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Serious Inadequacies of the Washington Consensus: Misunderstanding the Poor by the Brightest

*Wing Thye Woo*¹

1 The Karma of Development Economics

The post-World War II development experiences of East Asia, Latin America and Africa have been strikingly different. Latin Americans started off as the richest of the three regions, but they have now been surpassed by the best performing East Asian economies. Argentina remains the richest Latin American economy, but its per capita income is now below those of Korea and Taiwan.² The per capita income of Malaysia is lower than those of Mexico and Venezuela when measured using current exchange rates, but it is higher when using PPP exchange rates.³ According to the Human Development Index, which is a better indicator of welfare than GDP per capita, Mexico's welfare went from

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² Per capita GDP in 2001, measured using current exchange rates, was \$7,166 for Argentina, \$8,917 for Korea, and \$12,876 for Taiwan. The gap is even larger when PPP exchange rates are used e.g. \$11,320 for Argentina and \$15,090 for Korea. See Table 1.

³ Using current exchange rates, per capita GDP in 2001 was \$6,214 for Mexico, \$5,073 for Venezuela, \$3,699 for Malaysia, but respective PPP-based figures are \$8,430, \$5,670, and \$8,750. This situation is also true for Thailand vis-à-vis Venezuela and El Salvador.

0.684 in 1975 to 0.800 in 2001, Malaysia's welfare from 0.615 to 0.790, and Venezuela's welfare from 0.715 to 0.775.⁴

In general, the long-run prospects for East Asia seem brighter than those for Latin America because the former contained many more cases with sustained high growth rates. For example, while China is still much poorer than El Salvador (per capita PPP-based GDP being \$4,020 and \$5,260 respectively), China grew an average 8.2 percent annually during the 1975-2001 period whereas El Salvador only grew 0.1 percent annually. This sense of optimism about East Asia and pessimism about Latin America was already prevalent in the early 1980s when it was the intellectual fad to pontificate upon the causes of this regional difference in economic dynamism.

In 1990, John Williamson codified this litany of praise for East Asian economic management into Ten Commandments known collectively as the Washington Consensus to guide policymaking in Latin America. The Washington Consensus advocates the following policy stances:⁵

1. Fiscal discipline.
2. A redirection of public expenditure priorities toward fields offering both high economic reforms and the potential to improve income distribution, such as primary health care, primary education, and infrastructure.
3. Tax reform (to lower marginal rates and broaden the tax base).
4. Interest rate liberalisation.
5. A competitive exchange rate.
6. Trade liberalisation.
7. Liberalisation of inflows of direct foreign investment.
8. Privatisation.
9. Deregulation (to abolish barriers to entry and exit).
10. Secure property rights.

Because Williamson formulated these ten commandments specifically for Latin America, and because he did not explicitly identify their intellectual ancestry, some commentators have assumed that these policy recommendations were derived solely from the Latin American experience. Such a conclusion is wrong in our opinion. First, Williamson stated clearly that

⁴ The Human Development Index for Argentina was 0.784 in 1975 and 0.849 in 2001, and for Korea was 0.701 and 0.879 respectively.

⁵ This summary in the format of fortune cookie slips is from Williamson (2000). This retrospective summary was done after much criticisms about the soundness of the Washington Consensus.

he was collating principles that had general professional consensus, he did not say that these principles had professional consensus only in Latin America. Second, 1990 was preceded by a long period in which there were many widely publicised comparative analyses that included both Latin America and East Asia, and hence the professional consensus in 1990 Washington had to have been influenced by more than just the Latin American experience alone. The proof of the preceding statement is that one could very easily compile Williamson's ten recommendations from the works of Balassa (1982), Bhagwati (1978), Edwards (1989), Krueger (1978), Lal (1985), Lin (1989), and Sachs (1985).⁶

In the extreme interpretation of the Washington Consensus by its popularisers, as well as by its critics,⁷ the unambiguous promise made by the Washington Consensus is that if a developing country were to implement conservative macroeconomic policies and liberal microeconomic policies to expand the role of the private market at the expense of the state in resource allocation, then it would achieve sustained high growth rates on its own.

What about Africa, which was mentioned in the opening sentence of this chapter? Compared to the mild pessimism about Latin American economic prospects, the African situation has been, and remains, downright depressing. Africa has not only remained the poorest region, a significant part of sub-Saharan Africa has actually gotten even poorer. Per capita income in sub-Saharan Africa declined 0.9 percent annually during the 1975-2001 period. Of the 175 countries ranked by their level of human development in the *Human Development Report 2003*, the 151st (Gambia) to 175th (Sierra Leone) places were occupied entirely by African countries.

What has been the growth experience of the developing world in the 1990-2001 sub-period when the Washington Consensus was increasing

⁶ For example, Lin (1989, p. 191 and p. 198) concluded that "many Latin American countries need to undertake a thorough re-examination of their basic approaches to economic development and price stabilisation in order to break away from the vicious circle of balance of payments crises, persistent inflation and sluggish economic growth ... [and to achieve an East Asian-type] virtuous circle of rapid export expansion, higher economic growth, and stable domestic prices." Similarly, Edwards (1989, Table 4.7) showed that the real exchange rates in Latin America were considerably more volatile than in East Asia, which means that inflation in Latin America was decreasing the reliability of price signals to producers, and hence decreasing their willingness to undertake investments in response to changes in relative prices.

⁷ Williamson (2000).

its influence over policymaking? Because a large number (frequently, the majority) of the sub-Saharan African countries, and a significant number of Latin American countries, were under Washington Consensus-based conditionality programmes in any given year in the 1990s, it might therefore be appropriate to credit the Washington Consensus for the higher growth rates in the 1990-2001 period compared to 1975-1989; being -0.1 percent and -1.5 percent respectively for sub-Saharan Africa, and 1.5 percent and 0.06 percent respectively for Latin America and the Caribbean.⁸ However, even if the Washington Consensus were the reason for the improvement in African and Latin American growth, one could be content with the Washington Consensus prescriptions only if one had dismally low expectations. The growth rates during 1990-2001 for sub-Saharan Africa (-0.1 percent) and Latin America (1.5 percent) were still not anywhere near the 5.5 percent growth rate in East Asia (which was already below its growth of 6.2 percent in 1975-1989).

Furthermore, even this low growth boost of the Washington Consensus might well be unsustainable and unreliable. The euphoric growth in Argentina was short-lived; it ended with the collapse of the currency board on January 6, 2002. Indonesia, Korea and Thailand implemented Washington Consensus type of policies to counter the Asian financial crisis, and they suffered deeper output losses for a longer period than Malaysia, which adopted capital controls instead.

It is the purpose of this chapter to argue that the Washington Consensus suffers from fundamental inadequacies, and that a more comprehensive framework of the economic process is needed to guide the formulation of country-specific development strategies. The following five propositions summarise the particular set of interrelated arguments that we will make in the remainder of this chapter:

1. The Washington Consensus was based on a wrong reading of the East Asian growth experience. This explains why Deepak Lal (1985) called the trade regimes of Korea and Taiwan in the 1965-1980 period “free trade regimes” even though they featured extensive import tariffs and export subsidies.

2. There have been two phases to the Washington Consensus doctrine. The mantra of the first phase (Washington Consensus Mark 1) is “get your prices right”, and the falsification of this first mantra led to the emergence of the second phase of the Washington Consensus doctrine. The new mantra from the Washington Consensus Mark 2 is

⁸ The 1975-1989 growth rates are calculated from Table 1.

Table 1 Growth and Development Indicators for Developing Countries and Regions
(in billions of dollars and percentages)

	HDI ^a rank	HDI Values		GDP per capita 2001		GDP per capita annual growth rate	
	2001	1975	2001	\$	PPP \$	1975-01	1990-01
Latin America & Caribbean		0.777		3,752	7,050	0.7	1.5
East Asia and the Pacific ^b		0.722		1,267	4,233	5.9	5.5
Sub-Saharan Africa		0.468		475	1,831	-0.9	-0.1
Argentina	34	0.784	0.849	6,166	11,320	0.4	2.3
Mexico	55	0.684	0.800	6,214	8,430	0.9	1.5
Venezuela	69	0.715	0.775	5,073	5,670	-0.9	-0.6
El Salvador	105	0.595	0.719	2,147	5,260	0.1	2.4
Korea	30	0.701	0.879	8,917	15,090	6.2	4.7
Malaysia	58	0.615	0.790	3,699	8,750	4.1	3.9
Thailand	74	0.612	0.768	1,874	6,400	5.4	3.0
China	104	0.521	0.721	911	4,020	8.2	8.8
Zimbabwe	145	0.544	0.496	706	2,280	0.2	-0.2
Gambia	151	0.291	0.463	291	2,050	-0.2	0.1
Zambia	163	0.462	0.386	354	780	-2.2	-1.7
Sierra Leone	175	n.a.	0.275	146	470	-3.3	-6.6

Notes:

^a Human Development Index.

^b Taiwan has a GDP per capita of \$12,876 in 2001.

Source: *Human Development Report 2003*.

“get the institutions right”. The danger is that an elastic definition of the term “institutions” will render the current mantra intellectually vacuous.

3. While central planning went overboard in suppressing the private market economy, the Washington Consensus runs the danger of denying the state its rightful role in providing an important range of public goods. The Washington Consensus also runs the danger of denying the limitations of self-help in the case of sub-Saharan Africa by overlooking the possibility of poverty traps.

4. The Washington Consensus does not understand that the ultimate engine of growth in a predominantly private market economy is technological innovation, and that the state can play a role in

facilitating technological innovations. The Washington Consensus is too focused upon trade-led growth to acknowledge that science-led growth is becoming even more important.

5. The Washington Consensus does not recognise the constraints that geography and ecology could set on the growth potential of a country. For example, the trade-led growth strategy of East Asia cannot work with the same efficiency for a landlocked country. Foreign direct investment is also less likely to go to places that are malaria-infested.

2 The Emergence of Washington Consensus Mark 1: Getting the State Out

In retrospect, Karl Marx's famous observation on world history, when paraphrased, applies very well to the evolution of development economics as an academic discipline: development economics has repeated itself, first as tragedy in the 1960s, and second as farce in the 1990s. The Washington Consensus is the farce that the development establishment in Washington foisted upon the developing world as universal science, a status that justifies a one-size-fits-all approach to the problems of the poor, regardless of where they are located.

Development economics had emerged with the decolonisation that followed World War II as the type of economics that was applicable to developing economies, just like Keynesian economics was recognised to be the type of economics that was appropriate for developed economies, and central planning to be the best resource allocation mechanism for the new socialist economies. First-generation development economics downplayed the applicability of neo-classical economics and emphasised discontinuity in economic structure and the generation of economic externalities as drivers of economic growth. The stages of growth hypothesis of Walt Rostow, the big push industrialisation strategy of Paul Rosenstein-Rodan, and the circular and cumulative causation of Gunnar Myrdal typified this genre of thinking. The overarching assumption that was based on the disastrous economic performance in the inter-war period was that "two hands were better than one". A *laissez faire* market economy was deemed to be incapable of timely self-correction and of adequate self-propulsion, and the visible hand of the state has to supplement the working of the invisible hand.

First-generation development economics started dying in 1970 from two main causes. The first cause was widespread disappointment with the growth outcomes in Latin America and Africa in the 1960s. The

cycle of war-disease-low growth in many countries seemed undisturbed by the development projects implemented there.⁹

The second cause for the death of first-generation development economics was the appearance of several multi-country studies that concluded that countries that pursued development strategies based on the neo-classical principle of comparative advantage grew faster and saw improvements in their income distribution compared with the countries with trade regimes that deviated substantially from the comparative advantage principle.¹⁰ These multi-country studies focused on the differences between economic management in East Asia and Latin America to provide three pillars of wisdom to serve as the foundations for a new generation of development economics.

Pillar 1: The average effective tariff rate in East Asia was significantly lower than in Latin America, i.e. Latin America was more protectionist than East Asia.

Pillar 2: The variance of the effective tariff rates was much smaller in East Asia than in Latin America, i.e. Latin America was more prone to creating winners and losers than East Asia. This is because the variance could be zero only if every importable had the same effective tariff, which means that the composition of importables produced was decided entirely by market forces. A large variance means that the state is actively influencing the production mix of importables, i.e. that the state has given a smaller role for market forces in resource allocation.

Pillar 3: In East Asia, the average effective tariff rate for imports was approximately equal to the effective rate of subsidy for exports, while in Latin America, the average effective tariff rate for imports greatly exceeded the effective rate of subsidy for exports. This means that the trade regime in East Asia makes East Asian firms indifferent between producing for internal market and external market, whereas the trade regime in Latin America makes it more profitable for the Latin American firms to sell in their domestic markets than to sell in the external markets.

The abovementioned implications of Pillar 3 can be more clearly seen when we consider equation (1) below, which shows the relationship between the domestic prices and the world prices of importables and exportables:

⁹ For example, see Hirschman (1981).

¹⁰ Some of the most notable ones are Little, Scott and Scitovsky (1970), Bhagwati (1978), Krueger (1978), and Balassa (1982).

$$(P_I/P_X) = PW_I(1+t) / PW_X(1+s) \quad (1)$$

P_I = domestic price of importables

P_X = domestic price of exportables

PW_I = world price of imports

PW_X = domestic price of exports

t = effective tariff rate on imports > 0

s = effective subsidy rate on exports > 0

In a market economy with only these two goods, if the ratio (P_I/P_X) rises, say, because of a rise in t (or a fall in s), then producers will switch to making importables from exportables. So when the state sets $t > s$, then it is encouraging the production of importables – this is the case of Latin American. From pillar 2, we know that the Latin Americans were also varying the tariff rates across sectors in order to influence the composition of importables that was being produced.

In the situation where $t = s > 0$, which is the case of East Asia, then equation (1) reduces to:

$$(P_I/P_X) = PW_I / PW_X \quad (2)$$

which is the same situation of free trade where $t = s = 0$. Furthermore, Pillar 2 tells us that the low variance in the distribution of the tariff and subsidy rates in East Asia indicates that the state was allowing market forces to determine the composition of importables and exportables made by domestic manufacturers. The equality between s and t , and the limited dispersion in the values of s and t might be why Deepak Lal (1985) has described the East Asian trade regimes as “free trade” even though they had positive tariff rates and positive export subsidy rates.

The important analytical difference is that the incentive system in East Asia is neutral toward the production of importables and exportables, while the incentive system in Latin America favours the production of importables. In a strange, asymmetrical use of terminology, these large-scale comparative studies labeled the seemingly *neutral trade regime* in East Asia with terms like “export-promotion trade regime” and “outward-oriented trade regime”, and accurately labelled the biased trade regime in Latin America as “import-substitution trade regime” and “inward-oriented trade regime”.

Since the economic growth in East Asia was higher than in Latin America, and was accompanied by fewer inflation and balance of payments crises, it was therefore quite natural that the superior performance of East Asia was attributed to the greater role that market

forces there had in resource allocation. The operational principle lesson distilled by the World Bank and the IMF from these comparative studies is captured by the now famous mantra of Washington Consensus Mark 1 “get the prices right”. At the macroeconomic level, the state should aim for general price stability by keeping the growth of money and the budget deficit low (say, at the rate of real GDP growth), and introduce exchange rate flexibility by deregulating balance-of-payments transactions, and allow market-clearing interest rates by liberalising the financial sector. At the microeconomic level, the state should not only remove restrictions on price-setting, and on entry and exit into businesses, but also reduce state subsidies and privatise state-owned companies. These policies are essentially the Ten Commandments of the Washington Consensus presented by John Williamson in 1990.

To be fair, it must be mentioned that the term “Washington Consensus” has now assumed meanings beyond what John Williamson might have had in mind in 1990 – he was certainly in favour of some withdrawal of the state in the economic sphere but he would not have favoured the total withdrawal of the state. For example, Williamson (2000) said that he had not mentioned capital account liberalisation in 1990, even though this was an operational objective that the IMF had been advocating at least since the late 1980s¹¹ (but, now, not with the same stridency). In any case, the term “Washington Consensus” has, in many popular discussions, come to be identified with what George Soros (1998) has called “market fundamentalism”, and thus become the pejorative title of the second generation of development economics.

Unlike first-generation development economics that considered itself an alternative to neo-classical economics, second-generation development economics is happy to pronounce itself an applied branch of neo-classical economics.¹² This fate of development economics was also experienced by the other alternatives that had emerged or became more widespread after World War II. Keynesian economics has been overthrown by the

¹¹ It therefore appears that the IMF was the practitioner of a more market-oriented version of the Washington Consensus than what Williamson was advocating. According to Williamson (2000), “[this version of] the Washington Consensus consists of the set of policies endorsed by the principal economic institutions located in Washington: the US Treasury, the Federal Reserve Board, the IMF, and the World Bank. I would argue that the policies these institutions advocated in the 1990s were inimical to the cause of poverty reduction in emerging markets in at least one respect: their advocacy of capital account liberalisation.”

¹² The triumph of neo-classical economics over first-generation development economics is analysed in detail in Woo (1990).

Monetarist Counter-Revolution led by Milton Friedman, and the New Classical Revival led by Robert Lucas. Central planning has disappeared not only in Eastern Europe but also in the land of its origin.

The tragedy about the demise of first-generation development economics is that some very good insights about the growth process were subsequently ignored in policy discussions and in the academic literature. Recent advancements in methodology and recent increases in empirical knowledge on a broad front in economic analysis have restored intellectual respectability to a few key propositions of first-generation economics. Andrei Shleifer has succeeded in formulating the big push hypothesis in a mathematically tractable form, and Paul Romer has revived the circular and cumulative causation mechanism to be the central piece of the new endogenous growth models. Jeffrey Sachs *et al.* (2004) have explicated the dynamics of development traps so convincingly that these ideas are now guiding the implementation of the just-initiated Millennium Development Goals (MDG) project of the United Nations.¹³

The farce of second-generation development economics, as exemplified by the Washington Consensus (especially the Mark 1 version), is occurring on two levels: in theory and in practice. As the farce is still an ongoing play at the moment, it deserves its own section to enable a more detailed discussion.

3 The Emergence of Washington Consensus Mark 2: Bringing the State Back In

The farce of second-generation development economics at the theory level is that Washington Consensus Mark 1 is based upon an incorrect reading of the evidence presented in the various multi-country studies on the effects of the trade regime choice. This incorrect reading arises from the fact that an economy produces non-tradable goods as well as the tradable goods of importables and exportables. This means that a rise in the tariff rate will not just mean the production of more importables at the expense of exportables, it will also mean a decline in the amount of non-tradables produced. Since changes in the tariff rates and subsidy rates will affect the production of non-tradables, this means that the

¹³ The MDG project seeks to mobilise sufficient international aid to make drastic and self-sustained improvements in the living standards of the world's poorest people, e.g. halving the rate of absolute poverty by 2015.

allocation effects of the case where $t = s > 0$ (the outward-oriented trade regime case) will be different from the case where $t = s = 0$ (the free trade case). In short, it was wrong for Deepak Lal (1985) to equate the outward-oriented trade regime with free trade, and it was also wrong for the World Bank to call it “neutral incentive policy”.

The preceding discussion can be formalised as follows, by first introducing the following notations:

$$\begin{aligned} P_T &= \text{domestic price of tradables} \\ P_N &= \text{domestic price of non-tradables} \\ PW_T &= \text{world price of tradables} \end{aligned}$$

and then making the following definitions in equations (3) and (4):

$$P_T = aP_I + (1-a)P_X \text{ where } 0 < a < 1 \quad (3)$$

$$PW_T = aPW_I + (1-a)PW_X \quad (4)$$

Using equation (1), we can rewrite equation (3) in the form of equation (5):

$$P_T = aPW_I(1+t) + (1-a)PW_X(1+s) \quad (5)$$

For the special case when $s = t > 0$ as in the outward-oriented trade regime (OORT), equation (5) reduces to equation (6):

$$P_T = (1+t)PW_T \text{ under OORT} \quad (6)$$

When we compare the ratio of price of tradables to the price of non-tradables under OORT and with the ratio of these prices under free trade, we find that the former is larger than the latter, as given in equation (7):

$$\begin{aligned} (P_T/P_N) \text{ under OORT} &= [(1+t)(PW_T)/P_N] > [PW_T/P_N] \\ &= (P_T/P_N) \text{ under free trade} \end{aligned} \quad (7)$$

The conclusion from equation (7) is that the OORT increases the production of tradables at the expense of non-tradables. It means that the alleged salubrious growth effects of the OORT come not from the effects of the import tariffs and export subsidies serendipitously cancelling each other out (hence producing a free trade outcome) but from the diminution of the non-tradable sector. It is therefore wrong, as has been frequently done, to use the empirical studies of Little *et al.*, Bhagwati, Krueger and Balassa to justify market fundamentalism.

The interesting question is why has the OORT been good for growth? Because the largest component of non-tradable activities in many developing economies is subsistence agriculture, OORT by increasing the profitability of the manufacturing sector accelerates the industrialisation process and hence quickens the absorption of surplus agricultural labour. Another possible growth mechanism is that by making activities in the tradable industries more financially rewarding, it focuses the minds of the entrepreneurs to participate more actively in the international product cycle, resulting in faster diffusion of foreign technology to these developing countries.

Perhaps what really did Washington Consensus Mark 1 in was that it was also a farce in practice. First, the application of second-generation development economics has not appeared to have effected more positive outcomes in Latin America (with the possible exception of Chile) and Africa. Macroeconomic storms in Latin America have continued unabated in frequency and in depth. And negative growth has continued to be the norm in Africa. The East Asians continued to have higher growth rates, albeit that they suffered a serious region-wide crisis in 1997-1999 thanks to the capital account liberalisation started in the early 1990s.

Second, the large-scale economic deregulation spurred on by the Washington Consensus backfired much more frequently than expected. The removal of interest rate ceilings and entry barriers into the banking system turned out to be very costly in many countries. The explosion in the number of banks and the total loan value often fuelled excessive speculation and created large amounts of non-performing loans, developments that bankrupted the banking system. In almost every case, the government stepped in to refund the depositors in order to prevent a meltdown of the economy, of social order, and of its political status. Equally egregiously, the privatisation of state assets many times meant sales at heavily discounted prices to political cronies of the ruling party, and the replacement of public monopolies by private monopolies. Basically, in some countries, the Washington Consensus was used to camouflage the looting of the state and the embezzlement of the general public.

The economic transition of Eastern Europe and the former Soviet Union (EEFSU) from centrally-planned economies to market economies that started in 1990, and the Asian financial crisis of 1997-99 also discredited Washington Consensus Mark 1 in public perception. Joseph Stiglitz, former chairman of the US President's Council of Economic Advisors, former Chief Economist of the World Bank, and Nobel laureate in economics, has excoriated the Washington Consen-

sus-inspired IMF programmes for causing the sizeable output losses in both episodes. The collapse of the Argentinean economy in 2002 was particularly damaging because the IMF had taken credit earlier for the uncharacteristically strong growth that began with the establishment of the currency board on April 1, 1991.

One pretty widespread interpretation of the output decline in EEFSU is that their comprehensive deregulation did not create the expected improvements in welfare because these countries lacked the institutional infrastructure that was necessary for the satisfactory working of a market economy.¹⁴ To cite a few examples of the long list of necessary capitalist (or, capitalist-style) institutions, the EEFSU in 1990 had:

- no independent, qualified judiciary systems to settle commercial disputes, enforce contracts, protect the rights of minority shareholders, enforce competition policies more conscientiously, and oversee orderly restructuring of bankrupt companies;
- no corruption-free, competent securities regulatory commissions to monitor the integrity of transactions in the stock markets, and improve the transparency of corporate governance;
- no effective, honest financial sector oversight boards to formulate appropriate risk-exposure standards for the financial industry, strengthen prudential regulations, and supervise adherence to these standards and regulations;
- no higher education facilities that could impart to existing and new managers the skills (e.g. accounting practices that are in accordance with international norms) that are necessary to run their enterprises in the new market economies.

In many countries, the government was in complete disarray, not only because the operational procedures of the bureaucracy lagged behind the sweeping legal changes, but also because the accompanying political revolution caused confusion over the lines of authority within ministries and over the division of responsibilities across the reorganised ministries. Furthermore, during this chaos, many bureaucrats took the opportunity to grab the state assets that they had supervisory responsibility for, thereby worsening the economic disintegration.

With this calamity in EEFSU so recent in memory, it was perhaps inevitable that one common knee-jerk diagnosis of the 1997 Asian financial crisis was that it had been caused by crony capitalism. In particular, the lack of arm-length transactions between the Asian banks and their biggest shareholders and borrowers (a situation enabled by

¹⁴ See Cornia and Popov (2001).

the patronage practices of the political systems in these countries) resulted in irrationally large amounts of investments directed to high-risk projects, prestige projects, and projects kept viable by regulations. The meltdown of the Asian financial crisis came when investors fled into foreign assets upon recognition that the contingent losses had exceeded the fiscal ability and political willingness of the state to bail out these projects. The claim, in short, was that the absence of market infrastructural institutions (e.g. an honest, capable state financial supervisory body) had caused the East Asian economies to implode in the same way that the EEFSU had earlier.

Once caught in the mindset of “institution mania”, the reason for the collapse of the Argentinean currency board is a no-brainer: the currency board was obviously the wrong economic institution for Argentinean circumstances, the right institution (by definition) would not have failed. Institutional mania has continued to strengthen since; it has now in fact become the new linchpin in the revised Washington Consensus. John Williamson, the primogenitor of the Washington Consensus, had this to say ten years after reporting the apparent phenomenon of intellectual convergence in the discipline of development economics:

I have a somewhat different view [from my critics e.g. Joseph Stiglitz] of what should be added to the Washington Consensus to make it a policy manifesto supportive of egalitarian, environmentally sensitive development [My] emphasis would have been different; I would have focused much more generally on institutions The major advance of the 1990s stemmed from recognition that the central task of the transition from communism to market-based economies involved building the institutional infrastructure of a market economy. This realisation was complemented by a growing recognition that bad institutions can sabotage good policies. (Williamson, 2000, pp. 260-261).

The new mantra of the revised Washington Consensus (i.e. Washington Consensus Mark 2) is undoubtedly “get the institutions right”. Washington Consensus Mark 2 might turn out to be no more correct than its predecessor but it is certainly much more ambitious in scope. It not only promises us a richer world but a fairer and greener one as well. Dani Rodrik (well-known for his rejection of the “get the prices right” approach) has vouched for the intellectual respectability of this new policy wisdom. He and his co-authors have produced empirical evidence to show that only institutions mattered for economic growth

(“the quality of institutions ‘trumps’ everything else”); not trade regime, and not geography.¹⁵

This unearthing of the one variable that explains all that is about growth is certainly startling, especially since Dani Rodrik had always been on the forefront of reminding the development economics profession about how very much more remains to be understood, and how complex the world really is. However, what is equally startling about Washington Consensus Mark 2 but has received surprisingly little attention is that it has now reversed the role of the government. Washington Consensus Mark 1 concentrated on jettisoning the government out of economic life, and Washington Consensus Mark 2 now brings it back to the centre stage to be the conductor of the economic orchestra, providing and maintaining the infrastructure that enables a private market economy to operate effectively. The only crucial aspect on the state that Washington Consensus Mark 2 shares with Washington Consensus Mark 1 (in the literal sense) is: without the government, there will be no music to face.

4 A Critique of the Logical and Empirical Foundations of Washington Consensus Mark 2

In our assessment, Washington Consensus Mark 2 is founded on two non-existent pillars:

- the single-variable explanation of growth; and
- the absence of good capitalist-style institutions (i.e. software like bankruptcy courts, transparent accounting standards) as the reason for the output collapses in EEFSU during 1990-1993, and in East Asia in 1997-1998.

We think that it is reasonable to start with the premise that economic growth is difficult to understand. If this were not the case, the whole world would be rich already. One enduring lesson that painful experience has taught scholars of economic growth is that the dazzlingly bright idea of the moment about what specific factor really causes economic growth will inevitably turn out to be just another blinding insight, where the cleverness of the idea blinds us temporarily to the partial nature of

¹⁵ Rodrik, Subramaniam and Trebbi (2002) wrote: “We estimate the respective contributions of institutions, geography, and trade in determining income levels around the world Our results indicate that the quality of institutions ‘trumps’ everything else.”

the correctness of the explanation – applicable only to a small subsample of countries, and then only for a limited sub-period in their history. The one thing about economic growth that we can be reasonably sure about, despite our admittedly incomplete understanding of the phenomenon, is that no single variable, or two – or even three – variables, can constitute an adequate explanation. The most optimistic and kind remark that one can make about any big idea currently in vogue is that it deserves incorporation into the melting pot of ideas.

Assuming that we know at least four of the variables that influence economic growth, then one simple characterisation of economic growth could be equation (8):

$$y = a_1x_1 + a_2x_2 + a_3x_3 + a_4x_4 + e \quad (8)$$

where y = trend growth rate of output; x_i = factor i ; a_i = (relative) impact that factor i exerts on the growth rate; and e = residual factors (a measure of our ignorance).

However, because many examples suggest that economic growth could be a more complex process than the simple weighted sum of each individual factor, economic growth could well be a non-linear function of the four variables, as given, for example, by the sum of three composite terms in equation (9):

$$y = \left[\sum_{i=1}^4 a_i x_i \right] + \left[x_4 \sum_{i=1}^3 b_i x_i \right] + c [x_1 x_2 x_3 x_4] + \varepsilon \quad (9)$$

where b_i and c are technical coefficients, and ε is the new measure of our ignorance.

Specification (9) is interesting because it allows large output changes to occur for a tiny change in any one of the x_i ; it also imposes prerequisites in order for a high growth rate to occur. The second and third composite terms become influential only when x_4 switches from zero to a positive value; a real world equivalent of x_4 could, for example, be “law and order”. The third composite term has no influence on growth when any one of the x_i is zero, denying economic growth the “synergy effects” from virtuous circle type of interactions.

In a context where many (say, n) variables determine the growth rate, one way that any single variable can be said to ‘trump’ all other variables is when the growth specification is of the form in equation (10):

$$y = x_{institution} \left[\sum_{i=1}^n b_i x_i \right] + \varepsilon \quad (10)$$

As long as $x_{institution}$ is zero, y will always be zero regardless of the values of any of the x_i . On *a priori* grounds, we reject equation (10) as lacking in intuitive appeal. On *a posteriori* grounds, we reject equation (10) on our past dismal experiences with single-variable explanations of growth, e.g. we have now gotten over the confusion that Confucian values constituted the cause of higher growth in East Asia vis-à-vis Latin America, and that class struggle is the only driver of history. In any case, it is certainly too early and imprudent to allow the single study by Rodrik, Subramaniam and Trebbi (2002) to resolve this single-variable issue.

The fact that China and Vietnam experienced rapid sustained growth upon their adoption of market-oriented reforms despite the same absence of effective capitalist-style institutions as in EEFSU shows that the institutional explanation for output fall in EEFSU might be of secondary importance. Let us quickly add that the growth performance across the two regions cannot be attributed to a difference in the speed of reform either. Both China and Ukraine implemented their reform gradually but output fell precipitously in Ukraine. Both Poland and Vietnam implemented “big-bang” reforms but output immediately soared in Vietnam.¹⁶

The real difference between the socialist states in East Asia and the formerly socialist states in Eastern Europe is that they had very different economic production structures at the time when they each initiated market reforms.¹⁷ Vietnam and China were primarily subsistence peasant economies, with over 75 percent of their labour force in the agricultural sector, which was marked by widespread underemployment. Poland and Russia were on the other hand already urbanised, industrialised, fully-employed economies, with state subsidies maintaining an overly large heavy industrial sector. Less than 20 percent of the Russian labour force was engaged in agricultural activities. Finally, China’s reforms did not start in a situation with a severe macroeconomic crisis and a severe external debt crisis that required the implementation of an austerity programme.

¹⁶ See Woo (2003).

¹⁷ See Sachs and Woo (1994), and Woo, Parker and Sachs (1996).

When the economic reforms freed prices, cut state subsidies, and legalised the non-state sector, new rural industrial enterprises and new urban non-state service firms sprung up in China to employ the idle agriculture labour, while the artificially large heavy industrial sector in Poland and Russia collapsed because, first, the market-determined composition of demand did not require so much heavy industrial products, and, second, it was no longer receiving the same amount of subsidies as before.

The labour for the new Chinese enterprises came entirely from the agricultural sector. Workers in state-owned enterprises (SOEs) did not shift to the non-state enterprises because, thanks to various subsidies from the government, SOEs paid higher wages. SOEs provided generous pensions, and heavily-subsidised housing, medical coverage, child-care, food and recreational facilities. The Chinese peasants, receiving none of these benefits and consuming only one-third of what urban residents consumed, were hence only too glad to shift out of low-income agricultural activities to the new higher-income jobs (which paid less than SOE jobs but higher than agricultural jobs).

In Russia, over 80 percent of the population were urban residents and SOE employees. Furthermore, Russian farmers receive the same income as SOE workers. So when the new non-state sector was legalised, a SOE worker or farmer shifting into it would experience a drop in income because he would no longer receive the various subsidies and would pay taxes to support the subsidies to the SOEs. The point is that unless the subsidies to the SOEs are ended, there will be no voluntary movement by workers from the state enterprises to the new non-state enterprises.¹⁸

The very different results that we see in China, Vietnam, Poland and Russia immediately after the implementation of economic reform programmes came more from their differences in economic structure than from the presence of effective capitalist-style economic institutions in China and Vietnam, and their absence in EEFSU. China's reform problem is the classic development problem of moving surplus agricultural labour into industries, while Eastern Europe's and Russia's reform problem is the classic adjustment problem of moving employed

¹⁸ The fact is that, unlike in Russia and Poland, there was no flow of workers from China's SOEs to the new non-state enterprises. The proportion of the Chinese labour force employed by state-owned units was 18 percent in 1978 and it was still 18 percent in 1992. This means that there were 32 million more Chinese working in state-owned units in 1992 than in 1978.

labour from uncompetitive industries to newly-emerging efficient industries. The fact is that economic development is easier than economic adjustment, both practically and politically, even in the absence of efficient capitalist-style institutions.

How about the “inadequate institutions (soft rot)” explanation for the Asian financial crisis? Well, there is an alternative to it: the financial contagion (speculative mania) explanation. The claim of this alternative explanation is that just as external creditors had been excessively optimistic about economic prospects earlier in 1994-1996, they became overly pessimistic at the end of 1997.¹⁹ If irrational exuberance exists, as Alan Greenspan warns, then irrational melancholia must also occur occasionally.

The simultaneous nature and the regional nature of the financial crisis suggest that weak internal economic fundamentals cannot be the only significant explanation of the crisis. It is hard to believe that the soft rot in the different countries would coincidentally cause these neighbouring economies to collapse within a few months of each other. Such coincidence would be as plausible as the facetious suggestion that the warranties for Asian capitalism had simultaneously expired in mid-1997. We think that it is more reasonable to conclude that while soft rot existed in different degrees in all Asian countries, it was a financial contagion that brought about the crisis.²⁰

Enough time has passed that we can now say with greater certainty that financial panic is a better explanation for the Asian financial crisis than the soft rot explanation. This is because if the crises were caused by soft rot, then economic rebound would occur only after fundamental economic restructuring has been largely accomplished. In short, the soft rot explanation would necessitate a U-shape movement in GDP. On the other hand, if financial contagion were the primary reason for the economic collapse in these countries, then their output would rebound right after the panic is over. This was the experience of Argentina in 1995, Mexico in 1995, and Turkey in 1994 when they

¹⁹ The facts are that foreign capital inflows into these four countries had been increasing every year since 1991, and heavy capital outflows from Indonesia, Malaysia and Korea started only in the last quarter of 1997. The outflow was so large in the last quarter that the net inflow for the whole year was negative. The reversal in capital flows between 1996 and 1997 amounted to about 10 percent of their pre-crisis GDP.

²⁰ The existence of speculative mania does not mean the violation of the rational expectations assumption (that agents exploit their information sets optimally and know the economic structure). Woo (1987) gives evidence of rational speculative bubbles in foreign exchange markets.

experienced financial panics. The financial contagion explanation would predict a V-shape in GDP movement, and this is exactly what happened in Korea, Malaysia, and Thailand in 1999-2000.²¹

We have examined the flawed institutions explanation for the output losses in EEFSU and in the Asian financial crisis, and in each case we have found more convincing alternative explanations. This implausibility of Washington Consensus Mark 2 at the intuitive *a priori* level, and as the explanation for the EEFSU and Asian crises of the 1990s leads us to conclude that the complexity of the world cannot be usefully understood by constantly searching for the single truth that would set us free in a richer, fairer and greener world.

5 Beyond the Washington Consensus to Misunderstand the Poor

It is a rather big mystery why economists have generally paid very little attention to the role of geography in economic development even when, on a global scale, the wealth of nations is well characterised by two geographical divides. The first geographical divide emphasises differences in ecological conditions: the temperate zone versus the tropical zone. The second geographical divide emphasises differences in the ability to conduct international trade: the coast versus the interior.

The empirical validity of the temperate–tropical divide is supported by the fact that over 90 percent of the world's poor lives between the Tropic of Cancer and the Tropic of Capricorn. The result is a GDP per capita (PPP-adjusted) of \$3,326 in 1995 for tropical economies, and \$9,027 for non-tropical economies. This strong correlation between ecological zone and income level is not a new observation in economics, e.g. Lee (1957) and Kamarck (1976), but it has not been a major analytical organising principle in development economics.

The coast-interior dichotomy highlights the importance of transportation costs in determining a country's participation in the international division of labour. In the industrial age, water transportation has the lowest cost for moving goods over extended distance. The growth effects of trade are well known, beginning with Adam Smith's observation that productivity improvements are enabled by the greater division of labour that, in turn, is enabled by the expansion of the market. The clear policy lesson here is that investments in physical infrastructure

²¹ See Woo (2000a, 2000b), and Woo, Sachs and Schwab (2000) for details on the Asian financial crisis.

and transportation technology can change the comparative advantage of a region.

The above configuration of spatial inequality suggests to us the possibility that both of these geographical divides are a combination of independent causes of economic wealth and of proxies for some important determinants of economic prosperity. For example, there could be a “biological” dimension to the growth phenomenon as proposed by natural scientists. In the book, *Guns, Germs and Steel*, the physiologist Jared Diamond (1997) has demonstrated that many types of innovation (especially those in agriculture and construction) are not transferable across ecological zones. So, in ancient times, while improved varieties of crops and beasts of burden could spread from Northern Asia in the East to Europe in the West (and vice versa), they could not be transmitted from the temperate zone in North America to the temperate zone in South America because of the intervening tropics. Biological endowments also matter. Most areas of Asia and Europe have more naturally pliable livestock (horses and cows) that can be harnessed to help in war and production. The African equivalent of those animals, for example, zebras, hippopotamuses, antelopes, and wildebeests, have proved themselves, up to today, resistant to efforts to turn them into beasts of burden. Even the African elephant is temperamentally uncooperative compared to its Asian cousin.

Some economists, Landes (1998), Engerman and Sokoloff (1997), and Gallup, Sachs, and Mellinger (1999), have begun to incorporate the new insights on physical geography to explore whether physical geography was an overarching explanation of economic performance. For example, Bloom and Sachs (1998) presented rigorous statistical testing to conclude that the virulence of diseases and the limited potential for large gains in agricultural productivity in the tropics are the key obstacles to economic development in most areas of Africa.²²

This biology-based analysis is of course not the only recent attempt to explain the upward income gradient that begins at the equator. Institutional mania has struck here as well. Hall and Jones (1999) have suggested instead that the distance from the equator proxies for the relative

²² It is therefore noteworthy that the southern border of China extends only a few miles beyond the Tropic of Cancer. Is it more than coincidental that after one thousand years, 800 B.C. to 200 A.D., of aggressive southward expansion from the Yellow River valley, the Chinese southern border has not changed for about one thousand eight hundred years? The borders stooped at approximately where the tropical zone, i.e. the malaria zone begins.

penetration of European economic institutions and that European-style economic institutions are the ultimate engines of growth.

How plausible is the explanation of the institutional fundamentalists? Well, if they are right, then it is quite inscrutable that Japan is considerably richer than Nigeria and Mexico. Japan is further away from Europe and North America than Nigeria is from Europe, and, furthermore, Nigeria, being a former British colony, had direct transfer of institutions from Britain. Mexico is right next to the United States, and it had also undergone a total transformation to European institutions three centuries before the 1868 Meiji Restoration in Japan.

There is clearly no shortage of explanations for spatial income disparity and its durability. The great surfeit of views is suggestive of inadequate understanding about this phenomenon and of confusion about what to do about it. What is clear, however, is that the successful development strategies of some countries cannot produce the same salubrious results when implemented in other national settings. When China opened some coastal pockets for foreign direct investment, these Special Economic Zones (SEZs) quickly blossomed into vibrant export platforms and created backward linkages with the immediate hinterland. When landlocked Mongolia turned the entire country into a free trade and investment zone in the late 1990s, however, the inflow of foreign capital was a mere trickle compared to China's experience. The specific lesson in this case is that the time-tested effective growth policy package for a coastal economy, and minor modifications of it, are unlikely to work for an interior economy.

Hereby, we see another fundamental flaw in the Washington Consensus development paradigm touted by the international financial and development institutions. Their development paradigm is most effective for small economies like Hong Kong and Singapore and for mid-size economies like Korea, Malaysia, and Taiwan (with easy access to shipping) which can participate fully in the international division of labour, and which had earlier accumulated relatively high level of human capital stocks (measured in education and health terms). When we review, in the context of Swiss economic history, the largely dismal growth performance of landlocked Bolivia, Burundi, Laos, Mongolia, Nepal, Rwanda, and Zambia, it appears that their fates are very much dependent on the growth rates and prosperity levels of their surrounding neighbours. But then these countries are all surrounded by other poor countries. In the absence of high demand by the neighbours for their products, we think that dealing successfully with the developmental changes arising from physical isolation and local disease vectors are just as important as

“getting the prices right” and “getting the institutions right”.

However, it is also clear from history that geography need not be destiny. Our guarded optimism is based on the fact that every geographically large country in the world has enduring pockets of regional poverty, e.g. Northern Shaanxi in China, Chiapas in Mexico, Madura in Indonesia, but the United States has been successful in reducing this problem. Despite the great geographical diversity of the United States, the per capita income in different states has actually been converging to a common income level; or, in technical parlance, there is unconditional convergence of income within the United States. Even more optimistically for the developing world, the process of unconditional convergence of income has also been verified for Western Europe.

Our optimism, however, is tempered by the knowledge that the process of absolute convergence of income is not operating within China. Most studies on China’s regional growth have found the existence of conditional convergence instead, which is that China could be described as a collection of regions each with a different long-run equilibrium income level, and provinces within each region are converging to its own region-specific equilibrium income level. There are, however, also studies, e.g. Démurger, Sachs, Woo, Bao, Chang, and Mellinger (2002), that found no reliable evidence of any kind of income convergence, whether unconditional or conditional.

There was nothing automatic about the catching up phenomenon in the United States, it occurred because of the massive state investments in the poor regions, e.g. rural electrification, an extensive national transportation system, large-scale water works projects implemented through the Army Corp of Engineers, the widespread land grant university system at the state level. The establishment of land grant universities in the poorer states was particularly important because it not only increased human capital formation but also mobilised science to overcome the ecology-specific barriers to higher productivity yield in agriculture and to better health within the local populations.

This comparative regional development experience in the United States and China reveals two more fundamental flaws in the Washington Consensus development prescriptions: (i) no recognition of the poverty trap phenomenon; and (ii) no acknowledgement of the importance of technical innovations.

The Washington Consensus believes only in self-help, it has no mention of foreign aid at all. Presumably, its position is that foreign assistance might accelerate the income convergence process but the country’s actions alone will be enough to initiate this process. To see that

the Washington Consensus position is wrong, we ask: why hasn't China already undertaken the same large-scale regional investments that the US did in the early parts of the 20th century? The answer is straightforward: China has not been able to afford to make these investments until recently. China had to wait until the economic deregulation, and the resulting integration of the coastal provinces into the international division of labour had created so much new wealth (not at the expense of the inland provinces) that it finally had the fiscal ability to do so. China is solving its regional poverty through self-help only in the sense that the richer provinces are subsidising the poorer ones (as the US did in the past), it is not relying on each province to pull itself up by its own bootstraps solely through the tonic mix of right prices and right institutions.

If we now consider an extremely destitute medium-size country that has no vibrant income growth in any of its provinces, the scope for cross-region subsidies is non-existent. It is therefore conceivable that some desperately poor countries are caught in poverty traps from which they cannot escape because they are too poor to make the critical amount of investments that will free them from the interlocking vicious cycles of illiteracy and poverty, and of disease and poverty.²³ Unless the rich nations are willing to live up to their moral obligations and grant sustained aid to change what Ocampo (2004) has called the "framework conditions" of these penurious societies, these societies will remain mired in misery.

We suspect that many sub-Saharan countries, especially the land-locked ones like Malawi, Burkina Faso, and Zambia, are caught in the bind of poverty traps. Good internal governance (with both prices and institutions being right) alone will not generate a satisfactory rate of sustained growth; it has to be supplemented by adequate external aid in order for faster growth to happen. The self-help logo of the Washington Consensus, when used indiscriminately, can serve as a cover for moral callousness.

²³ One side of the disease-poverty circle is that people fall sick, incur expenses that thrust them into debt, possibly lose their jobs because of sickness-induced low performance or absenteeism, and finally sink into poverty. The other side is that poor people cannot afford the required medical care and preventive screening, and fall sick more frequently (and, possibly also become sick more seriously) compared to the non-poor. The illiteracy-poverty vicious cycle can operate across generations rather as well as within a generation. The extremely poor cannot afford to educate their children, and in the absence of work skills these children obtain only the lowest-paying jobs or become subsistence farmers.

The second fundamental failing of the Washington Consensus revealed by the US-China comparison (particularly, the founding of the extensive land grant university system) is its static view of the economic process. This failure of the Washington Consensus can be characterised as “seeing the forest but not the trees”. Specifically, while the Washington Consensus imputes numerous positive growth effects to increasing the degree of trade openness as measured by the export-GDP ratio, and points out that East Asia is more trade oriented than Latin America (see Appendix, Figures 1 to 3),²⁴ it has not noticed, that the export composition of East Asia shows even greater economic dynamism than the rise in the export-GDP ratio (see Appendix, Figures 4 to 11).

In East Asia, higher value added manufactured exports have been displacing lower value added manufactured exports (and, in some cases, agricultural exports) very rapidly, whereas in most of Latin America, the composition of manufactured exports has been stable even when there is the rise in the export-GDP ratio.²⁵ Mexico is the only large country in Latin America that shows the East Asia trait of the rise in the export-GDP ratio being driven by high value added manufactured exports – a development that began in 1987 and intensified in 1993 when NAFTA was established.²⁶

The rapid evolution in the composition of manufactured exports in Korea, Taiwan and Malaysia reflects the steady and dramatic pace of industrial upgrading in these countries. This continual transformation of their production structures reveals the effectiveness of the technology policies adopted there. These countries have adopted aggressive concessionary policies to incubate high-tech firms, and to attract high-tech investments by multinational corporations. The upshot is that the

²⁴ The average export-to-GDP ratio for East Asia went from 35 to 63%, for Africa from 22 to 29%, and for Latin America from 9 to 20%, see Appendix, Figure 1. For this calculation, East Asia consisted of Hong Kong, Indonesia, Korea, Malaysia, Philippines, Singapore and Thailand; Africa of Gabon, Ghana, Cote Ivoire, Kenya, Nigeria and Senegal; and Latin America of Chile, Colombia and Mexico. Taiwan, Argentina and Brazil were excluded because of missing data.

²⁵ For example, see Appendix Figure 4, when (Manu/Total) of Argentina rose from 11% in 1970 to 30% in 1997, (Manu A/Total) went from 6% to 13%, and (Manu B/Total) from 5% to 13%. The result was only a minor change in Argentina’s composition of manufactured exports. Whereas in Korea’s case, as (Manu/Total) stayed about the same over the 1970-1997 period (76% in 1970 and 71% in 1997), (Manu A/Total) fell from 54% to 22%, and (Manu B/Total) climbed from 22% to 49%.

²⁶ See Appendix, Figures 2 and 11.

typical Latin American country is richer than the typical East Asian country, but the technology level of the former is lower! For example, Table 2 shows that the sample of Argentina, Brazil, Chile and Mexico is 48 percent richer than the sample of Malaysia, Thailand, and Philippines, but the technology level of the former is 24 percent lower than that of the latter. So the usual image of East Asia being more *laissez faire* than Latin America is certainly not true. Latin America either does not have a technology policy, or has one that does not work as desired, e.g. the standard import-substituting industrialisation policy is a *negative* technology policy because it discourages participation in the international product cycle.²⁷

In short, what has been described as trade-led growth in East Asia could instead be called science-led growth. For many of the least-developed economies, where agriculture would continue to be the mainstay of their economies, employing the bulk of the population, the developed countries should focus a large part of their increased aid on raising agricultural productivity and demand for the agricultural output through the application of science, establishing regional agriculture research centres for each of the distinct ecosystems in the least-developed countries (e.g. tropical monsoon region of East Asia, high plateau area of Latin America, and tropical grassland territory of Africa) to:

- conduct research on new seed varieties (including agro biotechnology), new approaches to water and environmental management, and new approaches to agricultural mechanisation;
- improve the local livestock through cross-breeding, and through better access to veterinarian services;
- enhance agriculture extension services to assist farmers in adopting new technologies;
- develop new processed-food products (e.g. new fruit drinks, new vegetable stuffing) from the agricultural products of these least-developed countries.

A key component of a science-led growth strategy for the developing countries is the mobilisation of their universities to be drivers of growth. The donor community should expand and upgrade these universities, especially their agricultural, scientific and technical departments. The universities should adopt incentive schemes to promote university-business partnerships that improve production techniques, and develop

²⁷ For a recent discussion about the state of innovation systems and technological development in Latin America and the policies required to strengthen them, see Chapter 7 in ECLAC (2002), and Chapter 6 in ECLAC (2004).

Table 2 Technology Levels in East Asia and Latin America

	GDP per capita in 2000 (PPP \$)	Ranking of technology level (out of 75)
East Asia	13,200	28
<i>The Four Dragons</i>	<i>20,778</i>	<i>16</i>
Hong Kong	25,153	33
Singapore	23,356	18
Korea	17,380	9
Taiwan	17,223	4
<i>The ASEAN-4</i>	<i>5,621</i>	<i>41</i>
Malaysia	9,068	22
Thailand	6,402	39
Philippines	3,971	40
Indonesia	3,043	61
Latin America	8,925	46
Argentina	12,311	48
Chile	9,417	42
Mexico	9,023	36
Brazil	7,625	49
Colombia	6,248	56
Latin America level as percentage of East Asian level	68%	62%
Argentina-Brazil-Mexico-Chile level as percentage of Malaysia- Thailand-Philippines level	148%	76%

Source: Ranking of Technology Level from *The Global Competitiveness Report 2001-2002* (GCR); PPP GDP data from *Human Development Report 2002*, except that for Taiwan which is from GCR.

new products, especially those that are based on the regional resource base. The universities in the poorest nations must, of course, give high priority to agricultural development by working collaboratively with the new regional agricultural research centres to effect technology transfers to farmers.

The truth is that the Washington Consensus (especially the Mark 1 version) is really an economic programme that is focused myopically on short and medium-term stabilisation of output, prices, and the balance of payments, and not on long-run sustained growth, particularly in the poorest countries. This accountant's approach to economic management

means that little attention is given to national specificities because accounting statements are the same everywhere in the world (even though the same outcomes might have been generated by different sets of factors). Why is there this accountant's mentality toward economic management?

The answer to this question brings us to the final fundamental defect of Washington Consensus Mark 2. Washington Consensus Mark 2, despite its obsession with getting institutions right, misses a serious institutional defect in its own intellectual backyard. It ignores the institutional weaknesses in the international financial and development institutions, especially the World Bank and the International Monetary Fund, and the need for root-and-branch reforms there. The recent negative experiences with the EEFSU economic transition and the Asian financial crisis show that bureaucratic inertia, operational convenience, and governance problems within the international financial and development institutions coalesced to produce the "one-size-fits-all" type of policy packages. We have to change the incentives within existing international economic organisations (e.g. alter the voting structure in the IMF), and to create new international frameworks to deal with the increase in economic accidents created by greatly enhanced interactions from the accelerating pace of global economic integration (e.g. an international bankruptcy court), and to prevent the tragedy of the global commons caused by the trend of higher global economic growth (e.g. the Kyoto Protocol). Only by moving beyond the Washington Consensus, can we then move closer to achieving the dream of a richer, fairer, and greener world that the primogenitor of the Washington Consensus wished for us.

In conclusion, it needs to be re-emphasised that the causes of underdevelopment are many. The reality is that countries differ in structure and in the international economic constraints they face; many combinations of different shocks produce similar readings on a number of economic indicators; and country characteristics and the international situation could change abruptly. Thus development economics becomes a farce whenever the epigones of neo-classical economics apply the Washington Consensus uncritically or, worse, elevate it to the status of universal truths.

The frequent focus on the role of poor governance and inappropriate economic institutions (e.g. over-regulation, ignorance and corruption) is correct but not sufficient. Démurger, Sachs, Woo, Bao, Chang, and Mellinger (2002), for example, have found that geographical factors have been just as important quantitatively as deregulation policies in the growth of the coastal provinces of China, and Bloom and Sachs (1998)

have found poor health conditions to be absolute barriers to African development. Physical capital formation for overcoming geographical and health barriers is, however, unlikely to be the final nail into the coffin in which poverty would be laid to rest. We believe that only human capital formation can come up with better solutions to the centuries-old problem of poverty and to the looming challenge of global ecological Armageddon because there is still a lot about the complexities of science-led growth that we have yet to understand. These two challenges will be easier to overcome if we can empower every mind in the world to be capable of thinking creatively about them, which is why the developed nations must redouble their efforts to help the developing nations meet the Millennium Development Goals of the United Nations. The common hope for a richer, fairer, and greener world will be realised if we can act collectively on this common agenda.

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Appendix

Figure 1 Seeing the Forest: Overall Trade Orientation
(exports in percent of GDP)

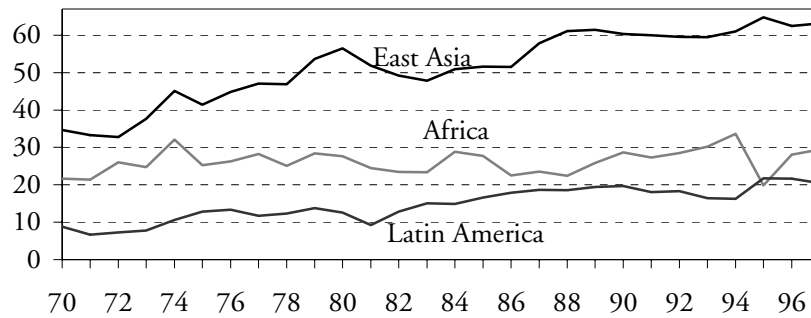


Figure 2 Export Orientation in Latin America
(exports in percent of GDP)

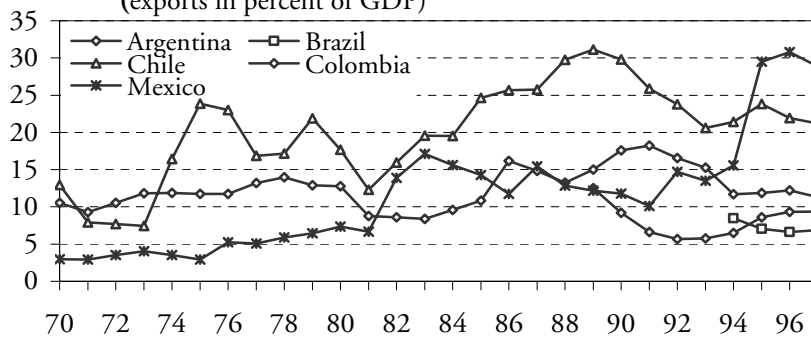
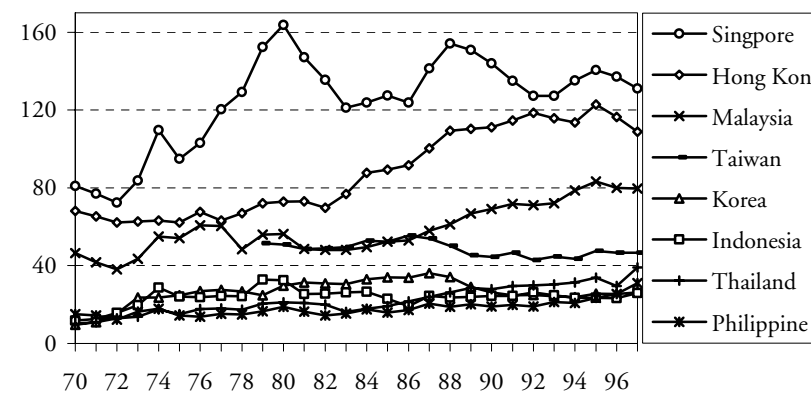


Figure 3 Export Orientation in East Asia
(exports in percent of GDP)



In Figures 4 to 11, the notations are as follows:

—◇—	Manu / Total	Manu = manufactured exports
—□—	Manu A / Total	Total = total exports
—△—	Manu B / Total	Manu A = low-tech manufactured exports
—*—	Mine / Total	Manu B = high-tech manufactured exports
—x—	Ag / Total	Mine = mineral exports
		Ag = agricultural exports

Figure 4 Export Composition in Argentina: Steady Manufactured Share

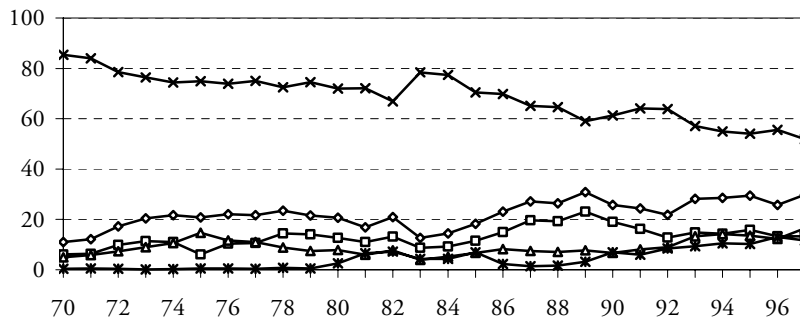


Figure 5 Export Composition in S. Korea: Steady Manufactured Share but Rising High Value-Added Component

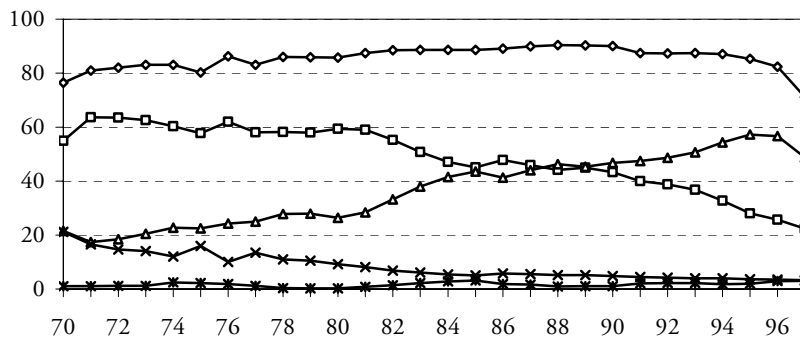


Figure 6 Export Composition in Taiwan: Steady Manufactured Share but Rising High Value-Added Component

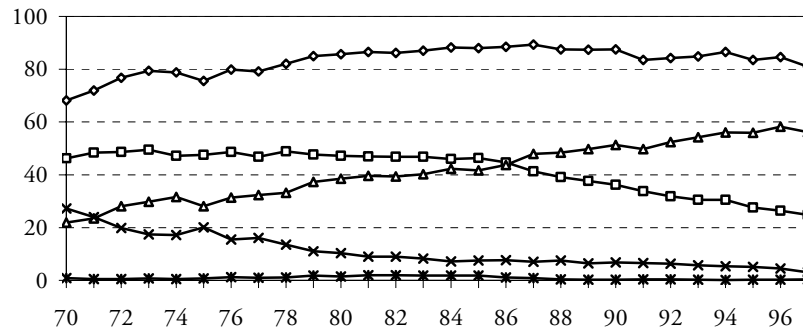


Figure 7 Export Composition in Brazil: Rising Manufactured Share

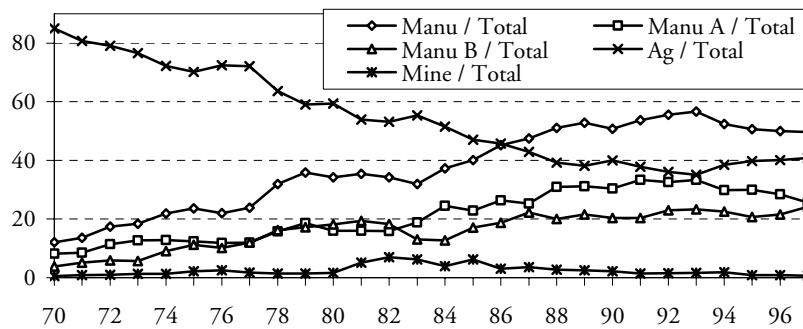


Figure 8 Export Composition in Malaysia: Rising Manufactured Share Driven by High Value Added Component

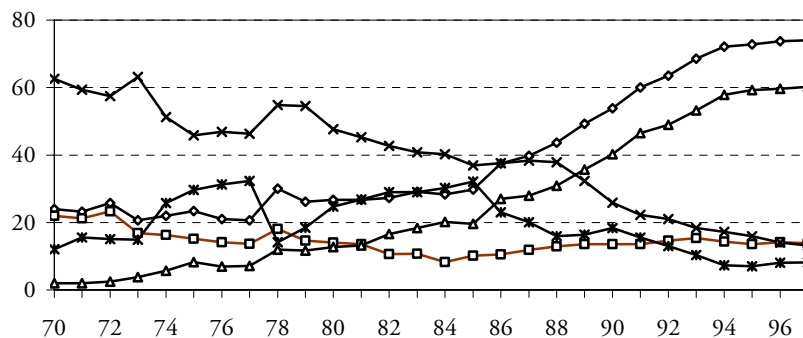


Figure 9 Export Composition in Thailand: Rising Manufactured Share Driven by High Value Added Component

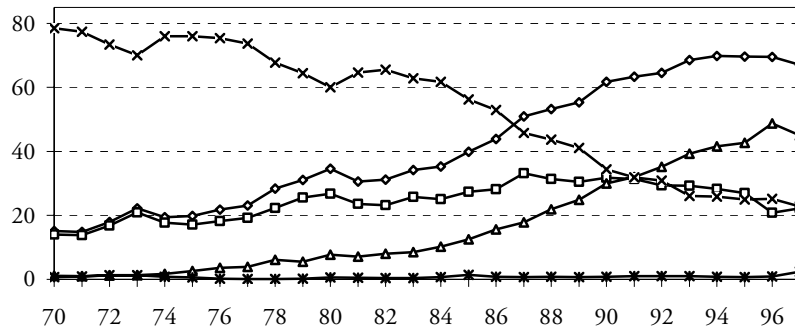


Figure 10 Export Composition in Colombia: Slightly Rising Manufactured Share

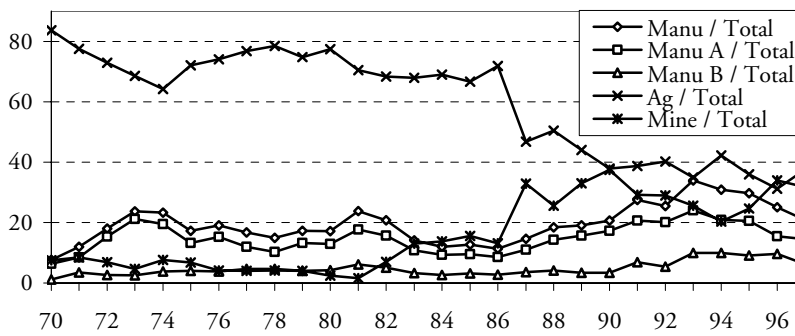


Figure 11 Mexico: South-East Asia-style Rise in Manufactured Export Share Driven by its High Value Component

