RETHINKING ECONOMIC GROWTH IN DEVELOPING COUNTRIES[1]

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What should developing countries do to increase their growth rates and speed up the rates at which their citizens converge to the level of material well-being obtained in today's advanced nations? Around ten or fifteen years ago, there was a fair degree of consensus on how to answer this question among North American and Western European economists. This consensus has by now largely dissipated, for reasons that I will explore below. Few economists now seriously believe that there is a short list of 10 or 20 policy reforms that can be relied on systematically to produce higher economic growth.

Any reappraisal of growth strategies must start from a few empirical facts. I summarize below a number of empirical propositions on which I think most economists would now agree.

1. The reforms of the 1980s and 1990s have produced disappointing results.

By the end of the 1980s, there was wide agreement among North American economists and policy "technocrats" around the world about the overwhelming desirability of a few simple reforms, the nature of which can be summarized under the triple commandments: stabilize, liberalize, and privatize. There was a wave of reforms around the world modeled after the now much-maligned "Washington Consensus." Latin America was the region which adopted this policy agenda the most wholeheartedly (see Figure 1), but similar reforms were also launched all over the Sub-Saharan African continent and in many places around Asia. Among all reforms, trade liberalization was perhaps the most striking in its extent. In a relatively short period, most developing countries unilaterally eliminated quantitative restrictions on imports, lowered tariff barriers, and reduced the dispersion of tariff rates.

It would be fair to say that confronted with these radical changes in policies, most economists would have expected an equally radical improvement in economic performance. After all, if growth was held back by the high inflation generated by macroeoconomic populism and the protectionism driven by statism, the elimination of these obstacles should have unleashed the private sector in full force.

That has not happened. While the interpretations of why vary, the facts are not in doubt. Economic growth rates in those countries that adopted the "stabilize, liberalize, and privatize" agenda has turned out to be low not only in absolute terms, but also relative to other countries that were reluctant reformers and relative to the reforming

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countries' own historical experience. Perhaps the disappointments in Africa are due to special circumstances: the ravages of civil war and crises in public health. But how can one explain the Latin American story, which is one of poor growth and productivity performance in the 1990s—much worse than in the 1950-1980 period (Table 1)? Fiscal discipline, privatization and openness to trade have produced an economic performance that does not even begin to match the performance under import substitution. And that is a puzzle of major proportions.

2. The most successful growth performers have followed heterodox policies.

This puzzle would be even more distressing if it were not the case that some of the poorest and most populous countries in the world have done amazingly well in the last two decades. China of course leads the way here, with an average economic growth rate since 1980 of around 9 percent in per capita terms, a stupendous performance. Even if we knock out a couple of percentage points off this for reasons of statistical manipulation, what we are left with is still a stupendous performance. India has managed to engineer its own smaller-scale miracle as well, doubling its growth rate since 1980. These two giants are accompanied by a few other Asian countries, such as Vietnam, that have also done very well. The success of these large countries is of momentous consequence, since most poor people do live (or used to live) in Asia. Global poverty has probably been reduced as a result, in relative if not absolute terms.

The bad news, for policy reformers elsewhere, is that these high-growth countries have marched to their own drummers, and the fit between their policies and the conventional policy agenda is awkward at best. China and Vietnam are of course the chief exhibits here. Both countries have become more market-oriented, but have done so through unorthodox means. China reformed its incentives in a two-track manner (grafting a market system on top of a planned system, rather than abandoning the latter altogether), underplayed private property rights (relying instead on township-and-village enterprises owned by local governments), and opened up to the world in a partial way (complementing its highly protectionist trade regime with special economic zones). Vietnam, as a fellow socialist country, followed many of the same principles since the second half of the 1980s. And India, despite the folk wisdom that relates its growth acceleration to the liberalization of 1991, actually began its take off a decade earlier, during the early 1980s and under heavy protectionism (Figure 2).

These experiences are the rule rather than the exception. When we turn to an earlier set of growth miracles, namely the East Asian gang of four, we encounter the same pattern of market orientation-cum-heterodoxy. Of the four, Hong Kong is the only one that approximates a free-market ideal. South Korea and Taiwan, like Japan before them, have diverged significantly, making extensive use of trade protection and industrial policy and adopting anomalous institutions in corporate governance, finance, and regulatory areas (Table 2). Singapore had free trade, but also extensive industrial policies, which allowed Alwyn Young (1992) to attribute his famous finding of low aggregate total factor productivity growth in Singaporean manufacturing to the apparently distorting effect of these policies.

Determining whether East Asian countries have done well because of these heterodox elements in their armory, or despite them, has long been a cottage industry within the development economics profession. For my purposes here, we need not take a stand on this issue, but simply recognize that heterodox elements were part and parcel of successful growth strategies, among the earlier crop of countries as well as the more recent one.

3. There are some general, first-order principles of economic policy that all successful countries have more or less adhered to.

While specific policies vary across successful countries, and exhibit heterodoxy more of than not, it is also true that we can enumerate a number of general objectives that policies in successful countries have pursued.

One such objective is the maintenance of *macroeconomic stability*. All high growth countries pursue "responsible" monetary and fiscal policies that prevent high inflation and the buildup of unsustainable debt levels. Another is the desire to *integrate in the world economy*. While China, Vietnam, India and most other high-growth economies have had high levels of protection against imports, and often have remained outside the formal rules of the world trade regime (i.e., the GATT/WTO system), they have also found ways to spur exports and attract direct foreign investment. A third objective is to provide investors with effective protection in terms of *property rights and contract enforcement*. Without such protection, firms and entrepreneurs do not have the incentive to accumulate capital and improve productivity. A fourth objective is to maintain a certain degree of *social cohesion, solidarity, and political stability*. Without social and political peace, the economy cannot perform adequately.

One can perhaps list a few more of these higher-order principles—such as an appropriate environment for productive diversification and innovation, social insurance and safety nets, prudential regulation of financial intermediaries, appropriate management of the exchange rate and of the capital account, and so on. What is relevant and very important is that these can only be stated in terms of broad objectives. There is no unique mapping between these objectives and specific policy proposals, which is the next point on which there is by now a fair amount of consensus.

4. General principles of good economic policy do not map directly and uniquely into specific policy agendas.

It is impossible to have observed the patterns of development around the world during the last two decades and not realized that propection of property rights, contract enforcement, macroeconomic stability, integration into the world economy, and so on can be achieved in a number of different ways. China and Vietnam have managed to provide their investors with enough of a sense of security to have elicited inordinate amounts of private investment and entrepreneurship despite the absence of a private property rights regime. Macroeoconomic stability is compatible with any number of exchange-rate

regimes and operating rules for the central bank. Integration into the world economy can be achieved with low tariffs and high tariffs (as India and China have both spectacularly demonstrated).

It is for this reason that careful summaries of the evidence state their conclusions in terms of general proclivities to achieve these ends, rather than in terms of specific policies. For example, when Larry Summers (2003) recently summarized what we have learned from the experience with growth, this is how he put it:

> "[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. All the evidence we have suggests that these "abilities" and "capacities" do not map neatly into specific policy preferences, and can be generated in a variety of ways.

5. Consequently, policy diversity is desirable and a certain amount of policy experimentation is to be recommended.

The need to avoid one-size-fits-all strategies and to develop context-specific policies is fast becoming a new conventional wisdom. This reflects in part a reaction to the perception that the old Washington Consensus was too rigid, implying that the same policy agenda could be expected to work in all contexts, and in part a grudging acceptance of the overbearing reality of policy heterodoxy in growth superstars such as China and Vietnam. Reagrdless of the source, the feeling is that we may have overshot in terms of prescribing predefined policy agendas on developing countries.

The change can be observed in a number of different ways. Among the IFIs, the talk has shifted from structural adjustment and conditionality to country ownership and country-generated poverty reduction strategies. The hope is that having a broad based domestic discussion on development strategies, involving a wide cross section of civil society, facilitates both the selection of appropriate policies and their acceptance by the same. In discussions about the world trade regime, there is increasing recognition of the need to avoid rigid and uniform disciplines (a la TRIPS), to maintain space for developmental policies, and to find an alternative to the "single undertaking" approach to trade agreements. In academic circles, North (1994), Dixit (2004), Freeman (2000), Pistor (2000), Djankov et al. (2003), Mukand and Rodrik (2002) and others have begun to emphasize that sound institutional arrangements have large elements of indeterminacy

and country specificity. Policy experimentation therefore becomes a necessary component of institutional development.

So what next?

All of the propositions above should be uncontroversial. The question is what does all this imply for the design of growth strategies? How do we provide guidance to countries besides uttering platitudes ("integrate into the world economy," "maintain sound money and sustainable fiscal balances," etc.)? How do we avoid policy nihilism and an anything-goes kind of approach ("all countries must find their own solutions to their problems")? How do we move forward with a positive agenda for policy reform instead? For those of us working on issues of economic growth, this constitutes the central challenge of our time.

I want to contrast here two approaches to these questions, one that we seem to have fallen into almost by default and that does not appear to me to be particularly helpful, and another one that I believe has much greater promise.

The Augmented Washington Consensus

The first approach constitutes of augmenting the original Washington Consensus with several additional layers of policy reforms, focusing heavily on institutional and governance areas (Table 3). The idea behind this approach is that while the original policy prescriptions had the right fix on the problem, their implementation and effectiveness have been undercut by weaknesses in other, unforeseen domains. The remedy is to fix these other problems *in addtion* to implementing the original agenda.

Hence, if trade liberalization did not produce the expected boost to economic activity, it must be because labor markets were not sufficiently flexible, the fiscal system was not robust enough, and the educational system not good enough. If privatization did not work and proved unpopular, it must be because the appropriate regulatory system had not been put in place. If financial liberalization led to financial crises, it must be because the prudential regulation and corporate governance systems were too weak. If tight fiscal policies did not produce macroeconomic stability, it must be because they were not perceived as credible, and hence credibility-enhancing institutions (such as central bank independence and fiscal responsibility legislation) were required. If the poor did not receive much of the benefits and ended up feeling more insecure, it must be because targeted anti-poverty programs and social safety nets had not been put in place. And let's not forget corruption, which has the potential to blunt the effectiveness of any and all of these reforms if not tackled aggressively.

This sort of logic has been employed both to explain why the reforms of the 1980s and 1990s have produced such weak effects and to shape the policy agenda of the day. The result has been called variably the Washington Consensus-plus agenda, the second-generation list of reforms, and the Augmented Washington Consensus.

The new items on the list are heavily institutional in nature. Unlike the elements of the old list, which for the most part could be implemented (in principle) with the stroke of a pen (e.g. trade liberalization, tight fiscal policy, price deregulation), these new reforms require extensive administrative and human resources.

The Augmented Washington Consensus is problematic from a number of different perspectives. For one thing, there is an almost-tautological relationship between the enlarged list and economic development. The new "consensus" reflects what a rich country *already* looks like. If a developing country can acquire, say, Denmark's institutions, it is already rich and need not worry about development. The list of institutional reforms describe not what countries need to do in order to develop—the list certainly does not correspond to what today's advanced countries did during their early development—but where they are likely to end up once they develop.

Related to this point, the enlarged reform agenda is an impossibly ambitious one that no country can be expected to complete within the lifetime of any government. The amount of administrative capacity, human resources, and political capital needed to complete this vast agenda of institutional reforms is simply not there in any developing country. Yet the agenda comes without a way of determining priorities. Too often, the result is that policy effort is spread too thinly over too many different areas: governments are overwhelmed with the range of things that need to be done, copies of Western legislation or "best-practice" codes are adopted without much consideration of their suitability and adaptability, and too little effort is made to render the reforms politically popular and ultimately sustainable.

The World Bank and other IFIs of course recognize this issue, but they have not confronted it in a serious manner. The implicit, and sometimes explicit, approach seems to be to say: "well, we know that all of these things cannot be done at once, but more is better than less, and the more countries can do the better." So they and the governments they advise proceed opportunistically, and try to complete the enlarged agenda as best as they can, as completely as they can, and as quickly as they can. Scratch any number of Country Assistance Strategy documents of the World Bank, and this is the strategic approach that you will find lurking underneath.

The trouble with the "do as much as you can, as quickly as you can" approach is that it is bad economics. There are two issues involved here. The first one, about which I will say much more below, is that the opportunistic strategy may end up being targeted on areas of reform that are not particularly significant for economic growth at that point in time and that produce low economic returns. After much effort, governments may find that economic performance has hardly improved. The second objection comes from the theory of second-best, and points to an inconsistency between the original conception of the augmented Washington Consensus and its actual implementation in piecemeal fashion. The theory of second-best says that when an economy has n problems, fixing $n-k$ of them is not guaranteed to improve economic performance, and may actually make us worse off rather than better off. If we want to guarantee that partial reform will work, we need to select those areas of reform where the second-best interactions magnify the direct

positive effects rather than weaken or reverse them. But in any real economy, figuring out these interactions ex ante is extremely complicated and attempting to do so is likely to prove as foolhardy as adopting the entire reform agenda wholesale in the first place.

Finally, there is something intellectually worrisome about the Augmented Washington Consensus, in that it is entirely unfalsifiable. Such is the nature of the agenda that if a country adopts it and fails to grow, it is always possible to find something wrong with what the government did. So long is the list and so demanding the reforms that no government could possibly claim to have implemented it a full 100 percent. So in the end it is the policymakers who end up being chastised for the "incompleteness" of their reforms.[2] And if enough countries find themselves in this predicament, then it must be time to augment the list further by adding yet other needed reforms. Ultimately, we end up chasing after an inachievable goal, while congratulating ourselves all along about the comprehensiveness of our solution.

For these reasons, the Augmented Washington Consensus seems to me to be a non-starter. It is empirically at odds with the advanced countries' own historical development experience. It is too ambitous a reform agenda. It does not come with a well-defined list of priorities. And as applied in practice, it is as likely to make things worse as to make them better.

Towards an Alternative: What Does the Empirical Record Show?

Before we consider an alternative to the Augmented Washington Consensus, let us take a detour through the empirical patterns of economic growth. There is by now an overwhelming amount of cross-national econometrics on economic growth. The initial burst of enthusiasm on how much we can learn about the consequences of policy from this kind of work has gradually given way to a sense of defeatism (which is well captured, for example, in Bill Easterly's (2003) chapter for the forthcoming *Handbook on Economic Growth*). Most of the early sensationalist claims on the impact of, say, trade liberalization or foreign aid, on growth have eventually turned out to be vaporware.

One of the curious aspects of this huge empirical literature is that practically none of it has focussed on turning points in growth performance. If we want to understand what is needed to *spur* economic growth, it stands to reason that we would want to look at what actually happens with policy at and around the time that growth receives a significant boost. Yet standard growth empirics simply averages policies and performance during 5-, 10-, 20-, or 30-year periods, completely disregarding turning points within these periods.

Ricardo Hausmann, Lant Pritchett, and I recently undertook a different kind of exercise, which focussed explicitly on moments of growth take-off (Hausmann, Pritchett,

[2] The title of a recent speech by the IMF's Anne Krueger exemplifies this attitude: "Meant Well, Tried Little, Failed Much: Policy Reforms in Emerging Market Economies" (Roundtable Lecture, Economic Honors Society, New York University, New York, March 23, 2004).

and Rodrik 2004). Analyzing data from 1950 on, we first identified episodes of growth acceleration. Our criteria for this was as follows:

1) $g_{t,t+7} \geq 3.5$ *ppa* *Growth is rapid*

2) $\Delta g_t \geq 2.0$ *ppa* *Growth accelerates*

3) $y_{t+7} \geq \max\{y_i\}, i \leq 7$ *Post – growth output exceeds pre – episode peak*

For each country, we looked for *t* such that these conditions held. In words, we looked for instances where growth accelerated by at least 2 percentage points for a period of at least 8 years, and where post-acceleration growth was high enough (higher than 3.5 percent). When there were multiple dates, we eliminated contiguous ones within a 5-year time span, picking as our preferred *t* the date that maximized the statistical break pre- and post-*t*. We eliminated from our sample countries with population less than 1 million, as well as all countries with fewer than 20 data points in the Penn World Tables. Given our horizon for identifying growth episodes, the earliest and latest years for which we can identify episodes are 1957 and 1992, respectively.

The first surprise that emerged from our analysis is the sheer number of growth accelerations that have actually taken place. We identified 83 such episodes (Table 4), which given our sample implies that a randomly drawn country had a 25 percent chance of experiencing a growth acceleration in any given decade. These accelerations are distributed across all continents, including Africa, even though the incidence of growth accelerations has clearly come down over time in sub-Saharan Africa. Our method identified most of the well-known episodes of rapid growth associated with discrete policy reforms (e.g. China 1978, Argentina 1990, Mauritius 1971, Korea 1962, Indonesia 1967, Brazil 1967, Chile 1986, Uganda 1989)—and many more besides.

Moreover, the *magnitude* of the typical acceleration is also striking. Conditional on a growth acceleration of at least 2 percent, the average (median) acceleration was 4.7 (4.0) percent. This implies that in the typical episode output stood almost 40 percent higher at the end of the episode than it would have been without any acceleration. There are many episodes of accelerations of 7 percentage points or more (e.g. Ghana 1965 (8.4), Pakistan 1962 (7.1), Argentina 1990 (9.2)).

The fact that there are so many instances of rapid growth, most of which are not associated with major reforms, indicates that growth accelerations are often produced by idiosyncratic factors and less-than-comprehensive reform efforts. Indeed, this is the second point that clearly emerges from our analysis. When we correlated the timing of growth accelerations with major policy, political, or external changes, we found that the correlation was not very tight. This is shown in summary form in Table 5. The take-home message with regard to economic reform is this: the vast majority of growth take-offs are not produced by significant economic reforms, and the vast majority of significant economic reforms do not produce growth take-offs.

Hence there is both good news and bad news in these findings. The good news is that the high incidence of growth accelerations suggests that *igniting* economic growth is not such a terribly difficult thing to accomplish. Every country is bound to experience such an acceleration within the span of a few decades. The bad news is that we actually have a very poor fix on what produces these accelerations. Whatever the secret of economic growth is, comprehensive economic reform ain't it. This second conclusion immediately leads to a more selective, strategic approach to growth policies, which I discuss next.

A Diagnostic Approach to Growth Strategies

My colleagues Ricardo Hausmann and Andres Velasco and I have proposed that growth strategies be devised by targeting policies on the most binding constraints on economic growth (Hausmann, Rodrik, and Velasco 2004). Rather than waste precious human and political capital on a diverse set of reform objectives, we argue that the biggest bang for the reform buck can be obtained by identifying the most significant bottleneck in the economy at any point in time, and focussing efforts on alleviating that bottleneck. In terms of our second-best analysis, this amounts to removing distortions with the biggest direct impacts (and not worrying too much about the indirect effects since they are likely to be small in relation to the direct effects if we have done the targeting job well enough.) This approach economizes on the administrative resources needed to achieve growth and avoids the dangers of the spray-painting approach—namely, the risk that we will fail to hit the most significant constraints holding growth back by going after too many targets.

This seems simple and straightforward enough, but it begs the question: can it be done? We show in our paper that it can, relying on the idea that different bottlenecks throw out different diagnostic signals.

To see how this idea can be operationalized, consider Figure 3. Our diagnostic approach can be visualized as a decision tree. We start from what we think is the single most important symptom of low growth: inadequate levels of private investment and entrepreneurship. The factors keeping private investment low can be traced to three possible proximate sources. First, investible funds may be too scarce and the cost of capital too high. Second, the social returns to private investment may be too low. Third, the social returns may be high, but private investors may be unable to appropriate these returns. The first task is to figure out which of these is the binding constraint to economic growth, and therefore which of the nodes in Figure 3 we ought to be traveling along.

There are several diagnostic tests that can answer these initial questions. In particular:

- An economy where investment is constrained by high cost of capital at home can be expected to utilize foreign borrowing opportunities to the hilt—that is, have a current account deficit that is only constrained by the willingness of foreign

lenders to lend. Domestic banks must face unconstrained credit demand. An increase in autonomous foreign transfers—remittances, a terms of trade improvement, foreign aid—must result disproportionately in an increase in the investment/GDP ratio rather than a decline in the domestic saving effort.

- An economy where investment is constrained by low social returns must have a relative shortage of complementary factors of production (skilled workers), poor infrastructure, and geographical or other advantages that depress the overall productivity of the economy. Checking whether the country is an outlier in a cross-national sense with respect to these elements—does the economy have poor transport and communication infrastructure for a country at its level of income? Is it unusually distant fom its trading partners?—can help identify the degree to which such features can be considered as important constraints on growth.

- Finally, an economy where growth prospects are significantly harmed by inadequate appropriability of the social returns by private investors must show the tell-tale signs of high "taxation." The relevant taxation here goes beyond regular taxes, and includes poor institutions and contract enforcement, macro instability, corruption, and so on. The relevant signals on these can be extracted through a combination of surveys and cross-national benchmarking.

A useful diagnostic in determining whether investment is constrained by low returns or by the shortage of investible funds is to ask businessmen where they would invest $10 million if they were given the money. In environments where it is low returns that bind, the answer will typically be embarrassed silence or "Miami." In environments where returns are high, the response will be a long string of projects: tourist hotels, call centers, avocados, biotech, and so on.

Once these issues are analyzed, and we have some idea where the most significant constraint lies, we can then travel down to the next stage of the diagnostic exercise. If the problem is with the high cost of capital, are the problems with low domestic saving, poor intermediation, or poor integration with international financial markets? If the problem is with low social returns, is it labor, infrastructure, or geography that is the culprit? If the problem is low appropriability, is that in turn due to high tax rates, high corruption, macro risks, or market externalities (for example, information spillovers and coordination externalities)?

Many of these questions are also susceptible to diagnostic analysis. For example, if intermediation is problematic, there must be lack of competition among banks and/or high taxes on the financial system that are commensurate with the margins. If labor skills are the constraint, this must show up in very high returns to education. If taxes are significantly constraining private activity, the effective tax rate must be high. If corruption and other institutional problems are dominant, these should show up in cross-national survey evidence. If informational or coordination externalities are rampant, there must be a shortage of new investment ideas and the policy setting needed to exploit new opportunities must be absent.

In Hausmann, Rodrik, and Velasco (2004), we applied this framework to the recent growth experience of three Latin American countries, El Salvador, Brazil, and Dominican Republic. The first two of these countries did rather poorly in the 1990s, while the Dominican Republic has recently come crashing down under the weight of a banking crisis following a period of fairly high growth. We showed how the diagnostic approach helps determine policy priorities in each of the countries. I summarize here some of the main findings.

In El Salvador, our diagnostic exercise rules out some of the most common culprits for low growth. First, there is little evidence that this is an economy that is constrained by lack of investible funds. The economy is investment-grade, and unconstrained from the standpoint of foreign borrowing. Remittances amount to more than 10 percent of GDP. And banks are flush with liquidity and are having to look for customers abroad. Second, there are few of the tell-tale signs of poor private appropriability. The institutional environment is rated highly by outside observers, corruption is not a severe problem, taxes are low (probably too low, at 10 percent of GDP), inflation is low, the monetary system is dollarized, and the economy is among the most liberal and open in the hemisphere. Some of the standard reasons for low social returns can also be ruled out. The economy is geographically well placed to take advantage of trade opportunities. There is no indication that labor skills bind, since the return to education is among the lowest in the region. Given these circumstances, our diagnostic exercise points to the following culprit: weaknesses of the policy environment with respect to encouraging new economic activities. Simply put, El Salvador is an economy where entrepreneurs have run out of new investment ideas, and markets alone are insufficient to diversify the productive structure away from traditional areas such as coffee, cotton, and maquilas. To put it even more bluntly, El Salvador is in need of industrial policies.

Brazil is very different. All the indications are that this is an economy that is bumping up against a financing constraint. Real interest are extremely high despite a reasonable investment rate, and the current account balance is driven by the willingness of foreign creditors to lend. Relaxation of the external borrowing constraint reliably produces growth. Indeed, Brazil's growth performance moves in parallel with the tightness of the external constraint. When the external constraint is relaxed, say because of an increase in the general appetite for emerging market risk or because of higher commodity prices, as in recent months, the economy is able to grow. But when the external constraint tightens, real interest rates increase, the currency depreciates and growth declines. Brazil, therefore, is a high-return country where the domestic financial system and external capital markets constrain the equilibrium level of investment. The solution therefore lies in improving financial intermediation and in increasing Brazil's external creditworthiness (in part by tight fiscal policies). So the diagnostic approach produces a much more orthodox policy agenda for Brazil than it does for El Salvador.

Finally, the Dominican Republic is an example of a country that was able to generate high rates of economic growth, not through comprehensive reform, but through

policy tinkering that addressed the institutional needs of a few dynamic sectors—tourism and maquilas in particular. But the signs are that the economy outgrew its weak institutional base. In particular, poor financial governance and the impossibility of imposing prudential and regulatory standards on the banking system for political reasons exposed the economy to negative shocks. When international tourism suffered from the aftermath of 9/11, a Ponzi scheme was uncovered in the banking system. The upshot was socialized bank losses of over 20 percent of GDP and an equivalent rise in the public debt. The Dominican Republic remains mired in the ensuing crisis. The lesson is clear: igniting growth may not require the full laundry list of reforms promoted by the Augmented Washington Consensus, but sustaining it and endowing the economy with resilience to adverse shocks require addressing over time the institutional and governance constraints that will inevitably become more binding in a growing economy.

Hence the diagnostic approach clarifies why it is desirable to apply different fixes to different countries, and what that means in practice. The strategy generated by the diagnostic approach is to match policy priorities with the diagnostic signals. It provides a way of identifying country-specific solutions. The approach is inherently bottom-up: it empowers countries to do their own diagnostic analyses. In this, it differs significantly from the Augmented Washington Consensus, which is typically presented to each country in the form of an identical laundry-list of reforms. In addition, the diagnostic approach is sensitive to political and administrative constraints, and it is dynamic in that it recognizes that the nature of the binding constraint changes over time.

Finally, the diagnostic approach embeds existing strategic approaches. Resource mobilization and/or financial sector reform will be the main task in countries where investment is constrained by lack of investible funds and the high cost of capital. In these countries, we may expect foreign aid to provide a big spur to economic growth. By contrast, aid will be completely ineffective where the constraint is low investment demand due to low private returns. Within this group of countries, industrial policy works best when private returns are low due to informational and coordination failures. Reducing trade barriers work best when such barriers are main determinant of the gap between private and social returns to entrepreneurial activity. And so on.

Concluding remarks: on economists and policy advice

Carlos Diaz-Alejandro once quipped (paraphrasing Oscar Wilde) that economists are people who knew the shadow price of everything and the value of nothing. If so, the diagnostic approach that I have outlined here serves to employ them in their proper capacity. What economists are good at doing is evaluating the relative scarcity of different contributors to economic well being and the tradeoffs involved in their provision. Poor countries are poor because they are scarcely endowed with most of the determinants of prosperity. It is of little use to tell them to simply increase their endowments of these determinants across the board. It is much more productive to focus on areas where the returns are the greatest—where the shadow price of relaxing a constraint is the biggest. It is remarkable how little thinking along these lines actually goes on.when country programs are designed in IFIs and elsewhere.

A second concluding thought is the need to get away from rule-of-thumb economics when practising policy advice. Much of the Washington Consensus—in its original and augmented versions—cannot be directly deduced from proper economic analysis. Any graduate student in economics knows that liberalization, privatization, openness to trade, and the other strictures in the Washington Consensus cannot be *unconditionally* expected to produce economic benefits without a long list of unlikely conditions being satisfied (complete markets, absence of externalities, full information, etc.). The relationship between so-called "second-generation reforms" and economic analysis is even more distant. There is nothing in economic theory that should make economic technocrats think that Anglo-American institutions of corporate governance or "flexible labor markets," to pick just two examples, produce *unambiguously* superior economic performance when compared to German-style insider control or institutionalized labor markets. What passes as "state of the art" thinking on economic policy turns often to be based on some crude rules of thumb.

For both reasons, therefore, the kind of approach I have advocated here entails taking economics more seriously, not less seriously. But the economics we need is the economics of the seminar room and of professional publications, not the glib, rule-of- thumb economics that has long substituted for careful policy analysis in development policy advice, nor the type of economics that imposes the values and the preferences of the economists on unsuspecting policy makers under the guise of rigor and technical soundness.

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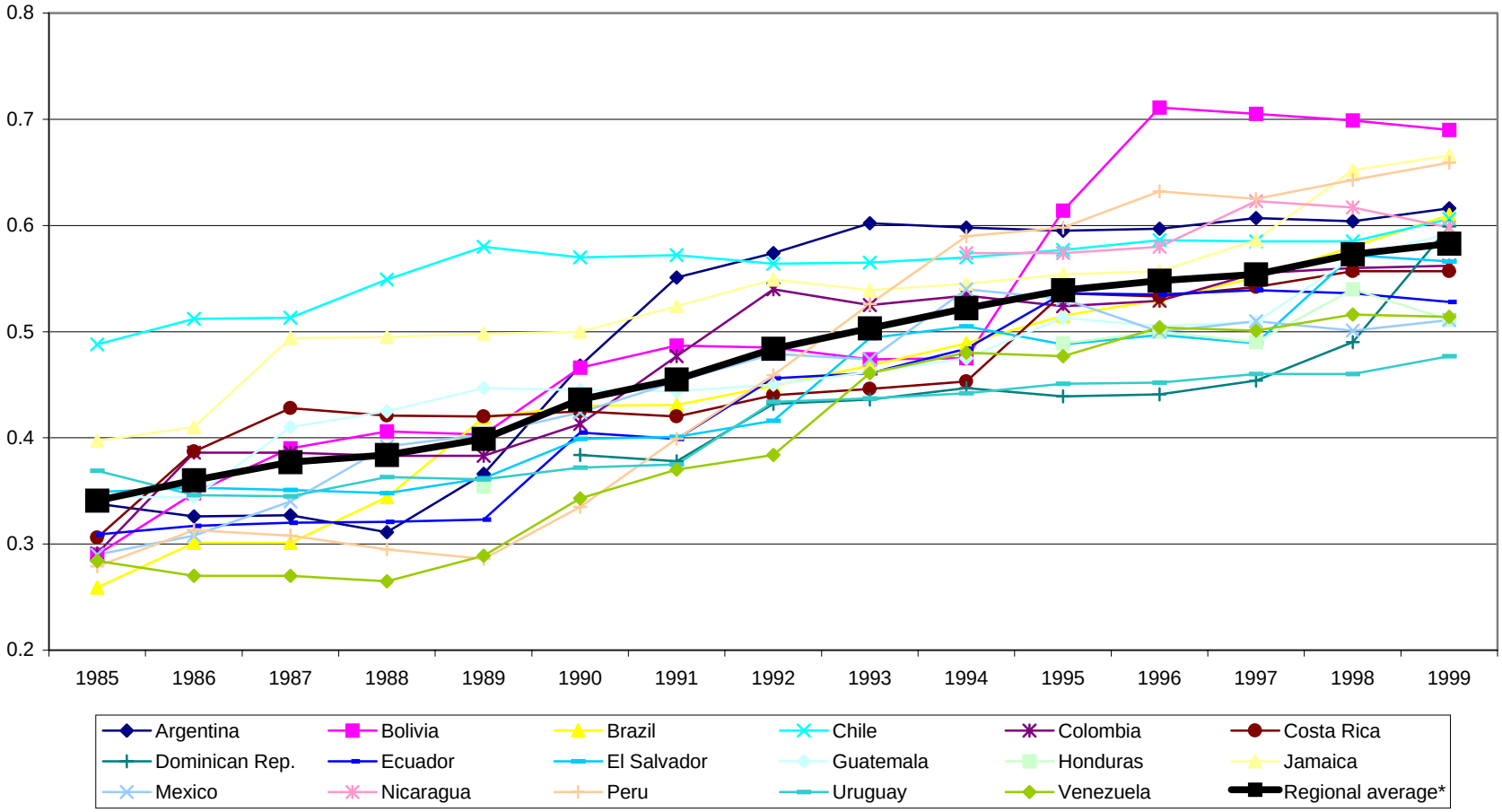
Figure 1: Structural reform index for Latin American Countries



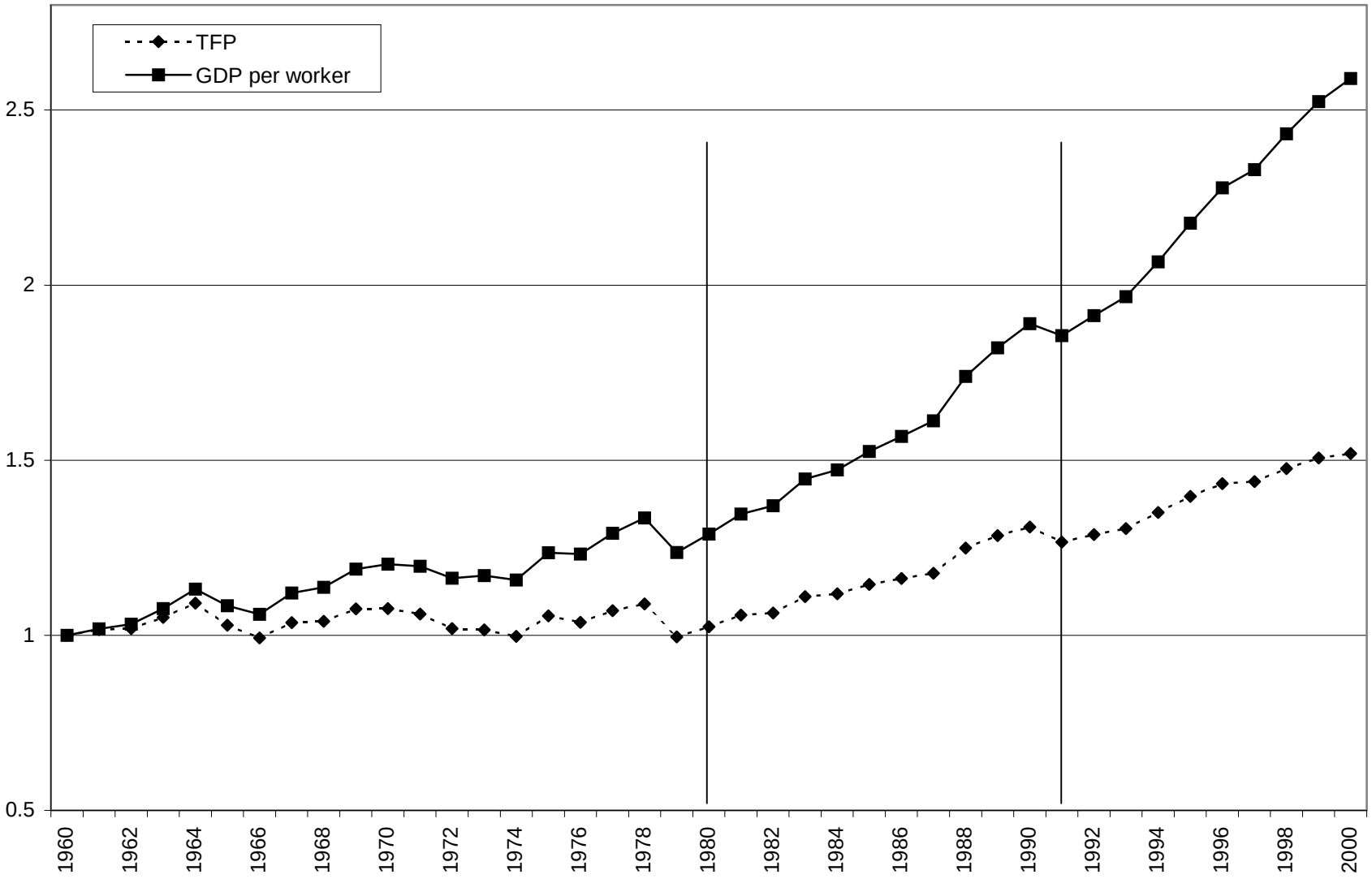
Source: Lora (2001).

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).

Figure 2: The Indian take-off



Source: Bosworth and Collins (2003)

Table 2: 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.

Source: Rodrik (2003)

Table 3: 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 4: 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 4 (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, Pritchett, and Rodrik (2004)

Table 5: Predictability of Growth Accelerations

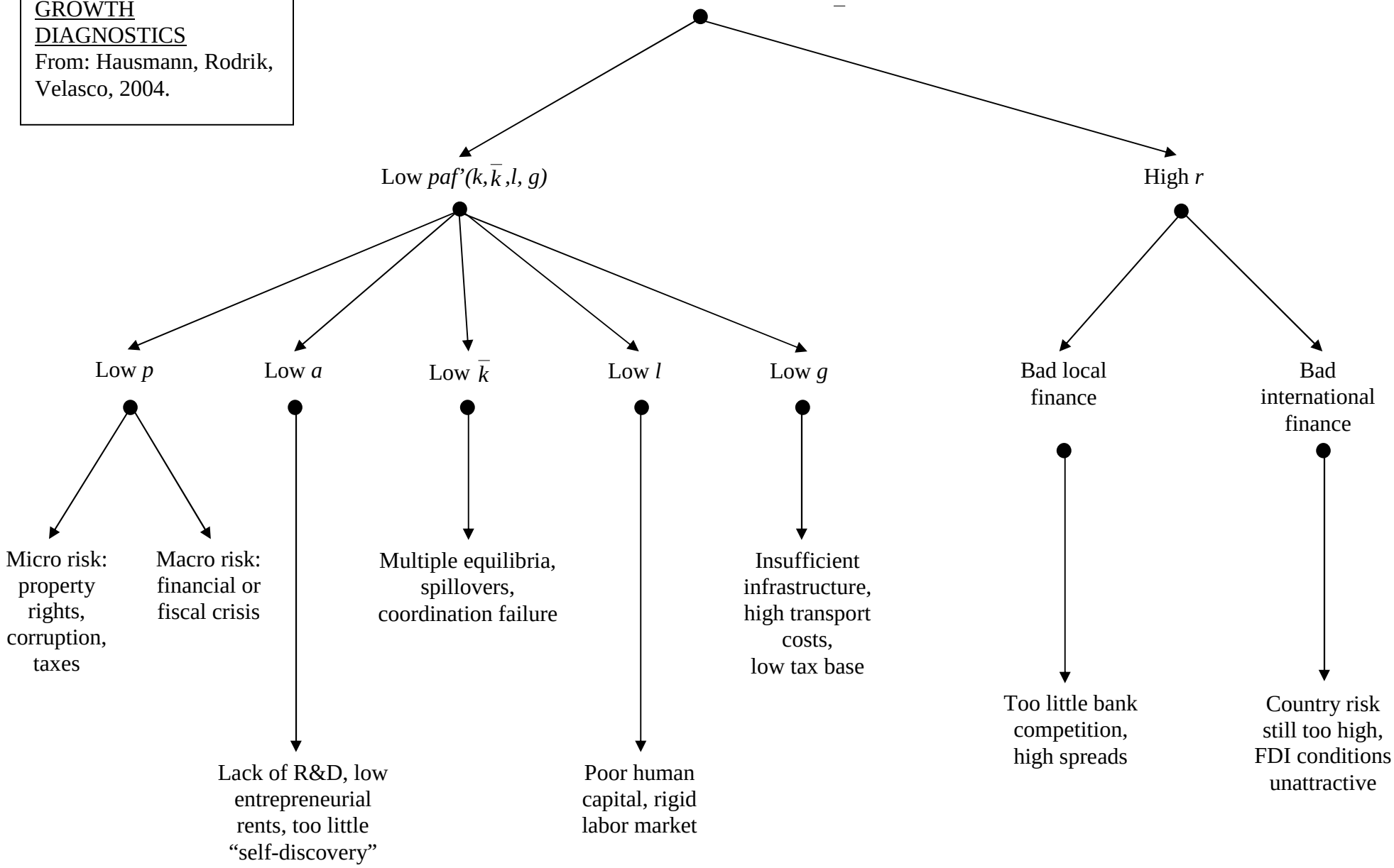
(a) All growth episodes	
Proportion of growth accelerations that are preceded or accompanied by:	
Economic liberalization	14.5%
Political regime change	50.6%
External shock	27.5%
Proportion of occurrences of column variable that is accompanied or followed by growth accelerations:	
Economic liberalization	18.2%
Political regime change	13.6%
External shock	5.1%
(b) Sustained growth episodes only	
Proportion of growth accelerations that are preceded or accompanied by:	
Economic liberalization	16.2%
Political regime change	56.8%
External shock	23.5%
Proportion of occurrences of column variable that is accompanied or followed by growth accelerations:	
Economic liberalization	9.1%
Political regime change	7.1%
External shock	1.4%

Notes: We allow for a five-year lag between a change in the underlying determinant and a growth acceleration. The timing of the growth acceleration is the three year window centered on the initiation dates shown in Table 4.

Source: Hausmann, Pritchett, and Rodrik (2004).

Figure 3: PROBLEM: LOW LEVELS OF PRIVATE INVESTMENT AND ENTREPRENEURSHIP

GROWTH DIAGNOSTICS
From: Hausmann, Rodrik, Velasco, 2004.



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p : private approbability *a* : total factor productivity *k* : individual capital stock *l* : labor input

$\bar{k}$: aggregate capital stock *g* : government provided infrastructure *r* : domestic lending rate