GROWTH STRATEGIES*

Dani Rodrik
Harvard University

John F. Kennedy School of Government
79 Kennedy Street
Cambridge, MA 02138
(617) 495-9454
Fax: (617) 496-5747
E-mail: dani_rodrik@harvard.edu
http://www.ksg.harvard.edu/rodrik/

This version
August 2004

ABSTRACT

This is an attempt to derive broad, strategic lessons from the diverse experience with economic growth in last fifty years. The paper revolves around two key arguments. One is that neoclassical economic analysis is a lot more flexible than its practitioners in the policy domain have generally given it credit. In particular, first-order economic principles—protection of property rights, market-based competition, appropriate incentives, sound money, and so on—do not map into unique policy packages. Reformers have substantial room for creatively packaging these principles into institutional designs that are sensitive to local opportunities and constraints. Successful countries are those that have used this room wisely. The second argument is that igniting economic growth and sustaining it are somewhat different enterprises. The former generally requires a limited range of (often unconventional) reforms that need not overly tax the institutional capacity of the economy. The latter challenge is in many ways harder, as it requires constructing over the longer term a sound institutional underpinning to endow the economy with resilience to shocks and maintain productive dynamism. Ignoring the distinction between these two tasks leaves reformers saddled with impossibly ambitious, undifferentiated, and impractical policy agendas.

GROWTH STRATEGIES

Dani Rodrik

"[A]s far as the LDCs are concerned, it is probably fair to say that at least a crude sort of 'justice' prevails in the economic policy realm. Countries that have run their economies following the policy tenets of the professionals have on the whole reaped good fruit from the effort; likewise, those that have flown in the face of these tenets have had to pay the price."

-- Arnold C. Harberger (1985, p. 42)

"When you get right down to business, there aren't too many policies that we can say with certainty deeply and positively affect growth."

-- Arnold C. Harberger (2003, p. 215)

I. Introduction

Real per-capita income in the developing world grew at an average rate of 2.3 percent per annum during the four decades between 1960 and 2000.[1] This is a high growth rate by almost any standard. At this pace incomes double every 30 years, allowing each generation to enjoy a level of living standards that is twice as high as the previous generation's. To provide some historical perspective on this performance, it is worth noting that Britain's per-capita GDP grew at a mere 1.3 percent per annum during its period of economic supremacy in the middle of the 19th century (1820-1870) and that the United States grew at only 1.8 percent during the half century before World War I when it overtook Britain as the world's economic leader (Maddison 2001, Table B-22, 265). Moreover, with few exceptions, economic growth in the last few decades has been accompanied by significant improvements in social indicators such as literacy, infant mortality, life expectation, and the like. So on balance the recent growth record looks quite impressive.

However, since the rich countries themselves grew at a very rapid clip of 2.7 percent during the period 1960-2000, few developing countries consistently managed to close the economic gap between them and the advanced nations. As Figure 1 indicates, the countries of

[1] This figure refers to the exponential growth rate of GDP per capita (in constant 1995 US$) for the group of low- and middle-income countries. The data come from the World Development Indicators 2002 CD-ROM of the Word Bank.

East and Southeast Asia constitute the sole exception. Excluding China, this region experienced per-capita GDP growth of 4.4 percent over 1960-2000. Despite the Asian financial crisis of 1997-98 (which shows as a slight dip in Figure 1), countries such as South Korea, Thailand and Malaysia ended the century with productivity levels that stood significantly closer to those enjoyed in the advanced countries.

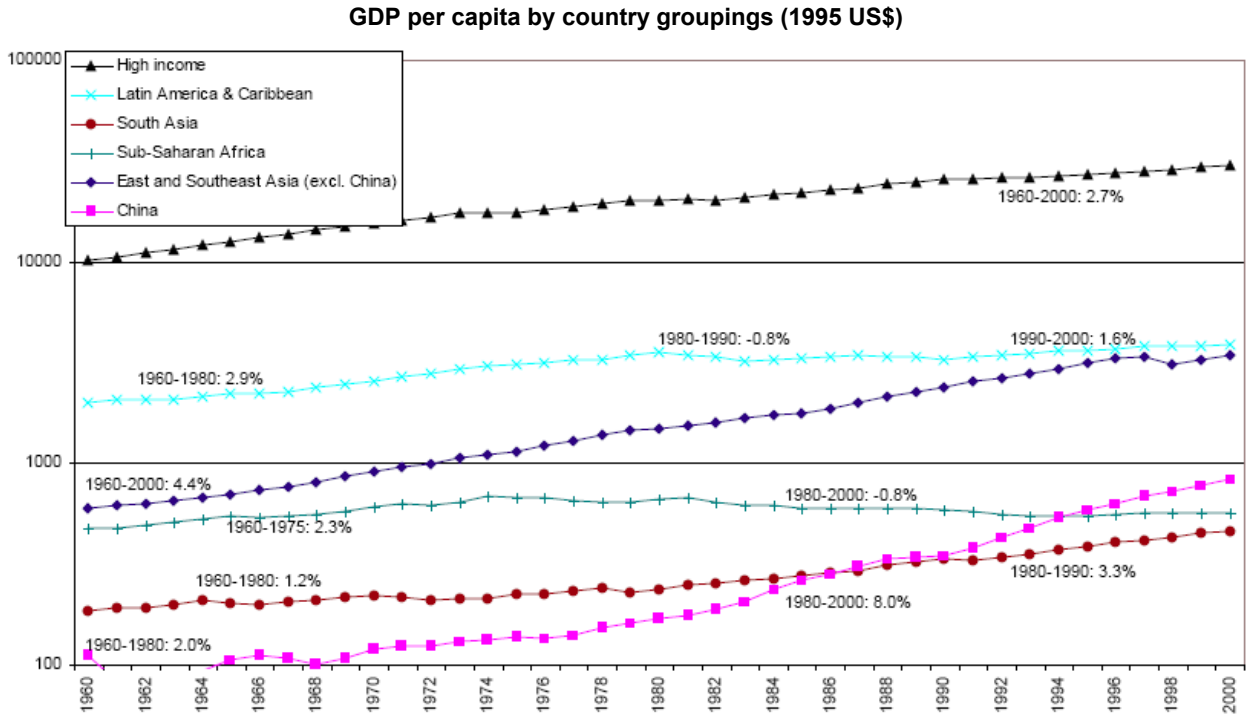

Figure 1

Elsewhere, the pattern of economic performance has varied greatly across different time periods. China has been a major success story since the late 1970s, experiencing a stupendous growth rate of 8.0 percent (as compared to 2.0 percent in 1960-80). Less spectacularly, India has roughly doubled its growth rate since the early 1980s, pulling South Asia's growth rate up to 3.3 percent in 1980-2000 from 1.2 percent in 1960-1980. The experience in other parts of the world was the mirror image of these Asian growth take-offs. Latin America and Sub-Saharan Africa both experienced robust economic growth prior to the late 1970s and early 1980s—2.9 percent and 2.3 percent respectively—but then lost ground subsequently in dramatic fashion. Latin America's growth rate collapsed in the "lost decade" of the 1980s, and has remained anemic despite some recovery in the 1990s. Africa's economic decline, which began in the second half of the 1970s, continued throughout much of the 1990s and has been aggravated by the onset of HIV/AIDS and other public-health challenges. Measures of total factor productivity run parallel to these trends in per-capita output (see Table 1).

Hence the aggregate picture hides tremendous variety in growth performance, both geographically and temporally. We have high growth countries and low growth countries; countries that have grown rapidly throughout, and countries that have experienced growth spurts

for a decade or two; countries that took off around 1980 and countries whose growth collapsed around 1980.

This paper is devoted to the question: what do we learn about *growth strategies* from this rich and diverse experience? By "growth strategies" I refer to economic policies and institutional arrangements aimed at achieving economic convergence with the living standards prevailing in advanced countries. My emphasis will be less on the relationship between specific policies and economic growth—the stock-in-trade of cross-national growth empirics—and more on developing a broad understanding of the contours of successful strategies. Hence my account harks back to an earlier generation of studies that distilled operational lessons from the observed growth experience, such as Albert Hirschman's *The Strategy of Economic Development* (1958), Alexander Gerschenkron's *Economic Backwardness in Historical Perspective* (1962) or Walt Rostow's *The Stages of Economic Growth* (1965). This paper follows an unashamedly inductive approach in this tradition.

A key theme in these works, as well as in the present paper, is that growth-promoting policies tend to be context specific. We are able to make only a limited number of generalizations on the effects on growth, say, of liberalizing the trade regime, opening up the financial system, or building more schools. The experience of the last two decades has frustrated the expectations of policy advisers who thought we had a good fix on the policies that promote growth—see the shift in mood that is reflected in the two quotes from Harberger that open this paper. And despite a voluminous literature, cross-national growth regressions ultimately do not provide us with much reliable and unambiguous evidence on such operational matters.[2] An alternative approach, and the one I adopt here, is to shift our focus to a higher level of generality and to examine the broad design principles of successful growth strategies. This entails zooming away from the individual building blocks and concentrating on how they are put together.

The paper revolves around two key arguments. One is that neoclassical economic analysis is a lot more flexible than its practitioners in the policy domain have generally given it credit. In particular, first-order economic principles—protection of property rights, contract enforcement, market-based competition, appropriate incentives, sound money, debt sustainability—do not map into unique policy packages. Good institutions are those that deliver these first-order principles effectively. There is no unique correspondence between the <u>functions</u> that good institutions perform and the <u>form</u> that such institutions take. Reformers have substantial room for creatively packaging these principles into institutional designs that are sensitive to local constraints and take advantage of local opportunities. Successful countries are those that have used this room wisely.

The second argument is that igniting economic growth and sustaining it are somewhat different enterprises. The former generally requires a limited range of (often unconventional) reforms that need not overly tax the institutional capacity of the economy. The latter challenge is in many ways harder, as it requires constructing a sound institutional underpinning to maintain productive dynamism and endow the economy with resilience to shocks over the longer term.

---

[2] Easterly (2003) provides a good overview of these studies. See also Temple (1999), Brock and Durlauf (2001), and Rodriguez and Rodrik (2001).

Ignoring the distinction between these two tasks leaves reformers saddled with impossibly ambitious, undifferentiated, and impractical policy agendas.

The plan for the paper is as follows. The next section sets the stage by evaluating the standard recipes for economic growth in light of recent economic performance. Section III develops the argument that sound economic principles do not map into unique institutional arrangements and reform strategies. Section IV re-interprets recent growth experience using the conceptual framework of the previous section. Section V discusses a two-pronged growth strategy that differentiates between the challenges of igniting growth and the challenges of sustaining it. Concluding remarks are presented in section VI.

II. What we know that (possibly) ain't so

Development policy has always been subject to fads and fashions. During the 1950s and 1960s, "big push," planning, and import-substitution were the rallying cries of economic reformers in poor nations. These ideas lost ground during the 1970s to more market-oriented views that emphasized the role of the price system and outward-orientation.[3] By the late 1980s a remarkable convergence of views had developed around a set of policy principles that John Williamson (1990) infelicitously termed the "Washington Consensus." These principles remain at the heart of today's conventional understanding of a desirable policy framework for economic growth, even though they have been greatly embellished and expanded in the years since.

The left panel in Table 2 shows Williamson's original list, which focused on fiscal discipline, "competitive" currencies, trade and financial liberalization, privatization and deregulation. These were perceived to be the key elements of what Krugman (1995, 29) has called the "Victorian virtue in economic policy," namely "free markets and sound money". Towards the end of the 1990s, this list was augmented in the thinking of multilateral agencies and policy economists with a series of so-called second-generation reforms that were more institutional in nature and targeted at problems of "good governance." A complete inventory of these Washington Consensus-plus reforms would take too much space, and in any case the precise listing differs from source to source.[4] I have shown a representative sample of ten items (to preserve the symmetry with the original Washington Consensus) in the right panel of Table 2. They range from anti-corruption and corporate governance to social safety nets and targeted anti-poverty programs.

The perceived need for second-generation reforms arose from a combination of sources. First, there was growing recognition that market-oriented policies may be inadequate without more serious institutional transformation, in areas ranging from the bureaucracy to labor markets. For example, trade liberalization may not reallocate an economy's resources appropriately if the

[3] Easterly (2001) provides an insightful and entertaining account of the evolution of thinking on economic development. See also Lindauer and Pritchett (2002) and Krueger (1997).

[4] For diverse perspectives on what the list should contain, see Stiglitz (1998), World Bank (1998), Naim (1999), Birdsall and de la Torre (2001), Kaufmann (2002), Ocampo (2002), and Kuczynski and Williamson (2003).

labor markets are "rigid" or insufficiently "flexible." Second, there was a concern that financial liberalization may lead to crises and excessive volatility in the absence of a more carefully delineated macroeconomic framework and improved prudential regulation. Hence the focus on non-intermediate exchange-rate regimes, central bank independence, and adherence to international financial codes and standards. Finally, in response to the complaint that the Washington Consensus represented a trickle-down approach to poverty, the policy framework was augmented with social policies and anti-poverty programs.

It is probably fair to say that a listing along the lines of Table 2 captures in broad brushstrokes mainstream thinking about the key elements of a growth program *circa* 2000. How does such a list fare when held against the light of contemporary growth experience? Imagine that we gave Table 2 to an intelligent Martian and asked him to match the growth record displayed in Figure 1 and Table 1 with the expectations that the list generates. How successful would he be in identifying which of the regions adopted the standard policy agenda and which did not?

Consider first the high performing East Asian countries. Since this region is the only one that has done consistently well since the early 1960s, the Martian would reasonably guess that there is a high degree of correspondence between its policies and the list in Table 2. But he would be at best half-right. South Korea's and Taiwan's growth policies, to take two important illustrations, exhibit significant departures from the Washington Consensus. Neither country undertook significant deregulation or liberalization of their trade and financial systems well into the 1980s. Far from privatizing, they both relied heavily on public enterprises. South Korea did not even welcome direct foreign investment. And both countries deployed an extensive set of industrial policies that took the form of directed credit, trade protection, export subsidization, tax incentives, and other non-uniform interventions. Using the minimal scorecard of the original Washington Consensus (left panel of Table 2), the Martian would award South Korea a grade of 5 (out of 10) and Taiwan perhaps a 6 (Rodrik 1996).

The gap between the East Asian "model" and the more demanding institutional requirements shown on the right panel of Table 2 is, if anything, even larger. I provide a schematic comparison between the standard "ideal" and the East Asian reality in Table 3 for a number of different institutional domains such as corporate governance, financial markets, business-government relationships, and public ownership. Looking at this, the Martian might well conclude that South Korea, Taiwan, and (before them) Japan stood little chance to develop. Indeed, such were the East Asian anomalies that when the Asian financial crisis of 1997-98 struck, many observers attributed the crisis to the moral hazard, "cronyism," and other problems created by East Asian-style institutions (see MacLean 1999, Frankel 2000).

The Martian would also be led astray by China's boom since the late 1970s and by India's less phenomenal, but still significant growth pickup since the early 1980s. While both of these countries have transformed their attitudes towards markets and private enterprise during this period, their policy frameworks bear very little resemblance to what is described in Table 2. India deregulated its policy regime slowly and undertook very little privatization. Its trade regime remained heavily restricted late into the 1990s. China did not even adopt a private property rights regime and it merely appended a market system to the scaffolding of a planned

economy (as discussed further below). It is hardly an exaggeration to say that had the Chinese economy stagnated in the last couple of decades, the Martian would be in a better position to rationalize it using the policy guidance provided in Table 2 than he is to explain China's actual performance.[5]

The Martian would be puzzled that the region that made the most determined attempt at remaking itself in the image of Table 2, namely Latin America, has reaped so little growth benefit out of it. Countries such as Mexico, Argentina, Brazil, Colombia, Bolivia, and Peru did more liberalization, deregulation and privatization in the course of a few years than East Asian countries have done in four decades. Figure 2 shows an index of structural reform for these and other Latin American countries, taken from Lora (2001a). The index measures on a scale from 0 to 1 the extent of trade and financial liberalization, tax reform, privatization, and labor-market reform undertaken. The regional average for the index rises steadily from 0.34 in 1985 to 0.58 in 1999. Yet the striking fact from Figure 1 is that Latin America's growth rate has remained significantly below its pre-1980 level. The Martian would be at a loss to explain why growth is now lower given that the quality of Latin America's policies, as judged by the list in Table 2, has improved so much.[6] A similar puzzle, perhaps of a smaller magnitude, arises with respect to Africa, where economic decline persists despite an overall (if less marked) "improvement" in the policy environment.[7]

[5] Vietnam, a less well known case than China, has many of the same characteristics: rapid growth since the late 1980s as a result of heterodox reform. Vietnam has benefited from a gradual turn toward markets and greater reliance on private entrepreneurship, but as Van Arkadie and Mallon (2003) argue, it is hard to square the extensive role of the state and the nature of the property rights regime with the tenets of the Washington Consensus.

[6] Lora (2001b) finds that structural reforms captured by this index do correlate with growth rates in the predicted manner, but that the impacts (taking the decade of the 1990s as a whole) are not that strong. Another econometric study by Loayza et al. (2002) claims that Latin America's reforms added significantly to the region's growth. However the latter paper uses outcome variables such as trade/GDP and financial depth ratios as its indicators of "policy," and therefore is unable to link economic performance directly to the reforms themselves. Lin and Liu (2003) attribute the failure of the Washington Consensus to the non-viability of enterprises created under the previous "distorted" policy regime and the political impossibility of letting these go bust.

[7] See also Milanovic (2003) for a closely related Martian thought experiment. Milanovic emphasizes that economic growth has declined in most countries despite greater globalization.

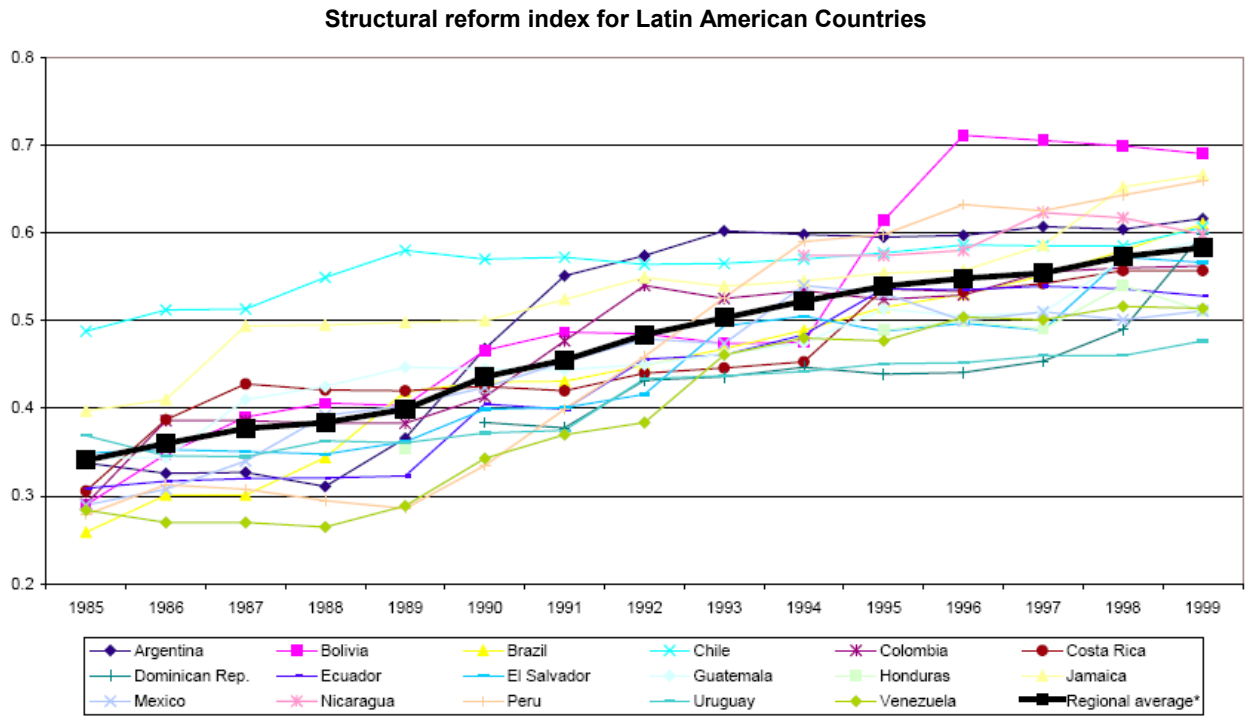

Figure 2

Source: Lora (2001a).

The Martian would recognize that the growth record is consistent with some of the *higher-order* economic principles that inspire the standard policy consensus. A semblance of property rights, sound money, fiscal solvency, market-oriented incentives—these are elements that are common to all successful growth strategies.[8] Where they have been lacking, economic performance has been lackluster at best. But the Martian would also have to conclude that the mapping from our more detailed policy preferences (such as those in Table 2) to economic success is quite imperfect. He would wonder if we cannot do better.

[8] Here is how Larry Summers (2003) summarizes the recent growth evidence: "[The] rate at which countries grow is substantially determined by three things: their ability to integrate with the global economy through trade and investment; their capacity to maintain sustainable government finances and sound money; and their ability to put in place an institutional environment in which contracts can be enforced and property rights can be established. I would challenge anyone to identify a country that has done all three of these things and has not grown at a substantial rate." Note how these recommendations are couched not in terms of specific policies (maintain tariffs below *x* percent, raise the government primary surplus above *y* percent, privatize state enterprises, and so on), but in terms of "abilities" and "capacities" to get certain outcomes accomplished. I will suggest below that these "abilities" and "capacities" do not map neatly into the standard policy preferences, and can be generated in a variety of ways.

III. The indeterminate mapping from economic principles to institutional arrangements

Here is another thought experiment. Imagine a Western economist was invited to Beijing in 1978 in order to advise the Chinese leadership on a reform strategy. What would she recommend and why?

The economist would recognize that reform must start in the rural areas since the vast majority of the poor live there. An immediate recommendation would be the *liberalization of agricultural markets* and the *abolition of the state order system* under which peasants had to make obligatory deliveries of crops at low, state-controlled prices. But since price liberalization alone would be inadequate to generate the appropriate supply incentives under a system of communal land ownership, the economist would also recommend the *privatization of land.* Next, the economist would have to turn her attention to the broader implications of price liberalization in agriculture. Without access to cheap grains, the state would be left without a source of implicit tax revenue, so *tax reform* must be on the agenda as well. And in view of the rise of food prices, there must be a way to respond to urban workers' demand for higher wages. State enterprises in urban areas must be *corporatized*, so that their managers are in a position to adjust their wages and prices appropriately.

But now there are other problems that need attention. In an essentially closed and non-competitive economy, price-setting autonomy for the state behemoths entails the exercise of monopoly power. So the economist would likely recommend *trade liberalization* in order to "import" price discipline from abroad. Openness to trade in turn calls for other complementary reforms. There must be *financial sector reform* so that financial intermediaries are able to assist domestic enterprises in the inevitable adjustments that are called forth. And of course there must be *social safety nets* in place so that those workers who are temporarily displaced have some income support during the transition.

The story can be embellished by adding other required reforms, but the message ought to be clear. By the time the Western economist is done, the reform agenda she has formulated looks very similar to the Washington Consensus (see Table 4). The economist's reasoning is utterly plausible, which underscores the point that the Washington Consensus is far from silly: it is the result of systematic thinking about the multiple, often complementary reforms needed to establish property rights, put market incentives to work, and maintain macroeconomic stability. But while this particular reform program represents a logically consistent way achieving these end goals, it is not the only one that has the potential of doing so. In fact, in view of the administrative and political constraints that such an ambitious agenda is likely to encounter, it is not implausible that there would be better ways of getting there.

How can we be sure of this? We know this because China took a very different approach to reform—one that was experimental in nature and relied on a series of institutional innovations that departed significantly from Western norms. What is important to realize about these innovations is that in the end they delivered—for a period of a couple of decades at least—the very same goals that the Western economist would have been hoping for: market-oriented incentives, property rights, macroeconomic stability. But they did so in a peculiar fashion that, given the Chinese historical and political context, had numerous advantages.

For example, the Chinese authorities liberalized agriculture only *at the margin* while keeping the plan system intact. Farmers were allowed to sell surplus crops freely at a market-determined price only after they had fulfilled their obligations to the state under the state order system. As Lau, Qian, and Roland (2000) explain, this was an ingenious system that generated efficiency without creating any losers. In particular, it was a shortcut that neatly solved a conundrum inherent in wholesale liberalization: how to provide microeconomic incentives to producers while insulating the central government from the fiscal consequences of liberalization. As long as state quotas were set below the fully liberalized market outcome (so that transactions were conducted at market prices at the margin) and were not ratcheted up (so that producers did not have to worry about the quotas creeping up as a result of marketed surplus), China's dual-track reform in effect achieved full allocative efficiency. But it entailed a different infra-marginal distribution—one that preserved the income streams of initial claimants. The dual track approach was eventually employed in other areas as well, such as industrial goods (e.g. coal and steel) and labor markets (employment contracts). Lau et al. (2000) argue that the system was critical to achieve political support for the reform process, maintain its momentum, and minimize adverse social implications.

Another important illustration comes from the area of property rights. Rather than privatize land and industrial assets, the Chinese government implemented novel institutional arrangements such as the Household Responsibility System (under which land was "assigned" to individual households according to their size) and Township and Village Enterprises (TVEs). The TVEs were the growth engine of China until the mid-1990s (Qian 2003), with their share in industrial value added rising to more than 50 percent by the early 1990s (Lin et al. 1996, 180), so they deserve special comment. Formal ownership rights in TVEs were vested not in private hands or in the central government, but in local communities (townships or villages). Local governments were keen to ensure the prosperity of these enterprises as their equity stake generated revenues directly for them. Qian (2003) argues that in the environment characteristic of China, property rights were effectively more secure under direct local government ownership than they would have been under a private property-rights legal regime. The efficiency loss incurred due to the absence of private control rights was probably outweighed by the implicit security guaranteed by local government control. It is difficult to explain otherwise the remarkable boom in investment and entrepreneurship generated by such enterprises.

Qian (2003) discusses other examples of "transitional institutions" China employed to fuel economic growth—fiscal contracts between central and local governments, anonymous banking—and one may expand his list by including arrangements such as Special Economic Zones. The main points to take from this experience are the following. First, China relied on highly unusual, non-standard institutions. Second, these unorthodox institutions worked precisely because they produced orthodox results, namely market-oriented incentives, property rights, macroeconomic stability, and so on. Third, it is hard to argue, in view of China's stupendous growth, that a more standard, "best-practice" set of institutional arrangements would have necessarily done better.

The Chinese experience helps lay out the issues clearly because its institutional innovations and growth performance are both so stark. But China's experience with non-standard growth policies is hardly unusual; in fact it is more the rule than the exception. The

(other) East Asian anomalies noted previously (Table 3) can be viewed as part of the same pattern: non-standard practices in the service of sound economic principles. I summarize a few non-Chinese illustrations in Table 5.

Consider for example the case of financial controls. I noted earlier that few of the successful East Asian countries undertook much financial liberalization early on in their development process. Interest rates remained controlled below market-clearing levels and competitive entry (by domestic or foreign financial intermediaries) was typically blocked. It is easy to construct arguments as to why this was beneficial from an economic standpoint. Table 5 summarizes the story laid out by Hellman, Morduck, and Stiglitz (1997), who coin the term "financial restraint" for the Asian model. Where asymmetric information prevails and the level of savings is sub-optimal, Hellman et al. argue that creating a moderate amount of rents for incumbent banks can generate useful incentives. These rents induce banks to do a better job of monitoring their borrowers (since there is more at stake) and to expand effort to mobilize deposits (since there are rents to be earned on them). The quality and level of financial intermediation can both be higher than under financial liberalization. These beneficial effects are more likely to materialize when the pre-existing institutional landscape has certain properties—for example when the state is not "captured" by private interests and the external capital account is restricted (see last two columns of Table 5). When these preconditions are in place, the economic logic behind financial restraint is compelling.

The second illustration in Table 5 comes from South Korea's and Taiwan's experiences with industrial policy. The governments in these countries rejected the standard advice that they take an arms' length approach to their enterprises and actively sought to coordinate private investments in targeted sectors. Once again, it is easy to come up with economic models that provide justification for this approach. In Rodrik (1995), I argued that the joint presence of scale economies and inter-industry linkages can depress the private return to investment in non-traditional activities below the social return. Industrial policy can be viewed as a "coordination device" to stimulate socially profitable investments. In particular, the socialization of investment risk through implicit bailout guarantees may be economically beneficial despite the obvious moral hazard risk it poses. However, once again, there are certain prerequisites and institutional complements that have to be in place for this approach to make sense (see Table 5).

The third illustration in Table 5 refers to Japan and concerns the internal organization of the workplace, drawing on Aoki's (1997) work. Aoki describes the peculiar institutional foundations of Japan's postwar success as having evolved from a set of arrangements originally designed for wartime mobilization and centralized control of resources. He presents Japan's team-centered approach to work organization and its redistribution of economic resources from advanced to backward sectors—arrangements that he terms "horizontal hierarchy" and "bureau-pluralism," respectively—as solutions to particular informational and distributive dilemmas the Japanese economy faced in the aftermath of World War II. Unlike the previous authors, however, he views this fit between institutions and economic challenges as having been unintended and serendipitous.

Lest the reader think this is solely an East Asian phenomenon, an interesting example of institutional innovation comes from Mauritius (Rodrik 1999). Mauritius owes a large part of its

success to the creation in 1970 of an export-processing zone (EPZ), which enabled an export boom in garments to European markets. Yet, instead of liberalizing its trade regime across the board, Mauritius combined this EPZ with a domestic sector that was highly protected until the mid-1980s, a legacy of the policies of import-substituting industrialization (ISI) followed during the 1960s. The industrialist class that had been created with these policies was naturally opposed to the opening up of the trade regime. The EPZ scheme provided a neat way around this difficulty (Wellisz and Saw 1993). The creation of the EPZ generated new profit opportunities, without taking protection away from the import-substituting groups. The segmentation of labor markets was particularly crucial in this regard, as it prevented the expansion of the EPZ (which employed mainly female labor) from driving wages up in the rest of the economy, and thereby disadvantaging import-substituting industries. New profit opportunities were created at the margin, while leaving old opportunities undisturbed. At a conceptual level, the story here is essentially very similar to the two-track reforms in China described earlier. To produce the results it did, however, the EPZ also needed a source of investible funds, export-oriented expertise, and market access abroad, which were in turn provided by a terms-of-trade boom, entrepreneurs from Hong Kong, and preferential market access in Europe, respectively (Rodrik 1999; Subramanian and Roy 2003).

In reviewing cases such as these, there is always the danger of reading too much into them after the fact. In particular, we need to avoid several fallacies. First, we cannot simply assume that institutions take the form that they do <u>because</u> of the functions that they perform (the functionalist fallacy). Aoki's account of Japan is a particularly useful reminder that a good fit between form and function might be the unintended consequence of historical forces. Second, it is not correct to ascribe the positive outcomes in the cases just reviewed only to their anomalies (the ex-post rationalization fallacy). Many accounts of East Asian success emphasize the standard elements--fiscal conservatism, investment in human resources, and export orientation (see for example World Bank 1993). As I will discuss below, East Asian institutional anomalies have often produced perverse results when employed in other settings. And it is surely not the case that all anomalies are economically functional.

The main point I take from these illustrations is robust to these fallacies, and has to do with the "plasticity" of the institutional structure that neoclassical economics is capable of supporting. All of the above institutional anomalies are compatible with, and can be understood in terms of, neoclassical economic reasoning ("good economics"). Neoclassical economic analysis does not determine the form that institutional arrangements should or do take. What China's case and other examples discussed above demonstrate is that the higher-order principles of sound economic management do not map into unique institutional arrangements.

In fact, principles such as appropriate incentives, property rights, sound money, and fiscal solvency all come institution-free. We need to operationalize them through a set of policy actions. The experiences above show us that there may be multiple ways of packing these principles into institutional arrangements. Different packages have different costs and benefits depending on prevailing political constraints, levels of administrative competence, and market failures. The pre-existing institutional landscape will typically offer both constraints and opportunities, requiring creative shortcuts or bold experiments. From this perspective, the "art"

of reform consists of selecting appropriately from a potentially infinite menu of institutional designs.

A direct corollary of this line of argument is that there is only a weak correspondence between the higher-order principles of neoclassical economics and the specific policy recommendations in the standard list (as enumerated in Table 2). To see this, consider for example one of the least contentious recommendations in the list, having to do with trade liberalization. Can the statement "trade liberalization is good for economic performance" be derived from first principles of neoclassical economics? Yes, but only if a number of side conditions are met:

- The liberalization must be complete or else the reduction in import restrictions must take into account the potentially quite complicated structure of substitutability and complementarity across restricted commodities.[9]
- There must be no microeconomic market imperfections other than the trade restrictions in question, or if there are some, the second-best interactions that are entailed must not be adverse.[10]
- The home economy must be "small" in world markets, or else the liberalization must not put the economy on the wrong side of the "optimum tariff."[11]
- The economy must be in reasonably full employment, or if not, the monetary and fiscal authorities must have effective tools of demand management at their disposal.
- The income redistributive effects of the liberalization should not be judged undesirable by society at large, or if they are, there must be compensatory tax-transfer schemes with low enough excess burden.[12]
- There must be no adverse effects on the fiscal balance, or if there are, there must be alternative and expedient ways of making up for the lost fiscal revenues.
- The liberalization must be politically sustainable and hence credible so that economic agents do not fear or anticipate a reversal.[13]

---

[9] There is a large theoretical literature on partial trade reform, which shows the difficulty of obtaining unambiguous characterizations of the welfare effects of incomplete liberalization. See Hatta (1977), Anderson and Neary (1992), and Lopez and Panagariya (1993). For an applied general equilibrium analysis of how these issues can complicate trade reform in practice, see Harrison, Rutherford, and Tarr (1993).

[10] For an interesting empirical illustration on how trade liberalization can interact adversely with environmental externalities, see Lopez (1997).

[11] This is not a theoretical curiosum. Gilbert and Varangis (2003) argue that the liberalization of cocoa exports in West African countries has depressed world cocoa prices, with most of the benefits being captured by consumers in developed countries.

[12] The standard workhorse model of international trade, the factor-endowments model and its associated Stolper-Samuelson theorem, comes with sharp predictions on the distributional effects of import liberalization (the "magnification effect").

[13] Calvo (1989) was the first to point out that lack of credibility acts as an intertemporal distortion. See also Rodrik (1991).

All these theoretical complications could be sidestepped if there were convincing evidence that in practice trade liberalization systematically produces improved economic performance. But even for this relatively uncontroversial policy, it has proved difficult to generate unambiguous evidence (see Rodriguez and Rodrik 2001, Vamvakidis 2002, and Yanikkaya 2003).[14]

The point is that even the simplest of policy recommendations—"liberalize foreign trade"—is contingent on a large number of judgment calls about the economic and political context in which it is to be implemented.[15] Such judgment calls are often made implicitly. Rendering them explicit has a double advantage: it warns us about the potential minefields that await the standard recommendations, and it stimulates creative thinking on alternatives (as in China) that can sidestep those minefields. By contrast, when the policy recommendation is made unconditionally, as in the Washington Consensus, the gamble is that the policy's prerequisites will coincide with our actual draw from a potentially large universe of possible states of the world.

I summarize this discussion with the help of Tables 6, 7, and 8 dealing with microeconomic policy, macroeconomic policy, and social policy, respectively. Each table contains three columns. The first column displays the ultimate goal that is targeted by the policies and institutional arrangements in the three domains. Hence microeconomic policies aim to achieve static and dynamic efficiency in the allocation of resources. Macroeconomic policies aim for macroeconomic and financial stability. Social policies target poverty reduction and social protection.

The next column displays some of the key higher-order principles that economic analysis brings to the table. Allocative efficiency require property rights, the rule of law, and appropriate incentives. Macroeconomic and financial stability requires sound money, fiscal solvency, and prudential regulation. Social inclusion requires incentive compatibility and appropriate targeting. These are the "universal principles" of sound economic management. They are universal in the sense that it is hard to see what any country would gain by systematically defying them. Countries that have adhered to these principles—no matter how unorthodox their manner of doing so may have been—have done well while countries that have flouted them have typically done poorly.

From the standpoint of policy makers, the trouble is that these universal principles are not operational as stated. In effect, the answers to the real questions that preoccupy policy makers—how far should I go in opening up my economy to foreign competition, should I free up interest

[14] Recent empirical studies have begun to look for non-linear effects of trade liberalization. In a study of India's liberalization, Aghion et al. (2003) find that trade liberalization appears to have generated differentiated effects across Indian firms depending on prevailing industrial capabilities and labor market regulations. Firms that were close to the technological frontier and in states with more "flexible" regulations responded positively while others responded negatively. See also Helleiner (1994) for a useful collection of country studies that underscores the contingent nature of economies' response to trade liberalization.

[15] This is one reason why policy discussions on standard recommendations such as trade liberalization and privatization now often take the formulaic form: "policy *x* is not a panacea; in order to work, it must be supported by reforms in the areas of *a, b, c, d,* and so on."

rates, should I rely on payroll taxes or the VAT, and the others listed in the third column of each table--cannot be directly deduced from these principles. This opens up space for a multiplicity of institutional arrangements that are compatible with the universal, higher-order principles.

These tables clarify why the standard recommendations (Table 2) correlates poorly with economic performance around the world. The Washington Consensus, in its various forms, has tended to blur the line that separates column 2 from column 3. Policy advisors have been too quick in jumping from the higher-order principles in column 2 to taking unconditional stands on the specific operational questions posed in column 3. And as their policy advice has yielded disappointing results, they have moved on to recommendations with even greater institutional specificity (as with "second generation reforms"). As a result, sound economics has often been delivered in unsound form.

I emphasize that this argument is not one about the advantages of gradualism over shock therapy. In fact, the set of ideas I have presented are largely orthogonal to the long-standing debate between the adherents of the two camps (see for example Lipton and Sachs 1990, Aslund et al. 1996, Williamson and Zagha 2002). The strategy of gradualism presumes that policy makers have a fairly good idea of the institutional arrangements that they want to acquire ultimately, but that for political and other reasons they can proceed only step-by-step in that direction. The argument here is that there is typically a large amount of uncertainty about what those institutional arrangements are, and therefore that the process that is required is more one of "search and discovery" than one of gradualism. The two strategies may coincide when policy changes reveal information and small-scale policy reforms have a more favorable ratio of information revelation to risk of failure.[16] But it is best not to confuse the two strategies. What stands out in the real success cases, as I will further illustrate below, is not gradualism per se but an unconventional mix of standard and non-standard policies well attuned to the reality on the ground.

IV. Back to the real world

Previously we had asked our Martian to interpret economic performance in the real world from the lens of the standard reform agenda. Suppose we now remove the constraint and ask him to summarize the stylized facts as he sees them. Here is a list of four stylized facts that he may come up with.

1. In practice, growth spurts are associated with a narrow range of policy reforms.

One of the most encouraging aspects of the comparative evidence on economic growth is that it often takes very little to get growth started. To appreciate the point, it is enough to turn to Table 9, which lists 83 cases of growth accelerations. The table shows all cases of significant growth accelerations since the mid-1950s that can be identified statistically. The definition of a growth acceleration is the following: an increase in an economy's per-capita GDP growth of 2

[16] For example, Dewatripont and Roland (1995) and Wei (1997) present models in which gradual reforms reveal information and affect subsequent political constraints.

percentage points or more (relative to the previous 5 years) that is sustained over at least 8 years. The timing of the growth acceleration is determined by fitting a spline centered on the candidate break years, and selecting the break that maximizes the fit of the equation (see Hausmann, Pritchett, and Rodrik 2004 for details on the procedure).[17]

Most of the usual suspects are included in the table: for example Taiwan 1961, Korea 1962, Indonesia 1967, Brazil 1967, Mauritius 1971, China 1978, Chile 1986, Uganda 1989, Argentina 1990, and so on. But the exercise also yields a large number of much less well-known cases, such as Egypt 1976 or Pakistan 1979. In fact, the large number of countries that have managed to engineer at least one instance of transition to high growth may appear as surprising. As I will discuss later, most of these growth spurts have eventually collapsed. Nonetheless, an increase in growth of 2 percent (and typically more) over the better part of a decade is nothing to sneer at, and it is worth asking what produces it.

In the vast majority of the cases listed in Table 9, the "shocks" (policy or otherwise) that produced the growth spurts were apparently quite mild. Asking most development economists about the policy reforms of Pakistan in 1979 or Syria in 1969 would draw a blank stare. This reflects the fact that not much reform was actually taking pace in these cases. Relatively small changes in the background environment can yield significant increase in economic activity.

Even in the well-known cases, policy changes at the outset have been typically modest. The gradual, experimental steps towards liberalization that China undertook in the late 1970s were discussed above. South Korea's experience in the early 1960s was similar. The military government led by Park Chung Hee that took power in 1961 did not have strong views on economic reform, except that it regarded economic development as its key priority. It moved in a trial-and-error fashion, experimenting at first with various public investment projects. The hallmark reforms associated with the Korean miracle, the devaluation of the currency and the rise in interest rates, came in 1964 and fell far short of full liberalization of currency and financial markets. As these instances illustrate, an attitudinal change on the part of the top political leadership towards a more market-oriented, private-sector-friendly policy framework often plays as large a role as the scope of policy reform itself (if not larger). Perhaps the most important example of this can be found in India: such an attitudinal change appears to have had a particularly important effect in the Indian take-off of the early 1980s, which took place a full decade before the liberalization of 1991 (de Long 2003; Rodrik and Subramanian 2004).

This is good news because it suggests countries do not need an extensive set of institutional reforms in order to start growing. Instigating growth is a lot easier in practice than the standard recipe, with its long list of action items, would lead us to believe. This should not be surprising from a growth theory standpoint. When a country is so far below its potential steady-state level of income, even moderate movements in the right direction can produce a big growth payoff. Nothing could be more encouraging to policy makers, who are often overwhelmed and paralyzed by the apparent need to undertake policy reforms on a wide and ever-expanding front.

---

[17] The selection strategy allows multiple accelerations, but they must be at least five years apart. We require post-acceleration growth to be at least 3.5 percent, and also rule out recoveries from crises.

2. The policy reforms that are associated with these growth transitions typically combine elements of orthodoxy with unorthodox institutional practices.

No country has experienced rapid growth without minimal adherence to what I have termed higher-order principles of sound economic governance—property rights, market-oriented incentives, sound money, fiscal solvency. But as I have already argued, these principles were often implemented via policy arrangements that are quite unconventional. I illustrated this using examples such as China's two-track reform strategy, Mauritius' export processing zone, and South Korea's system of "financial restraint."

It is easy to multiply the examples. When Taiwan and South Korea decided to reform their trade regimes to reduce anti-export bias, they did this not via import liberalization (which would have been a Western economist's advice) but through selective subsidization of exports. When Singapore decided to make itself more attractive to foreign investment, it did this not by reducing state intervention but by greatly expanding public investment in the economy and through generous tax incentives (Young 1992). Botswana, which has an admirable record with respect to macroeconomic stability and the management of its diamond wealth, also has one of the largest levels of government spending (in relation to GDP) in the world. Chile, a country that is often cited as a paragon of virtue by the standard check list, has also departed from it in some important ways: it has kept its largest export industry (copper) under state ownership; it has maintained capital controls on financial inflows through the 1990s; and it has provided significant technological, organizational, and marketing assistance to its fledgling agro-industries.

In all these instances, standard desiderata such as market liberalization and outward orientation were combined with public intervention and selectivity of some sort. The former element in the mix ensures that any economist so inclined can walk away from the success cases with a renewed sense that the standard policy recommendations really "work." Most egregiously, China's success is often attributed to its turn towards market—which is largely correct—and then with an unjustified leap of logic is taken as a vindication of the standard recipe—which is largely incorrect. It is not clear how helpful such evaluations are when so much of what these countries did is unconventional and fits poorly with the standard agenda.[18]

It is difficult to identify cases of high growth where unorthodox elements have not played a role. Hong Kong is probably the only clear-cut case. Hong Kong's government has had a hands-off attitude towards the economy in almost all areas, the housing market being a major exception. Unlike Singapore, which followed a free trade policy but otherwise undertook extensive industrial policies, Hong Kong's policies have been as close to laissez-faire as we have ever observed. However, there were important prerequisites to Hong Kong's success, which

[18] Another source of confusion is the mixing up of policies with outcomes. Successful countries end up with much greater participation in the world economy, thriving private sectors, and a lot of financial intermediation. What we need to figure out, however, are the policies that produce these results. It would be a great distortion of the strategy followed by countries such as China, South Korea, Taiwan and others to argue that these outcomes were the result of trade and financial liberalization, and privatization.

illuminate once again the context-specificity of growth strategies. Most important, Hong Kong's important entrepôt role in trade, the strong institutions imparted by the British, and the capital flight from communist China had already transformed the city-state into a high investment, high entrepreneurship economy by the late 1950s. As Figure 3 shows, during the early 1960s Hong Kong's investment rate was more than three times higher than that in South Korea or Taiwan. The latter two economies would not reach Hong Kong's 1960 per-capita GDP until the early 1970s.[19] Hence Hong Kong did not face the same challenge that Taiwan, South Korea, and Singapore did to crowd in private investment and stimulate entrepreneurship.

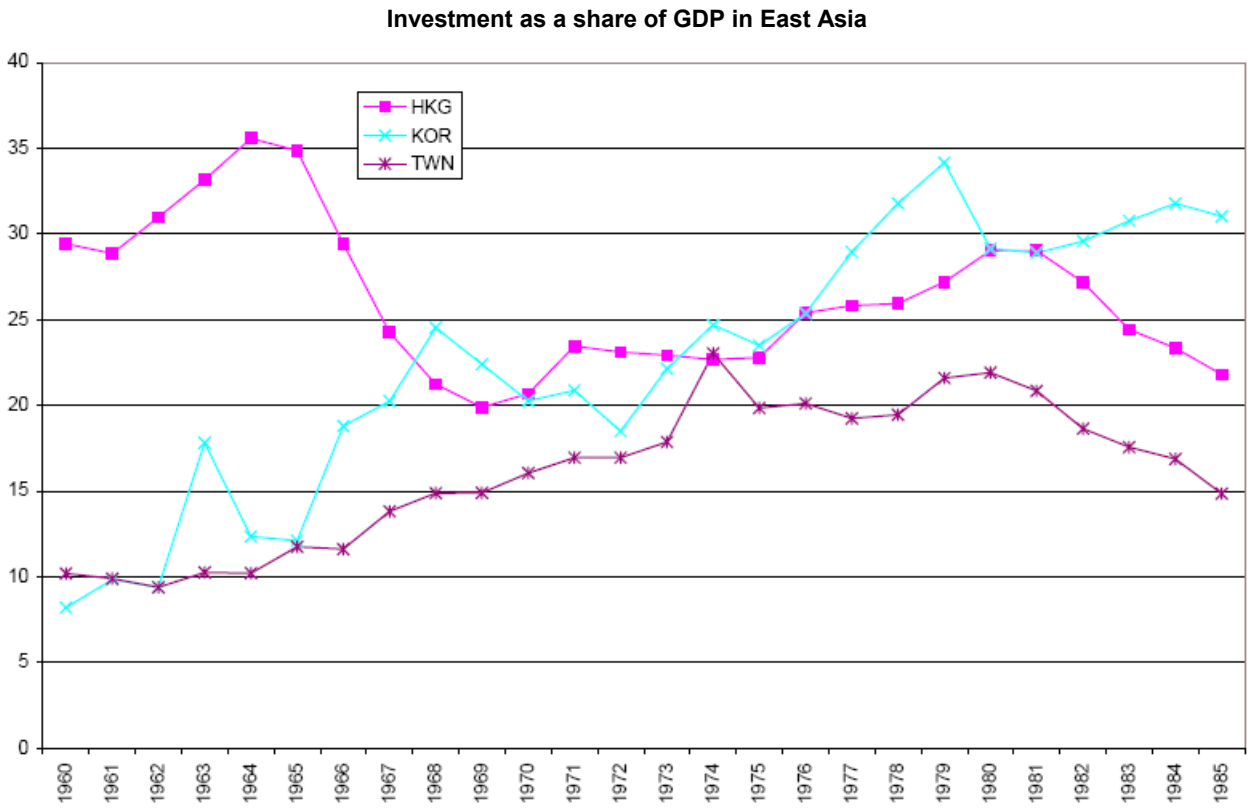

Figure 3

It goes without saying that not all unorthodox remedies work. And those that work sometimes do so only for a short while. Consider for example Argentina's experiment in the 1990s with a currency board. Most economists would consider a currency board regime as too risky for an economy of Argentina's size insofar as it prevents expenditure switching via the exchange rate. (Hong Kong has long operated a successful marketing board.) However, as the Argentinean economy began to grow rapidly in the first half of the 1990s, many analysts altered their views. Had the Asian crisis of 1997-98 and the Brazilian devaluation of 1999 not forced Argentina off its currency board, it would have been easy to construct a story ex post about the virtues of the currency board as a growth strategy. The currency board sought to counteract the effects of more than a century of financial mismanagement through monetary discipline. It was

[19] These and investment data are from the Penn World Tables 6.1.

a shortcut aimed at convincing foreign and domestic investors that the rules of the game had changed irrevocably. Under better external circumstances, the credibility gained might have more than offset the disadvantages. The problem in this case was the unwillingness to pull back from the experiment even when it became clear that the regime had left the Argentine economy with a hopelessly uncompetitive real exchange rate. The lesson is that institutional innovation requires a pragmatic approach which avoids ideological lock-in.

3. Institutional innovations do not travel well.

The more discouraging aspect of the stylized facts is that the policy packages associated with growth accelerations—and particularly the elements therein that are non-standard—tend to vary considerably from country to country. China's two-track strategy of reform differs significantly from India's gradualism. South Korea's and Taiwan's more protectionist trade strategy differs markedly from the open trade policies of Singapore (and Hong Kong). Even within strategies that look superficially similar, closer look reveals large variation. Taiwan and South Korea both subsidized non-traditional industrial activities, but the former did it largely through tax incentives and the latter largely through directed credit.[20]

Attempts to emulate successful policies elsewhere often fail. When Gorbachev tried to institute a system similar to China's Household Responsibility System and two-track pricing in the Soviet Union during the mid- to late-1980s, it produced few of the beneficial results that China had obtained.[21] Most developing countries have export processing zones of one kind or another, but few have been as successful as the one in Mauritius. Import-substituting industrialization (ISI) worked in Brazil, but not in Argentina.[22]

In light of the arguments made earlier, this experience should not be altogether surprising. Successful reforms are those that package sound economic principles around local capabilities, constraints and opportunities. Since these local circumstances vary, so do the reforms that work. An immediate implication is that growth strategies require considerable local knowledge. It does not take a whole lot of reform to stimulate economic growth—that is the good news. The bad news is that it may be quite difficult to identify where the binding constraints or promising opportunities lie. A certain amount of policy experimentation may be required in order to discover what will work. China represents the apotheosis of this experimental approach to reform. But it is worth noting that many other instances of successful reform were preceded by failed experiments. In South Korea, President Park's developmental efforts initially focused on the creation of white elephant industrial projects that ultimately went nowhere (Soon 1994, 27-28). In Chile, Pinochet's entire first decade can be viewed as a failed experiment in "global monetarism."

---

[20] On the institutional differences among East Asian economies, see Haggard (2003).

[21] Murphy, Shleifer, and Vishny (1992) analyze this failure and attribute it to the inability of the Soviet state to enforce the plan quotas once market pricing was allowed (albeit at the margin). This had been critical to the success of the Chinese approach.

[22] TFP growth averaged 2.9 and 0.2 percent per annum in Brazil and Argentina, respectively, during 1960-73. See Rodrik (1999) and Collins and Bosworth (1996).

Economists can have a useful role to play in this process: they can identify the sources of inefficiency, describe the relevant trade offs, figure out general-equilibrium implications, predict behavioral responses, and so on. But they can do these well only if their analysis is adequately embedded within the prevailing institutional and political reality. The hard work needs to be done at home.

4. Sustaining growth is more difficult than igniting it, and requires more extensive institutional reform.

The main reason that few of the growth accelerations listed in Table 9 are etched in the consciousness of development economists is that most of them did not prove durable. In fact, as discussed earlier, over the last four decades few countries except for a few East Asian ones have steadily converged to the income levels of the rich countries. The vast majority of growth spurts tend to run out of gas after a while. The experience of Latin America since the early 1980s and the even more dramatic collapse of Sub-Saharan Africa are emblematic of this phenomenon. In a well-known paper, Easterly, Kremer, Pritchett and Summers (1993) were the first to draw attention to a related finding, namely the variability in growth performance across time periods. The same point is made on a broader historical canvas by Goldstone (forthcoming).

Hence growth in the short- to medium-term does not guarantee success in the long-term. A plausible interpretation is that the initial reforms need to be deepened over time with efforts aimed at strengthening the institutional underpinning of market economies. It would be nice if a small number of policy changes—which, as argued above, is what produces growth accelerations—could produce growth over the longer term as well, but this is obviously unrealistic. I will discuss some of the institutional prerequisites of sustained growth in greater detail later in the paper. But the key to longer-term prosperity, once growth is launched, is to develop institutions that maintain productive dynamism and generate resilience to external shocks.

For example, the growth collapses experienced by many developing countries in the period from the mid-1970s to the early 1980s seem to be related mainly to the inability to adjust to the volatility exhibited by the external environment at that time. In these countries, the effects of terms-of-trade and interest-rate shocks were magnified by weak institutions of conflict management (Rodrik 1999b). This, rather than the nature of microeconomic incentive regimes in place (e.g., import substituting industrialization), is what caused growth in Africa and Latin America to grind to a halt after the mid-1970s and early 1980s (respectively). The required macroeconomic policy adjustments set off distributive struggles and proved difficult to undertake. Similarly, the weakness of Indonesia's institutions explains why that country could not extricate itself from the 1997-98 East Asian financial crisis (see Temple 2003), while South Korea, for example, did a rapid turnaround. These examples are also a warning that continued growth in China cannot be taken for granted: without stronger institutions in areas ranging from financial markets to political governance, the Chinese economy may well find itself having outgrown its institutional underpinnings.[23]

[23] Young (2000) argues that China's reform strategy may have made things worse in the long run, by increasing the number of distorted margins.

V. A two-pronged growth strategy

As the evidence discussed above reveals, growth accelerations are feasible with minimal institutional change. The deeper and more extensive institutional reforms needed for long-term convergence take time to implement and mature. And they may not be the most effective way to raise growth at the outset because they do not directly target the most immediate constraints and opportunities facing an economy. At the same time, such institutional reforms can be much easier to undertake in an environment of growth rather than stagnation. These considerations suggest that successful growth strategies are based on a two-pronged effort: a short-run strategy aimed at stimulating growth, and a medium- to long-run strategy aimed at sustaining growth.[24] The rest of this section takes these up in turn.

1. An investment strategy to kick-start growth

From the standpoint of economic growth, the most important question in the short run for an economy stuck in a low-activity equilibrium is: how do you get entrepreneurs excited about investing in the home economy? "Invest" here has to be interpreted broadly, as referring to all the activities that entrepreneurs undertake, such as expanding capacity, employing new technology, producing new products, searching for new markets, and so on. As entrepreneurs become energized, capital accumulation and technological change are likely to go hand in hand—too entangled with each other to separate out cleanly.

What sets this process into motion? There are two kinds of views on this in the literature. One approach emphasizes the role of government-imposed barriers to entrepreneurship. In this view, policy biases towards large and politically-connected firms, institutional failures (in the form of licensing and other regulatory barriers, inadequate property rights and contract enforcement), and high levels of policy uncertainty and risk create dualistic economic structures and repress entrepreneurship. The removal of the most egregious forms of these impediments is then expected to unleash a flurry of new investments and entrepreneurship. According to the second view, the government has to play a more pro-active role than simply getting out of the private sector's way: it needs to find means of crowding in investment and entrepreneurship with some positive inducements. In this view, economic growth is not the natural order of things, and establishing a fair and level playing field may not be enough to spur productive dynamism. The two views differ in the importance they attach to prevailing, irremovable market imperfections and their optimism with regard to governments' ability to design and implement appropriate policy interventions.

(a) Government failures

---

[24] A similar distinction is also made by Ocampo (2003), who emphasizes that many of the long-run correlates of growth (such as improved institutions) are the result, and not the instigator, of growth. There is also an analogue in the political science literature in the distinction between the political prerequisites of initiating and sustaining reform (see Haggard and Kaufman 1983).

A good example of the first view is provided by the strategy of development articulated in Stern (2001). In a deliberate evocation of Hirschman's *The Strategy of Economic Development* (1958), Stern outlines an approach with two pillars: building an appropriate "investment climate" and "empowering poor people." The former is the relevant part of his approach in this context. Stern defines "investment climate" quite broadly, as "the policy, institutional, and behavioral environment, both present and expected, that influences the returns and risks associated with investment" (2001, 144-45). At the same time, he recognizes the need for priorities and the likelihood that these priorities will be context specific. He emphasizes the favorable dynamics that are unleashed once a few, small things are done right.

In terms of actual policy content, Stern's illustrations make clear that he views the most salient features of the investment climate to be government-imposed imperfections: macroeconomic instability and high inflation, high government wages that distort the functioning of labor markets, a large tax burden, arbitrary regulations, burdensome licensing requirements, corruption, and so on. The strategy he recommends is to use enterprise surveys and other techniques to uncover which of these problems bite the most, and then to focus reforms on the corresponding margin. Similar perspectives can be found in Johnson et al. (2000), Friedman et al. (2000), and Aslund and Johnson (2003). Besley and Burgess (2002) provide evidence across Indian states on the productivity depressing effects of labor market regulations. The title of Shleifer and Vishny's (1998) book aptly summarizes the nature of the relevant constraint in this view: The Grabbing Hand: Government Pathologies and Their Cures.

(b) Market failures

The second approach focuses not on government-imposed constraints, but on market imperfections inherent in low-income environments that block investment and entrepreneurship in non-traditional activities. In this view, economies can get stuck in a low-level equilibrium due to the nature of technology and markets, even when government policy does not penalize entrepreneurship. There are many versions of this latter approach, and some of the main arguments are summarized in the taxonomy presented in Table 10. I distinguish here between stories that are based on learning spillovers (a non-pecuniary externality) and those that are based on market-size externalities induced by scale economies. See also the useful discussion of these issues in Ocampo (2003), which takes a more overtly structuralist perspective.

As Acemoglu, Aghion, and Zilibotti (2002) point out, two types of learning are relevant to economic growth: (a) adaptation of existing technologies; and (b) innovation to create new technologies. Early in the development process, the kind of learning that matters the most is of the first type. There are a number of reasons why such learning can be subject to spillovers. There may be a threshold level of human capital beyond which the private return to acquiring skills becomes strongly positive (as in Azariadis and Drazen 1990). There may be learning-by-doing which is either external to individual firms, or cannot be properly internalized due to imperfections in the market for credit (as in Matsuyama 1992). Or there may be learning about a country's own cost structure, which spills over from the incumbents to later entrants (as in Hausmann and Rodrik 2002). In all these cases, the relevant learning is under-produced in a decentralized equilibrium, with the consequence that the economy fails to diversify into non-

traditional, more advanced lines of activity.[25] There then exist policy interventions that can improve matters. With standard externalities, the first-best takes the form of a corrective subsidy targeted at the relevant distorted margin. In practice, revenue, administrative or informational constraints may make resort to second-best interventions inevitable.

For example, Hausmann and Rodrik (2002) suggest a carrot-and-stick strategy to deal with the learning barrier to industrialization that they identify. In that model, costs of production in non-traditional activities are uncertain, and they are revealed only after an upfront investment by an incumbent. Once that initial investment is made, the cost information becomes public knowledge. Entrepreneurs engaged in the cost discovery process incur private costs, but provide social benefits that can vastly exceed their anticipated profits. The first-best policy here, which is an entry subsidy, suffers from an inextricable moral hazard problem. Subsidized entrants have little incentive to engage subsequently in costly activities to discover costs. A second-best approach takes the form of incentives contingent on good performance. Hausmann and Rodrik (2002) evaluate East Asian and Latin American industrial policies from this perspective. They argue that East Asian policies were superior in that they effectively combined incentives with discipline. The former was provided through subsidies and protection, while the latter was provided through government monitoring and the use of export performance as a productivity yardstick. Latin American firms under import substituting industrialization (ISI) received considerable incentives, but faced very little discipline. In the 1990s, these same firms arguably faced lots of discipline (exerted through foreign competition), but little incentives. This line of argument provides one potential clue to the disappointing economic performance of Latin America in the 1990s despite a much improved "investment climate" according to the standard criteria.

The second main group of stories shown in Table 10 relates to the existence of coordination failures induced by scale economies. The big-push theory of development, articulated first by Rosenstein-Rodan (1943) and formalized by Murphy, Shleifer and Vishny (1989), is based on the idea that moving out of a low-level steady state requires coordinated and simultaneous investments in a number of different areas. A general formulation of such models can provided as follows. Let the level of profits in a given modern-sector activity depend on n, the proportion of the economy that is already engaged in modern activities: $\pi^m(n)$, with $d\pi^m(n)/dn > 0$. Let profits in traditional activities be denoted π^t. Suppose modern activities are unprofitable for an individual entrant if no other entrepreneur already operates in the modern sector, but highly profitable if enough entrepreneurs do so: $\pi^m(0) < \pi^t$ and $\pi^m(1) > \pi^t$. Then $n = 0$ and $n = 1$ are both possible equilibria, and industrialization may never take hold in an economy that starts with $n = 0$. The precise mechanism that generates profit functions of this form depends on the model in question. Murphy, Shleifer, and Vishny (1989) develop models in which the complementarity arises from demand spillovers across final goods produced under scale economies or from bulky infrastructure investments. Rodriguez-Clare (1996), Rodrik (1996), and Trindade (2003) present models in which the effect operates through vertical

[25] Imbs and Wacziarg (2003) demonstrate that sectoral diversification is a robust correlate of economic growth at lower levels of income. This is in tension with standard models of trade and specialization under constant returns to scale. Sectoral concentration starts to increase only after a relatively high level of income is reached, with the turning point coming somewhere between $8,500 and $9,500 in 1985 U.S. dollars.

industry relationships and specialized intermediate inputs. Hoff and Stiglitz (2001) discuss a large class of models with coordination failure characteristics.

The policy implications of such models can be quite unconventional, requiring the crowding in of private investment through subsidization, jawboning, public enterprises and the like. Despite the "big push" appellation, the requisite policies need not be wide-ranging. For example, socializing investment risk through implicit investment guarantees, a policy followed in South Korea, is welfare enhancing in Rodrik's (1996) framework because it induces simultaneous entry into the modern sector. It is also costless to the government, because the guarantees are never called on insofar as the resulting investment boom pays for itself. Hence, when successful, such policies will leave little trail on government finances or elsewhere.[26]

Both types of models listed in Table 10 suggest that the propagation of modern, non-traditional activities is not a natural process and that it may require positive inducements. One such inducement that has often worked in the past is a sizable and sustained depreciation of the real exchange rate. For a small open economy, the real exchange rate is defined as the relative price of tradables to non-tradables. In practice, this price ratio tends to move in tandem with the nominal exchange rate, the price of foreign currency in terms of home currency. Hence currency devaluations (supported by appropriate monetary and fiscal policies) increase the profitably of tradable activities across the board. From the current perspective, this has a number of distinct advantages. Most of the gains from diversification into non-traditional activities are likely to lie within manufactures and natural resource based products (i.e., tradables) rather than services and other non-tradables. Second, the magnitude of the inducement can be quite large, since sustained real depreciations of 50 percent or more are quite common. Third, since tradable activities face external competition, the activities that are encouraged tend to be precisely the ones that face the greatest market discipline. Fourth, the manner in which currency depreciation subsidizes tradable activities is completely market-friendly, requiring no micromanagement on the part of bureaucrats. For all these reasons, a credible, sustained real exchange rate depreciation may constitute the most effective industrial policy there is.

Large real exchange rate changes have played a big role in some of the more recent growth accelerations. Figure 4 shows two well-known cases: Chile and Uganda since the mid-1980s. In both cases, a substantial swing in relative prices in favor of tradables accompanied the growth take-off. In Chile, the more than doubling of the real exchange rate following the crisis of 1982-83 (the deepest in Latin America at the time) is commonly presumed to have played an instrumental role in promoting diversification into non-traditional exports and stimulating economic growth. It is worth noting that import tariffs were raised significantly as well (during 1982-85), giving import-substituting activities an additional boost. As the bottom panel of Figure 3 shows, the depreciation In Uganda was even larger. These depreciations are unlikely to have been the result of growth, since growth typically generates an appreciation of the real exchange rate through the Balassa-Samuelson effect. By contrast, large real depreciations did

[26] On South Korea's implicit investment guarantees, see Amsden (1989). During the Asian financial crisis, these guarantees became an issue and they were portrayed as evidence of crony capitalism (MacLean 1999).

not play a major role in early growth accelerations in East Asia during the 1960s (Rodrik 1997).[27]

[27] Polterovich and Popov (2002) provide theory and evidence on the role of real exchange rate undervaluations in generating economic growth.

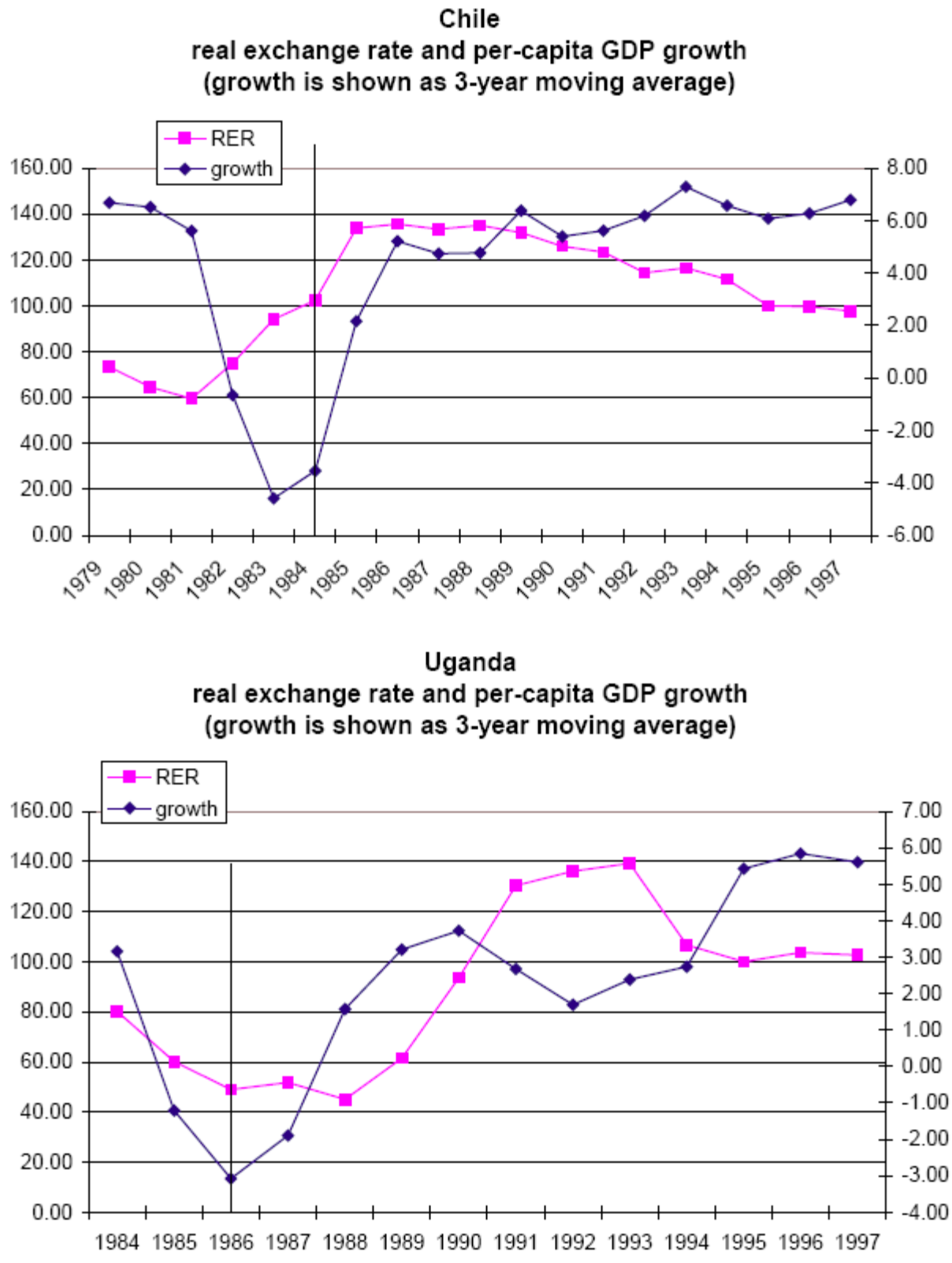

Figure 4: Real exchange rate and growth in Chile and Uganda

(c) Where to start?

The two sets of views outlined above—the government failure and market failure approaches—can help frame policy discussions and identify important ways of thinking about policy priorities in the short run. The most effective point of leverage for stimulating growth obviously depends on local circumstances. It is tempting to think that the right first step is to remove government-imposed obstacles to entrepreneurial activity before worrying about "crowding in" investments through positive inducements. But this may not always be a better strategy. Certainly when inflation is in triple digits or the regulatory framework is so cumbersome that it stifles any private initiative, removing these distortions will be the most sensible initial step. But beyond that, it is difficult to say in general where the most effective margin for change lies. Asking businessmen their views on the priorities can be helpful, but not decisive. When learning spillovers and coordination failures block economic take-off, enterprise surveys are unlikely to be revealing unless the questions are very carefully crafted to elicit relevant responses. Hausmann, Rodrik, and Velasco (2004) outline a framework for undertaking "growth diagnostics," i.e., targeting reforms on the most binding constraints on economic growth.

One of the lessons of recent economic history is that creative interventions can be remarkably effective even when the "investment climate," judged by standard criteria, is pretty lousy. South Korea's early reforms took place against the background of a political leadership that was initially quite hostile to the entrepreneurial class.[28] China's TVEs have been stunningly successful despite the absence of private property rights and an effective judiciary. Conversely, the Latin American experience of the 1990s indicates that the standard criteria do not guarantee an appropriate investment climate. Governments can certainly deter entrepreneurship when they try to do too much; but they can also deter entrepreneurship when they do too little.

It is sometimes argued that heterodoxy requires greater institutional strength and therefore lies out of reach of most developing countries. But the evidence does not provide much support for this view. It is true that the selective interventions I have discussed in the case of South Korea and Taiwan were successful in part due to unusual and favorable circumstances. But elsewhere, heterodoxy served to make virtue out of institutional weakness. This is the case with China's TVEs, Mauritius' export processing zone, and India's gradualism. In these countries, it was precisely institutional weakness that rendered the standard remedies impractical. It is in part because the standard reform agenda is institutionally so highly demanding—a fact now recognized through the addition of so-called "second generation reforms"—that successful growth strategies are so often based on unconventional elements (in their early stages at least).

It is nonetheless true that the implementation of the market failure approach requires a reasonably competent and non-corrupt government. For every South Korea, there are many Zaires where policy activism is an excuse for politicians to steal and plunder. Finely-tuned

[28] One month after taking power in a military coup in 1961, President Park arrested some of the leading businessmen in Korea under the newly passed Law for Dealing with Illicit Wealth Accumulation. These businessmen were subsequently set free under the condition that they establish new industrial firms and give up the shares to the government (Amsden 1989, 72).

policy interventions can hardly be expected to produce desirable outcomes in setting such as the latter. And to the extent that Washington Consensus policies are more conducive to honest behavior on the part of politicians, they may well be preferable on this account. However, the evidence is ambiguous on this. Most policies, including those of the Washington Consensus type, are corruptible if the underlying political economy permits or encourages it. Consider for example Russia's experiment with mass privatization. It is widely accepted that this process was distorted and de-legitimized by asset grabs on the part of politically well-connected insiders. Washington Consensus policies themselves cannot legislate powerful rent-seekers out of existence. Rank ordering different policy regimes requires a more fully specified model of political economy than the reduced-form view that automatically associates governmental restraint with less rent-seeking.[29]

I close this section with the usual refrain: the range of strategies that have worked in the past is quite diverse. Traditional import-substituting industrialization (ISI) model was quite effective in stimulating growth in a large number of developing countries (e.g., Brazil, Mexico, Turkey). So was East Asian style outward orientation, which combined heavy-handed interventionism at home with single-minded focus on exports (South Korea, Taiwan). Chile's post-1983 strategy was based on quite a different style of outward orientation, relying on large real depreciation, absence of explicit industrial policies (but quite a bit of support for non-traditional exports in agro-industry), saving mobilization through pension privatization, and discouragement of short-term capital inflows. The experience of countries such as China and Mauritius is best described as two-track reform. India comes as close to genuine gradualism as one can imagine. Hong Kong represents probably the only case where growth has taken place without an active policy of crowding in private investment and entrepreneurship, but here too special and favorable preconditions (mentioned earlier) limit its relevance to other settings. In view of this diversity, any statement on what ignites growth has to be cast at a sufficiently high level of generality.

2. An institution building strategy to sustain growth

In the long run, the main thing that ensures convergence with the living standards of advanced countries is the acquisition of high-quality institutions. The growth-spurring strategies described above have to be complemented over time with a cumulative process of institution building to ensure that growth does not run out of steam and that the economy remains resilient to shocks. This point has now been amply demonstrated both by historical accounts (North and Thomas 1973, Engerman and Sokoloff 1994) and by econometric studies (Hall and Jones 1999, Acemoglu et al. 2001, Rodrik et al., 2002, Easterly and Levine, 2002). However, these studies tend to remain at a very aggregate level of generality and do not provide much policy guidance (a point that is also made in Besley and Burgess 2002b).

[29] In Rodrik (1995) I compared export subsidy regimes in six countries, and found that the regimes that were least likely to be open to rent-seeking ex ante—those with clear-cut rules, uniform schedules, and no arms' length relationships between firms and bureaucrats—were in fact less effective ex post. Where bureaucrats were professional and well-monitored, discretion was not harmful. Where they were not, the rules did not help.

The empirical research on national institutions has generally focused on the protection of property rights and the rule of law. But one should think of institutions along a much wider spectrum. In its broadest definition, institutions are the prevailing rules of the game in society (North 1990). High quality institutions are those that induce socially desirable behavior on the part of economic agents. Such institutions can be both informal (e.g., moral codes, self-enforcing agreements) and formal (legal rules enforced through third parties). It is widely recognized that the relative importance of formal institutions increases as the scope of market exchange broadens and deepens. One reason is that setting up formal institutions requires high fixed costs but low marginal costs, whereas informal institutions have high marginal costs (Li 1999; Dixit 2004, chap. 3). I will focus here on formal institutions.

What kind of institutions matter and why? Table 11 provides a taxonomy of market-sustaining institutions, associating each type of institutions with a particular need. The starting point is the recognition that markets need not be self-creating, self-regulating, self-stabilizing, and self-legitimizing. Hence, the very existence of market exchange presupposes property rights and some form of contract enforcement. This is the aspect of institutions that has received the most scrutiny in empirical work. The central dilemma here is that a political entity that is strong enough to establish property rights and enforce contracts is also strong enough, by definition, to violate these same rules for its own purpose (Djankov et al., 2003). The relevant institutions must strike the right balance between disorder and dictatorship.

As Table 11 makes clear, there are other needs as well. Every advanced economy has discovered that markets require extensive regulation to minimize abuse of market power, internalize externalities, deal with information asymmetries, establish product and safety standards, and so on. They also need monetary, fiscal, and other arrangements to deal with the business cycle and the problems of unemployment/inflation that are at the center of macroeconomists' analyses since Keynes. Finally, market outcomes need to be legitimized through social protection, social insurance, and democratic governance most broadly (Rodrik 2000).

Institutional choices made in dealing with these challenges often have to strike a balance between competing objectives. The regulatory regime governing the employment relationship must trade off the gains from "flexibility" against the benefits of stability and predictability. The corporate governance regime must delineate the interests and prerogatives of shareholders and stakeholders. The financial system must be free to take risks, but not so much so that it becomes an implicit public liability. There must be enough competition to ensure static allocative efficiency, but also adequate prospect of rents to spur innovation.

The last two centuries of economic history in today's rich countries can be interpreted as an ongoing process of learning how render capitalism more productive by supplying the institutional ingredients of a self-sustaining market economy: meritocratic public bureaucracies, independent judiciaries, central banking, stabilizing fiscal policy, antitrust and regulation, financial supervision, social insurance, political democracy. Just as it is silly to think of these as the prerequisites of economic growth in poor countries, it is equally silly not to recognize that such institutions eventually become necessary to achieve full economic convergence. In this connection, one may want to place special emphasis on democratic institutions and civil liberties,

not only because they are important in and of themselves, but also because they can be viewed as meta-institutions that help society make appropriate selections from the available menu of economic institutions.

However, the earlier warning not to confuse institutional function and institutional form becomes once again relevant here. Appropriate regulation, social insurance, macroeconomic stability and the like can be provided through diverse institutional arrangements. While one can be sure that some types of arrangements are far worse than others, it is also the case that many well-performing arrangements are functional equivalents. Function does not map uniquely into form. It would be hard to explain otherwise how social systems that are so different in their institutional details as those of the United States, Japan, and Europe have managed to generate roughly similar levels of wealth for their citizens. All these societies protect property rights, regulate product, labor, and financial markets, have sound money, and provide for social insurance. But the rules of the game that prevail in the American style of capitalism are very different from those in the Japanese style of capitalism. Both differ from the European style. And even within Europe, there are large differences between the institutional arrangements in, say, Sweden and Germany. There has been only modest convergence among these arrangements in recent years, with the greatest amount of convergence taking place probably in financial market practices and the least in labor market institutions (Freeman 2000).

There are a number of reasons for institutional non-convergence. First, differences in social preferences, say over the tradeoff between equity and opportunity, may result in different institutional choices. If Europeans have a much greater preference for stability and equity than Americans, their labor market and welfare-state arrangements will reflect that preference. Second, complementarities among different parts of the institutional landscape can generate hysteresis and path dependence. An example of this would be the complementarity between corporate governance and financial market practices of the Japanese "model," as discussed previously. Third, the institutional arrangements that are required to promote economic development can differ significantly, both between rich and poor countries and among poor countries. This too has been discussed previously.

There is increasing recognition in the economics literature that high-quality institutions can take a multitude of forms and that economic convergence need not necessarily entail convergence in institutional forms (North 1994, Freeman 2000, Pistor 2000, Mukand and Rodrik forthcoming, Berkowitz et al. 2003, Djankov et al. 2003, Dixit 2004).[30] North (1994, 8) writes: "economies that adopt the formal rules of another economy will have very different performance characteristics than the first economy because of different informal norms and enforcement [with the implication that] transferring the formal political and economic rules of successful Western economies to third-world and Eastern European economies is not a sufficient condition for good economic performance." Freeman (2000) discusses the variety of labor market institutions that prevail among the advanced countries and argues that differences in these practices have first-order distributional effects, but only second-order efficiency effects. Pistor (2000) provides a general treatment of the issue of legal transplantation, and shows how importation of laws can

[30] Furthermore, as Roberto Unger (1998) has argued, there is no reason to suppose that today's advanced economies have already exhausted all the useful institutional variations that could underpin healthy and vibrant economies.

backfire. In related work, Berkowitz et al. (2003) find that countries that developed their formal legal orders internally, adapted imported codes to local conditions, or had familiarity with foreign codes ended up with much better legal institutions than those that simply transplanted formal legal orders from abroad. Djankov et al. (2003) base their discussion on an "institutional possibility frontier" that describes the tradeoff between private disorder and dictatorship, and argue that different circumstances may call for different choices along this frontier. And Dixit (2004, 4) summarizes the lessons for developing countries thus: "it is not always necessary to create replicas of western style state legal institutions from scratch; it may be possible to work with such alternative institutions as are available, and build on them."

Mukand and Rodrik (forthcoming) develop a formal model to examine the costs and benefits of institutional "experimentation" versus "copycatting" when formulas that have proved successful elsewhere may be unsuitable at home. A key idea is that institutional arrangements that prove successful in one country create both positive and negative spillovers for other countries. On the positive side, countries whose underlying conditions are sufficiently similar to those of the successful "leaders" can imitate the arrangements prevailing there and forego the costs of experimentation. This is one interpretation of the relative success that transition economies in the immediate vicinity of the European Union have experienced. Countries such as Poland, the Czech Republic or the Baltic republics share a similar historical trajectory with the rest of Europe, have previous experience with capitalist market institutions, and envisaged full EU membership within a reasonable period (de Menil 2003). The wholesale adoption of EU's acquis communautaire may have been the appropriate institution-building strategy for these countries. On the other hand, countries may be tempted or forced to imitate institutional arrangements for political or other reasons, even when their underlying conditions are too dissimilar for the strategy to make sense.[31] Institutional copycatting may have been useful for Poland, but it is much less clear that it was relevant or practical for Ukraine or Kyrgyzstan. The negative gradient in the economic performance of transition economies as one moves away from Western Europe provides some support for this idea (see Mukand and Rodrik forthcoming).

Even though it is recent, this literature opens up a new and exciting way of looking at institutional reform. In particular, it promises an approach that is less focused on so-called best practices or the superiority of any particular model of capitalism, and more cognizant of the context-specificity of desirable institutional arrangements. Dixit's (2004) monograph outlines a range of theoretical models that help structure our thinking along these lines.

VI. Concluding remarks

Richard Feynman, the irreverent physicist who won the Nobel Prize in 1965 for his work on quantum electrodynamics, relates the following story. Following the award ceremony and the dinner in Stockholm, he wanders into a room where a Scandinavian princess is holding court.

[31] In Mukand and Rodrik (forthcoming) it is domestic politics that generates inefficient imitation. Political leaders may want to signal their type (and increase the probability of remaining in power) by imitating standard policies even when they know these will not work as well as alternative arrangements. But one can also appeal to the role of IMF and World Bank conditionality in producing this kind of outcome.

The princess recognizes him as one of the awardees and asks him what he got the prize for. When Feynman replies that his field is physics, the princess says that this is too bad. Since no one at the table knows anything about physics, she says, they cannot talk about it. Feynman disagrees:

> "On the contrary," I answered. "It's because somebody knows *something* about it that we can't talk about physics. It's the things that nobody knows anything about that we *can* discuss. We can talk about the weather; we can talk about social problems; we can talk about psychology; we can talk about international finance … so it's the subject that nobody knows anything about that we can all talk about!" (Feynman 1985)

This is not the place to defend international finance (circa 1965) against the charge Feynman levels at it. But suppose Feynman had picked on economic growth instead of international finance. Would growth economists have a plausible riposte? Is the reason we all talk so much about growth that we understand so little about it?

It is certainly the case that growth theory is now a much more powerful tool than it was before Solow put pencil to paper. And cross-country regressions have surely thrown out some useful correlations and stylized facts. But at least at the more practical end of things—how do we make growth happen? —things have turned out to be somewhat disappointing. By the mid-1980s, policy oriented economists had converged on a new consensus regarding the policy framework for growth. We thought we knew a lot about what governments needed to do. But as my Martian thought experiment at the beginning of the paper underscores, reality has been unkind to our expectations. If Latin America was booming today and China and India were stagnating, we would have an easier time fitting the world to our policy framework. Instead, we are straining to explain why unorthodox, two-track, gradualist reform paths have done so much better than sure-fire adoption of the standard package.

Very few policy analysts think that the answer is to go back to old-style ISI, even though its record was certainly respectable for a very large number of countries. Certainly no-one one believes that central planning is a credible alternative. But by the same token, few are now convinced that liberalization, deregulation, and privatization on their own hold the key to unleashing economic growth. Maybe the right approach is to give up looking for "big ideas" altogether (as argued explicitly by Lindauer and Pritchett 2002, and implicitly by Easterly 2001). But that would be overshooting too. Economics is full of big ideas on the importance of incentives, markets, budget constraints, and property rights. It offers powerful ways of analyzing the allocative and distributional consequences of proposed policy changes. The key is to realize that these principles do not translate directly into specific policy recommendations. That translation requires the analyst to supply many additional ingredients that are contingent on the economic and political context, and cannot be done a priori. Local conditions matter not because economic principles change from place to place, but because those principles come institution free and filling them out requires local knowledge.

Therefore, the real lesson for the architects of growth strategies is to take economics more seriously, not less seriously. But the relevant economics is that of the seminar room, with its refusal to make unconditional generalizations and its careful examination of the contingent

relation between the economic environment and policy implications. Rule-of-thumb economics, which has long dominated thinking on growth policies, can be safely discarded.

Acknowledgements

I gratefully acknowledge financial support from the Carnegie Corporation of New York. I also thank, without implicating, Philippe Aghion, Richard Freeman, Steph Haggard, Ricardo Hausmann, Murat Iyigun, Sharun Mukand, José Antonio Ocampo, Andrei Shleifer, and Arvind Subramanian for comments that substantially improved this paper.

REFERENCES

Acemoglu, Daron, Simon Johnson, and James A. Robinson, (2001), "The Colonial Origins of Comparative Development: An Empirical Investigation," American Economic Review 91(5): December 1369-1401.

Acemoglu, Daron, Philippe Aghion, and Fabrizio Zilibotti, (2002), "Distance to Frontier, Selection, and Economic Growth," NBER Working Paper No. 9066, July.

Aghion, Philippe, Robin Burgess, Stephen Redding and Fabrizio Zilibotti, (2003)"The Unequal Effects of Liberalization: Theory and Evidence from India," Department of Economics, London School of Economics, March.

Amsden, Alice H., (1989),Asia's Next Giant: South Korea and Late Industrialization, Oxford University Press (New York and Oxford).

Anderson, James E., and J. Peter Neary, (1992) "Trade Reform with Quotas, Partial Rent Retention, and Tariffs," Econometrica 60: 57-76.

Aoki, Masahiko, (1997), "Unintended Fit: Organizational Evolution and Government Design of Institutions in Japan," in M. Aoki et al, eds., The Role of Government in East Asian Economic Development: Comparative Institutional Analysis, (Clarendon Press, Oxford).

Aslund, Anders, Peter Boone, and Simon Johnson, (1996) "How to Stabilize: Lessons from Post-Communist Countries," Brookings Papers on Economic Activity 1.

Aslund, Anders, and Simon Johnson, (2003) "Small Enterprises and Economic Policy," Working Paper, Sloan School, MIT.

Azariadis C., and A. Drazen (1990) "Threshold Externalities in Economic Development" Quarterly Journal of Economics 105, 501–526.

Berkowitz, Daniel, Katharina Pistor, and Jean-Francois Richard, (2003) "Economic Development, Legality, and the Transplant Effect," European Economic Review, 47(1):165-195.

Besley, Timothy, and Robin Burgess, (2002) "Can Labor Regulation Hinder Economic Performance? Evidence from India," CEPR Discussion Paper No. 3260.

Besley, Timothy, and Robin Burgess, (2002) "Halving Global Poverty," Department of Economics, London School of Economics, August. (2002b)

Birdsall, Nancy, and Augusto de la Torre, (2001) "Washington Contentious: Economic Policies for Social Equity in Latin America." Washington: Carnegie Endowment for International Peace and Inter-American Dialogue.

Bosworth, Barry, and Susan M. Collins, (2003)"The Empirics of Growth: An Update," Brookings Institutions, unpublished paper, March 7, 2003.

Brock, William A., and Steven N. Durlauf, (2001) "Growth Empirics and Reality," The World Bank Economic Review, 15(2): 229-272.

Calvo, Guillermo, "Incredible Reforms," (1989) in Calvo *et al*. eds., Debt, Stabilization and Development, (New York, Basil Blackwell).

Collins, Susan, and Barry Bosworth, (1996) "Economic Growth in East Asia: Accumulation versus Assimilation," Brookings Papers on Economic Activity 1996:2, 135-191.

DeLong, Brad, (2003) "India since Independence: An Analytic Growth Narrative," in Dani Rodrik, ed., In Search of Prosperity: Analytic Narratives of Economic Growth, (Princeton University Press, Princeton, NJ).

De Menil, Georges, (2003) "History, Policy, and Performance in Two Transition Economies: Poland and Romania," in Dani Rodrik, ed., In Search of Prosperity: Analytic Narratives of Economic Growth, (Princeton University Press, Princeton, NJ).

Dewatripont, Mathias, and Gerard Roland, (1995) "The Design of Reform Packages under Uncertainty," American Economic Review, 85(5): 1207-23.

Dixit, Avinash, (2004) Lawlessness and Economics: Alternative Modes of Economic Governance, Gorman Lectures (forthcoming, Princeton University Press).

Djankov, Simeon, Edward Glaeser, Rafael LaPorta, Florencio Lopez-de-Silanes, and Andrei Shleifer, "The New Comparative Economics," Harvard University, January 2003.

Easterly, William, (2001) The Elusive Quest for Growth, (MIT Press, Cambridge, MA).

Easterly, William, (2003) "National Policies and Economic Growth: A Reappraisal," New York University, Development Research Institute (DRI) Working Paper No. 1, March 2003.

Easterly, William, Michael Kremer, Lant Pritchett and Lawrence H. Summers, (1993) "Good Policy or Good Luck? Country Growth Performance and Temporary Shocks," Journal of Monetary Economics 32(3): 459-483.

Easterly, W., and R. Levine, (2002) "Tropics, Germs, and Crops: How Endowments Influence Economic Development," mimeo, Center for Global Development and Institute for International Economics.

Engerman, Stanley L., and Kenneth L. Sokoloff, (1994) "Factor Endowments, Institutions, and Differential Paths of Growth Among New World Economies: A View from Economic Historians of the United States," National Bureau of Economic Research Working Paper No. H0066, December.

Feynman, Richard P., (1985) "Surely You're Joking Mr. Feynman!", W.W. Norton, New York)

Frankel, Jeffrey, (2000) "The Asian Model, the Miracle, the Crisis, and the Fund," in P. Krugman, ed., Currency Crises, The University of Chicago Press for the NBER.

Freeman, Richard B., (2000) "Single Peaked vs. Diversified Capitalism: The Relation Between Economic Institutions and Outcomes," NBER Working Paper No. W7556, February.

Friedman, Eric, Simon Johnson, Daniel Kaufmann, and Pablo Zoido-Lobaton, (2000) "Dodging the Grabbing Hand: The Determinants of Unofficial Activity in 69 Countries," Journal of Public Economics, 76: 459-493.

Gerschenkron, Alexander, (1962) Economic Backwardness in Historical Perspective: A Book of Essays, (Harvard University Press, Cambridge, MA).

Gilbert, Christopher L., and Panos Varangis, (2003) "Globalization and International Commodity Trade with Specific Reference to West African Cocoa Producers," NBER Working Paper No. w9668, May.

Goldstone, Jack A., The Happy Chance: The Rise of the West in Global Context, 1500-1850, book manuscript in preparation, U.C. Davis, forthcoming.

Haggard, Stephan, (2003) "Institutions and Growth in East Asia," UCSD, unpublished manuscript.

Haggard, Stephan, and Robert Kaufman, eds., (1983) The Politics of Economic Adjustment, (Princeton University Press, Princeton, NJ).

Hall, Robert, and Chad I. Jones, (1999) "Why Do Some Countries Produce So Much More Output per Worker than Others?" Quarterly Journal of Economics, 114(1): 83-116.

Harberger, Arnold C., (1985) Economic Policy and Economic Growth, International Center for Economic Growth, Institute for Contemporary Studies, San Francisco, CA.

Harberger, Arnold C., "Interview with Arnold Harberger: Sound Policies Can Free Up Natural Forces of Growth," IMF Survey, International Monetary Fund, Washington, DC, July 14, 2003, 213-216.

Harrison, Glenn W., Thomas F. Rutherford, and David G . Tarr, (1993) "Trade Reform in the Partially Liberalized Economy of Turkey," The World Bank Economic Review, 7 (2), 191-218.

Hausmann, Ricardo, Dani Rodrik, and Andres Velasco, "Growth Diagnostics," unpublished paper, John F. Kennedy School of Government, Harvard University, Cambridge, MA, October 2004.

Hatta, Tatsuo, (1977) "A Recommendation for a Better Tariff Structure," Econometrica 45: 1859-69.

Hausmann, Ricardo and Dani Rodrik, (2002) "Economic Development as Self-Discovery," NBER Discussion Paper No. w8952, May.

Hausmann, Ricardo, Lant Pritchett, and Dani Rodrik. (2004). "Growth Accelerations," NBER Working Paper No. w10566, June.

Helleiner, Gerald K., ed., (1994) Trade Policy and Industrialization in Turbulent Times, UNU/WIDER, (Routledge, New York).

Hellmann, Thomas, Kevin Murdock, and Joseph Stiglitz, (1997) "Financial Restraint: Toward a New Paradigm," in M. Aoki et al, eds., The Role of Government in East Asian Economic Development: Comparative Institutional Analysis, (Clarendon Press, Oxford).

Hirschman, Albert O., (1958) The Strategy of Economic Development, (Yale University Press, New Haven, CT).

Hoff, Karla and Joseph Stiglitz, (2001) "Modern Economic Theory and Development," in G.M. Meier and J.E. Stiglitz, eds., Frontiers of Development Economics, New York, Oxford University Press, 389-459.

Imbs, Jean, and Romain Wacziarg, (2003) "Stages of Diversification," American Economic Review, 93(1): 63-86.

Johnson, Simon, John McMillan, and Chris Woodruff, (2000) "Entrepreneurs and the Ordering of Institutional Reform: Poland, Slovakia, Romania, Russia, and Ukraine Compared," Economics of Transition.

Kaufmann, Daniel, (2002) "Rethinking Governance," World Bank Institute, World Bank, Washington, D.C., December.

Krueger, Anne O. , (1997) "Trade Policy and Development: How We Learn," The American Economic Review, March.

Krugman, Paul, (1995) "Dutch Tulips and Emerging Markets", Foreign Affairs, July/August.

Kuczynski, Pedro-Pablo, and John Williamson, eds., (2003) After the Washington Consensus: Restarting Growth and Reform in Latin America, Institute for International Economics, Washington, DC.

Lau, Lawrence, J., Yingyi Qian, and Gerard Roland, (2000) "Reform Without Losers: An Interpretation of China's Dual-Track Approach to Transition," The Journal of Political Economy, 108(1): 120-143.

Li, Shuhe, (1999) "The Benefits and Costs of Relation-Based Governance: An Explanation of the East Asian Miracle and Crisis," City University of Hong Kong, October.

Lin, Justin Yifu, Fang Cai, and Zhou Li, (1996) The China Miracle: Development Strategy and Economic Reform, The Chinese University Press, Shatin, NT, Hong Kong.

Lin, Justin Yifu, and Mingxing Liu, (2003) "Development Strategy, Viability and Challenges of Development in Lagging Regions," paper prepared for the 15th World Bank's Annual Bank Conference on Development Economics, Bangalore, India, May.

Lindauer, David L., and Lant Pritchett, (2002) "What's the Big Idea? The Third Generation of Policies for Economic Growth," Economia, 1-40.

Lipton, David, and Jeffrey Sachs, (1990) "Creating a Market Economy in Eastern Europe: The Case of Poland," Brookings Papers on Economic Activity, 1.

Loayza, Norman, Pablo Fajnzylber, and Cesar Calderon, (2002)"Economic Growth in Latin America and the Caribbean" Stylized Facts, Explanations, and Forecasts," World Bank, Washington, D.C., June.

Lopez, Ramon, (1997) "Environmental Externalities in Traditional Agriculture and the Impact of Trade Liberalization: The Case of Ghana," Journal of Development Economics, 53(1): 17-39.

Lopez, Ramon, and Arvind Panagariya, (1992)"On the Theory of Piecemeal Tariff Reform: The Case of Pure Imported Intermediate Inputs," American Economic Review, 82(3): 615-625.

Lora, Eduardo, (2001a) "Structural Reforms in Latin America: What Has Been Reformed and How to Measure It," Inter-American Development Bank, Washington, D.C., December.

Lora, Eduardo, (2001b)"El crecimiento económico en América Latina después de una década de reformas estructurales". Washington, DC, United States: Inter-American Development Bank, Research Department. Mimeographed document.

MacLean, Brian K., (1999)"The Rise and Fall of the 'Crony Capitalism' Hypothesis: Causes and Consequences," Department of Economics, Laurentian University, Ontario, March.

Maddison, Angus, (2001) The World Economy: A Millennial Perspective, OECD Development Centre, (OECD, Paris).

Matsuyama, Kiminori, (1992) "Agricultural Productivity, Comparative Advantage, and Economic Growth," Journal of Economic Theory, December: 317-334.

Milanovic, Branko, (2003) "The Two Faces of Globalization: Against Globalization as we Know It," World Development, 31(4): 667-683.

Mukand, Sharun, and Dani Rodrik, (forthcoming) “In Search of the Holy Grail: Policy Convergence, Experimentation, and Economic Performance,” NBER Working Paper, January 2002 (American Economic Review, forthcoming).

Murphy, Kevin M., Andrei Shleifer, and Robert W. Vishny, (1989) "Industrialization and the Big Push," Journal of Political Economy, Vol. 97 (5): 1003-26.

Murphy, Kevin M., Andrei Shleifer, and Robert W. Vishny, (1992) “The Transition to a Market Economy: Pitfalls of Partial Reform,” The Quarterly Journal of Economics, 107(3): 889-906.

Naim, Moises, (1999) “Fads and Fashion in Economic Reforms: Washington Consensus or Washington Confusion?” paper prepared for the IMF Conference on Second Generation Reforms, Washington, D.C., October.

North, Douglass C., (1990) Institutions, Institutional Change and Economic Performance, (Cambridge University Press, New York).

North, Douglass C., (1994)“Economic Performance Through Time,” The American Economic Review, 84(3): 359-368.

North, Douglass C., and R. Thomas, (1973) The Rise of the Western World: A New Economic History, (Cambridge University Press, Cambridge).

Ocampo, José Antonio, (2002) “Rethinking the Development Agenda,” United Nations Economic Commission for Latin America and the Caribbean (ECLAC), Santiago, Chile.

Ocampo, José Antionio, (2003) “Structural Dynamics and Economic Growth in Developing Countries,” United Nations Economic Commission for Latin America and the Caribbean (ECLAC), Santiago, Chile.

Pistor, Katharina, (2000) “The Standardization of Law and its Effect on Developing Economies,” G-24 Discussion Paper No. 4, July.

Polterovich, Victor, and Vladimir Popov, (2002), “Accumulation of Foreign Exchange Reserves and Long Term Growth,” New Economic School, Moscow, Russia, unpublished paper.

Qian, Yingyi, (2003) “How Reform Worked in China,” in D. Rodrik, ed., In Search of Prosperity: Analytic Narratives of Economic Growth, Princeton, NJ, Princeton University Press.

Rodríguez, Francisco, and Dani Rodrik, (2001) "Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence," Macroeconomics Annual 2000, eds. Ben Bernanke and Kenneth S. Rogoff, (MIT Press for NBER, Cambridge, MA).

Rodriguez-Clare, Andres, "The Division of Labor and Economic Development," Journal of Development Economics, 49 (April), 3-32.

Rodrik, Dani, (1991) "Policy Uncertainty and Private Investment in Developing Countries," Journal of Development Economics 36, (November).

Rodrik, Dani, (1995) "Taking Trade Policy Seriously: Export Subsidization as a Case Study in Policy Effectiveness," in A. Deardorff, J. Levinson, and R. Stern (eds.), New Directions in Trade Theory, (University of Michigan Press, Ann Arbor).

Rodrik, Dani, (1996) "Coordination Failures and Government Policy: A Model with Applications to East Asia and Eastern Europe," Journal of International Economics 40(1-2): (February) 1-22.

Rodrik, Dani (1996)"Understanding Economic Policy Reform," Journal of Economic Literature, XXXIV: (March) 9-41.

Rodrik, Dani, (1997) "Trade Strategy, Exports, and Investment: Another Look at East Asia," Pacific Economic Review, (February).

Rodrik, Dani, (1999) The New Global Economy and Developing Countries: Making Openness Work, Washington, D.C., Overseas Development Council.

Rodrik, Dani, (1999b) "Where Did All the Growth Go? External Shocks, Social Conflict and Growth Collapses," Journal of Economic Growth, (December).

Rodrik, Dani, (2000) "Institutions for High-Quality Growth: What They Are and How to Acquire Them," Studies in Comparative International Development, 35(3): Fall.

Rodrik, Dani, and Arvind Subramanian, (2004). "From 'Hindu Growth' to Productivity Surge: The Mystery of the Indian Growth Transition," NBER Working Paper No. w10376, March.

Rodrik, Dani, Arvind Subramanian, and Francesco Trebbi, (2002) "Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development" Kennedy School of Government, Harvard University, (October).

Rosenstein-Rodan, Paul, (1943) "Problems of Industrialization of Eastern and Southeastern Europe." Economic Journal 53(210-211): 202-211.

Rostow, Walt W., (1965) The Stages of Economic Growth: A Non-Communist Manifesto, (Cambridge University Press, Cambridge and New York).

Shleifer, Andrei, and Robert W. Vishny, (1998) The Grabbing Hand: Government Pathologies and Their Cures, (Harvard University Press, Cambridge, MA).

Soon, Cho, (1994) The Dynamics of Korean Development, Washington, DC, Institute for International Economics.

Stern, Nicholas, (2001)"A Strategy for Development," ABCDE Keynote Address, Washington, DC, World Bank, (May).

Stiglitz, Joseph E., (1998) "More Instruments and Broader Goals Moving toward the Post-Washington Consensus." United Nations University/WIDER, Helsinki.

Subramanian, Arvind, and Devesh Roy, (2003) "Who Can Explain the Mauritian Miracle? Meade, Romer, Sachs, or Rodrik?" in Dani Rodrik, ed., In Search of Prosperity: Analytic Narratives of Economic Growth, (Princeton University Press, Princeton, NJ).

Summers, Lawrence H., (2003) "Godkin Lectures," John F. Kennedy School of Government, Harvard University, (April).

Temple, Jonathan, (1999) "The New Growth Evidence," Journal of Economic Literature, 37(1): 112-156.

Temple, Jonathan, (2003) "Growing into Trouble: Indonesia since 1966," in Dani Rodrik, ed., In Search of Prosperity: Analytic Narratives of Economic Growth, (Princeton University Press, Princeton, NJ).

Trindade, Vitor, (2003) "The Big Push, Industrialization, and International Trade: The Role of Exports," Maxwell School, Syracuse University, (March).

Unger, Roberto Mangabeira, (1998) Democracy Realized: The Progressive Alternative, Verso, London and New York.

Vamvakidis, Athanasios, (2002) "How Robust is the Growth-Openness Connection? Historical Evidence," Journal of Economic Growth, 7(1): (March) 57-80.

Van Arkadie, Brian, and Raymond Mallon, (2003) Vietnam: A Transition Tiger?, Asia Pacific Press at The Australian National University, Australia.

Wei, Shang-Jin, (1997) "Gradualism versus Big Bang: Speed and Sustainability of Reforms," Canadian Journal of Economics, 30(4B): 1234-47.

Wellisz, Stanislaw, and Philippe Lam Shin Saw, (1993) "Mauritius," in Ronald Findlay and Stanislaw Wellisz, eds., The Political Economy of Poverty, Equity, and Growth: Five Open Economies, (New York, Oxford University Press).

Williamson, John, (1990)"What Washington Means by Policy Reform", in J. Williamson, ed., Latin American Adjustment: How Much Has Happened? (Washington: Institute for International Economics).

Williamson, John, and Roberto Zagha, (2002)"From Slow Growth to Slow Reform," World Bank, unpublished paper.

World Bank, (1993) The East Asian Miracle: Economic Growth and Public Policies, (World Bank, Washington, D.C.).

World Bank, (1998) Beyond the Washington Consensus: Institutions Matter, (World Bank, Washington, D.C.).

Yanikkaya, Halit, (2003) "Trade Openness and Economic Growth: A Cross-Country Empirical Investigation," Journal of Development Economics, 72(October): 57-89.

Young, Alwyn, (1992) "A Tale of Two Cities: Factor Accumulation and Technical Change in Hong Kong and Singapore," NBER Macroeconomics Annual, (MIT Press for NBER, Cambridge, MA).

Young, Alwyn, (2000) "The Razor's Edge: Distortions and Incremental Reform in the People's Republic of China," NBER Working Paper No. 7828, (August).

Table 1. Sources of growth by regions, 1960-2000 (percent increase)

			Contribution of:		
Region/Period	Output	Output per worker	Physical capital	Education	Productivity
World (84)					
1960-70	5.1	3.5	1.2	0.3	1.9
1970-80	3.9	1.9	1.1	0.5	0.3
1980-90	3.5	1.8	0.8	0.3	0.8
1990-2000	3.3	1.9	0.9	0.3	0.8
Industrial Countries (22)					
1960-70	5.2	3.9	1.3	0.3	2.2
1970-80	3.3	1.7	0.9	0.5	0.3
1980-90	2.9	1.8	0.7	0.2	0.9
1990-2000	2.5	1.5	0.8	0.2	0.5
China (1)					
1960-70	2.8	0.9	0.0	0.3	0.5
1970-80	5.3	2.8	1.6	0.4	0.7
1980-90	9.2	6.8	2.1	0.4	4.2
1990-2000	10.1	8.8	3.2	0.3	5.1
East Asia less China (7)					
1960-70	6.4	3.7	1.7	0.4	1.5
1970-80	7.6	4.3	2.7	0.6	0.9
1980-90	7.2	4.4	2.4	0.6	1.3
1990-2000	5.7	3.4	2.3	0.5	0.5
Latin America (22)					
1960-70	5.5	2.8	0.8	0.3	1.6
1970-80	6.0	2.7	1.2	0.3	1.1
1980-90	1.1	-1.8	0.0	0.5	-2.3
1990-2000	3.3	0.9	0.2	0.3	0.4
South Asia (4)					
1960-70	4.2	2.2	1.2	0.3	0.7
1970-80	3.0	0.7	0.6	0.3	-0.2
1980-90	5.8	3.7	1.0	0.4	2.2
1990-2000	5.3	2.8	1.2	0.4	1.2
Africa (19)					
1960-70	5.2	2.8	0.7	0.2	1.9
1970-80	3.6	1.0	1.3	0.1	-0.3
1980-90	1.7	-1.1	-0.1	0.4	-1.4
1990-2000	2.3	-0.2	-0.1	0.4	-0.5
Middle East (9)					
1960-70	6.4	4.5	1.5	0.3	2.6
1970-80	4.4	1.9	2.1	0.5	-0.6
1980-90	4.0	1.1	0.6	0.5	0.1
1990-2000	3.6	0.8	0.3	0.5	0.0

Source: Bosworth and Collins (2003).

Table 2: Rules of good behavior for promoting economic growth

Original Washington Consensus:	"Augmented" Washington Consensus: … the previous 10 items, plus:
1. Fiscal discipline 2. Reorientation of public expenditures 3. Tax reform 4. Interest rate liberalization 5. Unified and competitive exchange rates 6. Trade liberalization 7. Openness to DFI 8. Privatization 9. Deregulation 10. Secure Property Rights	11. Corporate governance 12. Anti-corruption 13. Flexible labor markets 14. Adherence to WTO disciplines 15. Adherence to international financial codes and standards 16. "Prudent" capital-account opening 17. Non-intermediate exchange rate regimes 18. Independent central banks/inflation targeting 19. Social safety nets 20. Targeted poverty reduction

Table 3: East Asian anomalies

Institutional domain	**Standard ideal**	**"East Asian" pattern**
Property rights	Private, enforced by the rule of law	Private, but govt authority occasionally overrides the law (esp. in Korea).
Corporate governance	Shareholder ("outsider") control, protection of shareholder rights	Insider control
Business-government relations	Arms' length, rule based	Close interactions
Industrial organization	Decentralized, competitive markets, with tough anti-trust enforcement	Horizontal and vertical integration in production (chaebol); government-mandated "cartels"
Financial system	Deregulated, securities based, with free entry. Prudential supervision through regulatory oversight.	Bank based, restricted entry, heavily controlled by government, directed lending, weak formal regulation.
Labor markets	Decentralized, de-institutionalized, "flexible" labor markets	Lifetime employment in core enterprises (Japan)
International capital flows	"prudently" free	Restricted (until the 1990s)
Public ownership	None in productive sectors	Plenty in upstream industries.

Table 4: The logic of the Washington Consensus and a Chinese counterfactual

Problem		**Solution**
Low agricultural productivity	→	Price liberalization
Production incentives	→	Land privatization
Loss of fiscal revenues	→	Tax reform
Urban wages	→	Corporatization
Monopoly	→	Trade liberalization
Enterprise restructuring	→	Financial sector reform
Unemployment	→	Social safety nets
… and so on		

Table 5: How to understand/rationalize institutional anomalies: four illustrations

Objective	**What is problem?**	**Institutional response**	**Prerequisites**	**Institutional complements**
Financial deepening (saving mobilization and efficient intermediation)	Asymmetric information (investors know more about their projects than lenders do) and limited liability	"Financial restraint" (Hellmann et al. 1997): controlled deposit rates and restricted entry —creation of rents to induce better portfolio risk management, better monitoring of firms, and increased deposit mobilization by banks.	Ability to maintain restraint at <u>moderate</u> levels; Positive real interest rates; Macroeconomic stability; Avoid state capture by financial interests.	<u>Finance</u>: Highly regulated financial markets (absence of security markets and closed capital accounts to prevent cherry picking and rent dissipation); <u>Politics</u>: State "autonomy" to prevent capture and decay into "crony capitalism."

Table 5: How to understand/rationalize institutional anomalies: four illustrations (cont.)

Objective	**What is problem?**	**Institutional response**	**Prerequisites**	**Institutional complements**
Spurring investment and entrepreneurship in non-traditional activities	Economies of scale together with inter-industry linkages depress private return to entrepreneurship/investment below social return.	"Industrial policy as a coordination device" (Rodrik 1995) --credit subsidies (Korea) and tax incentives (Taiwan) for selected sectors; --protection of home market coupled with export subsidies; --public enterprise creation for upstream products; --arm-twisting and cajoling by political leadership; --socialization of investment risk through implicit investment guarantees.	A high level of human capital relative to physical capital. A relatively competent bureaucracy to select investment projects.	Trade: Need to combine import protection (in selected sectors) with exposure to competition in export markets to distinguish high-productivity firms from low-productivity ones; Business-government relations: "Embedded autonomy" (Evans) to enable close interactions and information exchange while preventing state capture and decay into "crony capitalism."

Table 5: How to understand/rationalize institutional anomalies: four illustrations (cont.)

Objective	**What is problem?**	**Institutional response**	**Prerequisites**	**Institutional complements**
Productive organization of the workplace	Tradeoff between information sharing (working together) and economies of specialization (specialized tasks)	"horizontal hierarchy" (Aoki 1997)	(unintended) fit with prewar arrangements of military resource mobilization in Japan	Corporate governance: insider control to provide incentive for accumulating long-term managerial skills; Labor markets: lifetime employment and enterprise unionism to generate long-term collaborative teamwork; Financial markets: main bank system to discipline firms and reduce the moral hazard consequences of insider control; Politics: "bureau-pluralism" (regulation, protection) to redistribute benefits to less productive, traditional sectors.

Table 5: How to understand/rationalize institutional anomalies: four illustrations (cont.)

Objective	**What is problem?**	**Institutional response**	**Prerequisites**	**Institutional complements**
Reduce anti-export bias	Import-competing interests are politically powerful and opposed to trade liberalization	export processing zone (Rodrik 1999)	saving boom; elastic supply of foreign investment; preferential market access in EU	Dual labor markets: segmentation between male and female labor force, so that increase female employment in the EPZ does not drive wages up in the rest of the economy.

Table 6: Sound economics and institutional counterparts: microeconomics

OBJECTIVE	**UNIVERSAL PRINCIPLES**	**PLAUSIBLE DIVERSITY IN INSTITUTIONAL ARRANGEMENTS**
Productive efficiency (static and dynamic)	Property rights: Ensure potential and current investors can retain the returns to their investments Incentives: Align producer incentives with social costs and benefits. Rule of law: Provide a transparent, stable and predictable set of rules.	What type of property rights? Private, public, cooperative? What type of legal regime? Common law? Civil law? Adopt or innovate? What is the right balance between decentralized market competition and public intervention? Which types of financial institutions/corporate governance are most appropriate for mobilizing domestic savings? Is there a public role to stimulate technology absorption and generation? (e.g. IPR "protection")

Table 7: Sound economics and institutional counterparts: macroeconomics

OBJECTIVE	**UNIVERSAL PRINCIPLES**	**PLAUSIBLE DIVERSITY IN INSTITUTIONAL ARRANGEMENTS**
Macroeconomic and Financial Stability	Sound money: Do not generate liquidity beyond the increase in nominal money demand at reasonable inflation. Fiscal sustainability: Ensure public debt remains "reasonable" and stable in relation to national aggregates. Prudential regulation: Prevent financial system from taking excessive risk.	How independent should the central bank be? What is the appropriate exchange-rate regime? (dollarization, currency board, adjustable peg, controlled float, pure float) Should fiscal policy be rule-bound, and if so what are the appropriate rules? Size of the public economy. What is the appropriate regulatory apparatus for the financial system? What is the appropriate regulatory treatment of capital account transactions?

Table 8: Sound economics and institutional counterparts: social policy

OBJECTIVE	**UNIVERSAL PRINCIPLES**	**PLAUSIBLE DIVERSITY IN INSTITUTIONAL ARRANGEMENTS**
Distributive justice and poverty alleviation	Targeting: Redistributive programs should be targeted as closely as possible to the intended beneficiaries. Incentive compatibility: Redistributive programs should minimize incentive distortions.	How progressive should the tax system be? Should pension systems be public or private? What are the appropriate points of intervention: educational system? access to health? access to credit? labor markets? tax system? What is the role of "social funds"? Redistribution of endowments? (land reform, endowments-at-birth) Organization of labor markets: decentralized or institutionalized? Modes of service delivery: NGOs, participatory arrangements., etc.

Table 9: Episodes of rapid growth, by region, decade and magnitude of acceleration						
Region	Decade	Country	Year	Growth before	Growth after	Difference in growth
Sub-Saharan Africa	1950s and 1960s	NGA	1967	-1.7	7.3	9.0
		BWA	1969	2.9	11.7	8.8
		GHA	1965	-0.1	8.3	8.4
		GNB	1969	-0.3	8.1	8.4
		ZWE	1964	0.6	7.2	6.5
		COG	1969	0.9	5.4	4.5
		NGA	1957	1.2	4.3	3.0
	1970s	MUS	1971	-1.8	6.7	8.5
		TCD	1973	-0.7	7.3	8.0
		CMR	1972	-0.6	5.3	5.9
		COG	1978	3.1	8.2	5.1
		UGA	1977	-0.6	4.0	4.6
		LSO	1971	0.7	5.3	4.6
		RWA	1975	0.7	4.0	3.3
		MLI	1972	0.8	3.8	3.0
		MWI	1970	1.5	3.9	2.5
	1980s and 1990s	GNB	1988	-0.7	5.2	5.9
		MUS	1983	1.0	5.5	4.4
		UGA	1989	-0.8	3.6	4.4
		MWI	1992	-0.8	4.8	5.6
South Asia	1950s/60s	PAK	1962	-2.4	4.8	7.1
	1970s	PAK	1979	1.4	4.6	3.2
		LKA	1979	1.9	4.1	2.2
	1980s	IND	1982	1.5	3.9	2.4
East Asia	1950s and 1960s	THA	1957	-2.5	5.3	7.8
		KOR	1962	0.6	6.9	6.3
		IDN	1967	-0.8	5.5	6.2
		SGP	1969	4.2	8.2	4.0
		TWN	1961	3.3	7.1	3.8
	1970s	CHN	1978	1.7	6.7	5.1
		MYS	1970	3.0	5.1	2.1
	1980s and 1990s	MYS	1988	1.1	5.7	4.6
		THA	1986	3.5	8.1	4.6
		PNG	1987	0.3	4.0	3.7
		KOR	1984	4.4	8.0	3.7
		IDN	1987	3.4	5.5	2.1
		CHN	1990	4.2	8.0	3.8

Table 9 (cont.): Episodes of rapid growth, by region, decade and magnitude of acceleration						
Region	Decade	Country	Year	Growth before	Growth after	Difference in growth
Latin America and Caribbean	1950s and 1960s	DOM	1969	-1.1	5.5	6.6
		BRA	1967	2.7	7.8	5.1
		PER	1959	0.8	5.2	4.4
		PAN	1959	1.5	5.4	3.9
		NIC	1960	0.9	4.8	3.8
		ARG	1963	0.9	3.6	2.7
		COL	1967	1.6	4.0	2.4
	1970s	ECU	1970	1.5	8.4	6.8
		PRY	1974	2.6	6.2	3.7
		TTO	1975	1.9	5.4	3.5
		PAN	1975	2.6	5.3	2.7
		URY	1974	1.5	4.0	2.6
	1980s and 1990s	CHL	1986	-1.2	5.5	6.7
		URY	1989	1.6	3.8	2.1
		HTI	1990	-2.3	12.7	15.0
		ARG	1990	-3.1	6.1	9.2
		DOM	1992	0.4	6.3	5.8
Middle East and North Africa	1950s and 1960s	MAR	1958	-1.1	7.7	8.8
		SYR	1969	0.3	5.8	5.5
		TUN	1968	2.1	6.6	4.5
		ISR	1967	2.8	7.2	4.4
		ISR	1957	2.2	5.3	3.1
	1970s	JOR	1973	-3.6	9.1	12.7
		EGY	1976	-1.6	4.7	6.3
		SYR	1974	2.6	4.8	2.2
		DZA	1975	2.1	4.2	2.1
	1980s and 1990s	SYR	1989	-2.9	4.4	7.3
OECD	1950s and 1960s	ESP	1959	4.4	8.0	3.5
		DNK	1957	1.8	5.3	3.5
		JPN	1958	5.8	9.0	3.2
		USA	1961	0.9	3.9	3.0
		CAN	1962	0.6	3.6	2.9
		IRL	1958	1.0	3.7	2.7
		BEL	1959	2.1	4.5	2.4
		NZL	1957	1.5	3.8	2.4
		AUS	1961	1.5	3.8	2.3
		FIN	1958	2.7	5.0	2.2
		FIN	1967	3.4	5.6	2.2
	1980s and 1990s	PRT	1985	1.1	5.4	4.3
		ESP	1984	0.1	3.8	3.7
		IRL	1985	1.6	5.0	3.4
		GBR	1982	1.1	3.5	2.5
		FIN	1992	1.0	3.7	2.8
		NOR	1991	1.4	3.7	2.2

Source: Hausmann et al. (2004).

Table 10: A taxonomy of "natural" barriers to industrialization

A. Learning externalities

    1. Learning-by-doing (e.g., Matsuyama, 1992)

    2. Human capital externalities (e.g., Azariadis and Drazen, 1990)

    3. Learning about costs (e.g., Hausmann and Rodrik, 2002)

B. Coordination failures (market-size externalities induced by IRS)

    1. Wage premium in manufacturing (e.g., Murphy, Shleifer, and Vishny, 1989)

    2. Infrastructure (e.g., Murphy, Shleifer, and Vishny, 1989)

    3. Specialized intermediate inputs (e.g., Rodrik 1994, 1995)

    4. Spillovers associated with wealth distribution (e.g., Hoff and Stiglitz 2001)

Table 11: A taxonomy of market-sustaining institutions

- Market-creating institutions
  - Property rights
  - Contract enforcement
- Market-regulating institutions
  - Regulatory bodies
  - Other mechanisms for correcting market failures
- Market-stabilizing institutions
  - Monetary and fiscal institutions
  - Institutions of prudential regulation and supervision
- Market-legitimizing institutions
  - Democracy
  - Social protection and social insurance