

**Key Economic and Social Challenges for Latin America: Perspectives from Recent Studies \***

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**Abstract**

The paper draws on recent studies at the World Bank and elsewhere to highlight four aspects of Latin America's current challenges. First, high inequality, partly related to historical relations between Europeans, indigenous and Afro-descendants, but reinforced by continuing dualism between the formal and informal sectors. Second, education, where the region suffers from a serious "secondary deficit" and weak educational quality. Third, the business climate, which exhibits continuing problems with inappropriate regulation, while infrastructure provision has suffered from cutbacks to public provision, only partly compensated for by increased private investment. Finally, Latin America's future sources of international comparative advantage: whether in natural resource-based exports or in manufacturing, the region needs to improve performance in mobilizing knowledge and technology.

## **Key Economic and Social Challenges for Latin America: Perspectives from Recent Studies**

**David de Ferranti and Anthony J. Ody**

### **INTRODUCTION**

Over roughly the past decade and a half, most countries of Latin America have made important changes to the economic model they had followed since the 1940s, an inherited model sometimes categorized in simplified terms as “state-directed inward-looking development” (or “state-led import-substituting industrialization (ISI)”). The initiative to make fundamental changes reflected a broad sense among many analysts and policy-makers that the earlier model was not serving their countries well. Among elements prompting fundamental rethinking were the crisis conditions experienced in many Latin American countries during the 1980s – including external debt crisis, hyperinflation, and macroeconomic stagnation or decline. Beyond this, it had become clear that comparator countries in some other regions in the world, including most obviously East Asia, had ridden out some of the same external shocks as Latin America (including the oil price and interest rate shocks of the 1970s and 1980s), with less trauma, and -- more broadly -- had achieved superior growth and development performance over an extended period.

The changes implemented have included substantial measures of (largely unilateral) liberalization of foreign trade and of inward foreign direct investment (FDI), and the privatization of many state-owned industries, utilities and banks. In addition, despite variations across countries and time periods, most countries have also achieved generally improved fiscal and monetary management, implemented efforts to upgrade regulation

and supervision within newly-liberalized financial sectors, and – albeit in some cases only after traumatic crises – attained increased exchange rate flexibility.

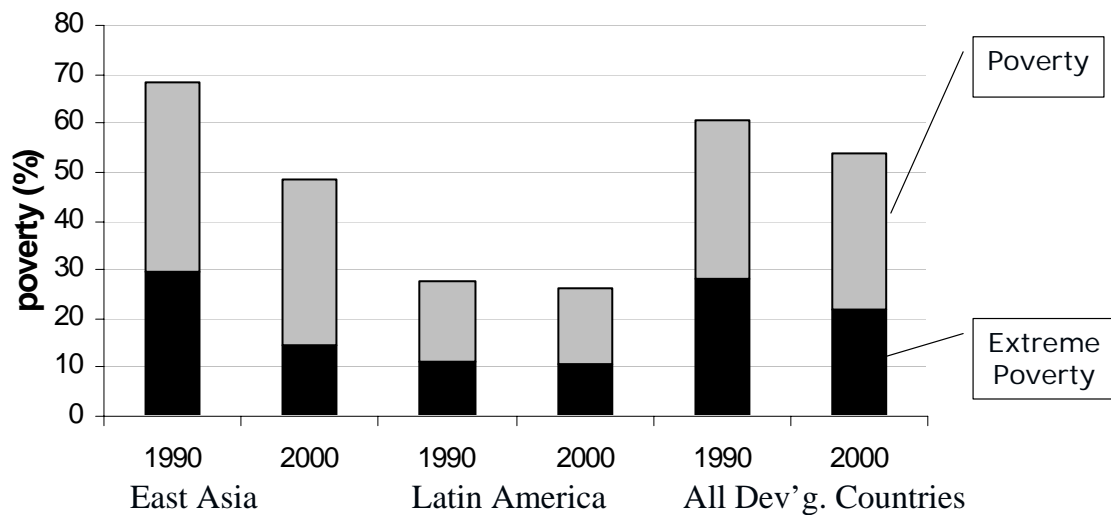
Taken together, these changes have been associated with improvements in various indicators of economic and social performance. Inflation, running at hyperinflation levels in many countries during the 1970s and 1980s, has now in most cases been reduced to single digit levels. The region has also begun to make up some of the ground lost earlier in relative shares of world trade. At a more localized level, service coverage by some of the privatized utilities (which often became leading recipients of inward FDI) has expanded to larger shares of domestic populations. This said, the overall results of the reforms have in most countries disappointed the more ambitious hopes initially held for them. Growth in per capita GDP, although generally improved from the stagnation (or worse) of the 1980s, has still in most cases been comparatively modest, and well below “miracle” rates, with only Chile matching East Asian successes on a sustained basis. A simple comparison, for example, shows average growth in per capita GDP in the region improving from 0.7 percent during 1973-90 to 1.4 percent during the 1990s (OECD, 2001).

More sophisticated comparisons, which have sought to disaggregate the impact of exogenous conditions from those of domestic policies, have generated higher estimates for the positive impact of policy changes. A careful study conducted at the World Bank, for example, concluded that “for most reforming countries [in Latin America in the 1990s] the growth contribution from structural and stabilization reforms amounted to 2.5-

3.0 percentage points [per annum]” (Loayza et al., 2002, 2003). Nonetheless, it bears repeating that such estimates of *improvements* start out from a very low base.

Meanwhile, progress in bringing down the region’s disturbingly high levels of poverty (and extreme poverty) has proved slow at best (Figure 1), and subject to reversals when the overall macro picture has turned cloudy. More encouragingly, most countries have managed to achieve sustained improvements in human development indicators, even during periods of mediocre macroeconomic performance.

**Figure 1: Poverty as a share of total population**



Source: Chen and Ravallion (2004)

In the above context of moderate gains but continuing unfulfilled hopes, the present paper will highlight selectively central aspects of some of the most important challenges that face the region. In doing so, the paper will draw to a significant degree on the findings of research studies conducted over recent years at the World Bank, primarily

under the overall direction of one of the present authors (de Ferranti), in his capacity as Regional Vice President for Latin America and the Caribbean (2000-05). The paper highlights four areas: (a) inequality, (b) education and technology, (c) the investment climate (including the provision of infrastructure), and (d) Latin American countries' international competitiveness and comparative advantage. This list does not exhaust the major issues that will critically determine the region's future progress. A more comprehensive treatment would have more to say, for example, about such issues as: (i) the determinants of aggregate savings and investment in the region, and (ii) the challenge of institutional reform and improved governance within the public sector. This said, the four areas of focus of the present article all meet the twin conditions that they are of the highest intrinsic importance and that the recent research to be cited in this article has significantly improved our understanding of the nature of the challenges involved.

## **INEQUALITY**

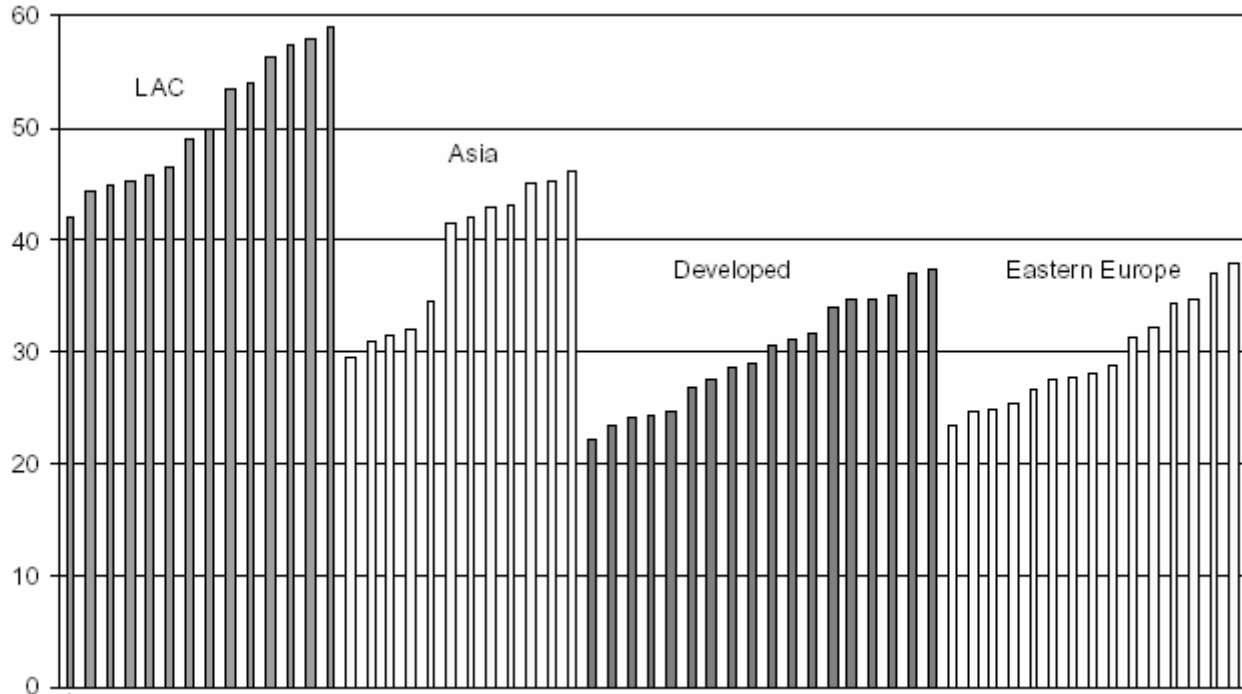
Unusually high levels of inequality by international standards represent a pervasive feature of most Latin American societies.<sup>1</sup> On average, the richest 10 percent of individuals received about 48 percent of total income in Latin America in the early 1990s; while the poorest 10 percent received just 1.6 percent of the total (comparable ratios for Asia would be 37.4 percent and 2.6 percent respectively, and for OECD nations, 29.1 percent and 2.5 percent). As seen in Figure 2 below, whose bars each show the gini coefficient measuring the concentration of income at the level of an individual

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<sup>1</sup> Except where otherwise specified, references in this section are drawn from de Ferranti et al. (2004).

country, the *most* egalitarian countries in Latin America show a degree of concentration comparable to the *least* egalitarian countries elsewhere in the world.

**Figure 2: Distribution of household per capita income, 1990s**



*Source: de Ferranti et al (2004)*

Inequality pervades not only the distribution of income (and assets), but also different individuals' access to public services, including education, health, water and other utilities, and their interactions with organs of the state (including in the sphere of law and order). The difference in average years of education between adults in the top and bottom income quintiles, for example, ranges from 5 to 9 years in different countries in the region (see also section on Education, below). Inequality also appears pervasive over time. Available data, which extend back to 1950, suggest that Latin American countries have consistently been among the most unequal internationally throughout the period.

Among the more striking features of inequality in Latin America, in fact, has been its apparently limited variance to changes in policy regime and economic environment.

Indeed, the origins of current stratification in Latin American societies must in large part be sought in long-term historical patterns. The sixteenth century European conquest of the region's pre-Colombian indigenous societies, supplemented by the introduction in selected parts of the region of African slaves, involved the creation of a range of mutually-reinforcing institutions, in labor management, land use, and political control, that consolidated the colonists' influence and wealth. In general, the subsequent achievement of independence from Europe in the early nineteenth century, and the later abolition of slavery, did relatively little to disrupt the effective control by small domestic elites and the high degree of social stratification. Even today, in countries with significant indigenous and/or Afro-descendant populations, such as Bolivia, Brazil, or Guatemala, average incomes among these groups are typically half those of their "white" counterparts.<sup>2</sup> These unequal outcomes in turn reflect a range of underlying inequalities in access to education, public services and credit, as well as unequal land distribution. They also appear in some settings to reflect continuing discrimination in job markets.

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<sup>2</sup> Note, though, that terms like "indigenous" and "Afro-descendant" do not necessarily lend themselves to unambiguous definition for purposes of quantification, due in part to widespread "mixing" between populations of different origins, but also to differences in perceptions among individuals and over time. In addition, efforts to measure these populations rigorously (e.g., within censuses) are in many countries of very recent origin. The indigenous population is often defined as those primarily speaking an indigenous rather than a European language. An alternative approach, which can yield significantly different results, favors "self-identification" by respondents. About 10 percent of the region's population reportedly identify themselves as indigenous, though the ratio is as high as 71 percent in Bolivia and 66 percent in Guatemala (de Ferranti, 2004, 78). The Inter-American Dialogue estimates a total Afro-descendant population of 120 million for Latin America including the Caribbean, or around 30 percent of the total population (IAD, 2003). It must be stressed that these two estimates are by no means mutually comparable, since the estimate for Afro-descendants, unlike the figure for the indigenous, includes large numbers who regard themselves (and are viewed by others) as being of "mixed" ancestry.



Running alongside these racial and ethnic divides, and often overlapping with them, is the dualism that characterizes many Latin American societies, and the stark contrasts between the “formal” and “informal” sectors of the economy. As argued in de Soto’s influential study of informality in Peru (de Soto, 1989), enterprises and workers functioning outside the formal sector tend to find themselves in a legal “no man’s land” in which rules and property rights are ill-defined, access to formal markets such as that for credit largely foreclosed, and relations with public sector institutions often characterized by predatory behavior (see also section on Climate for Business, below).

Beyond these widely-discussed economic aspects of dualism, though, is a division between formal and informal workers in access to public programs of social protection. The former typically have access to a range of programs such as pensions, healthcare and unemployment insurance, while the latter fall largely outside what has been described as a “truncated welfare state” (de Ferranti, 2004, 14). This limited coverage of the population by public programs is itself not unrelated to the relatively low share of fiscal revenues in GDP in most Latin American countries. The weakness of social safety nets, in turn, can be identified as contributing to the observed tendency for macroeconomic and/or financial crises to have a particularly damaging effect in the region in setting back progress in the reduction of poverty.

Why should policy analysts be concerned about Latin America’s unusually high levels of inequality? First, higher levels of inequality mean that, for any given level of average income, absolute levels of poverty and material deprivation will be higher, as will the

effort needed to reduce poverty. Second, a growing literature suggests, on the basis of empirical work, that extreme levels of inequality *per se* represent an obstacle to higher rates of economic growth. In a highly unequal society, many intrinsically talented individuals are likely to be denied access to secondary and tertiary levels of education, and to other opportunities such as credit. Inequality has also been correlated with higher levels of crime and violence (serious problems for Latin America). Finally, a system that is perceived by its own population to produce extreme inequality of opportunity (which survey data indicate is the case in Latin America) risks weakened political legitimacy, and may have difficulty taking necessary policy decisions with any degree of consensus.

Given the region's present high inequality, what are the prospects for significant change?

As far as current trends are concerned, both positive and negative elements can be identified. On the positive side, recent improvements in overall economic management have probably on balance been pro-poor, given the costs that hyperinflation and macro-financial crises alike impose on the most vulnerable groups. More profoundly, one can point to the positive implications of the region's political transformation over the past generation from domination by unelected authoritarian (frequently military) governments to the near-total reliance on elections -- more or less free and more or less competitive -- as the means for changing administrations. Democratization at the national level, together with the widespread increase in the role of elected local governments (Burki et al., 1999), has opened up increasing space for those outside traditional elites, including representatives of traditionally neglected groups like the indigenous and Afro-descendants, to have their voices heard and their concerns addressed. Thus, in Brazil, the

Lula administration (which took office in 2003) has encouraged unprecedented public discussion of educational under-performance by Afro-Brazilians and possible policy responses. Meanwhile, the political role played by organizations aspiring to represent indigenous groups has increased substantially in several Andean countries over recent years -- though it must be added that these changes have been playing out amid considerable political turbulence.

More concretely, there is evidence of at least some public programs reaching the hitherto excluded. As the reach of services like primary education and basic infrastructure has expanded increasingly closer to universal coverage, there is evidence that the distributional impact of *marginal* public expenditures has been significantly more progressive than that of *average* public spending. A forthcoming study of the region's indigenous population by two World Bank authors finds that, while gaps persist between indigenous and non-indigenous in many areas (including poverty, employment, health, and education), the gap in the average number of years of education completed, in particular, has narrowed very substantially over recent decades (Hall and Patrinos, forthcoming). This said, there is evidence to suggest that the average *quality* of education received by indigenous children may still be below that received by non-indigenous students. In a potentially encouraging finding, though, the same authors report that the number of countries offering bilingual education to indigenous children in the early grades, which has been found to improve school performance, has increased from 6 in the early 1970s to 18 currently. On a separate note, studies of relatively recently-introduced

targeted anti-poverty initiatives, specifically “conditional cash transfer” programs<sup>3</sup>, suggest that they can prove highly effective at reaching the poorest groups in the population, including the indigenous (de Ferranti et al, 2004, 277).

Despite these indicators of partial progress, it remains the case that, as indicated earlier, the overall pace of change in this area appears slow at best. One trend that may, at least temporarily, work in the direction of *increasing* inequality, has been the apparent increase in demand (and remuneration) for relatively more highly skilled workers. Some observers have related this increased demand for skills in part to the opening of Latin American economies to increased competition from more technically advanced producers in other regions. If combined with an initially inelastic supply of more skilled workers, the first-round impact of such a shift would indeed be predicted to increase income gaps. There is evidence from Chile and Mexico, however, which have a longer experience of liberalization, that such increases in wage differentials may subsequently reverse themselves (de Ferranti et al., 2002, 12).

Even on the most optimistic of interpretations, however, it would be difficult to rest a great deal of confidence purely on the continuation of current trends to produce a rapid reduction in the current extreme levels of inequality in the region. To the contrary, given the deep-seated nature of the mutually-reinforcing elements that have interacted to produce inequality up to now, determined and broad-ranging efforts appear called for to underpin decisive progress towards greater equity. One key will be to improve access to

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<sup>3</sup> A number of countries, including both Mexico and Brazil, have adopted programs that provide modest cash transfers to poor families *provided* recipients meet conditions such as keeping children in school (and, in some cases, also maintaining attendance at health clinics).

education and, in parallel, to make improvements in its quality (see also following section on Education). In parallel, there is considerable scope, given adequate political (and fiscal) will, to improve the level of public services more generally, and the coverage of basic social safety net programs, including building pragmatically on proven success stories like the conditional cash transfer programs. Beyond this, policies are needed to help make markets and infrastructure work better for ordinary people and the poor (see also the later section on the Climate for Business). Finally, special efforts may be required to help address the particular needs of historically marginalized groups, including the indigenous and Afro-descendants.

## **EDUCATION AND INNOVATION**

Whether the focus is primarily on equity, as above, or on economic dynamism and competitiveness, attention is drawn to the state of education across Latin America. It is an area in which, over the past 45 years or so, in spite of important improvements in coverage, Latin America has generally failed to keep pace with the enormous leaps forward in some of the more dynamic comparator countries around the world.<sup>4</sup> In parallel, comparative studies of technological progress also find Latin American countries generally underperforming comparators on a range of indicators of innovation.

### ***Education***

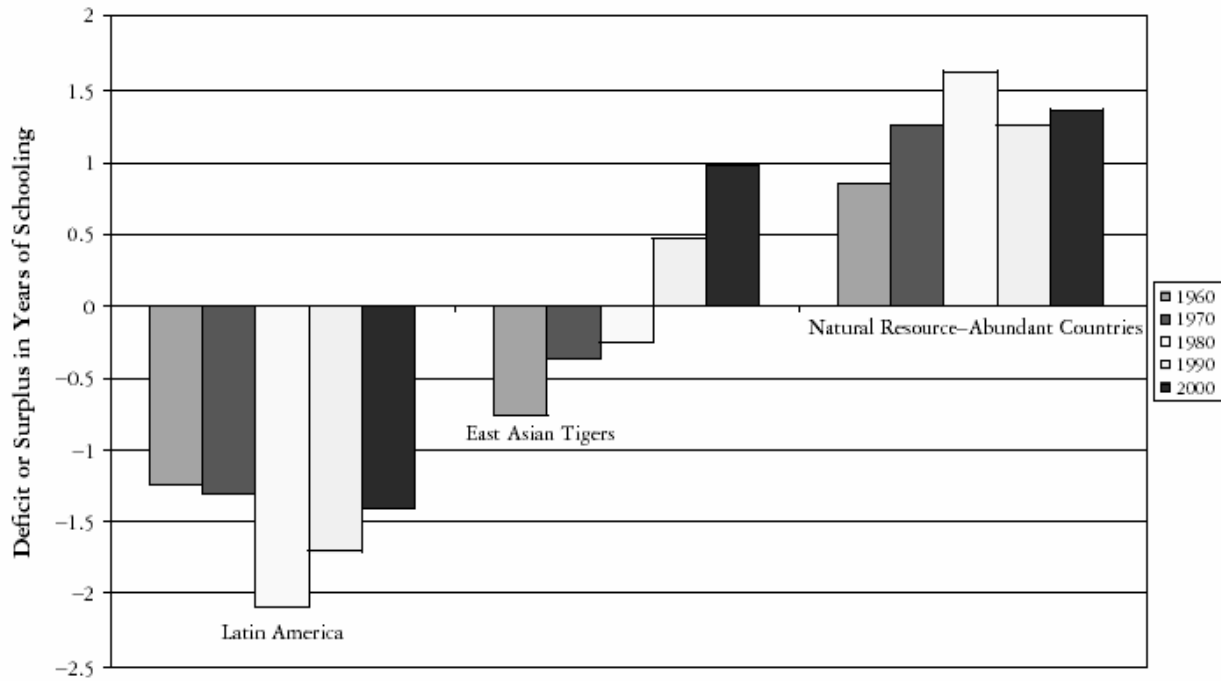
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<sup>4</sup> Except where otherwise specified, references in this section are drawn from de Ferranti et al. (2003). The comparative work that is discussed here compared Latin American countries primarily to two groups of comparators: (i) the “East Asian tigers” comprising Hong Kong (China), Korea, Malaysia, and Singapore, and (ii) a group of “natural resource-abundant countries” comprising Canada, Australia, New Zealand, Finland, Norway, and Sweden.

We start with education. There has been some progress at the quantitative level. Over the past two decades, for example, the average years of schooling of Latin America's adult population (25 and older), i.e., the *stock* of educational skills in the population at large, increased by 1.7 years (from 4.1 to 5.8 years). At the level of *flows*, in other words the educational level of children actually passing through the school age years during the period, most Latin American countries came close to universal coverage of at least some primary school attendance for all children. Earlier gender gaps in school attendance were also narrowed or eliminated over the period.

Despite these gains, however, Latin American countries have tended to fall behind the progress in comparable countries elsewhere. When mean years of schooling in the adult population are regressed against per capita GDP for 105 countries worldwide, for example, Latin American countries on average show a *deficit* of 1.4 years of schooling per person, compared to what would be predicted based on their level of per capita GDP. The East Asian tigers, by contrast, on average show 1.0 years *more* education than would be predicted, while the natural resource-abundant comparator countries show an average of 1.4 years more. As Figure 3 illustrates, the present situation reflects the reversal of an earlier education deficit in East Asia in 1960, while the deficit compared to GDP in Latin America *increased* slightly over the same period.

**Figure 3: Deficits and surpluses in mean years of schooling  
(compared to levels predicted by per capita GDP)**



*Source: de Ferranti et al (2003)*

Comparative studies further indicate that the *distribution* of education within much of Latin America is typically less equitable than within the comparator groups. Table 1 shows the proportion of adults with, respectively, (i) no education, (ii) at least some primary school, (iii) some secondary school, and (iv) some tertiary education, for Latin America and the two comparator groups.

**Table 1: Educational attainment among adult population**

	FRACTION OF THE ADULT POPULATION				
	YEARS OF SCHOOLING	NO SCHOOL	SOME PRIMARY	SOME SECONDARY	SOME TERTIARY
<b>Latin America</b>	<b>5.8</b>	<b>17.9</b>	<b>50.1</b>	<b>20.3</b>	<b>11.8</b>
Argentina	8.5	5.8	49.6	24.9	19.7
Bolivia	5.5	1.4	39.8	46.9	11.9
Brazil	4.6	21.3	56.8	13.5	8.4
Chile	7.9	5.3	42.9	36.0	15.8
Colombia	5.0	19.8	48.9	21.4	9.9
Costa Rica	6.0	9.4	60.7	11.3	18.6
Cuba	7.8	5.8	40.3	42.6	11.3
Dominican Republic	5.2	25.6	46.8	13.1	14.5
Ecuador	6.5	17.8	45.2	18.3	18.7
El Salvador	4.5	35.0	45.6	8.8	10.6
Guatemala	3.1	47.1	37.6	9.5	5.8
Haiti	2.7	54.4	32.3	12.3	1.0
Honduras	4.1	25.9	57.0	10.6	6.5
Jamaica	5.2	3.4	54.5	38.0	4.1
Mexico	6.7	12.4	47.3	29.0	11.3
Nicaragua	4.4	31.6	43.0	16.5	8.9
Panama	7.9	11.3	40.4	28.5	19.8
Paraguay	5.7	9.8	63.8	18.1	8.3
Peru	7.3	13.8	35.7	28.1	22.4
Trinidad and Tobago	7.6	5.1	46.3	44.1	4.5
Uruguay	7.3	3.2	52.2	32.1	12.5
Venezuela	5.6	15.7	56.6	9.7	18.0
<b>East Asian tigers</b>	<b>9.7</b>	<b>10.2</b>	<b>23.5</b>	<b>47.4</b>	<b>18.9</b>
Hong Kong (China)	9.5	10.7	26.6	47.4	15.3
Korea	10.5	8.0	16.7	49.5	25.8
Malaysia	7.9	13.9	35.6	43.0	7.5
Singapore	8.1	12.6	28.3	48.5	10.6
<b>Natural resource–abundant countries</b>	<b>11.1</b>	<b>1.7</b>	<b>21.1</b>	<b>38.6</b>	<b>38.7</b>
Australia	10.6	2.2	24.4	43.6	29.8
Canada	11.4	1.7	18.6	26.6	53.0
Finland	10.1	0.4	29.2	47.3	23.2
New Zealand	11.5	0.0	32.2	26.3	41.6
Norway	11.9	1.2	11.5	62.5	24.8
Sweden	11.4	2.0	17.7	57.2	23.1

*Note:* Regional averages are weighted by the population aged 25 or older in a country.

*Source: de Ferranti et al (2003)*

Overall, Latin American countries tend to have larger proportions of their adult populations with either no formal education at all or only primary schooling. More unexpected, perhaps, is a broader tendency for countries in Latin America to exhibit educational distributions that appear “unbalanced” in terms of the relationship between the different levels of education, including the relationship between the secondary and the tertiary levels. Compared to international norms, much of Latin America can be said to suffer from a massive “secondary deficit” – with abnormally low proportions of the

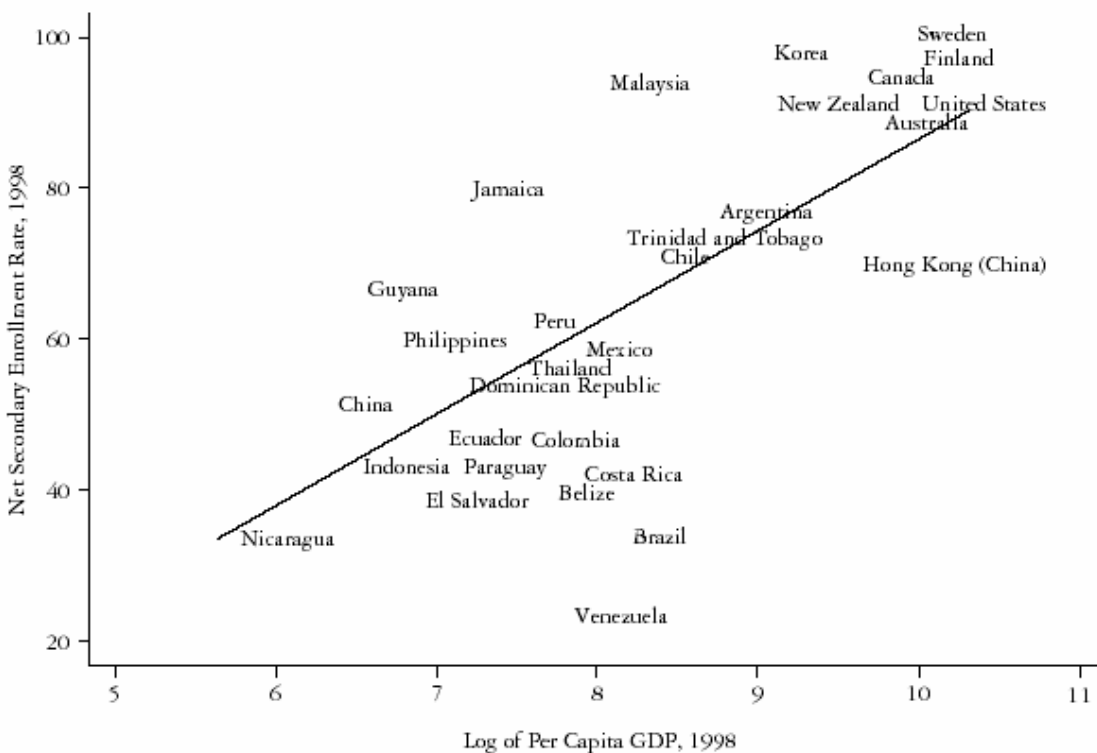


population achieving some secondary education without going on to the university level.

This secondary deficit, relative to what would be predicted by levels of per capita GDP, is estimated at an average 18.7 percent of the population for Latin America as a whole.

Figure 4 below illustrates secondary deficits (or surpluses) for individual countries.

**Figure 4: Surpluses and deficits in secondary enrollment  
(compared to levels predicted by per capita GDP)**



*Note:* Secondary enrollment data for Korea and Nicaragua are for 1997; for Venezuela are for 1996; for Colombia, Guyana, Hong Kong (China) and the Philippines are for 1995; and for Indonesia are for 1994. All other data are for 1998. The net secondary enrollment for Brazil has been calculated from the PNAD household surveys. Net enrollment rates for all other countries are from UNESCO. Countries with net secondary enrollment ratios above 100 were not included in the regression. The line corresponds to the predicted net secondary enrollment rate from a weighted regression on log per capita GDP and a constant, with the weights given by the population in a country. The sample size for the regression is 116 countries. Some country names have been omitted to make the figure more legible.

*Source: de Ferranti et al (2003)*

By comparison to the secondary deficit prevailing in much of the region, the situation at the tertiary level is less clear cut. Some countries show higher levels of tertiary education than would be predicted by GDP, some lower. The average picture is one of a deficit, though substantially smaller than at secondary level (10 percent).

Why should one be concerned about Latin America's deficit in secondary education?

The most obvious concern – and one of great economic importance -- is that perhaps as much as three quarters of the region's potential labor force possesses at most only a few years of basic primary education. As a result, many can be expected to have limited capacity and flexibility readily to acquire new skills: qualities that employers seek in a workplace that needs constantly to change to stay competitive, and qualities which are generally recognized to be fostered by at least several years of secondary education.

Beyond this, the relatively narrow field of secondary graduates relative to the size of the tertiary sector likely implies that many of these societies' most able children will not be among those progressing to higher education. More broadly, international experience indicates that successful expansions of educational systems, whether in the United States between 1850 and 1950, or in Europe and East Asia in more recent years, have been undertaken in a balanced and "bottom up" manner, rather than in the unbalanced manner that characterizes much of Latin America today.

Connections between Latin America's high levels of inequality overall and the unequal and imbalanced nature of educational development appear to run in both directions. It is natural to suggest that families in the (relatively small) upper end of the income

distribution are well-placed to obtain strong allocations of resources for their children's education -- whether through their own private resources or their influence over public policies and patterns of government spending -- while the larger proportion of the population settles for much less. As noted earlier, this tends to be true *a fortiori* for groups like the indigenous and Afro-descendants. In turn, unequal educational distribution clearly serves as an important channel for perpetuating inequality across generations.

Thus far, discussion has focused essentially on quantitative indicators. Beyond this, indications of the *qualitative* dimension of education give considerable cause for concern. On the relatively rare occasions that students from Latin American countries have participated in international standardized tests of achievement, they have tended to score at or close to the bottom of the comparator group. Thus, eighth-grade students from Colombia and Chile, taking part in, respectively, the 1995 and 1998 rounds of the Third International Math and Science Study (TIMSS), were among the weakest participants internationally, performing substantially worse than students from countries at comparable levels of development, and on a par with students from much poorer countries. Likewise, fifteen-year-olds from Brazil and Mexico were the two worst performing groups in the OECD-sponsored Program for International Student Assessment (PISA).<sup>5</sup>

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<sup>5</sup> Some additional insight into comparative standards at the primary level *within* Latin America, including for those countries that have not taken part in global standardized tests, is provided by the OREAL-UNESCO exams. These test third and fourth graders on language and math skills in 12 Latin American countries (but do not include any countries outside the region). For the most part, the tests show relatively narrow differences in achievement at this early level between the different countries. The one exception is Cuba, which scores significantly better than the other participating countries.

It is not entirely obvious that the weaknesses identified in Latin American educational systems can be attributed to inadequate levels of aggregate expenditure. On the face of it, World Bank data suggest that Latin American governments may on average spend a higher proportion of GDP on education than East Asian countries: an average 4.37 percent of GDP in 1995 for 24 Latin American and Caribbean countries, compared to 2.60 percent for 7 East Asian countries (de Ferranti et al. (2003, 84), though it is not clear that these data are fully comparable in their coverage across different countries. Going beyond totals, there are indications that the *composition* of expenditures in Latin America is frequently skewed – in favor of the tertiary sector, for example, and/or against primary and secondary schools in rural areas and poorer regions or neighborhoods. Beyond this, though, a notable finding is the relatively weak relationship across different countries within Latin America between levels of expenditure and educational achievements (85).

In this context, without downplaying the role which improved financial allocations (including more equitable distributions across schools) may be able to play in improving access to and availability of education (and, under certain circumstances, its quality too), analysts stress the need to look at other elements of educational systems as well. This includes the incentives and opportunities that apply to students, their families, and their communities; to teachers themselves and their associations and unions; to principals and officials; to potential or actual private or non-governmental providers of education; and to employers as interested “consumers” of the “output” of the educational system. Some of

the most successful recent efforts to improve educational outcomes actively seek to change incentives and often to involve actors beyond direct educational providers.

Latin American countries are experimenting with a wide range of reform designs in the educational system. Reforms that seem to have helped increase the number of children attending school include the “conditional cash transfers” (discussed earlier) to poor families that keep their children in school (e.g., Brazil, Mexico), as well as “capitation” programs under which public spending “follows the student,” thus providing incentives to school districts to boost school attendance (e.g., Brazil). The EDUCO program in El Salvador and comparable programs elsewhere, which increase the participation of community and parent groups in the management of local primary schools, are credited with improving levels of registration, reducing student (and teacher) absences, and improving learning outcomes. More generally, though, substantial improvements in *qualitative* indicators have been more difficult to achieve than quantitative increases in attendance. Experiments are under way with variants of performance-based financing for schools and/or individual teachers in Chile and Mexico, and with school vouchers in Chile, though full consensus has yet to emerge on the impact of these programs on educational outcomes, or their potential replicability across different countries.

### ***Innovation***

As noted earlier, the quality of the educational system is one of the elements contributing to the productivity of Latin America’s workforce, including the ability of workers to

adapt to changes in technology. As such, education forms part of a larger set of concerns about the capacity of Latin American countries to manage innovation effectively.

Aggregate measures of productivity growth are one warning sign that Latin American countries have, on average, had difficulties in taking full advantage of the economic potential of new technologies. During the so-called “lost decade” of the 1980s, when much of Latin America was mired in macroeconomic stagnation, the GDP-weighted growth of total factor productivity (TFP) in the region was, perhaps not surprisingly, negative (minus 0.93 percent per annum); but even in the 1990s, with the impact of reforms and economic recovery, the annual rate of improvement was a relatively modest 0.45 percent. This compares to annual TFP growth for the “East Asian Tigers” of 2.18 percent in the 1980s and 1.42 percent in the 1990s, and for the set of “natural resource-abundant countries” of 0.76 percent and 0.78 percent respectively (de Ferranti et al., 2003, 25). Other indicators of innovation, such as levels of research spending per worker, number of patents filed, or degree of computer penetration, tell a similar story.

Analysis of factors associated with stronger or weaker innovation indicates that the extent of competitive pressure experienced is positively correlated with the effort put into innovation. In this sense, the opening of Latin American markets to greater international competition via trade and FDI, together with specific measures of domestic market liberalization (e.g., in the area of telecommunications), can be seen as important positive steps, which may well have played a significant role in the productivity improvements seen in the 1990s. By themselves, however, these reforms could not be expected to close the gaps in technological performance between Latin American countries and their

comparators. As seen already, the educational systems in the region do not compare with those in potential competitors. More broadly, analysts find that, in spite of success stories in some specific sectors and countries, much of Latin America still has a way to go in developing effective “learning networks” that link universities, research institutions, and enterprises in a common endeavor to apply the latest thinking to the practical challenges of the workplace. Developing improved incentive patterns and links between these different players is thus seen as a priority for countries in the region (this set of issues is explored in greater detail in de Ferranti et al., 2003).

## **CLIMATE FOR BUSINESS**

### *Regulatory climate*

Clearly related to the challenges discussed above is the full range of factors that bear on the business environment for entrepreneurs, large and small, domestic and foreign, within the countries of the region. Analyses point to poorly-defined property rights, complex and inconsistently applied regulations, and unpredictable judicial systems. In many cases, smaller enterprises may suffer worse; as noted earlier, many of these function in the legally ambiguous environment of the informal sector.

As mentioned earlier, an influential study of the business climate for small operators in the informal sector was that undertaken by de Soto and his associates in Lima, Peru (de Soto, 1989). In a much-quoted experiment, the researchers undertook to establish a small

firm (specifically, a small, unincorporated, single-proprietor garment factory) in full compliance with all applicable laws and regulations (and paying bribes only when failure to do so would unavoidably bring the process to a halt<sup>6</sup>). They found that the process absorbed 289 person-days of their time to comply with the 11 different permit requirements, a cash outlay of \$194.40, and a total cost (allowing for the opportunity value of time) of around \$1,231, or 32 times the monthly minimum wage.

De Soto's work in Peru has helped inspire others to take up some of the same issues, not only elsewhere in Latin America but on a global basis. Inter alia, the World Bank Group has to date undertaken Investment Climate Surveys (ICS) in 56 countries, with coverage of a total of 26,000 firms of all sizes. In parallel, the Bank's recently-launched annual "Doing Business" series (commencing with "Doing Business in 2004") assesses the complexities and costs of undertaking various key business functions (e.g., starting a business, hiring and firing workers, obtaining a loan, enforcing a contract, etc.) across more than 130 countries, based on the estimates of credible experts in local business and legal conditions.<sup>7</sup>

These two complementary sources provide rich comparative country-level data on business climate on a global basis. They have helped to demonstrate that many of the issues raised by de Soto's work in Peru resonate in many countries across the region and the world. At the broadest level, these sources provide empirical justification for such

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<sup>6</sup> The researchers were asked for bribes on ten occasions. On eight, they managed -- with some difficulty -- to circumvent the need to pay; on two, they could see no alternative to paying the bribe.

<sup>7</sup> For the ICS, see the World Bank's ICS website; the Doing Business series is to be an annual publication (see World Bank, 2004).



otherwise apparently sweeping generalizations as (a) “poor countries regulate business the most,” (b) “heavier regulation is associated with informality and corruption,” (c) “more regulation is associated with higher costs and delays,” and (d) “more rigid employment regulation is associated with higher female unemployment.” But the benchmarking process is also helping to turn up more practical ways in which countries may, with the necessary will, be able to learn positive lessons from one another’s experiences: e.g., “credit bureaus are associated with more credit” and “[requirements for the involvement of] notaries are bottlenecks to business start-up.”

Both the ICS exercise and the “Doing Business” analysis identify many Latin American countries as among those with serious issues of inappropriate regulatory climates (though it should be emphasized that such issues are far from being unique to Latin America, and indeed can be found in all regions). According to the ICS, for example, “Brazil has the highest percentage of firms that say processes for obtaining business licenses and permits present serious obstacles to doing business.” Meanwhile, “Doing Business in 2004,” records that “in Bolivia, one of the most heavily regulated economies in the world, an estimated 82 percent of business activity takes place in the informal sector”.

As noted earlier, these studies can also offer positive lessons and reinforcement to countries that are sufficiently motivated to take on the vested interests whose activities lie at the heart of many of the problems identified. Honduras and Jamaica, for example, are reported as having significantly simplified business registration procedures; Chile, Colombia and Uruguay, as having eased excessive regulation of the labor market.

Mexico is identified as a leader in the simplification of debt collection procedures; and Colombia is singled out in the 2005 edition of “Doing Business” as one of the countries that had made the greatest improvement in business climate over the previous year. This said, it should be clear that the long-term challenge of improving the regulatory climate is not, in general, as simple as changing regulations with the stroke of a pen. The orientation and culture of the public sector will need to be redirected in fundamental ways if the kind of self-serving behavior that underlies most inappropriate regulatory conduct is not to re-emerge after each effort at regulatory simplification and reform.<sup>8</sup>

### *Infrastructure*

Costs of doing business also reflect the state of physical infrastructure within the region.<sup>9</sup> Overall, coverage for most infrastructure services has improved significantly across the region over the past two decades. Improvements have been especially notable in the areas of telephone service (fixed line, but also very strikingly cellular), and also electricity, and water and sanitation; however, there has generally been little improvement in coverage in transportation (roads, ports, and railways). Comparisons with other middle income countries also produce mixed results. Latin America does relatively well compared to an average of middle income countries (and to China) in the coverage of water and sanitation; while its superior performance in expanding access to cellular phones more-or-less compensates for less extensive fixed line coverage. By contrast, coverage of electric power remains well behind the comparators, and road

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<sup>8</sup> On the challenge of public sector reform, which this paper only touches on lightly, see Burki et al. (1998).

<sup>9</sup> Except where otherwise specified, references in this section are drawn from Fay and Morrison (2005).

coverage also appears inferior (though cross-country comparisons in this area are complicated by differences in topography and population density).

This rather mixed picture notwithstanding, there are indications that, in overall terms, deficiencies in the quantity and quality of infrastructure represent important constraints to productivity in the region. In responses to World Bank Investment Climate Surveys, an average of 55 percent of firms in Latin America cites infrastructure deficiencies (power, telecommunications, and/or transportation) as a major or severe obstacle to the operation and growth of their business. This proportion is comparable to that seen in the Middle East and North Africa, and represents the highest level of concern across regions; on average, less than 20 percent of respondents in East Asia express comparable concern over infrastructure. Microeconomic studies find that logistics costs for Latin American firms are well above OECD averages. Some recent macroeconomic studies suggest that feasible improvements to infrastructure could go a substantial way to raising typical growth rates in the region, as well as to improving living standards directly.

In reviewing some of the key factors involved in recent Latin American infrastructure performance, we find a mixture of forces that have pushed in conflicting directions. The fiscal adjustment faced by Latin American countries, as a result of the macroeconomic crises of the 1980s and subsequent years, fell especially heavily upon public investments in general, and public investment in infrastructure in particular (Fay and Morrison, 2005, 18). As a share of GDP, for example, public infrastructure investment fell between 1980-84 and 1995-98 by 1.98 percentage points in Mexico, and by 3.08 percentage points in

Brazil. However, Latin American countries managed during most of the 1990s to compensate at least partially for these drops in public investments by becoming leaders on a worldwide basis in the attraction of private infrastructure investment. Altogether, some 48 percent of the total \$786 billion of private participation in developing country infrastructure during 1990-2003 went to Latin America.

In evaluating this increased private provision of infrastructure in the region, the analyst confronts a paradox. Most analytical studies tend to point to generally quite positive outcomes, in the shape of broadened coverage of services (including better access by the poor), improved operational efficiency and service quality, in some cases lower costs to consumers (though by no means always, at least in part because earlier arrangements often involved heavy implicit subsidies). Yet in parallel, *perceptions* of private provisions on the part of public opinion have in many countries moved sharply in a negative direction over recent years, apparently reflecting concerns over such issues as the transparency (or lack thereof) of bidding arrangements, frequent contract renegotiations, selective price rises and immediate direct job losses in some utilities.

If public provision has suffered from poor “public relations” within many of the host countries, simultaneously “emerging markets” have lost favor among international investors, in part due to renewed macroeconomic instability during the late 1990s and early 2000s, as well as increased awareness of regulatory complexities. Total investment in infrastructure projects with private participation dropped in Latin America from a peak of \$70.8 billion in 1998 to \$15.7 billion in 2003. As data for 2004 start to become

available, they show some signs of at least a partial upturn in private investment in infrastructure in the region.<sup>10</sup> The point remains that Latin American countries face significant challenges in any effort to resume addressing their infrastructure gaps by whatever combination of public, private and mixed provision – both substantive challenges in the design of incentives and regulatory systems; fiscal and cost-recovery challenges, especially in the case of primarily public provision; and also to some degree political and communications challenges as regards the current widespread adverse public perceptions of private provision within the region.

## **LATIN AMERICA AND THE WORLD**

Having opened their economies decisively to international trade, Latin Americans face new concerns about how they will thrive in a globalizing world. Where will their future comparative advantage lie? Should they see China's emergence as a cause for concern, or as a source of enormous opportunities?<sup>11</sup>

One of the features of the import-substituting industrialization (ISI) era in Latin America was a whole range of policy measures that discriminated against sectors closely related to the exploitation of natural resources (agriculture, mining, etc.). These incentives, and the policy of promoting manufacturing which they supported, depended for much of their intellectual support on the work of analysts, like the late Raul Prebisch, who were

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<sup>10</sup> See World Bank (2005), which reports a modest revival in 2004 within the water and sewerage sector, albeit concentrated in a handful of countries. Comparable data for other sectors were not yet available when the present article was finalized for publication.

<sup>11</sup> On China and Latin America, see especially Inter-American Development Bank (forthcoming).

pessimistic both about long-term price prospects for commodities, and about the potential for significant productivity improvement in primary sectors. For many years, analysts have been aware of some of the distortions created by high levels of protection for favored manufacturing sectors, and – as noted earlier – policy-makers have gone a considerable way toward cutting back such protection. Beyond this, recent analytic work has also exposed earlier assumptions about natural-resource based development to more critical scrutiny, demonstrating both that Prebisch’s analysis of long-term price trends was flawed, and also that commodity-based sectors can, with appropriate efforts at applied research, prove every bit as technologically dynamic as manufacturing.<sup>12</sup>

Indeed, natural resources, whether primarily agricultural or mineral, are likely to continue to provide a major source of comparative advantage for many of the region’s economies. Southern cone economies such as Brazil, Argentina and Uruguay, for example, would be among the main winners from any dramatic liberalization in world agricultural trade that might emerge from the Doha Round.<sup>13</sup> Minerals – metals and/or hydrocarbons – are key resources for many of the Andean economies, among others. Given the Chinese economy’s highly constrained domestic availability of cultivable land and of most mineral resources, China’s recent dramatic growth has been highly intensive in imports of mineral and agricultural raw materials. This has been very good news for Latin American economies with endowments in these areas, and future prospects appear encouraging for this type of trade.

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<sup>12</sup> Except where otherwise specified, references in this section are drawn from de Ferranti et al. (2002).

<sup>13</sup> On Doha, see World Bank (2003), supplemented by other editions of this annual publication since 2002.

The recent analytical work cited above points to the importance of developing improved “learning networks” for the region’s key natural resource-based sectors. It is ironic, for example, that a mining corporation from Australia, a country that entered the mining industry far later than Chile, was responsible for discovering the largest copper deposit in Chile. Yet the irony highlights the more effective learning networks that Australia has developed within the mining sector – networks that Latin American countries need to emulate, not just in mining, but across the key sectors of their economies.

But countries in the region do not all share the same resource endowments or opportunities. Other export models, less closely based on natural resources, are also being explored by various countries in the region. Under NAFTA, Mexico has substantially expanded its exports of manufactured and assembled items to the US, and other countries in the Caribbean basin and Central America hope to take similar advantage of their proximity to the US market. More selectively, both Costa Rica and Chile have sought to make improved education and technology work to their benefit – Costa Rica in its attraction of Intel and related technology investments, Chile *inter alia* by adding value and moving up-market with many of its natural resource based exports.

Overall, Latin Americans increasingly recognize that they will not be able to compete in fields like manufacturing and assembly with countries like China purely on the basis of labor costs. This in turn places an added premium on efforts to raise productivity through improved education, a better business climate, and enhanced infrastructure -- all issues

this paper has sought to address -- and to develop niche markets that take advantage of Latin American countries' locational and other advantages.

## **CLOSING OBSERVATIONS**

Without purporting to achieve comprehensive coverage of all the policy issues that Latin American countries confront, the above discussion has attempted to highlight a few central aspects of the challenges facing the region. How decision-makers address these challenges will go a long way to determining how their countries fare. Each of the challenges is, in part at least, "political" in nature, with potentially important implications for how different groups interact in the future.

Some of these challenges pose special quandaries for what some may call the elites of the countries, but which are perhaps better described as the "more advantaged groups." By this, we refer to all those who reap advantages, compared to the broad mass of their fellow citizens, from the current structure of society and the present design of institutions. This includes the more traditional concept of the elite – the politically influential large businessman or farmer, for example. But the circle of the "advantaged" is wider than this. Compared to the broad mass of Brazilians, for example, the "advantaged" may include the Brazilian civil servant, even if in a relatively lowly position, who enjoys effective life tenure and a generous state-provided pension. Indeed, in many countries in the region, almost anyone holding a "formal" sector job, with its access to socially-provided benefits, may be considered advantaged by local standards.



If Latin American countries are to break out of the “low-level equilibria” portrayed in this paper – comparatively slow growth; high poverty, inequality, and informality; weak educational levels; slow technological progress; unsure future comparative advantage – with potential long-run gains to their societies as a whole, they will need inter alia to find more effective ways to lower some of the barriers which today divide their populations into more and less advantaged groups – indigenous (or black) and “white,” highly educated and poorly educated, formal and informal. This will call for finding ways to overcome and disarm the fears and potential resistance of some who currently benefit from being on the more advantaged side of those divisions. That, in turn, will provide a fundamental test of the political capabilities within each of these societies.

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