CHAPTER 1

From Vicious to Virtuous Circles

That raising income levels alleviates poverty, and that economic growth can be more or less effective in doing so, is well known and has received renewed attention in the search for pro-poor growth. Less well explored is the reverse channel: that poverty may, in fact, be part of the reason for a country's poor growth performance. This more elaborated view of the development process opens the door to the existence of vicious circles in which low growth results in high poverty and high poverty in turn results in low growth. This report is about the existence of those vicious circles in Latin America and about the ways and means to convert them into virtuous circles in which poverty reduction and high growth reinforce each other.

LATIN AMERICA'S TWIN DISAPPOINTMENTS OF relatively weak economic growth and persistent poverty and inequality are longstanding and intimately related. That raising income levels alleviates poverty, and that economic growth can be more or less effective in doing so, is well known and has received significant attention in the search for pro-poor growth. Less well explored is the reverse channel—poverty may, in fact, be part of the reason for a region's poor growth performance, creating vicious circles where low growth results in high poverty and high poverty in turn results in low growth. This report is about finding ways of converting this negative cycle into a virtuous circle of poverty reduction, in which broad-based attacks on poverty feed back into higher growth that in turn reduces poverty.

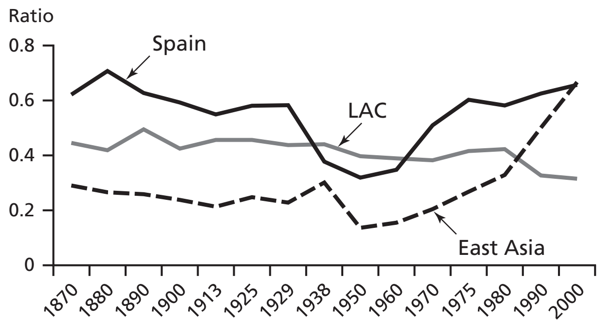
Latin America's economic performance in the last 50 years has been disappointing. Growth lagged behind core countries of the OECD (Organisation for Economic Co-operation and Development), at a time when East Asia and Spain, the *madre patria* on the periphery of Europe, were quickly catching up (figure 1.1). Income inequality has remained very high in Latin America over the past 50 years (figure 1.2), posing a double impediment to poverty reduction. First, had growth been accompanied by reduced inequality, it would have been more pro-poor. Second, even when inequality remains unchanged, economic growth is less effective in reducing poverty in countries with less equal distributions of income: To attain the same reduction of poverty, unequal countries must grow more than more equal ones. Given the region's acute growth divergence during the lost decade of the 1980s and the slowdown from 1998 to 2003, as well as lack of progress on the inequality front, it is not surprising that income poverty has been so persistent since 1980 (figure 1.3). Though the report discusses important caveats in traditional comparisons across countries and across time, it remains true that, with the exception of Chile, there has been little poverty reduction beyond the gains of the 1950–80 period, and in many countries growth has not been especially pro-poor.

Poverty as a multidimensional and dynamic concept

These conclusions broadly hold when a broader view of poverty and welfare is taken (chapter 2). As the literature increasingly stresses, poverty is a concept that spans a range of dimensions, such as health, mortality, and security, that may be uncorrelated with conventional measures of income poverty. Further, a complete concept of well-being needs to

FIGURE 1.1

Per capita income relative to the OECD, 1870–2000

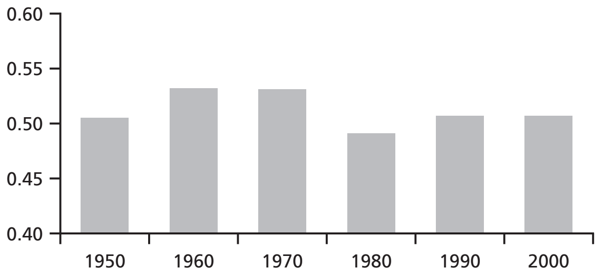


Source: Authors' calculations based on Prados de la Escosura (2005) and Maddison (2005).

Note: LAC = Argentina, Brazil, Chile, Mexico, República Bolivariana de Venezuela, and Uruguay. East Asia = South Korea, Taiwan (China), Hong Kong (China), and Singapore.

FIGURE 1.2

Gini coefficient for Latin America, 1950–2000

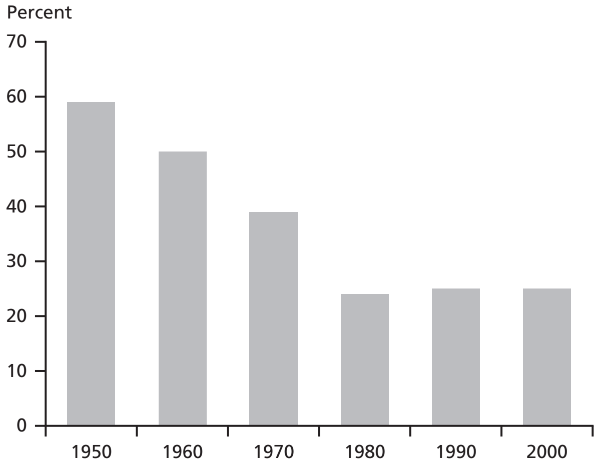


Source: Authors' calculations based on Altimir (1987) and Londoño and Szekely (1997).

Note: Based on data for Brazil, Chile, Mexico, and República Bolivariana de Venezuela.

FIGURE 1.3

Poverty rates in Latin America, 1950–2000



Source: Authors' calculations for 1950–1980; Gasparini, Guitierrez, and Tornarolli (2005) for 1990 and 2000.

Note: We used a poverty line of US$2 a day; poverty rates for 1950–1980 are estimated using a lognormal approximation.

incorporate income movements across lifetimes or even generations, which means that issues of risk and mobility through the income distribution must be examined. Ignoring these considerations leads to large distortions in the concepts of poverty and inequality.

Although the limited existing data on these aspects of poverty do not permit the kind of global comparisons that measures of income inequality and headcount poverty numbers do, the picture they sketch is only somewhat more optimistic. It is true that mortality rates have fallen far more than income levels would predict and account for large improvements in welfare in those countries with little growth. However, intergenerational mobility remains lower in Latin America and the Caribbean than in the worst of the OECD countries. Recent evidence indicates that the children of poor families and of parents with low education face a relatively high probability of achieving low educational levels, obtaining lower returns for their education, and remaining poor (figures 1.4 and 1.5). The fact that Chile is one of the most mobile societies in the region suggests that the modernization of the country across the last decades has offered more opportunities to the less well-off. Finally, as documented in the World Bank's Latin American region flagship *Securing Our Future in a Global Economy* (de Ferranti and others 2000), the high economic volatility in the region implies that the poor are subject to higher risks than the poor in other regions. Although macroeconomic volatility was reduced in the 1990s after peaking in the 1980s, it still remains exceptionally high, and labor market volatility remains substantially higher than it is in the United States, for example.

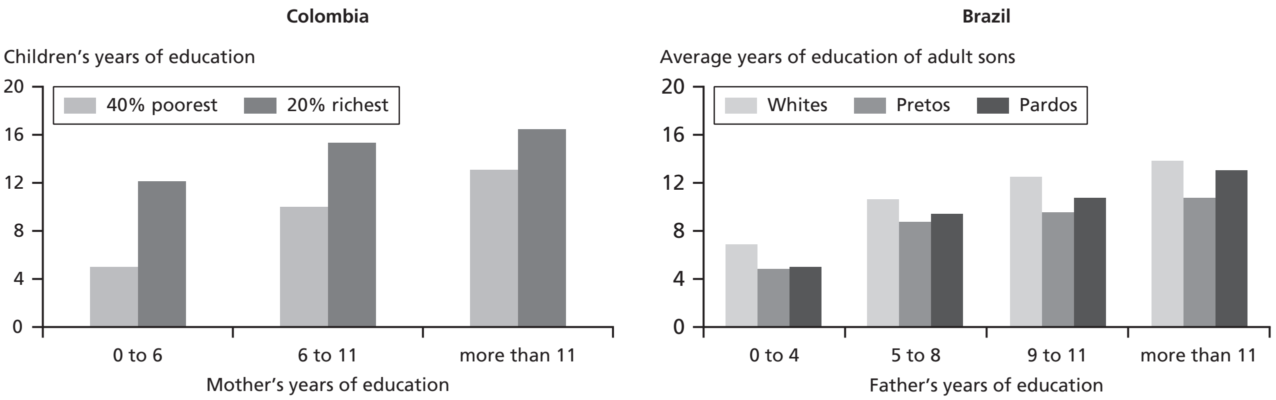
As later chapters show, all these dimensions not only provide a more complete view of poverty, they also constitute channels back to growth.

The twin disappointments: Destiny or choice?

Is there something intrinsic to the region that has left it with relatively low growth and high levels of inequality

FIGURE 1.4

Low educational traps persist across generations among the poor and excluded

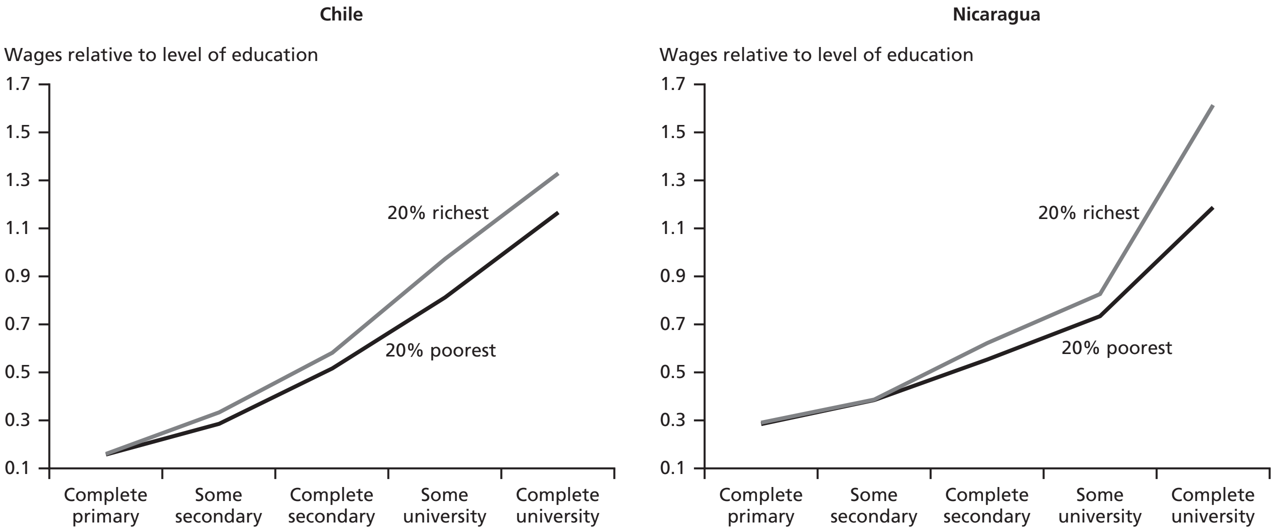


Source: Authors' estimates based on household survey data.

Note: Average years of school for adults aged 24–65 is determined by their parents' years of school.

FIGURE 1.5

Although they stand to gain the most from education, poor people actually have low returns



Source: Authors' estimates based on household survey data.

Note: Average schooling returns for workers from families in the bottom and top quintiles of the income distribution; from Mincer earnings regressions, controlling for work experience, gender, and urban residence.

and poverty? The World Bank's Latin American region flagship *Inequality in Latin America: Breaking with History?* (de Ferranti and others 2004) argued that exclusionary institutions set up during the European conquest to exploit existing mineral wealth and indigenous populations, and the particular crops suited to the region's climate (such as sugar plantations based on a slave workforce), led to highly unequal access to land, education, and political power at least until the late 1800s and thus had adverse consequences for growth and inequality for a long time.

In chapter 3, we show that indeed Latin America was well behind the advanced economies in the mid-1800s, when the region's per capita income levels represented about 60 percent of the U.S. levels and 55 percent of those in the broader OECD group. More important, we also show that a significant part of the current development gap in the region dates from the middle of the 20th century, when other regions took more advantage of the rapid pace of global expansion. Latin America's relative retardation in this period was in all likelihood related to the extreme inward-looking policies instituted then and to the lack of macroeconomic prudence that led to the devastating debt crisis of the 1980s. Although policies are importantly conditioned by historical context, more promising roads were not taken.

The same appears true in the realm of income distribution. The report shows that as the 20th century began, France, Spain, the United Kingdom, and the United States all had high levels of income inequality. Yet they managed to lower income inequality dramatically during the century and over relatively short periods of time (two to three decades). Such achievements appear related to the universal provision of basic education and health services and the establishment of highly redistributive welfare states.

Both Latin America's loss in relative income position in the last 50 years and the OECD's ability to sharply reduce inequality are, perhaps counterintuitively, good news: our history is not our destiny—choices of policies and institutions can lead to major improvements along both dimensions. Breaking with history is indeed difficult, but it is by no means impossible.

The link from growth and development to income-poverty reduction

Chapter 4 of the report concentrates on the effect of growth and changes in inequality on income-poverty reduction in countries with different characteristics. It shows that achieving the greatest reduction in poverty may imply placing differing relative emphasis on growth versus redistribution depending on the individual country's initial conditions: poor countries (such as Bolivia, Haiti, and Honduras) and relatively equal countries that, bluntly put, have little to distribute, need first and foremost high and sustained growth, even at the expense of some increases in inequality; this might be called the China model. In contrast, relatively richer and more unequal countries—most of Latin America, and especially Argentina, Brazil, Colombia, and Mexico—need both higher growth and significant redistribution if they want to make a fast and significant dent in poverty reduction (table 1.1).

TABLE 1.1

Growth rates needed to compensate for a 1-percentage-point increase in inequality

Country	Compensatory growth rate	Country	Compensatory growth rate
Argentina	2.5	Peru	1.6
Chile	2.4	St. Lucia	1.5
Brazil	2.3	Guatemala	1.5
Mexico	2.1	Paraguay	1.5
Costa Rica	2.1	El Salvador	1.4
Colombia	2.1	Venezuela, R.B. de	1.2
Trinidad and Tobago	2.0		
Dominican Republic	1.9	Ecuador	1.1
Panama	1.9	Nicaragua	1.1
Belize	1.8	Guyana	1.1
Uruguay	1.8	Bolivia	1.0
Jamaica	1.7	Honduras	0.8

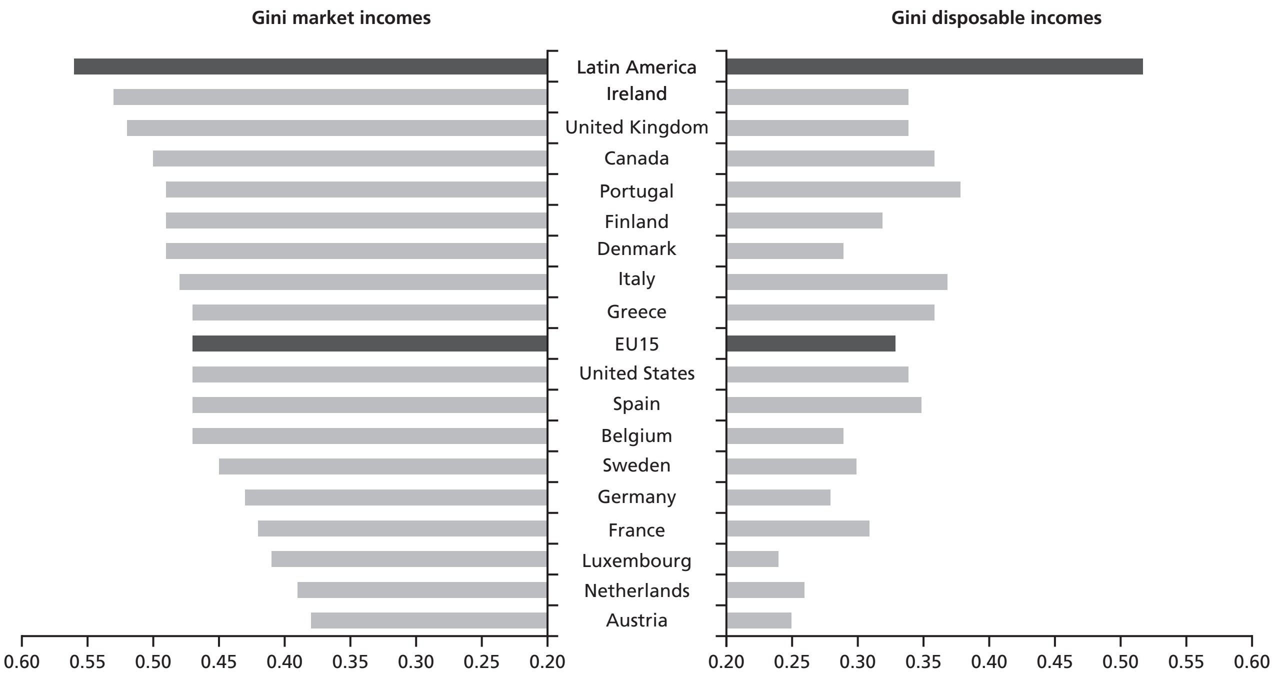
Source: Authors' calculations.
Note: The table reports the growth rates that would leave poverty unchanged when the Gini coefficient increases by 1 percent. Higher values indicate that inequality plays a more important role in poverty reduction.

Chapter 5 examines how different policies and different sectoral patterns of growth affect income-poverty reduction. It finds that sectoral composition matters: different industries show large differences in labor intensity (agriculture and construction are generally more labor intensive than manufacturing and services, and the latter are more labor intensive than mining and utilities); and poverty reduction is stronger when growth has a labor-intensive inclination. The chapter also finds that policies such as increased access to education and infrastructure have had direct positive impacts on growth, inequality, and poverty reduction, while others, such as trade opening, have had positive effects on growth but have tended to increase inequality and even poverty in the short run. In the long run, however, all pro-growth policies tend to reduce income poverty.

Chapter 5 also discusses the importance of transfers as a means of sharing the fruits of growth by investing in the poor. Bringing the historical discussion above into the present, the chapter shows that roughly half of the stark difference in income inequality between Latin America and contemporary OECD countries results from differences in returns to factors of production—the result of the unequal distribution of human and other capital in Latin America. But the other half results from the generally unprogressive nature of Latin America's system of transfers. The core OECD countries use transfers from the rich to the poor, and extensive pension schemes that distribute income from the those working today to those retired tomorrow, to lower

FIGURE 1.6

Gini coefficients for market and disposable incomes



Source: Authors' calculations.

the Gini (the standard measure of inequality) by about 15 percentage points (from, for instance, 0.53 in the United Kingdom to 0.35).[1] Transfers in a typical Latin American country, in contrast, alter the Gini by 2 percentage points or less, although there are a few exceptions such as Chile, which managed to reduce the Gini by twice as much (figure 1.6).

Whether the pure transfers of the magnitudes discussed above for Europe have been optimal from a growth point of view is debatable, as is their wisdom or political feasibility in Latin America. Arguably, for a variety of reasons, and in particular to be consistent with growth objectives, redistributive policy probably should focus on equalizing opportunities through more equal access to assets, such as human capital, rather than on equalizing outcomes measured as incomes per se. What is clear, however, is that Latin America has not made the efforts to mobilize the resources to attack poverty that it could. First, the region's tax collections are below those in similar countries (when benchmarked by income per capita), with a few exceptions such as Brazil and Nicaragua, and collections for progressive taxes, such as personal income and property taxes, are especially low. More important, although Latin American public expenditures underwrite large, progressive items (basic education and health), they also fund large regressive items (subsidies to pensions, tertiary education, and energy), which offset the progressive spending. An encouraging recent development is the introduction of successful policies such as *Progresa/Oportunidades* in Mexico, *Familias en Acción* in Colombia, and *Bolsa Escola* in Brazil, that combine fiscal transfers to the poor with incentives for them to build human capital through both health and education investments from early childhood.

Closing the virtuous circle: The link from poverty to growth

The more novel thesis of the report is that Latin America's persistent poverty may itself be impeding the achievement of higher growth rates—that there are reinforcing vicious circles that keep families, regions, and countries poor and unable to contribute to national growth. The now-expansive literature on poverty traps has elaborated a large number of channels that may perpetuate poverty. The emphasis we place on the multidimensionality of poverty and on lifetime and intergenerational considerations in welfare measurement further enriches the universe of channels through which poverty impedes growth. To list just a few we discuss:

- Poor people often have limited access to financial markets or other necessary complements to private investment (such as property rights and infrastructure) essential to the accumulation of physical and knowledge capital and participation in the growth process.
- Poor people are often in poor health, which reduces their productivity and impedes their ability to manage and generate knowledge.
- Poor people attend low-quality schools and the low and late returns to education and diminished prospects for mobility deter the accumulation of human capital essential for growth. Education enhances earnings potential, expands labor mobility, promotes the health of parents and children, and reduces fertility and child mortality.
- Poor people may face more labor market risk, or may be less able to hedge against it, and thus find returns to investing in human capital adjusted for risk to be less attractive. Further, the inability to diversify risk prevents specialization in agriculture or movements to off-farm activities, for example, that would lead to greater productivity. Since the poor are typically more risk averse than the rich because losses hurt them more severely, in the absence of well-functioning insurance and credit markets, the poor skip profitable investment opportunities that they deem too risky. Once again, societies with high poverty rates show a tendency to underinvest.
- Poor regions and countries have fewer individuals capable of adopting, managing, and generating new technologies that would contribute to productivity.
- Poor regions may lack the infrastructure or human capital that would make them attractive to extra-regional investment or the resources to develop them and that would facilitate sectoral and territorial labor mobility in search of higher income opportunities.
- Poor countries with poor regions may find ethnic or racial tensions exacerbated by income disparities leading to interregional tensions that make both regions and the country as a whole riskier to invest in.

In each case, poverty in itself prevents taking actions that would facilitate the exit from poverty and results in lower aggregate growth. Such vicious circles can lead to "convergence clubs"—richer and poorer countries, regions, or households tend to converge to different income or welfare levels even in the long run. Whether these are, in fact, poverty traps that cannot be escaped without intervention, or whether it simply takes much longer to transition to higher-income states, is to us a distinction of secondary importance, particularly when political economy issues are considered. What we do argue is that smart investments in the poor can lead to virtuous circles and that the issue of "pro-growth poverty reduction" should perhaps be as important a policy concern as traditional concerns with "pro-poor growth." In other words, investing in the poor is good business for society as a whole, not just for the poor.

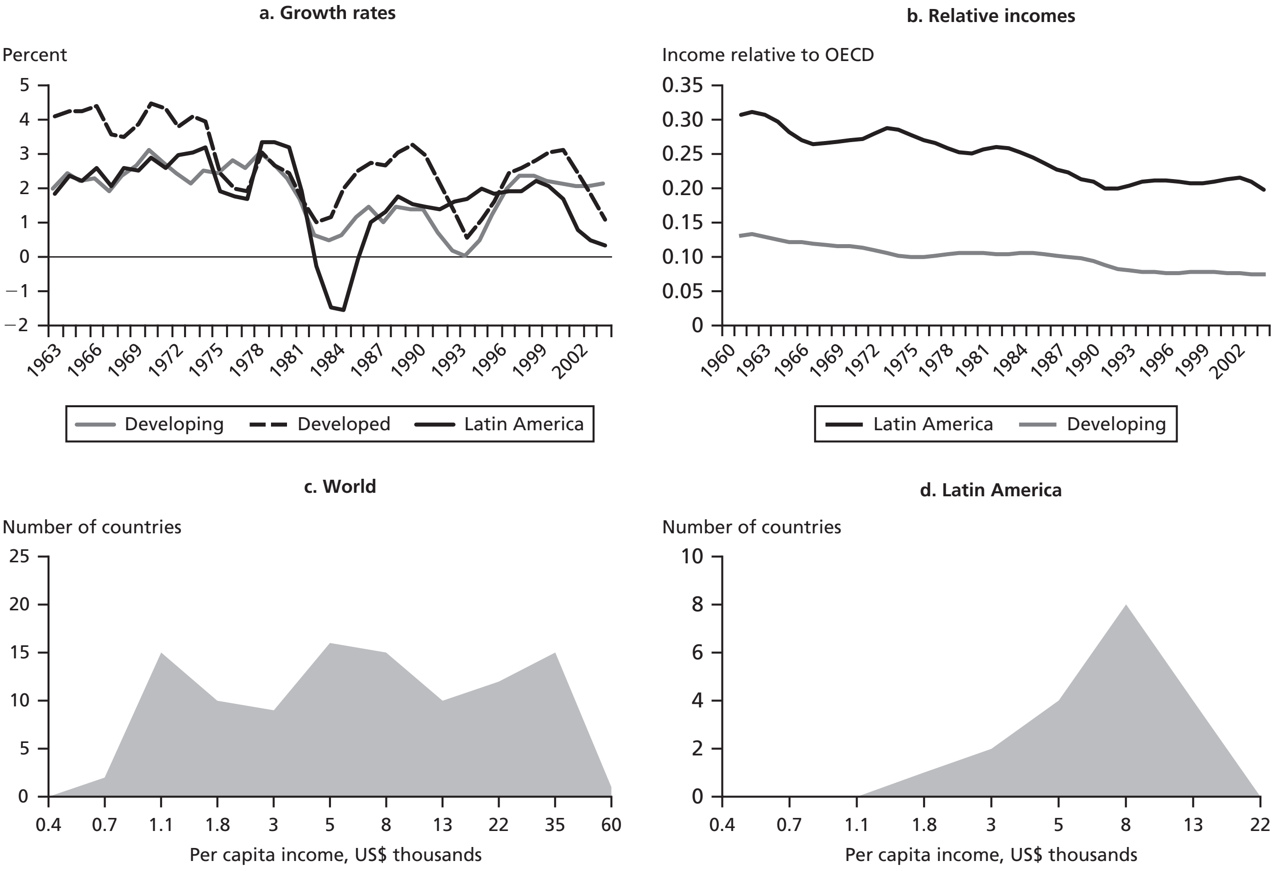
Tracing these reinforcing circles implies necessarily moving away from static concepts of poverty and studying the *dynamics* of poverty at every level, and this report aspires to break new ground in this area. It provides evidence on the existence of convergence clubs at the household, regional, and international level and in several cases shows that these appear to reveal the evidence of poverty-trap dynamics.

Global convergence clubs

Do poorer countries grow less than richer countries? The evidence presented in chapter 6 suggests that, with a few notable exceptions, they do. Panel a of figure 1.7 suggests that, apart from two short periods (one in the second half of the 1970s and another in the early 2000s), the typical developing country (and Latin America is not an exception here) has always experienced lower growth rates than the typical rich country. Over the 1963–2003 period, median per capita growth in industrial countries outpaced median growth in developing countries by an average of more than 1 percent per year.

The difference in per capita growth rates between the developed and developing countries has led to an expanding gap between rich and poor countries over time (figure 1.7, panel b). In the early 1960s the median Latin American country had an income level that was slightly less than one-third the income of the median developed country; today that gap is less than 20 percent. Globally speaking, the typical developing country had an income level about 12 percent that of the richer countries in 1960; and today it is closer to 5 percent. There is little to support the convergence hypothesis that poorer countries will tend to catch up with the richer ones. Rather, as panel c of the figure

FIGURE 1.7
Indicators for poor and rich countries



Source: Authors' calculations.

suggests, the poor stay poor, while the rich get richer. The histogram for the world in 1999 suggests a trimodal distribution, with a low peak at $1,100; a second at between $5,000 and $8,000, and a third peak around $35,000 forming poor, middle-income, and rich convergence clubs. (Chapter 7 shows that since 1960 there has been convergence within these clubs but divergence among them.) Panel d shows that Latin America as a region is unimodal with its single peak at about $8,000 and belongs to the middle cluster that is slowly separating both from the very poor and, distressingly, from the very rich.

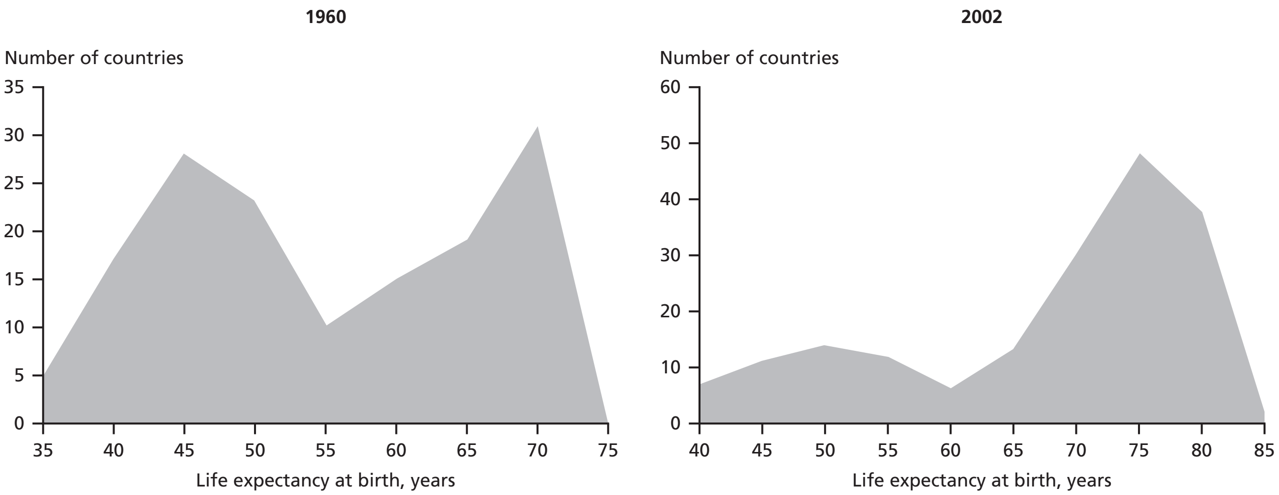
Convergence clubs at the cross-national level are also evident, though much less so, when nonincome dimensions of welfare are considered. For example, figure 1.8 presents the cross-national life expectancy histograms for 1960 and 2002. These histograms indicate the presence of a two-peaked pattern in both periods, but it is also evident that the mass of the low peak declines between 1960 and 2002, whereas the mass of the high peak increases (worldwide life expectancy has increased and is slowly converging).

Does poverty matter for growth?

Are high poverty levels to blame for the disappointing growth performance of poorer countries? A bimodal distribution in income or life expectancy levels does not, in itself, prove that poverty is a brake on growth, and chapter 6 finds only mixed evidence for the extreme case of poverty traps. However, the chapter does identify several self-reinforcing mechanisms that may retard growth and cause poverty to persist, and these may be more relevant from a policy point of view. Looking across countries, poverty does appear to deter growth and investment (figure 1.9), especially when the degree of financial development is limited. More specifically, we estimate in chapter 6 that, for the average country, a 10-percentage-point increase in income poverty lowers the growth rate by about

FIGURE 1.8

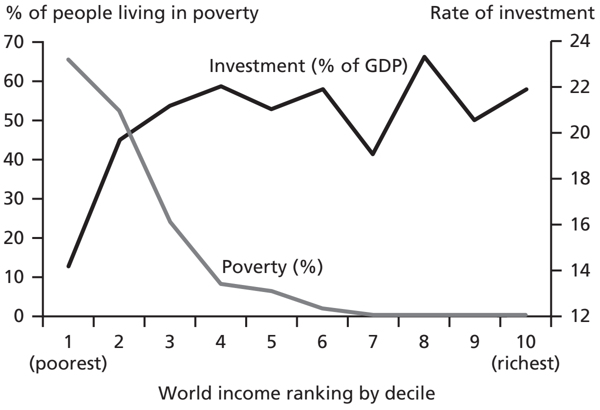
Convergence clubs in life expectancy throughout the world



Source: Authors' calculations.

FIGURE 1.9

Poverty and investment throughout the world



Source: Authors' calculations.

1 percent, holding other determinants of growth constant. Further, we estimate that a 10-percentage-point increase in income poverty reduces investment by 6–8 percentage points of gross domestic product (GDP) in countries with underdeveloped financial systems. These results validate the predictions of theory: that poverty may limit growth when financial sectors are imperfect because the poor, who lack access to credit and insurance, will not undertake many socially profitable investments, thus depressing the aggregate level of investment and growth. The report also finds evidence that poverty limits the level of innovation (as measured by research and development expenditures) and the accumulation of human capital (see below), both of which are additional channels through which poverty influences aggregate growth.

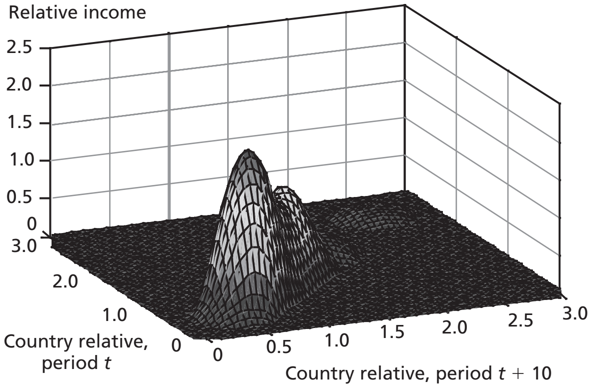
Regional convergence clubs

Chapter 7 finds an unusual combination of converging income among subnational units, but increased spatial concentration within countries. Modern spatial econometric tools show that within Brazil, Chile, and Mexico, there are clear convergence clubs of rich and poor regions, that appear to be drifting increasingly apart (figure 1.10). This finding is consistent with the New Economic Geography literature that has focused on how larger, already established regions enjoy scale economies while lagging regions are less productive and hence less attractive to factors of production.

These dynamics, and those discussed for national poverty traps in chapter 6, apply to national or subnational units equally. Two considerations are particular to the latter, however. The first is that within countries, labor can legally move freely. In practice it does not, leaving large wage gaps of often 50 percent among regions. Evidence from Chile and Mexico suggests that this phenomenon is partly the result of another poverty-trap dynamic—the poor cannot muster the savings or liquidity to migrate and hence cannot leave. But other evidence suggests that this story may be incomplete. Nonincome measures of poverty, such as mortality, show convergence within countries, much the

FIGURE 1.10

Regional income dynamics in Brazil: The persistence of two convergence clubs



Source: Authors' calculations.

Note: Figure shows relative state income distributions at time *t* and ten years later for the period 1955–2000. It suggests little movement in states' relative positions and a persistent two humped distribution.

way they do internationally, suggesting that the welfare gap broadly considered may be less dramatic. Further, simply asking people how poor they feel reveals some provocative anomalies. The poorest group in the Bolivian altiplano (largely indigenous) self-rates as the least poor in Bolivia, while inhabitants of the rich province of Buenos Aires rate themselves as the poorest in Argentina. These findings suggest that "congestion externalities"—the negative aspects of living in concentrated urban areas—may be important, that relative income disparities may be more brutally apparent in urban contexts, or simply that researchers are missing key dimensions of well-being that are uncorrelated with income.

Second, laggard regions in general have low levels of education and infrastructure that require special efforts to bring them toward the country average. However, to the degree that agglomeration externalities—the economies of scale that may arise from concentrating economic activity—dictate that poor regions have lower growth potential and lower returns to investment, governments may be confronted eventually with a trade-off between aggregate growth and geographical equity.

Household-level poverty traps

The fundamental building block underlying the international and regional analyses discussed above is the household. Addressing persistent poverty requires an understanding of the factors preventing poor families from moving out of low-productivity economic activities. The poverty-traps literature emphasizes insufficient asset holdings (including human capital), thresholds in the returns to those assets, fixed costs of productive transitions, and limited access to credit or insurance among the poor as main determinants of their inability to take advantage of growth opportunities. Of particular importance is the ability of the poor to use their labor (their most abundant asset) in wage jobs, self-employment, or their own microenterprises. Labor earnings often account for more than two-thirds of total household income of the Latin American poor. The pricing of labor reflects productivity differentials across workers and jobs, sector and regional supply-demand imbalances, and non-market factors. Low-earnings traps can arise from deficiencies in the endowments that enhance the productivity (quality) of labor assets (such as human capital and infrastructure) and from earnings differentials unrelated to skills (such as ethnic discrimination and location) that arise from barriers to mobility in the labor market.

Chapter 8 examines some of the mechanisms that may prevent the Latin American poor from participating in the growth process and lead to persistent poverty. Unfortunately, the limited long-span panel data prevent in-depth analyses of the duration of poverty and its main determinants throughout Latin America. The chapter draws on the limited, though highly consistent, evidence available on these issues and reaches two main conclusions. First, low levels of productivity, rather than labor market segmentation, is the overwhelming driver of low earnings. Most poverty is thus not generated directly by labor market failures but by deficiencies in workers' productive endowments, especially education, combined with the low levels of overall productivity of their local economy. This effect is exacerbated by high volatility and the inability to insure against shocks, much more so than in developed countries. Second, detailed analyses of rural El Salvador and consistent evidence from other countries suggest that poverty traps surrounding the accumulation of these productive assets are a phenomenon of practical relevance in the region.

Chapter 9 then takes on one of the central channels that can support a two-way causality between poverty and economic growth: the accumulation of human capital. Human capital, proxied by education or health levels, is generally believed to be one of the key determinants of long-term growth, while cross-country empirical evidence suggests that poverty may affect education levels (see chapter 8). Chapter 9 investigates the micromechanisms that could support this double causality, so that specific actions to increase the educational attainment of the poor could ignite a virtuous circle of faster growth and poverty reduction in the region.

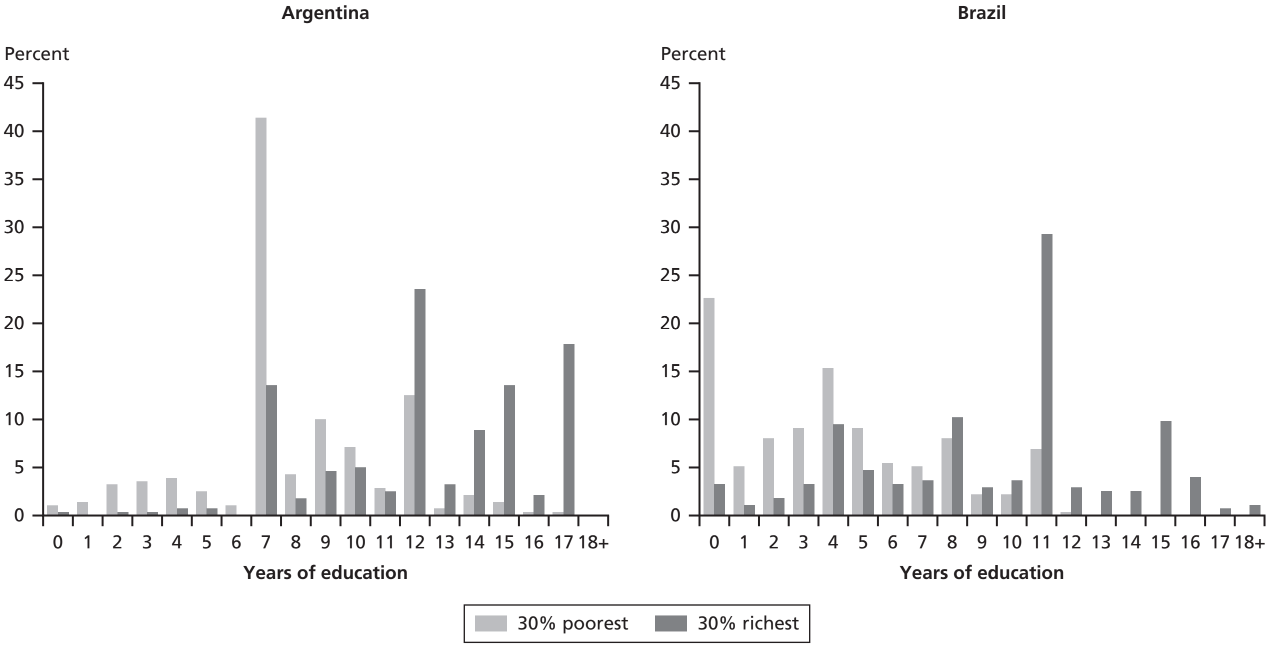
The chapter begins with a well-known fact: families with little education (specifically those with less than secondary schooling) tend to be poor, and in turn they tend not to invest enough in their and their children's education to escape poverty. The chapter documents several pieces of evidence on self-reinforcing mechanisms driving this vicious circle.

First, despite the region's recent progress toward universal primary enrollment, there is a clear and persistent educational divide in educational attainment. The population sorts into two groups: individuals with low-education attainments (typically less than secondary education) and individuals with secondary education and above (figure 1.11). Rural residents and the poorest families, including disadvantaged ethnic groups, are predominantly trapped in the low educational group. This divide continues replicating itself among the current cohort of students in high rates of repetition and dropout of these same groups. The smooth decline in enrollments during the secondary cycle in most countries suggests that lack of school facilities is not the main driving factor, although in some countries physical access constraints remain a problem.

Second, returns to schooling tend to increase with the level of education, a finding consistent with a skill bias in labor demand caused by technological change in the region, as detailed in the World Bank's Latin American region flagship *Closing the Gap in Education and Technology* (de Ferranti and others 2003). Schooling returns are flat during the basic and secondary cycles and increase after completion of secondary education; in some cases, the full return materializes only after completion of tertiary education. That is, schooling returns become attractive just as the opportunity cost, in terms of wages forgone by the student, becomes most acute for poor families. In addition, the chapter strikingly shows that in most countries poor families face below-average returns to tertiary (and sometimes secondary) education, plausibly due to low-quality schools as well as disadvantages arising from family background and attitudes toward education (see figure 1.4). Poor families have to juggle current subsistence needs against schooling investments with a remote, uncertain, and less-attractive

FIGURE 1.11

The sharp educational divide between the poor and the rich in Latin America



Source: Authors' estimates based on household survey data.

Note: Distribution of the working-age population across schooling levels from families in the bottom and top quintiles of the income per capita distribution.

payoff. The statistical evidence describing the low incentives and barriers to accumulating human capital is corroborated by the responses that poor children and youth give for dropping out of school: high opportunity costs at older ages, perceived low benefits in the 1–12 grade schooling cycle, and physical access constraints.

In sum, the completion of a secondary education necessary for poor families to move out of poverty remains out of reach and children's education remains strongly correlated with that of their parents. The educational divide is self-reinforcing across generations and is a critical underlying driver of the vicious circles of poverty observed at the household, regional, and national levels.

Implications of the report

A number of implications emerge from the analyses described above. We discuss them along two main dimensions: strategic and policy levels.

Strategic implications

The report uncovers several lessons that have implications for the way we view poverty reduction.

1. *Pro-poor growth and pro-growth poverty reduction.* The existence of virtuous circles between growth and poverty reduction enriches the debate on optimal poverty reduction strategies in several ways.
   - First, the debate about whether strategies should emphasize pro-growth or pro-poor policies now appears somewhat less germane. Strategies that do not focus on growth forswear perhaps the most potent weapon for improving human well-being at our disposal, especially in light of the likely limits of explicitly pro-poor policies discussed above. Yet failing to take account of the constraints facing the poor in participating in and contributing to growth undermines its generation. For example, liquidity constraints, risk, and indivisibilities or lumpiness in human capital investments appear to prevent the poor from acquiring the education that would move them out of poverty and fuel growth. Redressing these constraints gives rise to an under-examined dimension of policy analysis that might be called pro-growth poverty reduction.
   - Second, the bidirectional relationship between growth and poverty reduction suggests that ideally consideration of policies should take into account their direct and indirect effects on growth and poverty reduction. This awareness introduces new but necessary levels of complexity in the evaluation of policy options on both agendas. As a simple but important example, conditional cash transfer programs have an impact on poverty that goes beyond the increased incomes for poor households provided by straight transfer policies. Conditional transfer programs also relieve credit constraints on and provide a further incentive to the accumulation of human capital that raises income both at the household and, eventually, at the economywide level.
   - Third, pro-growth policies that have short-run adverse impacts on distribution and poverty, as appears to be the case with trade opening, may actually create a drag on growth creation (see chapter 5). However, when combined with complementary policies such as improved access to education and infrastructure, the short-run adverse poverty effect can be mitigated, enhancing both the direct and indirect effects on growth. Further, compensatory actions to offset some of these effects (for example, support to small farmers in noncompetitive sectors during trade opening) gain a new rationale in increasing the efficiency of reform policies in addition to those justifications related to social protection.
   - Finally, transfer programs should always seek to directly stimulate the accumulation of assets that will advance the growth process, as programs like *Oportunidades* in Mexico, *Bolsa Escola* in Brazil, and *Familias en Acción* in Colombia do.
2. *Pro-poor growth vs. pro-poor government policy.* The finding that at most half of the difference in inequality between Latin America and OECD countries arises from differences in the distribution of market incomes implies two things. First, while efforts need to be made to improve both the endowments of the poor and the returns to them offered by the market, there appear to be limits to what can be done. For example, Sweden, a country well known for its concerns with equity and human capital formation, has a market distribution that is very similar to that of many countries in Latin America, suggesting that even states that put equity high on their policy agenda may end up with high levels of inequality in

market incomes. Second, much of the heavy lifting of equalizing incomes in the OECD countries appears to have been done by their expansive transfer systems that dwarf anything found in the Latin American region to date, although the report suggests that, here too, there are limits posed by political economy and efficiency. In short, policies designed to obtain equal opportunities for development of human capital, and hence more equal market incomes, need to be complemented with redistribution through taxes and transfers.

3. *Multiple dimensions of poverty, multiple channels to growth.* The narrowness of the traditional focus on income poverty becomes increasingly unsatisfactory in the context of tracing feedbacks to growth. As examples:
   - The strong gains in longevity in the region are only weakly correlated with income growth. In some countries where incomes have remained stagnant, welfare has risen substantially because of improvements in health care and disease prevention. As noted above, health is linked to productivity growth, and policies dedicated to redressing this dimension of poverty are thus both pro-poor and pro-growth.
   - The prospect of moving out of poverty or upward in the income distribution is a major motivation for the accumulation of human capital. However, the lower, late, and uncertain rates of return to education of the poor, for the reasons discussed above, foreclose such mobility and discourage individuals and their children from accumulating this capital. Clearly, one lesson is that redressing these disincentives both improves social indicators that more completely measure poverty and stimulates growth. But a second lesson is that antipoverty policy must take a life-cycle view, with policies that look at the barriers to mobility in a comprehensive way.
   - The risk associated with unanticipated mobility—high volatility in wages, for example—is also a disincentive to long-term investments in human capital. Clearly, reducing the high macroeconomic volatility of the region, as well as designing mechanisms to mitigate the various types of risk—health or income, for example—reduces poverty in all its dimensions and has pro-growth impacts.

   In short, policy makers need to consider more comprehensive measures of poverty and inequality not only to get a more accurate view of the evolution of societal well-being but to better understand and take advantage of the channels back to growth.

4. *Nonlinear thinking: Humps and black holes, agglomeration externalities, and complementarities.* One critical insight of the poverty-traps literature is that the response to policy is nonlinear: it may vary depending upon the magnitude and comprehensiveness of the effort.
   - There are thresholds (or humps) below which effort may have no impact; in such cases policy makers are effectively throwing resources down a black hole. For example, the fact that the returns to secondary education often materialize only upon completion—or, worse, upon completion of tertiary education—implies that it is not worth it for households to invest beyond primary school. Programs that seek to create incentives to invest in education may have a greater impact on poverty if they are designed to get the student "over the hump"—through the end of secondary school and not just to the next grade level.
   - The literature suggests that the returns to assets, such as human capital, depend greatly on other public assets that are complements, such as roads, communications systems, and credit markets. Major investment in education, for example, may have limited payoff if individuals cannot commute to a job that uses the higher level of skills. In the same way, a pro-growth policy of building roads in a region may have a greater impact if the population has the human capital to work in emerging industries than if they are sick, illiterate, or constrained by language.
   - Policies toward lagging regions may be complicated by the fact that concentrations (agglomerations) of economic activity are self reinforcing—that is, they are more economically dense. Richer areas may have intrinsic dynamism and yield higher returns to capital and labor than poorer areas where there is no natural equilibrating tendency toward geographical equality over the long run. There seems to be ample scope for policies that would facilitate growth and labor mobility in

regions whose citizens have had particularly low levels of access to markets, education, and infrastructure. Yet, as discussed in the World Bank's Latin American region flagship *Beyond the City: The Rural Contribution to Development* (de Ferranti and others 2005), investing excessive state resources in some of these areas could lower overall aggregate growth, and thus governments may eventually face a growth-equity dilemma. Even in such cases, however, a smart combination of conditional cash transfers for the poor and payments for environmental services can enhance both poverty reduction and long-term growth.

Policy implications

These considerations have important implications for specific policies. The report does not offer universal recipes to break the vicious circle between low growth and poverty. For one thing, different countries will likely have different policy priorities; policy makers in poorer and more equal countries should focus mainly on growth, whereas those in richer and more unequal countries should try to balance growth-enhancing objectives with policies to reduce inequality. Nonetheless, the following examples emerge from the report as illustrative.

Making growth more pro-poor

There is no doubt that economic growth has to be at the center of the development strategies, and numerous studies conducted by the Latin American Region of the World Bank have explored constraints on growth that the region faces. For example, both the 2002 and 2003 World Bank's Latin American region flagships (de Ferranti and others, 2002, 2003) stressed the need to address the gaps in education (particularly secondary schooling) and innovation to get the most out of its existing endowments and to develop dynamic new areas of comparative advantage. Similarly, the World Bank's Latin American regional study *The Limits of Stabilization: Infrastructure, Public Deficits, and Growth in Latin America* (Easterly and Servén 2003) stressed how the region's wide gaps in infrastructure implied significant lost opportunities in growth and welfare.

This report offers suggestive evidence that investments in these areas have, in fact, been highly efficient in both promoting growth and allowing the poor to connect with that process over the last 40 years, providing a classical "win-win" situation (see chapter 5). As *Inequality in Latin America: Breaking with History?* (de Ferranti and others 2004) showed, the poor were the primary beneficiaries of efforts within the region in the 1990s to provide universal basic education and health services and to expand some public services, such as access to safe water and electricity (that were already provided to rich and middle-income groups). Going forward, care must be taken to guarantee that the poor continue to benefit from efforts to expand coverage of secondary and tertiary education (which up to now have benefited more middle- and high-income groups) and to improve educational quality. In the same vein, future investments in infrastructure must benefit laggard regions and increase the poor's access to those services where past expansions primarily benefited rich and middle-income groups (telecommunications and access to the Internet, for example).

In addition, under a broad definition of poverty, two other areas have the complementary potential to reduce poverty and promote growth. First, improvements in health have important impacts on welfare and demonstrated positive effects on growth. Second, the report provides conceptual grounds for treating the income, health, and other risks that households face as a critical dimension of poverty. The macroeconomic instability arising from unsound policy therefore has a direct impact on the well-being of the poor and a documented adverse impact on growth.

There are, however, other pro-growth areas where Latin America needs to make progress but where there may be potential trade-offs with inequality and even with poverty reduction goals in the short run, according to the results discussed in chapter 5. Indeed, several previous studies have found that trade openness (an area of particular relevance given potential liberalization efforts) may lead to higher inequality through greater divergence of wage incomes.[2] This result appears to be related to the very desirable adoption of technologies that tend to be skill biased and thus enhance the returns and the demand for education. This phenomenon, found globally, nonetheless leaves the poor, and often poor regions, behind in the short run. Chapter 5 argues that governments may need to take complementary policies behind the border—facilitating access to education, expanding infrastructure to lagging areas with potential to tap into the benefits of liberalization, and providing conditional transfers for poor peasants who may lose out in the transition. Such policies permit a country to take full advantage of the opportunities brought about by trade opening, and thus significantly mitigate the inequality effects and considerably enhance the growth effects of trade liberalization. A parallel argument could be made based on concerns that greater trade openness will increase the risk that workers face. To date, little evidence has emerged to suggest that this is true, but were it the case, income support programs could mitigate the impact on poverty and the disincentive effects on human capital accumulation.

Although chapter 5 suggests that financial deepening over the past 40 years appears to have had adverse impacts on inequality and even on poverty in the short term, chapter 6 finds that it is precisely in countries with low access to financial services where poverty may become more of a drag for investment and growth. Chapters 8 and 9 reinforce this conclusion at the household level. Thus, even if past limited advances in financial deepening in the region may have left most of the poor behind, it is essential that future efforts guarantee that the poor gain access to both credit and insurance markets. Now that Latin America has apparently succeeded in achieving more resilient financial sectors to avoid the costly crises of the past, extending access to credit and insurance markets appears as a key policy agenda to strengthen the virtuous circles between poverty reduction and growth.

Another strand of the literature has explored the impact on poverty of the structure of growth. In particular this literature argues that the higher the representation of sectors that use unskilled labor, the more the favorable effect on poverty. Findings reported in chapter 5 give support to this view. The potential conceptual conflict is that policies that induce a sectoral bias in growth may conflict in the long run with pursuit of a country's natural comparative advantage, leading to growth-impeding inefficiencies. While this report does not delve deeply into the complex (country-specific) issues surrounding the sources of growth and interlinkages across sectors or into the political economy of government intervention, the evidence provided here and in de Ferranti and others (2005) suggests that interventions to induce strong sectoral biases are probably ill advised. A different matter is to ensure that policy biases and inefficiencies against rural development, for example, are lifted and that growth opportunities are enhanced by the efficient provision of public goods and national and sectoral "innovation" policies. Incomes of the poor, including those from agriculture and off-farm activities, thrive with higher trade openness, when public rural expenditures focus on the provision of public goods (such as rural roads, health and education, research and development, and extension services) and when policy biases against labor mobility (such as fiscal generosity for capital-intensive activities and stiff labor markets) are removed.

Nor does this report delve into policies to stimulate more "labor intensity" within all sectors, apart from making sure that potential biases against labor use are removed. However, the previous discussion suggests that one would have to carefully weigh the potential adverse effects on efficiency and growth of more "active" policies in this regard against potential short-term gains in poverty reduction. Given the potential short-term adverse effects of trade opening on poverty and the negative effects of poverty on growth, an area of future research regards the desirability of attempting to keep undervalued exchange rates in the early phases of trade opening, as long as inflationary pressures are kept at bay, as Chile did after 1984 and China is currently practicing.

Pro-poor government policy

In the end, the relatively young literature on pro-poor growth has not given us a feel for how much it is possible to engineer growth in order to promote income distribution. That the differences in the distributions of market incomes between Latin American and OECD countries explain at most only 50 percent of differences in disposable incomes suggests the important complementary role of taxes and public expenditures to ensure that the fruits of growth are broadly distributed. Chapter 5 argues that Latin America has made relatively modest use of these tools. Although recent trends toward universal basic education and health and the introduction of targeted conditional transfers (among others) are likely to have had a progressive impact on the distribution of income, many big-ticket items continue to be highly regressive: the high subsidies to pensions do not benefit the poor since they are seldom covered; since the poor seldom finish secondary education, they do not benefit from subsidized universities; gasoline, electricity, and other goods and services subsidized by the state are mostly consumed by the well-to-do.

Achieving a more redistributive and efficient pattern of public expenditures similar to the OECD patterns would greatly reduce poverty and inequality. However, given the centrality of growth to the goal of poverty reduction, policy makers may wish to ensure that state efforts of such magnitude have favorable effects on growth. Vehicles that condition cash transfers on the acquisition of human capital could be substantially expanded. The forthcoming World Bank's Latin American regional study *The Redistributive Impact of Transfers in Latin America and the Caribbean* finds that conditional cash transfers tend to be well targeted and make a strong marginal contribution to social welfare, outranking not only social insurance schemes but also most of the existing social assistance programs. However, the central thesis of this report is that, in addition to conditional cash transfers, there are numerous other areas where interventions to aid the poor would also be pro-growth. Some of these interventions are reviewed in the next sections.

First, we should emphasize once more that the relative weight of different instruments depends on initial conditions in individual countries. As mentioned above, poor (and more equal) countries should concentrate on achieving increased growth, even at the expense of some increases in inequality, while middle-income countries with high inequality should aim for policies that achieve a better balance of pro-growth and pro-poor effects (including redistribution through conditional transfers).

Pro-growth poverty reduction

The report presents some of the first empirical evidence that poverty adversely affects growth at economywide levels. As noted above, a central channel appears to work through underdeveloped financial sectors—more specifically, through the poor's lack of access to credit. This lack may arise from institutional failures that make contract enforcement difficult and do not address the problems of information asymmetries and the poor's lack of collateralizable wealth. The search for efficient means and innovations to overcome information asymmetries (including credit bureaus) and enforcement constraints and to convert the scarce wealth of the poor into collateralizable assets are key priorities for policy and further research.

Addressing spatial concerns

All the concerns that could potentially lead to lower economic growth at the national level hold for low growth in subnational regions as well, and a case can be made for policies analogous to those discussed above. Further, regional inequalities correlated to ethnic, linguistic, or religious divisions provide fertile ground for internal conflict that can undermine economywide growth. Yet in the world of the New Economic Geography, the case for major reorientation of resources to disadvantaged zones becomes less clear, and the literature to date has been very circumspect on policy prescriptions. Fundamentally, if the existing agglomeration externalities imply that those regions that are already most advanced are also those with the highest potential for growth, concentrating all types of costly infrastructure investments on poor regions may decrease national growth. Unfortunately, the literature offers little guidance on whether the externalities relative to agglomeration or those leading to dispersion of activity are more important, so we cannot know whether existing agglomerations are too big or too small. However, as indicated in *Beyond the City: The Rural Contribution to Development* (de Ferranti and others 2005), some policies targeted to rural areas, such as improved rural education and access to communications, are clearly win-win solutions: they would increase productivity in agriculture and other rural activities and at the same time increase labor mobility toward more productive activities and toward richer areas with higher growth potential.

A more subtle use of geographic information can attenuate the potential trade-offs to some extent. In many countries—the report looks specifically at Bolivia and Brazil—lagging regions frequently have the highest poverty rates, but larger urban areas actually contain the most poor people. Therefore, the theoretical trade-offs, providing existing agglomerations are not too large already, may be less important than initially thought: a large chunk of the poor are, in fact, in areas with potentially higher growth. In addition to those advanced regions with no poverty, three different spatial categories emerge that imply distinct policies, some of which allow investment in potential high-growth areas with large numbers of poor people.

- Areas with *high poverty rates but low poverty density* lack economies of scale arising from agglomeration externalities and are unlikely to develop substantial economic dynamism. Policies thus need to focus more on direct poverty alleviation and on programs that will impart skills useful in other more dynamic regions. Conditional cash transfer programs or other education and health initiatives, agricultural research and development, and payments for environmental services would be most appropriate in these circumstances (see de Ferranti and others 2005).

- In areas with *low poverty rates but high poverty density,* often urban or relatively dense rural areas where agglomeration forces have already taken place, policies aimed at fostering growth have a good chance of reaching the poor and translating into important poverty reductions. The major problem is to ensure that wealthy groups do not capture the flow of resources. For this reason, self-targeting mechanisms, such as those envisaged in the Argentine and Colombian workfare programs, are particularly appropriate. That said, conditional cash transfer schemes, such as those in Colombia and Mexico where targeting is quite good, perform well in this type of situation.
- Areas with *high poverty rates and high poverty density* have the potential to take advantage of projects with economies of scale with low levels of leakage of resources to the nonpoor. Infrastructure investments such as rural roads may be a good example of the type of projects for these kinds of areas.

From a practical point of view, the increasing use of detailed poverty maps to identify poor groups and target poverty policies may yield high dividends.

History suggests, however, that policy makers often either judge that current agglomerations are too big or allow other considerations to lead them to resist abandoning entire regions to low levels of economic activity and extensive conditional cash transfer programs. In fact, as several recent World Bank reports have noted, Latin America has substantial experience with ambitious regional development programs that have met with mixed success. The now vast OECD literature on the effects of public investment policies generally finds a positive impact on growth and sometimes inequality, although, as the Spanish case suggests, they do not necessarily maximize national growth. The evidence for Latin America is thinner but generally concurs.

What should be emphasized, however, is that traditional regional policy has not focused enough on the complementary roles of human capital, knowledge transmission, innovation, and improved economic environments, all of which consistently emerge as correlated with differences in regional income.

Addressing household concerns

Coordinated policies are needed to reverse the vicious cycles of poverty and low asset accumulation in the region. One of the findings of the report in this area is that public investments and policies in one area may have different impacts depending on the existing level of assets and other initial conditions affecting the poor. Ensuring that poor households have access to minimum bundles of assets (such as education, health, or access to infrastructure) is essential for their capacity to exploit growth opportunities.

On the human capital front, demographic forces offer many countries in the region a unique opportunity to translate the human capital accumulation of young cohorts into a more productive labor force and faster reduction in poverty. There is a need for integrated, long-term strategies for skills development that go beyond narrow educational policies and exploit the synergies in the life-cycle human capital accumulation process in which both families and schools play a central role. This calls for actions to correct deficiencies in early-childhood development of poor children, strengthen degree completion and schooling transitions, upgrade education quality for the poor, and improve the fluidity of labor markets. The main specific implications for human capital formation policies are:

- *Leveling the initial playing field for children at risk*. The unequalizing impact of deficiencies in early-childhood development and deficient parenting on poor children's educational attainment and returns to education as adults needs to be addressed. Almost half of the countries in the region are off track on meeting the UN Millennium Development Goal of halving malnutrition by 2015. Early-childhood interventions and other policies that strengthen the capacities of families to create early human capital should be given more attention. For example, conditional cash transfer programs should systematically incorporate health and nutritional components for mothers and infants. The experience with the Head Start program in the United States and similar interventions elsewhere in the world may merit consideration for replication in the region.
- *Strengthening the full option value of education for the poor.* Education policies should aim to strengthen transitions to secondary school and enable opportunities for tertiary education for the poor. While spending and reform priorities must be set according to binding constraints, acting at all levels of the education system, even on a small scale, is crucial to signal

low-income families that their educational investments have better chances of maturing in higher grades. Where returns are high and basic infrastructure is deficient, the construction and upgrading of schools and roads are of paramount importance. The development of multigrade schools, learning from best practices such as the Colombian *Escuela Nueva* and the Chilean MECE Rural, can address supply constraints cost-effectively; when appropriate, public-private partnerships and other modalities such as distance education should be considered. Schemes to use conditional cash transfers to the poor for encouraging completion of full courses of education (basic or lower secondary) may hold promise to reduce dropouts especially of children from poor families and parents with little education. Also needed are policies to promote the development of the tertiary education market, including student loan programs and well-designed (means-tested and merit-based) university scholarships.

- *Making education count for the poor.* Increasing or leveling the returns to educational investments of the poor is key to encourage them to move up the education ladder. Well-informed actions to improve the scholastic performance of poor children are needed. These may include removing automatic promotion policies in early grades, offering special programs to address learning deficiencies resulting from a poor learning environment at home, and addressing failures in the instruction process such as inadequate teaching and large class sizes. Effective interventions include decentralizing school management to get parents more involved in their children's school progress, offering incentives to encourage qualified teachers to work in disadvantaged schools, adapting innovations to improve learning environments in disadvantaged schools and communities, upgrading textbooks and school aids, providing teacher training, expanding computer education in secondary schools, and consistently using international standardized tests to assess performance progress. Some targeted and performance-based increases in public expenditures, particularly at the secondary level, might be needed in some countries.

Finally, chapter 9 shows that the higher levels of labor market risk found in the region have strong disincentive effects on the accumulation of human capital that, in turn, slow down growth. Income security policies, such as unemployment insurance, workfare programs, or conditional cash transfers as used in Colombia, therefore become both pro-poor and pro-growth. Policies to improve access to jobs may be needed that include enacting and enforcing antidiscrimination laws and establishing labor market intermediation services that help well-educated ethnic and racial populations gain greater access to better-quality jobs.

Some of the best policies from a social cost-benefit calculation, such as early-childhood interventions and overhauls of the educational system, may be complex to implement for reasons of political economy. However, considering the positive spillovers on technology adoption, productivity, and growth from a labor force with a minimum level of education, it is hard to overstate the critical importance of overcoming political failures that prevent pushing "education for all" (see de Ferranti and others 2003). This is critical to the region's long-term human capital accumulation and prospects for sustained growth. In many countries, the demographic window of opportunity is closing; the time to invest is now.

Bridging the gaps in both the quantity and quality of education and other productive characteristics of workers can go a long way toward reducing the wide earnings disparities in the region, but it will not be enough to reduce poverty significantly. In most countries, low levels of labor productivity are a chief constraint to earnings potential. Policies that promote an economic and institutional environment conducive to productivity growth are thus important to reduce the incidence of low-paid jobs and in turn make investments in skills more attractive.

For example, rural investments seem to correlate positively with rural household characteristics, indicating a need to increase access to markets through expansion of basic infrastructure while simultaneously strengthening the capacity of households to ensure a minimum level of wealth and education skills.

Rural development could be made more inclusive with some minimum coordination of rural investments and programs—such as education, the construction of roads to markets, the establishment of microcredit schemes, and the provision of agricultural extension—to ensure that all the potential returns to these investments are realized and the conditions of the rural poor improved. A minimum coordination of public interventions in poor areas can help exploit synergies and overcome the associated potential poverty traps that may affect households with a bundling of unfavorable characteristics.

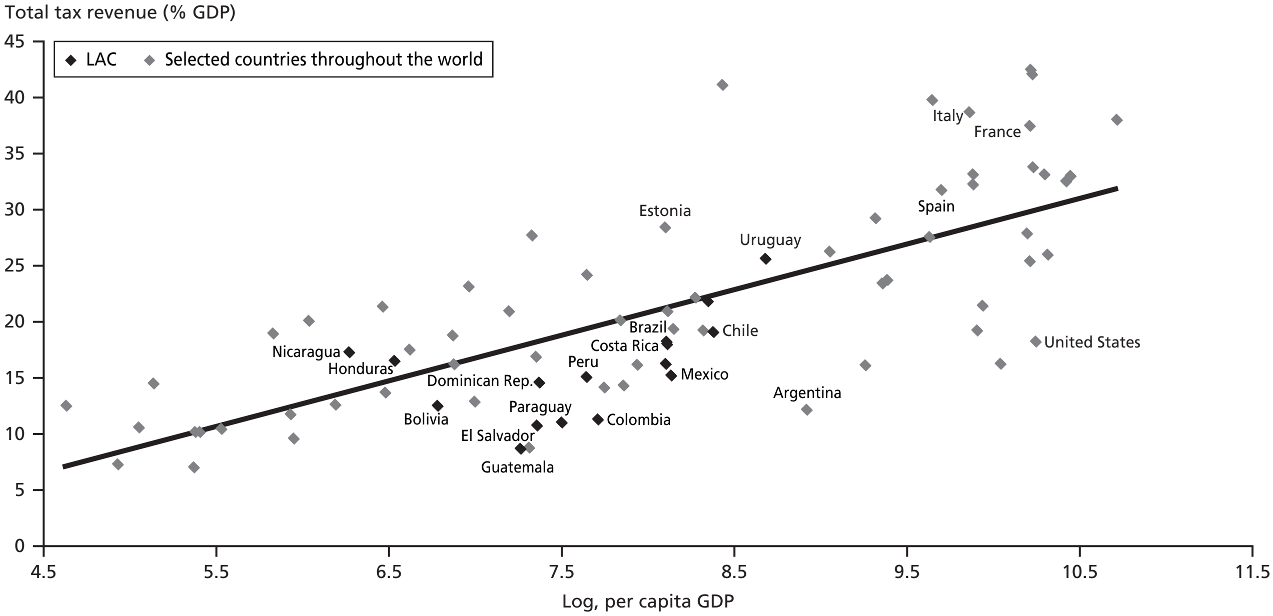
How are we going to pay for these interventions?

This report offers a relatively large number of areas that may require additional attention if the vicious circle between growth and poverty is to be converted into a virtuous circle. For example, it urges that the levels of human capital and public infrastructure in the region be expanded, in particular by increasing the poor's access to quality education and infrastructure. Similarly, it argues that an expansion of conditional cash transfer programs (especially in richer countries) would likely have a sustained impact on poverty reduction and growth. But what are the real possibilities the region has for financing these interventions, which in some cases can be quite expensive?

It is crucial that policy makers step up efforts toward improving the efficiency of the system and achieving better targeting before they increase public spending. For example, as noted in chapter 5, a number of big-ticket items such as tertiary education are highly regressive. Moreover, many public transfer programs such as pensions or unemployment insurance are typically poorly targeted and do not reach many of the poor. Policy makers are likely to face a trade-off between targeting and coverage: the greater the number of poor covered by a program, the more difficult it is to avoid leakages. A careful review of existing social programs, however, can result in significant savings that may be redirected to priority areas. Even more important, although they would require politically difficult reforms, highly regressive subsidies—of pensions for the well-to-do, of university students from wealthy families or who pay back educational credits, and of the consumption of energy by the middle class and the rich—offer huge opportunities to reallocate expenditures.

Once these potential gains have been tapped, and once efforts to curtail tax evasion have been stepped up, policy makers can consider increasing tax rates. In this regard, chapter 5 argues that most countries in the region (with a few exceptions such as Brazil and Nicaragua) have tax collections that are below what would be expected from their per capita income (figure 1.12). This, too, is a window of opportunity because bringing Latin America in line with the international experience in tax collections would allow some extra space to finance part of the expenditure priorities of the region. One related issue discussed in chapter 5 is that countries aiming at increasing tax collections should avoid, to the extent that it is possible, tax structures with

FIGURE 1.12
Total tax revenue versus per capita income, throughout the world



Source: Authors' calculations.

high efficiency costs. Latin American countries tend to have especially low levels of collections from personal income and property taxes—the very taxes that may have some redistributive effect without large costs to economic growth. Thus well-designed systems could increase tax collections while keeping the impact on growth low. Also, the region's value added and income tax productivity is significantly lower than it is in the OECD countries, and most Latin American countries maintain a large set of exemptions that significantly reduce the tax base. Thus the elimination of exemptions combined with additional efforts to enforce compliance would likely increase collections.

Converting the state into an agent that promotes equality of opportunities and practices efficient redistribution is, perhaps, the most critical challenge Latin America faces in implementing better policies that simultaneously stimulate growth and reduce inequality and poverty.

Notes

1. The Gini coefficient is a standard measure of inequality that ranges between 0 and 1. A value of 0 would indicate a perfectly equal distribution. As inequality increases, the Gini coefficient also tends to increase.

2. See, for example, de Ferranti and others (2003); Lederman, Maloney, and Servén (2005); and World Bank (2005c).