a high-cost one at home to a cheaper one in a developing region would incur substantial exit costs.

The case of automobile production in Mexico provides an illustration. Ford and Volkswagen established assembly and engine plants in Mexico in the 1960s, with a large part of production intended for export. From this experience it became clear to them and to other auto firms that big cost advantages were to be reaped. Yet by the late 1970s their investments remained relatively small, far from world-scale capacity and far from being integrated into their global sourcing network; and other major auto makers had not followed them in establishing Mexican plants. So in 1978–79, Mexican industrial policy officials, aware that US car makers were under competitive pressure at home from Japanese imports, decided to enforce a 1977 decree that linked access to the domestic market to exports: »if you fail to meet an escalating export schedule your domestic sales will be cut«. The first to respond was General Motors, which in 1979 announced the biggest one-time investment in its history, to be placed in Mexico. Other auto makers soon followed GM's lead in announcing plans for major expansion of exports from Mexican sites, in order not to lose share in the Mexican domestic market. But this was 16 years after Ford and Volkswagen first began to show the cost advantages of Mexican sites! They and the other auto firms had resisted international comparative advantage for a long time, and it took the »jolting« of Mexican officials to break their lock-in to exit costs and other intra-firm rigidities.[18]

The more recent case of auto production in South Africa provides another illustration. Here the government after 1995 introduced an export-

18. Theodor Moran, Strategic trade theory and the use of performance requirements to negotiate with multinational corporations in the Third World, typescript, Georgetown University, October 1991.

import link system (similar to that in Mexico), such that an auto firm's access to the domestic market (with current sales of around 350,000 light vehicle units a year and expected to grow) was made conditional on export performance, either of finished vehicles or components in the value chain. In addition, several complementary programs – formulated and monitored by an auto industry development council, comprising representatives of assemblers, component makers, retailers, trade unions, government, plus a few academics who met every six weeks – helped to improve business organization and labor relations up and down the supply chain. The whole program was designed to harness the rivalry between the big three German auto makers, but also Toyota and Ford, to the benefit of the South African economy. Justin Barnes et al. show that the selective policies targeted at the auto industry were almost certainly effective by several measures of effectiveness, and that they did not require large public expenditures or a sophisticated bureaucracy making sophisticated calculations.[19]

Conclusions

The general point from all this is that there is a body of theory, or theoretical insights, at hand to support a strategy of governing the market in a developing country context (including Eastern Europe), based on ideas of economies of scale, learning-by-doing, second-mover advantages, stickiness in location decisions of transnational corporations, and the arbitrariness of much of »comparative advantage«.[20] And there is also some relevant empirical evidence, even if its conclusions about effectiveness are open to dispute – though no more so than the evidence which purports to show the fallacies of government efforts to change the composition of economic activity.

The case studies show that the task for industrial policy strategists in identifying products or sub-sectors for targeting is not particularly difficult – it involves estimating costs of production, comparing with import prices and quality, estimating demand elasticity, and so on, the same sort of calculations as transnational corporations make every day; and it involves understanding the bargaining tactics of transnationals and how to

19. Barnes et al., 2004, above.
20. Philip Toner, *Main Currents in Cumulative Causation*, Palgrave, 1999.

turn them to national advantage. In the Eastern European case it is important for industrial policy strategists not to think only of inward-FDI, but also of outward-FDI as a strategy – using banks awash with funds to make mergers and acquisitions and perhaps green-field investments in core economies; this helps to shift thinking out of the center-periphery mindset where the periphery thinks its salvation lies in obtaining resources from the center. Again, Taiwan and other East Asian cases show how the government can help to orchestrate these outward-investments in line with a national interest.

The more difficult task is not the policies themselves, but designing an industrial policy bureaucracy – even if not the larger developmental state, as above – which is motivated to achieve its intended objectives. But relatively meritocratic agencies like Taiwan's Industrial Development Bureau should not be beyond the wit of many Eastern European states.

In the end, the main obstacle to success lies at the level of the norms: the legitimacy of efforts by public agencies to change the composition of economic activity. Taiwan's Industrial Development Bureau has the Goethe quote referred to earlier. The prevailing norm in the »international development community« and in the transnational community of economists, on the other hand, is captured in the remark of Sir Terence Burns, chief economic advisor during the Thatcher years: »if we can't make money by manufacturing things, we'd better think of something else to do«, or the remark of Herbert Stein, chairman of the Council of Economic Advisors during the Reagan years: »if the most efficient way for the U.S. to get steel is to produce tapes of ›Dallas‹ and sell them to the Japanese, then producing tapes of ›Dallas‹ is our basic industry«.[21] Burns and Stein reflect the assumption that the competitive model is a reasonable approximation to the real world; the Goethe quote, as operationalized in Taiwan, reflects the assumption that the real world is better understood in terms of oligopolistic markets, where governing the market has potentially big payoffs. Eastern European economists and policy makers believe Burns and Stein at peril to their economies' catch-up with the West.

21. Cited in Robert Wade, »East Asia's economic success: conflicting perspectives, partial insights, shaky evidence«, *World Politics*, 44, January 1992, p. 270–320.