

How can Middle-Income Countries Escape 'Gravity' and Catch up with High-Income Countries? The Case for Open Economy Industrial Policy

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The Continuing Ascendancy of the Washington Consensus

In 2002, a *New York Times* reporter covering the World Economic Forum meeting reported that among business executives and government leaders attending the forum, the prevailing view was that "A nation that opens its economy and keeps government's role to a minimum invariably experiences more rapid economic growth and rising incomes" (*New York Times* 2002).

In 2006, Harvard professor Gregory Mankiw, the author of a leading economics textbook and former Chairman of the President's Council of Economic Advisors, informed readers of *The Wall Street Journal* that "Adam Smith was right when he said that 'Little else is required to carry a state to the highest degree of opulence from the lowest barbarism but peace, easy taxes and a tolerable administration of justice'" (Mankiw 2006).

Also in 2006, *The Economist* magazine published a survey of the world economy called The New Titans. The New Titans are the developing countries, or some of them. The theme of the survey was that "As these newcomers become more integrated into the global economy and their incomes catch up with the rich countries, they will provide the biggest boost to the world economy since the industrial revolution" (*The Economist Group* 2006, 3).

Developing countries as a group, the survey reports, have enjoyed growth of GDP per head at 5.6% a year over the past five years, the fastest rate of growth of any large set of people in recorded history, well above the 1.9% growth in average incomes in the rich countries, and well above the 2.5% growth of average incomes of developing countries over the preceding 20 years. Looking ahead, *The Economist* says that the long-run growth prospects of developing countries "look excellent, so long as they continue to move towards free and open markets, sound fiscal and monetary policies and better education. Because they start with much less capital per worker than developed economies, they have huge scope for boosting productivity by importing Western machinery and know-how. Catching up is easier than being a leader" (*The Economist Group* 2006, 4).

The key to Asia's 'miracle,' says the survey, was to have created the right conditions for high investment: "a high saving rate, open markets and a good education system" (*The Economist Group* 2006, 12).

Looking forward, the survey says that in order to sustain catch up growth, developing country “governments [must] do more to free up markets and reduce their own meddling” (*The Economist Group*, 12).

These three sources all express the ‘fundamentals’ of the neoliberal policy prescriptions for growth, which we have come to know as ‘The Washington Consensus’ (Wade 2007b). Of the fundamentals, the most fundamental is the proposition that ‘government failure is always likely to be worse than market failure’.

Does the World Bank still endorse the Washington Consensus?

It is sometimes said today that the Washington Consensus is dead, that no-one really believes it anymore.¹ Exhibit A for this proposition is the 2005 publication from the World Bank, called *Economic Growth in the 1990s: Learning from a Decade of Reform*. It says that the central lesson of the 1990s is

“that there is no unique universal set of rules. Sustained growth depends on key functions that need to be fulfilled over time: accumulation of physical and human capital, efficiency in the allocation of resources, adoption of technology, and the sharing of the benefits of growth. Which of these functions is the most critical at any given point in time, and hence which policies will need to be introduced, which institutions will need to be created for these functions to be fulfilled, and in which sequences, varies depending on initial conditions and the legacy of history. Thus we need to get away from formulae and the search for elusive ‘best practices’, and rely on deeper economic analysis to identify the binding constraints on growth. The choice of specific policy and institutional reforms should flow from these growth diagnostics ... [T]he complexity and diversity of growth experiences are not amenable to simplistic policy prescriptions” (World Bank 2005, xii-xiii).

It is true that this line of argument is very different from previous World Bank publications in its emphasis on avoiding ‘one size fits all’ policy prescriptions. But note two big qualifications. First, the report continues the Bank’s long standing neglect of ‘industrialization’ in general (the 360-page report makes just one reference to ‘industrial performance’ and one reference to ‘industrialization,’ and no reference to ‘industrial policy’); and equally it continues the Bank’s long standing neglect of ‘technology’ or ‘technology development’ (to which it gives passing references scattered over five pages). Apparently, the lessons from the 1990s do not include lessons about industrialization or industrial policy or technology policy – which from a Schumpeterian perspective should be central.

Indeed, so antagonistic has the Bank been to the idea of deliberate policy to foster technological learning that a few determined World Bank staff members had to struggle for years to persuade senior management to allow a World Development Report focused on technological development (which eventually appeared under the title *Knowledge for Development, World Development Report 1998/99*, World Bank

¹ Including Dani Rodrik in “Goodbye Washington Consensus, Hello Washington Confusion?” (2006)

1999). At the operational level, the Bank has allowed hardly any projects or country work squarely focused on technological development since the early 1980s, when neoliberal ideas came to constitute ‘global policy.’

The second big qualification to the idea that the *Economic Growth in the 1990s* report (World Bank 2005) signals the end of the Washington Consensus is that one swallow does not a spring make. No other Bank report before or since has made such a pragmatic argument. And it is entirely likely that the great majority of the Bank’s operational staff have not read even the summary, and that in their daily work, they continue to operate in the belief that their job is to ensure that governments adopt the Washington Consensus.

The World Bank and Mongolia

As an example of a common World Bank modus operandi, take the case of Mongolia. The government that took power in Mongolia after the end of communism in 1991 swung to the non-communist extreme and embarked on a program of rapid economic liberalization, making it a star pupil of the Washington Consensus. The result was a collapse of the industrial sector, fast-rising urban unemployment, an influx into pastoralism, fall in pastoral yields, and a sharp deterioration in ‘social indicators,’ which had been relatively high in the era of protected industry, relative to Mongolia’s average income.

However, the government did want to retain one ‘industrial policy’ instrument, namely an export tax on unprocessed wool. The Asia Development Bank offered the government a big loan, on condition that the government drop the export tax. The government obliged, and now Mongolia’s wool is processed in China. Mongolia continues to struggle with high unemployment and a low-yield pastoral economy (Reinert 2004). Mongolia’s experience illustrates that the alternative to an ‘inefficient’ industrial sector (measured in world market prices) is often not an ‘efficient’ industrial sector, but none, which may be worse.

Fast-forward to 2002, when a German Development Bank mission arrived in Ulan Bator to help with Mongolia’s WTO accession. The mission discussed Mongolia’s situation with the World Bank country director. It floated the idea of restoring an export tax on unprocessed wool. The World Bank country director objected strongly. As recalled by a participant, he said: “That would be going backwards. We don’t want the government to intervene in the economy. We want the government to stick to free trade.”

Most economists dismiss such evidence as ‘anecdote,’ as though the next observation could reverse the big picture. I suggest that a large set of observations of World Bank economics staff and country directors in action would support the picture from the Mongolian case (though with more accommodation to ‘political realities’ in important borrowers like China).

These same hard neoliberal ideas have also, of course, come to have strong traction among political leaders, business people and academic economists in developing countries. As just one case in point take the remark of Brazil’s finance minister who said in the late 1990s, “Today there are only two choices: you are either a neoliberal or a neomoron.”

The bottom line: Washington Consensus or neoliberal policy prescriptions of a rather simple free market kind continue to constitute ‘global policy’ – policy advocated by multilateral actors like the World Bank, the Asian Development Bank, and the IMF, and by large swathes of developing country elites.

At the same time, the consensus is less strong than it used to be during the 1980s and 1990s. There is too much evidence that countries which have fully embraced the Washington Consensus have not seen substantial improvements in economic performance; and new developments in trade theory and growth theory question the theoretical foundation of the Washington Consensus.

In particular, there is the problem of the ‘China price’ – the ability of Chinese manufacturers to land goods in foreign markets at a fraction of the price, perhaps 50% of the price, of other developing country manufacturers. The result is sustained competitive pressure on developing country manufacturing sectors everywhere. Economists of neoliberal persuasion are unworried, on the assumption that resources released from manufacturing will be re-employed in other sectors more in line with comparative advantage – in agriculture and natural resource-based activities, for example. Implicitly, they assume that this new (or new-old) specialization will be good for growth and development. Other analysts with a more Schumpeterian (or Kaldorian) perspective see the erosion of developing country manufacturing in the face of Chinese competition as a major problem. This helps to explain why in Latin America over the 2000s, there has begun to be open talk of the need for ‘industrial policy,’ a previously forbidden phrase.

In short, the Washington Consensus still prevails, but surrounded by more uncertainty and ambivalence than in the 1980s and 1990s. This uncertainty and ambivalence creates space for critiques of the core neoliberal arguments and presentation of alternatives to be taken more seriously than in the past two and a half decades.

Catch up and Gravity

Let me start my critique of the neoliberal development agenda by addressing two of the key words in my title: catch up growth, and ‘gravity.’²

The problem of ‘catch up growth’ comes to exist when – to put it abstractly – a differential in ‘productivity’ or ‘competence’ opens up between two or more economies which trade with each other freely. The danger for the less productive economy is that firms in the more productive economy can outcompete firms in the less productive one across many sectors. Of course, from a neoliberal perspective, competition between firms in the two economies will lead to changes in relative prices which in turn release resources – including people and capital – from less efficient uses to more efficient uses, in line with comparative advantage, leading to output and income gains in both. But from a Schumpeterian perspective, the response may be such that the less productive economy is restructured by ‘free market forces’ into an

² My title also refers to ‘middle income countries.’ By this, I mean to eliminate developing countries where there is little organizational or normative separation between the private and the public sectors, between economic and political power; and where the state is highly exposed to external pressures, including those from multilateral agencies. See below.

appendage or exclave of the more productive economy, specialized in raw materials or agricultural commodities or routine assembly operations, with its growth highly coupled to growth in the more productive economy. The great question is what sorts of policies and policy packages can avoid this fate; with what accompanying institutions, and what structures of state authority.

Now to ‘gravity.’ Gravity is a metaphor for downward or not increasing state mobility in the world per capita income hierarchy. If we look at the ratio of average regional income to that of the North (pre-1994 OECD) for several regions from 1950 to 2001, we see that the ratios for Latin American, Eastern Europe, and Sub-Saharan Africa fell after 1980; China and ‘Asia minus China and India’ rose, but even by 2001, they had reached only around 15% of the North’s (in purchasing power parity dollars). This is far from a picture of catch up growth. If we think of the states of the world as a caravan, much of the caravan is falling even further behind the leaders.

Weighting the regional averages by regional population we get a ‘1:3:2’ world. There are roughly one billion people in the high-income countries; 3 billion in countries where growth rates have been substantially faster than in the high-income countries over the past two decades, though starting from very low income levels and remaining at very low income levels; and 2 billion where growth rates have been lower than in the high-income countries, some of these in middle-income countries, others in low-income countries.³ The large majority of developing countries (with over 1 million population) are in the non-catch-up category.

As *The Economist*’s figures quoted earlier suggest, the past five years have seen a strong rebound of developing countries in general. But whereas *The Economist* projects the currently high growth rates far into the future, there are no strong grounds for thinking that past growth mechanisms have been substantially altered such as to justify the projection. Most likely, most developing countries will continue to be subject to higher volatility of growth rates and longer periods of recession than developed countries.

I conclude that there may be forces at work in the world economy which are analogous to gravity, which make it very difficult for the majority of developing countries (clustered by region) to sustain catch up growth – growth in income per head fast enough for them to reach, say, 70% of that of the average of the North within two generations (40 years); and also forces analogous to ‘magnetic levitation’ holding up the now rich countries and making it unlikely that they will experience significant downward mobility (Wade 2007a; Wade 2004b).

In other words, the productivity gap between a small group of rich countries with about 15% of the world’s population, on the one hand, and developing countries on the other, does, as *The Economist* says, provide *opportunities* for catch up growth through assimilation of technologies and organizational forms developed elsewhere and through sales to markets already developed elsewhere; but the majority of developing countries (though not the majority of developing country people) have not been seizing those opportunities. Why not?

³ Paul Collier in *Economics and World History: Myths and Paradoxes* (2007) calculates this bottom category as one billion people.

Learning from Past Growth Trajectories

The Economist and other organs of the Washington Consensus would claim that to the extent that the opportunities opened by globalization are not being seized, the reason is insufficient ‘reforms’ – where the word ‘reforms’ always means liberalizing markets and extending the reach of markets into the state (legitimately as distinct from corruptly). As markets become more liberalized, more entrepreneurs and investors will come forward to exploit the new opportunities for profit. This of course puts the ‘blame’ for slow growth on the developing country government – it does not undertake sufficient liberalizing reforms – and takes attention away from the international economy.

The question is how well this claim fits the empirical evidence of growth trajectories. Not well, is the short answer.

First, a conceptual point. Globalization expands the opportunity set; but the opportunity set is also a function of a country’s location (including coastal versus landlocked), resources, disease load, and the like, as well as, as noted, the productivity gap between it and the leading countries (Collier 2007). It is misleading to emphasise the expansion of the opportunity set facing developing countries without recognizing the tight constraints imposed on many (especially in Sub-Saharan Africa) by these other determinants. Also, ability to seize opportunities is a function of not only policies, but also deeper and path-dependent institutions, including the structure of state authority. (And we should add, not only ability to seize opportunity, but ‘incentive to seize’ – which is also a function of international pressure, including geopolitical threats, as in the case of Japan, South Korea and Taiwan.) In short, the standard Washington Consensus focuses on ‘ability to seize opportunity,’ and reduces this largely to policies, ignoring the factors that affect the size of the opportunity set and the factors other than policies which affect ability to seize and incentive to seize.

Second, hardly any of today’s developed countries, with the partial exception of Britain, the first industrializer, developed on the basis of free trade. Most countries protected and promoted their infant industries in one way or another. The United States was “the mother country and bastion of modern protectionism” during the nineteenth and first half of the twentieth centuries, in the words of economic historian Paul Bairoch (1993, 30).⁴ At the end of the 19th century, when US per capita income (measured at purchasing power parity) was about equal to that of the average of developing countries today, its industrial tariffs averaged close to 50%, compared to around 10% in developing countries today.

Third, the highly successful East Asian ‘tigers’ did not limit state policies to making markets work more effectively; they used selective intervention extensively to steer markets and accelerate diversification and upgrading.

Fourth, in the stylized comparison between Latin America and East & South Asia, we find that Washington Consensus policies have not been associated with better economic performance. Latin American countries have, for the most part, been

⁴ See here also Chang (2002).

star pupils of the Washington Consensus; yet they have been falling behind in terms of income and productive capacity, as we saw in Figure 1. India and China, on the other hand, have been the star performers over the past 15 years; yet they would both score quite low by Washington Consensus criteria (except for China in terms of ratios of foreign trade and foreign investment to GDP). South Korea and Taiwan, too, would not have scored high on the Washington Consensus during the 1960s to 1980s, their period of fast catch up growth. Something is wrong when the good pupils score the low grades and the bad pupils score the high grades.

To clinch the point, consider two countries, A and B.⁵ A is a member of the WTO, it undertook comprehensive trade liberalization in 1994-5 (cutting tariffs to a maximum of 15% and removing all quantitative restrictions), and has implemented far-reaching liberalization within the domestic economy, including privatization, foreign ownership of national companies, full repatriation of profits, and the like. It is also located a few hundred miles by sea from the world's biggest market, the US. B is not a member of the WTO, it has maintained quantitative restrictions and tariffs of 30-50%, much of its trade is through state firms and import monopolies, foreign ownership of national companies is restricted, and it is located 4,000 miles from the US.

Orthodox thinking would identify A as the likely success story. In fact, A is Haiti, which has had dismal economic performance, and B is Vietnam, which has grown at more than 8 % a year since the mid 1980s, sharply reduced poverty, and rapidly integrated with the world economy (had rapidly rising trade/GDP and foreign investment/GDP) – high trade barriers notwithstanding.

The A/B comparison makes the point that coherent state-led growth strategy to build on increasing returns and the proximity-productivity mechanism can count for more than trade liberalization, and integration with the world economy is not a *pre-requisite* of a successful growth strategy. On the other hand, rising trade/GDP and foreign investment/GDP is indeed a likely *outcome* of a successful growth strategy, and if these ratios are prevented from rising, the strategy may not remain successful.

Third, we know that the East Asian capitalist economies in the 1950s to the 1980s – the phase of rapid industrialization – experienced intensive government ‘intervention’ in markets, including high rates of effective protection (though not in the city-states of Hong Kong or Singapore) and active technology-upgrading policies.

The fact that they had intensive government ‘intervention’ does not mean that the intervention was important to their subsequent growth, of course. Disentangling the impact of industrial policies from other things – including heavy investment in education, as well as Cold War-smoothed entry to the American market for manufactured exports and a large amount of aid – is very difficult. But we now have detailed studies of how these industrial policies worked, and these detailed studies make it plausible that the policies had an important effect.

For example, Amsden argues in *The Rise of the Rest* (2001) that East Asia's success in manufactured exports – and in leveraging exporting success into product

⁵ This comparison comes from Dani Rodrik's “The Global Governance of Trade as if Development Really Mattered” (2001).

diversification and upgrading – had much to do with the governments’ use of ‘reciprocal control mechanisms,’ such that firms had to meet performance targets in exchange for special favors – targets in terms of exporting, or local content requirements, or product specifications.

In my own work on East Asia, I provided a large amount of evidence about the nitty-gritty operation of industrial policies and the various kinds of links between policy support and performance. I argued that East Asian industrial policy comprised two kinds – ‘leading the market’ and ‘following the market’ – where ‘leading’ refers to the government making an investment decision which the private sector would not make, and ‘following’ refers to the government supporting *some* of the bets of private firms or supporting a marginal extension of the production frontier in a given product. The classic example of industrial policy of the ‘leadership’ kind was Posco, the Korean integrated steel firm, which no private firm wanted to undertake and which the World Bank, in the early 1970s, advised the Korean government (on the grounds that Korea had no comparative advantage in steel). By 1987 the World Bank described Posco as “arguably the world’s most efficient producer of steel” (Wade 2004a, 319).

However, most East Asian industrial policy was *not* the leadership kind. Rather, most of it tended to follow the market, so as to accelerate movement in some of the directions where private entrepreneurs were interested in moving. For example, the Taiwan government used a fiscal incentive scheme which gave fiscal incentives to firms for that part of their production which fell into specified frontier products. For example, in 1982, production of “high-efficiency fluorescent tubes, limited to those which have an intensity of 80 lumen or above” was eligible for a tax holiday or accelerated depreciation. At that time, few firms were producing at the 80 lumen level of sophistication. Later the standard was lifted as the volume of production of 80 lumen tubes increased (Wade 2004a, appendix A; Wade 1990).

In short, we have a substantial body of evidence which suggests that protection and more active government promotion policies have historically been associated with good economic performance. But what about the theoretical mechanisms which might suggest causality from the former to the other?

New Theory in Industrialization and Trade

Even though most students of economics today have never heard of Nicolas Kaldor and his three growth laws (which he enunciated in the 1960s), these growth laws are important for understanding economic growth and for making the case for industrial policy. Empirical generalizations rather than theory, they say that there is a strong positive correlation between the growth of manufacturing output and

- (1) the growth of GDP,
- (2) the growth of productivity in manufacturing (this one is also known as Verdoorn’s law), and
- (3) the growth of productivity outside of manufacturing (agriculture, services, etc.).

They imply that the manufacturing, or industry more generally, is the engine of growth; and that special promotion of manufacturing may be justified for its spill-over benefits on growth of output and growth of productivity in non-manufacturing. Tests of the model across 28 regions of China for the period 1965-91, and 45 countries of Africa for 1980-96, provide strong confirmation that industrial activity is the 'engine of growth'.⁶

While Kaldor's growth laws continue to suffer from neglect, we have seen over the 1990s and 2000s a burgeoning theoretical literature whose central theme is the prevalence and multiple sources of *market* failure. The irony should be noted: many of the assumptions about market failure which motivated the industrial policies of the 1960s, and which were subsequently rejected as irrelevant in the 1980s and 1990s (on the grounds that however bad market failure was, government failure was always likely to be worse), have made a comeback in development economics theory over the 1990s and 2000s.⁷

For example, the Big Push argument made by Rosenstein-Rodan, Nurkse, and Scitovsky more than 50 years ago has been repackaged into formal models. The core idea is the virtues of government-coordinated investment: that in the presence of increasing returns industrialization in one sector raises demand for other sectors and raises the profitability of investment in those other sectors; but in the absence of government coordination these complementarities may not be realized.

Likewise, the idea that countries can be stuck in a low-level equilibrium trap has made a comeback, with its implication that more than a market signal, more than market competition, is required to displace the previous equilibrium in order to make new investment projects attractive (Goodacre 2007; Palley 2006). Ralph Gomery and William Baumol, and Paul Krugman and Anthony Venables, are leading theorists in this vein.⁸

The empirical starting point is the finding that the location of a given industry in one country or another is often not a matter of comparative advantage but of accident and path-dependence. There is no comparative advantage reason why Switzerland has long dominated the watch industry, why Taiwan now dominates the production of laptops (but not branding), or why Pakistan specializes in soccer balls and Bangladesh specializes in hats, rather than the other way around. It turns out that industries have different 'retainability' scores, in the sense that some industries, once established, are sheltered from the blast of full competition and can earn 'super-normal' returns (because would-be competitors have difficulty breaking in).

One of the key analytical mechanisms is the increasing returns link from spatial proximity to productivity ('proximity promotes productivity'). Denser configurations of economic activity – in both product markets and labor markets – promote productivity more than looser ones, up to some point of diminishing returns resulting from rising congestion and other costs. This kind of market 'externality' underlies

⁶ See A.P. Thirlwall 2006, 117-120. Data presents a problem particularly for the non-manufacturing sector. For developed countries, see McCombie and Fingleton (1998), which uses regional data for the EU; and McCombie, Pugno and Soro (2002).

⁷ Here I draw on Helen Shapiro "Industrial Policy and Growth" (2005).

⁸ See here Gomery and Baumol 2000; Krugman and Venables 1995.

the importance of clustered networks of supporting industries for the growth of any one industry. For example, as Boeing switches component suppliers to China, US-based component suppliers stop producing in the US, US supply networks fragment, causing knock-on costs to other industries, and Chinese firms buy US component-making technology the better to supply companies like Boeing from China.

In a world of increasing returns (rather than constant or diminishing, as in standard models), the existing market equilibrium may not be optimal. Equilibrium allocations of industries across countries are (a) fragile and (b) not necessarily ‘globally’ optimal (globally in the sense of better than any feasible alternative, not in the geographical sense). But the market lacks a mechanism for getting to that optimum. The theory suggests that trade liberalization would not necessarily shunt the economy into a more desirable position than it could have reached with more activist trade and industrial policy, contrary to standard comparative advantage theory.

This line of argument highlights that the theory of comparative advantage is essentially short-term, in that it is about how an economy can best exploit its *present* stock of resources. It cannot tackle the trade-off between acting today to maximize short-term efficiency and acting today to accelerate the economy’s shift of tomorrow’s comparative advantage into higher value-added, higher return products.

The multiple equilibria theory suggests a new rationale for ‘infant industry protection,’ a long-but-grudgingly accepted partial exception to the general prescription of free trade. In conventional trade theory, the infant industry exception is presumed to apply – if at all – only to newly-industrializing countries trying to lay down basic industries which already exist elsewhere. Multiple equilibria theory suggests that the continuous technological evolution of the world economy means that parts of many industries are always ‘infants,’ even in the most technologically advanced economies. Governments, even in advanced economies, should take up the task to capture ‘high retainability’ industries for their jurisdiction, using trade and other industrial policy instruments – even at the cost of short-term inefficiency. The new thinking suggests how strategic industrial policy (including trade as well as technology and education policy) can help in securing the economy’s place in higher potential industries with higher ‘retainability’ scores. But it is critical that the intervention be temporary so that the market then supports the better equilibrium unaided.⁹

Of course, each government tries to disguise what it is doing and to get others to embrace free trade. This is the mercantilist strategy of ‘optimal obfuscation.’

In these terms, we can make sense of the observed intense rivalry between nations as they jockey for industrial advantage – a far cry from the harmonious world of comparative advantage theory (one of its strongest selling points for the international development community). The rivalry between developed nations is implemented not mainly with trade instruments like tariffs, but with more subtle, less noticeable behind-the-border instruments like anti-dumping legislation, anti-trust, rules of origin, health standards, and government procurement. The rivalry helps to explain why the business school myth of multinational corporations as free floating, cosmopolitan entities owing allegiance to nowhere is just that, a myth. State support

⁹ For new arguments for infant industry protection see also Marc Melitz (2005).

tends to be geared towards high tech firms regarded as ‘nationals’ of the same state: the US state channels its support more towards American firms than towards foreign firms operating in America, as do states of the other two core centers.

In these terms we can also make sense of the difficult-to-deny motive behind the Doha trade agenda (devised almost entirely by the US and the EU) – to ‘hold back’ developing countries from advancing into industrial and service areas now dominated by the developed countries (Wade 2006). For the theory shows that productivity growth in the less-productive trading partners (e.g. China and Vietnam) of an advanced country like the US is not necessarily in the interests of the advanced country. None other than Paul Samuelson recently developed an argument along these lines, showing that as China, for example, catches up in the production of goods which had been produced in the US (whether through outsourcing or domestic innovation), US export prices fall, worsening the US terms of trade. The US still benefits from trade (relative to ‘no trade’), but less than before (Samuelson 2004).

This body of theoretical literature shows how, in contrast to models of comparative advantage, a country’s pattern of specialization determines its rate of growth (a point also made by Kaldor’s growth laws). A country which has more presence in sectors with increasing returns allows for a higher return on capital and a higher investment rate. Governments which implement coordinated investment programs can achieve industrialization of each sector at lower explicit cost in terms of industrial policy support than a country which industrializes piecemeal, via investment decisions coordinated only through the market or within individual firms.

Another part of this theoretical literature focuses on *firms*, as distinct from macro policy regimes, and on knowledge or technology as distinct from factor accumulation. Here technology is treated not (as it was in the 1950s to the 1980s) as a missing input, akin to capital or labor, but as a learning process. As Sanjay Lall (2003) put it, “industrial success in developing countries depends essentially on how enterprises manage the process of mastering, adapting and improving upon existing technologies. The process is difficult and prone to widespread and diffuse market failures”. Public support, he says, is often crucial to help build their technological capabilities.

That public support may entail creating ‘rents’ for first-mover firms, via market barriers to entry of one kind or another or via additional public returns to selected activities or products, in contrast to the passive price-taking firms of comparative statics. From this more Schumpeterian perspective, ‘rents,’ or super-normal profits, are seen as a necessary (but not sufficient) condition for rapid technological advance, quite contrary to the prevailing view in development economics since Ann Krueger’s classic 1974 article which portrayed rents as the great underminer of efficiency and the trump card against selective state interventions.¹⁰ From the Schumpeterian perspective, the main qualification is whether governments can discipline the rent-receivers not to grow fat and lazy on their rents.

The policy implications of this upheaval in trade theory and in growth theory more generally have hardly begun to be developed, but it is clear that they seriously

¹⁰ See Anne Krueger’s “The Political Economy of the Rent-Seeking Society” (1974).

complicate the old certainties about the virtues of free trade and market liberalization. However even those who have done most to develop the new theories – and to show theoretical mechanisms by which countries might gain from selective interventions – tend to row back towards free trade as the best *practical* policy, as in Paul Krugman’s dictum, “Free trade rules are best for a world whose politics are as imperfect as its markets” (1987, 143). They justify the retreat to the safety of free trade by reference to the danger that any more strategic policy would be hijacked by special interests. Yet, they make no analysis of this claim, in contrast to the sophistication of their theoretical arguments against free trade.

The Relevance of Ownership for Industrial Policy

The new theoretical literature which shows the desirability of coordinating investment and protecting firms until they generate adequate returns tends to ignore ownership, treating firms as nationally owned. But today, any catch up growth strategy has to deal with the question of how to deal with transnational companies and their global strategies – for example, how much to emphasize integrating into production hierarchies controlled by transnationals and how much to emphasize national R&D and purchase of foreign technologies without foreign ownership.

The Washington Consensus says that foreign direct investment is good for development, and the more the better. And in yet another demonstration that the Washington Consensus is alive and well, the finance ministers of the Group of Eight industrial countries decry what they call the ‘new investment protectionism’ in their draft communiqué for the G8 meeting in June 2007. They declare that “restrictions to market access for foreign investment should only apply to exceptional cases where national security is at stake” (Beattie, Financial Times 2007).

Theodore Moran’s new study, called *Harnessing Foreign Director Investment for Development* (2006), takes a more nuanced view. It makes a sharp distinction between FDI which is not integrated into the parent firm’s global production chain and oriented to selling on a protected domestic market, on the one hand, and FDI which is integrated into the parent firm’s global production chain and oriented to exporting, on the other. The former generates net costs for the host economy, the latter net benefits, says Moran. He is critical of any attempt to impose domestic content requirements or limits on foreign ownership (such as a maximum of 49% of equity in the hands of the foreign company), on grounds that such requirements lead the foreign parent to use production technologies and business operations far back from the industry frontier and to produce high-cost, inferior products. On the other hand, “Plants built as part of the parent corporation’s strategy to compete in international markets invariably incorporate full economies of scale and operate with cutting-edge technologies, production techniques, and quality-control procedures” (p. 10). But the condition for the host to reap these benefits is to avoid domestic content and joint venture requirements.

As for the balance between relying on FDI and emphasizing national R&D and purchase of technology licences for national firms, Moran argues that the latter is potentially viable only in industries where technology is stable and can be replicated

with a combination of licenses and imported technical training. Korea's entry into ships and steel in the 1970s through this 'national champion' route was accomplished in these conditions of stable and purchasable technology. But even Korea, which is often held up as a model of an 'alternative' route to technological learning without relying on FDI, did rely on FDI in electronics, where foreign investors laid the base for an internationally competitive electronics industry in Korea from the mid 1960s to the mid 1970s. More generally, Moran argues that in most sectors the only sensible strategy for all developing countries is to attract in export-oriented FDI, as the prime channel for technological learning. "[F]oreign investors not only introduce new activities into the host economy but also continuously upgrade the technologies, management techniques, and quality-control procedures of their affiliates to keep their sourcing networks at the competitive frontier in the international industry" (2006, 21)

Moran's argument is more nuanced than the Washington Consensus' "the more FDI the better," but it misleads in several ways.¹¹ First, in suggesting that FDI can play a major role in the development of developing countries in general, it downplays the fact that FDI to developing countries is highly concentrated in a very small number of developing countries: roughly 80% goes to only 10 countries. The vast majority are receiving very little. In 1980, the concentration was more or less the same – indicating that the hopes of FDI spreading out across more and more developing countries have not been realized.

Second, the basic distinction between, on the one hand, import-substituting FDI which receives protection but is also under domestic content and joint venture requirements, and on the other, export-oriented FDI which receives no protection and has no domestic content or joint venture requirements, is too sharp, and too static. Moran cites approvingly the case of Singapore's Economic Development Board, which subsidized the salary of an engineer or manager in foreign affiliates whose job it was to hunt out and assist indigenous firms to become suppliers. I describe in *Governing the Market* how Taiwan's Industrial Development Bureau (IDB) performed the same function itself, its engineers seeking to marry up (export-oriented) foreign affiliates with domestic suppliers, using a variety of more or less subtle means to pressure the foreign affiliates into the marriage – thereby replacing imports, but always with an eye on maintaining the international competitiveness of the foreign affiliate's products. Local content requirements and joint venture requirements were part of the bargaining tools. In other words, Moran's two types are not necessarily alternatives; they can be complementary. It is possible to have gradations of both, and to begin with the former and move toward the latter over time.

Third, Moran's argument ignores evidence on the harmful effects of FDI in Latin America, where foreign firms have dominated the most dynamic manufacturing sectors since their inception, their share of sales relative to national firms increasing with trade liberalization over the 1990s. Without a strong push from government to build up domestic suppliers, transnationals' global strategies have led them to source

¹¹ Note that "80% in 10 countries" is from the mid 1990s. See "Symposium on Infant Industries" (2003) with contributions from John Roberts, Robert Wade, Sanjaya Lall and Adrian Wood.

many of their specialized inputs from abroad, and even to de-integrate existing vertical supplier links within the national economy. The effect has been to shrink intermediate and supplier industries. Yet much evidence suggests that the growth of intermediate inputs and producer services within the national economy is an essential part of industrialization, for these are typically rich sites of innovation (Ciccone and Matsuyama 1996).

In the case of Argentina, for example, Kosacoff says, “the data show that the manufacturing sector has itself utilized trade openness and economic deregulation to increase its imports not only of parts and components but of finished production too. This is indicative of a trend towards the vertical de-integration of activities that affects both manufacturing activities ... and commercialization activities” (Kosacoff 2000, 188).

The upshot is that reliance on TNCs can produce an ‘import intensive’ or ‘deficit-prone’ industrialization process.

We see this deficit-prone industrialization throughout Latin America, where exports of natural resource processing industries, foodstuffs, and primary commodities have grown fast, while imports of capital goods and intermediate goods have grown even faster. Also, this pattern of TNC-led growth has caused a rapid increase in economic concentration, as small and medium enterprises which had been suppliers to big national firms have been replaced by imports. Mexico’s income elasticity of import demand has doubled over the past 15-20 years. All these negative effects are seen even where the growth of output and exports from TNC activities is high, because the multiplier effects and technological spillovers turn out to be low.

The case of FDI illustrates a more general point: FDI can bring large benefits to a developing country host economy, but it can also – individually and in aggregate – bring large costs. The government has to build up capacity to be able to manage FDI strategically so as to raise the benefits and reduce the costs. But in the majority of developing countries, FDI will continue to remain marginal, which puts more onus on building up the capacity of national firms to respond to international competition.

Conclusions

A kind of schizophrenia has developed in the literature and practice of development. The Washington Consensus remains the consensus at the less academic end of the policy community – both in terms of what mainstream publications like *The Economist* and academic economists speaking to a lay audience say are the ‘fundamentals’ of good policy, and in terms of what development practitioners in Western-based development agencies like the World Bank tell their country counterparts. It continues to ignore industrialization, technology, and to dismiss industrial policy with jeers like “bureaucrats can’t pick winners.” And it continues to use misleading dichotomies like ‘importing substituting’ or ‘export oriented,’ and to load all the virtues onto one and all the bads onto the other.

On the other hand, academics writing for each other have come up with all kinds of empirical and theoretical objections to Washington Consensus ideas, much of the

theoretical arguments derived from those made – but not formalized – 50 years ago about the pervasiveness of market failure in developing countries. And they do give attention to industrialization, technological learning, product diversification, and the like.

However, these academic theorists of market failure have been rather reticent when it comes to alternative policies. And so, the two ends of development thinking tend to talk past each other – even when the two ends are in the same head: Gregory Mankiw, as a Harvard economist, is well aware of the theoretical and empirical literatures which question the Washington Consensus, but when writing for a lay audience he removes all the complexities and just gives the ‘fundamentals,’ as in, “Adam Smith was right when he said that ‘Little else is required to carry a state to the highest degree of opulence from the lowest barbarism but peace, easy taxes and a tolerable administration of justice’” (Mankiw 2006).

My argument for pro-active industrial policy designed to accelerate the growth of manufacturing output boils down to four propositions:

- (a) Kaldor’s growth laws are empirically valid – manufacturing industry is the engine of growth, and in particular, there is a strong positive correlation between the rate of growth of manufacturing output and the growth of productivity in both manufacturing and non-manufacturing;
- (b) the ‘China price’ means that manufacturing sectors throughout the developing world are under intense competitive pressure and shrinking;
- (c) industrial policy can help to accelerate restructuring and diversification of the kind needed to survive Chinese competition. However,
- (d) the industrial policy must be of the ‘open economy’ kind, not the inward-looking kind used in many developing countries through the 1950s and the 1970s, and with ‘reciprocal control mechanisms’ where state assistance is given against performance.

I also stress the need to avoid the trap of thinking that industrial policy equals ‘picking winners,’ and that industrial policy is like a light switch, either ‘on’ or ‘off.’ Industrial policy can be big or small, discontinuous or incremental. It can ‘lead’ the market or – less riskily – ‘follow’ the market. Much East Asian industrial policy was of the ‘followership’ kind, and involved nudging private producers to extend their production capabilities by degrees (producing more sophisticated fluorescent lights, for example); and nudging foreign affiliates to switch supplies of intermediate goods from imports to domestic firms. East Asian industrial policy provides concrete examples of how to do this nudging kind of small-scale, market-following industrial policy, a kind which may be relevant in countries with embryonic manufacturing sectors and weak states.

This brings up one of the great weakness of the debate about development policies, which is its almost complete neglect of the question of state capacity to implement policies in line with their expected results. As noted earlier, Paul Krugman developed a formal theory of strategic trade management, but then leapt back from the conclusion that governments should attempt to put it into practice, on grounds

that any such attempt would be ‘hijacked’ by special interests. But he presented no analysis of this essentially political claim.

Clearly, we need to make distinctions between states along such dimensions as the extent to which there is an organizational and normative separation between the ‘state’ and the ‘private sector.’ Such separation is likely to be thin where an economy has no significant ‘national bourgeoisie’ able to assert private property relations, in which case the state itself becomes a primary means to accumulate (private) wealth. The purpose of public office is not to implement public policies in a wider social interest but to extract resources from others. This is a ‘neopatrimonial’ type of state, commonly found in Sub-Saharan Africa. It is a safe bet that in such a state any but the most rudimentary ‘selective interventions’ would fail to achieve their ostensible purpose (Kohli 2004; Graham 2007). Favored World Bank governance reforms – like ‘decompressing’ salary differentials within the public sector so as to create larger increments for those who achieve technically-based and meritocratic promotion – may backfire, generating more rather than less patronage and clientelism as the available resources expand.

Much of the more popular *Economist*-type argument about development policy assumes that all developing countries have neopatrimonial states; hence the conviction behind the assumption that “government failure is likely to be worse than market failure.” The big challenge for development studies is to devise models and measures of state capacity, such that policies can be designed according to the type and capacity of the state. Given the weakening empirical and theoretical foundation for free market solutions, such understanding would make a constructive challenge to the presumption that government failure is worse than market failure.

But today, as I have said, ‘the market’ remains the default position, and nowhere more clearly than in Iraq. The US provisional administration in 2003 proposed radical implementation of the Washington Consensus agenda, including almost free trade, privatization of public enterprises, full ownership of domestic companies by foreign firms, full repatriation of profits, and opening national banks to foreign control; and it declared that these arrangements should be impossible to reverse by an incoming national government. In effect, the US administration has been trying to lock in arrangements of the kind in place in Haiti.

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