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# Centro de Estudios Distributivos, Laborales y Sociales

Maestría en Economía Universidad Nacional de La Plata



# A Turning Point? Recent Developments on Inequality in Latin America and the Caribbean

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# **A Turning Point?**

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#### **Abstract**

This paper documents patterns and recent developments on different dimensions of inequality in Latin America and the Caribbean (LAC). New comparative international evidence confirms that LAC is a region of high inequality, although maybe not the highest in the world. Income inequality has fallen in the 2000s, suggesting a turning point from the significant increases of the 1980s and 1990s. There have been some significant improvements toward the reduction in inequalities in the access to primary and secondary education, and to some services (water, sanitation, electricity, cell phones). However, there is an increasing gap between the rich and the poor in the access to tertiary education, and important differences in the access to new technologies.

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### 1. Introduction

Any assessment of the Latin American and Caribbean (LAC) economies would be incomplete without references to their high levels of socioeconomic inequalities. All countries in the region are characterized by large disparities of income and consumption levels, access to education, land, basic services, and other socioeconomic variables. Inequality is a distinctive, pervasive characteristic of the region.

This document aims to present information updated up to the mid-2000s, and to analyze patterns and trends of inequality in Latin America and the Caribbean. Although the paper focuses mainly on income inequality, some sections document and analyze inequality in other socioeconomic outcomes, such as education and access to some basic services (water, sanitation, electricity), durable goods (cars, fridges), and information technologies (computers, internet, cell phones).

The measurement and analysis of inequality has long been a major topic of study for Economics and other social sciences in the region. However, the scarcity of reliable and consistent microdata has always been an obstacle against comprehensive assessments. Most studies were based on limited sources or were constrained, typically, to cover a single country. First CEPAL, and more recently other international organizations – the World Bank and the IDB – have made efforts to assemble large databases of national household surveys to produce wider assessments of inequality, poverty and other socioeconomic variables. This study is mostly based on data from the Socioeconomic Database for Latin America and the Caribbean (SEDLAC), a project jointly developed by CEDLAS and the World Bank. This database contains information on more than 150 official household surveys in 24 LAC countries. This paper uses data for the period 1990-2006.

We confirm the finding of the literature that documents an increase in income inequality in the 1990s, but we also find that inequality decreased in the 2000s, suggesting a turning point from the unequalizing changes of the previous two decades. The recent fall in inequality is significant and widespread, but it is still too early to assess whether it is transitory or permanent. During the period under analysis, there have been some improvements toward the reduction in inequalities in the access to primary and secondary education, and to some services (water, sanitation, electricity, cell phones). However, there is an increasing gap between the rich and the poor in the access to tertiary education, and important differences in the access to new technologies.

The rest of this paper is organized as follows. Section 2 provides information on the data sources and their limitations. Section 3 is the core of the paper, as it documents the main patterns of income inequality in LAC, both at the country and regional levels. While section 3 focuses on the household income distributions, section 4 takes a look inside household income, discussing inequality patterns for the distribution of individual labor

and non labor income. Section 5 places the LAC evidence in international perspective, using various data sources. In sections 6 and 7 we cover other dimensions of inequality, considering educational variables (literacy, years of education and school enrollment), and indicators of access to basic services (housing conditions, water, sanitation, electricity), some durable goods (car, TV, refrigerator), and information technologies (computer, cell phones and internet). Section 8 concludes with some remarks.

#### 2. The data

The main source of data for this paper is the Socioeconomic Database for Latin America and the Caribbean (SEDLAC), jointly developed by CEDLAS at the Universidad Nacional de La Plata (Argentina) and the World Bank's LAC poverty group (LCSPP), with the help of the MECOVI program. This database contains information on more than 150 official household surveys in 24 LAC countries: the 17 countries in continental Latin America -Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela – plus Dominican Republic (a Latin American country in the Caribbean), plus 6 countries in the non-hispanic Caribbean: Bahamas, Belice, Guyana, Haiti, Jamaica, and Suriname. The sample represents 97% of LAC total population: 100% in continental Latin America, and 55% in the Caribbean. The main missing country is Cuba, which does not disclosure household survey information. Our analysis starts in the early 1990s, when most countries in LAC consolidated their household survey programs, and ends in 2006.

Table 2.1 lists the surveys used in this study. Household surveys in most countries are nationally representative, with the exception of Argentina, Suriname and Uruguay (before 2006), where surveys cover only urban population. This represents nonetheless 88%, 75% and 92% of the total population in these countries, respectively. In these three cases, we use the urban figures as proxies for the national statistics.<sup>1</sup>

Most countries experienced changes in their household surveys in the 1990s and 2000s. In many cases the geographical coverage was broadened, monthly surveys were replaced by annual, and the questionnaires were improved. Although these changes are certainly welcome, they pose significant comparison problems. The specific assumptions made in

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<sup>&</sup>lt;sup>1</sup> Uruguay expanded its official household survey (ECH) to the rural areas in 2006, with only negligible changes in inequality indicators: the national Gini is almost exactly the same as the Gini for the Greater Montevideo area. In Argentina, the World Bank's *Encuesta de Impacto Social de la Crisis* (ISCA) carried out in 2002 included small towns in rural areas. The Gini coefficient for the distribution of household per capita income turns out to be 47.4 in urban areas and 47.5 for the whole country. These facts suggest that in these two Southern Cone countries urban inequality statistics can be taken as good approximations for the national figures.

each country to construct an income inequality series for the period 1992-2006 are discussed in the methodological appendix.

Household surveys are not uniform across LAC countries. In addition, the National Statistical Offices (NSOs) take different methodological decisions to compute official measures of mean income (or consumption), poverty, and inequality.<sup>2</sup> For these reasons, rather than using the income variables defined by the NSOs, we construct a homogeneous (data permitting) household per capita income variable across countries/years that includes all the typical sources of current income. The tables presented in the SEDLAC project website (<a href="www.cedlas.org/sedlac">www.cedlas.org/sedlac</a>) include income aggregates with all the items considered (or excluded) to compute a comparable income variable in each country/year.<sup>3</sup>

Household consumption has several advantages over household income as a proxy of well-being. However, this paper studies income inequality, as few countries in the region routinely conduct national household surveys with consumption/expenditures-based questionnaires. To make the results more transparent and easy to reproduce, monthly incomes are not adjusted for non-reporting or misreporting, nor are they grossed-up to match national accounts.<sup>4</sup> The methodological decisions regarding missing data, zero income, implicit rent from own housing, regional prices and other issues are detailed in the SEDLAC web page. The SEDLAC database applies consistent criteria across countries and years, and identical programming routines to process the data.

# 3. Income inequality in LAC

This section documents the pattern of income inequality in LAC countries. Most of the evidence corresponds to the period 1990-2006. We start by presenting the main trends for the region as a whole, and then discuss the country-specific evidence.

#### 3.1. An overall view

Although historians have managed to document inequality in Latin America and the Caribbean from as early as the XVIth century,<sup>5</sup> systematic data on the personal income distribution only became available in the 1970s, when several countries in the region introduced household survey programs. However, the information for the 1970s and the 1980s is relatively weak, since surveys were infrequent, were usually restricted to main

<sup>&</sup>lt;sup>2</sup> NSOs differ in the treatment of adult equivalent scales, regional prices, implicit rent from own housing, zero incomes, adjustments for non-response and misreporting, and many other issues.

<sup>&</sup>lt;sup>3</sup> See also Gasparini, Gutiérrez and Tornarolli (2007).

<sup>&</sup>lt;sup>4</sup> See Deaton (2003) on arguments about matching household survey data with national accounts.

<sup>&</sup>lt;sup>5</sup> See the discussion in Bourguignon and Morrison (2002) and Robinson and Sokoloff (2004).

cities, included limited questions about income, and the questionnaires and sampling frames changed over time. The literature suggests that in the 1970s inequality fell in several countries – such as Mexico, Bahamas, Panama, Colombia, Peru and Venezuela—and increased in some Southern Cone economies – Argentina, Chile and Uruguay (Gasparini, 2003). The 1980s, known as the "lost decade" due to the weak macroeconomic performance, were also frustrating in terms of income inequality. Londoño and Székely (2000) report that the average income ratio of top to bottom quintiles in Latin American countries fell from 22.9 in 1970 to 18.0 in 1982, and rose back to 22.9 by 1991.

Our evidence starts in the early 1990s, when most countries consolidated their household survey programs. Table 3.1 depicts the evolution of inequality in Latin America by presenting the mean and median of the national Gini coefficients computed over the distributions of household per capita income. When considering the mean and the median Ginis, income inequality in the Latin American countries increased over the 1990s and has fallen in the first half of the 2000s, with levels in or around 2006 similar to those of the early 1990s. The latter assessment changes when considering the population weighted mean of the Ginis: Brazil and Mexico, which account jointly for 56% of the region's population, experienced stronger equalizing changes than the rest of the countries over the 2000s, so that the Latin American weighted mean is significantly lower in the mid 2000s than in the early 1990s.

Although the direction of the overall change in inequality is not ambiguous, the magnitudes are relatively small. The unweighted mean of the Gini first increased and then fell less than 2 points since the early 1990s. These changes can be appreciated in the first panel of figure 3.1, but their magnitude is revealed in the second panel of the figure, in which the scale (from 40 to 60 Gini points) reflects the country extreme values in the region. The changes in the median, reported in table 3.1, are only slightly larger.

Regarding sub-regional trends, the changes in inequality were similar in Southern South America and the Andean countries, the two regions in South America: the Gini increased in the 1990s and fell in the 2000s (as documented in table 3.2 and figure 3.2). To the contrary, on average the Gini has been slowly falling in Mexico and Central American countries since the early 1990s.

It is important to point out the substantial country heterogeneity of changes in inequality levels (see table 3.3): several countries do not match the overall regional pattern

<sup>&</sup>lt;sup>6</sup> Although it should be stressed that during the decade several countries in the region emerged from military dictatorships and managed to consolidate democratic systems.

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<sup>&</sup>lt;sup>7</sup> Estimates are for the 17 continental Latin American countries. Information for Caribbean countries is not presented as no country in that sub-region has reliably comparable information available for the early 1990s. See the methodological appendix for details on the coverage of the SEDLAC database.

described above. In fact, in 7 out of 17 Latin American countries inequality did not increase over the 1990s. The fall in inequality in the 2000s seems more widespread, although there are some exceptions. When taking the whole period into consideration, about the same number of countries experienced increases and falls in the Gini coefficients. This heterogeneity indicates further analysis of specific national experiences is needed to fully comprehend the regional pattern.

#### Box 3.1. The distributional impact of fiscal policy

The inequality statistics presented in this document are computed over the distribution of *quasi-disposable* income, since household surveys in LAC typically include cash benefits (pensions, unemployment insurance payments, social assistance transfers), and, implicitly some (but not all) direct taxes. The distributional impact of cash benefits and direct taxes in the region has been assessed as equalizing but small, given the relatively low levels of these fiscal instruments in the region. In a sample of six large LAC economies, Goñi *et al.* (2008) estimate that cash transfers (including pensions) imply a fall of between 1 and 2 Gini points, and that direct taxes account for a drop of just another point.

The bulk of the redistributive impact of fiscal policy in Latin America is channeled through in-kind transfers and indirect taxes. Gasparini and Cruces (2008) estimate that the Gini coefficient in Argentina falls by 9 points when incorporating social public expenditure and its financing (mostly through indirect taxation). Similar results are found for Honduras and Nicaragua, respectively – the Gini falls around 6 points in both cases (CEDLAS 2006, 2007). While these figures depict a larger distributive role for the public sector in the region than the one that emerges from considering direct transfers and taxes alone, they are still orders of magnitude lower than the distributional impact of fiscal policy in industrialized countries.

#### 3.2. Heterogeneity at the country level

The extent of income disparities is quite different across LAC countries (figure 3.3). While the Gini coefficient for the distribution of household per capita income is 44.7 in Uruguay, it reaches almost 60 in Bolivia and Haiti. Part of these discrepancies is due to country differences in the share of the rural population. However, even restricting the comparison to urban areas, and to more narrow definitions of household income, the differences in inequality between countries are still large. For instance, the Gini coefficient for the distribution of household equivalized labor monetary income in urban areas ranges from 45 in El Salvador to 55.2 in Brazil – the range is narrower than for national household per capita income, but still substantially wide.

Figure 3.3 suggests a sort of continuum of inequality levels across countries. Uruguay, Venezuela, Argentina and Costa Rica have relatively low inequality levels, while Bolivia, Haiti, Brazil and Colombia are among the most unequal societies in the region. Even within sub-regions the gaps in inequality levels are large: Southern South America encompasses some of the countries with the lowest (Uruguay) and highest (Brazil) Ginis in LAC; the same is true for the Andean region (Venezuela and Colombia), Central America (El Salvador and Honduras), and the Caribbean (Dominican Republic and Haiti). By inspection of figure 3.4, there does not seem to be large clusters of more egalitarian or unequal countries in the region.

LAC countries also differ in the changes of inequality experienced over the period under analysis, as depicted by figures 3.5 and 3.6, and table 3.4.9

#### Southern South America

Inequality has substantially increased in Argentina since the early 1990s. Income disparities grew during the period of structural reforms of the 1990s, accelerated during the deep macroeconomic crisis of 2001/02, and fell to pre-crisis levels in the recovery between 2003 and 2006. 10

Uruguay has also experienced an increase in income inequality, although with a smoother pattern. The Gini coefficient increased by 2 points in the 1990s, grew by around 2 additional points in the stagnation and crisis of the early 2000s, and fell 2 points in the subsequent recovery.<sup>11</sup>

Brazil has always been one of the most unequal countries in the region. While its income distribution did not change much in the first half of the 1990s, inequality has fallen substantially since 1999. The Gini coefficient was 60.4 in 1990, 58.6 in 1999, and fell to 55.9 in 2006. 12

<sup>&</sup>lt;sup>8</sup> There is a long standing debate on the economic performance of Cuba, and on its levels of income inequality in particular. Unfortunately, the country's government has not granted access to the microdata of the national household surveys, which is needed for reliable international comparisons. Based on a unique international survey with similar income questions for all countries in the sample (the Gallup World Poll 2006), Gasparini *et al.* (2008) find that Cuba has the lowest level of income inequality in the region.

<sup>&</sup>lt;sup>9</sup> Most of the results discussed in this section are robust to inequality indices, income definitions, treatment of zero incomes, and sample variability concerns. The methodological appendix details the construction of these tables and figures. The reader is referred to the SEDLAC webpage (<a href="www.cedlas.org">www.cedlas.org</a>) for a large set of statistics on these issues.

<sup>&</sup>lt;sup>10</sup> See also Gasparini and Cruces (2008), Altimir et al. (2002) and Lee (2000) for further references.

<sup>&</sup>lt;sup>11</sup> See Winkler (2005) and Amarante and Vigorito (2007) for further details.

<sup>&</sup>lt;sup>12</sup> This pattern is also reported and documented in Barros *et al.* (2003), CPS/FGV (2006), Ferreira *et al.* (2005) and CEPAL (2008).

High levels of inequality have also been a pervasive characteristic of the Chilean economy. However, there are encouraging signs of a significant fall in inequality in the 2000s. The Gini coefficient, roughly unchanged between 1990 and 2000 (55.1 and 55.2, respectively), had fallen slightly by 2003 (54.6) and by a larger degree by 2006, reaching 51.8.<sup>13</sup>

Household surveys in Paraguay have changed substantially since 1990, and these changes introduce a significant amount of noise in the inequality statistics. Some of the comparable evidence suggests that inequality increased substantially in the early 1990s.<sup>14</sup> The Gini fell from 58.4 in 1995 to 55.5 in 1999, increased again to 58.1 in 2003, fueled by a large macroeconomic crisis, and fell substantially again to 54.9 in 2006.

#### Andean countries

The performance of the Andean countries in terms of inequality has been disappointing. In Bolivia, which has probably the most unequal income distribution in Latin America, the income distribution in urban areas did not change much in the 1990s. <sup>15</sup> National indicators, available since the late 1990s, suggest an increase of around 2 Gini points between 1997 and 2002. UDAPE (2006) reports a stable income distribution since then, with a Gini of around 60.

The evolution of inequality in Colombia is not easy to trace, due to various changes in the national household surveys. We find a sizeable increase in income inequality from the early 1990s to year 2000, and a fall since then, with a return to the early 1990s levels. WDI (2008) and the official MERPD (2006) provide similar figures and patterns for 1996 onwards. Instead, CEPAL (2008) reports a fall in inequality between 1994 and 1999, and Ocampo *et al.* (1998) and Székely (2003) find a rather stable income distribution in the country.

The available information for Ecuador is patchy, with some Living Standard Measurement Surveys in the 1990s and one in 2006. Using consumption data from those surveys, INEC (2007) reports an increase of 3 Gini points between 1995 and 2006, from 43 to 46. Using nationally representative income data, only recently available, we find a significant fall in inequality between 2003 and 2006.

In Peru, the data for the 1990s suggests a significant increase in inequality in the distribution of both income and expenditure. In contrast, the income distribution seems to

<sup>&</sup>lt;sup>13</sup> Official statistics in MIDEPLAN (2006) are in accordance with this pattern. See Ferreira and Litchfield (1999) and Contreras *et al.*(2001) for evidence prior to 2000.

<sup>&</sup>lt;sup>14</sup> CEPAL (2007), Gasparini (2003), Morley and Vos (1997) and Robles (1999).

<sup>&</sup>lt;sup>15</sup> Some authors report a small increase (Gasparini, 2003; Morley, 2001 and Székely, 2003).

have become progressively less unequal since 1999. CEPAL (2007) reports a similar pattern.

Venezuela has the most egalitarian income distribution in the countries in the Andean region. Inequality rose substantially in the 1990s, with a Gini of 42.5 in 1989 increasing to 47.2 in 1998. The Gini fluctuated around that level until 2005, while the official statistics for 2006 report a strong fall in inequality (INE, 2008). <sup>16</sup>

#### Central America and Mexico

Costa Rica has one of the most equal income distributions in Latin America.<sup>17</sup> However, inequality increased substantially in the second half of the 1990s, and although it has fallen in the 2000s, it has not returned to its previous level. The Gini coefficient for the distribution of household per capita income climbed rose from 44.6 in 1995 to 50.0 in 2001, and fell only to 47.3 in 2005.

El Salvador has also had a relatively egalitarian income distribution compared to its neighbors. In contrast to other countries in the region, inequality did not change much in the 1990s, with a Gini coefficient of around 52, which started to fall around 2002, reaching 48.4 in 2004 and 49.7 in 2005.

Guatemala only implemented an annual household surveys very recently, which makes it difficult to provide a medium or long term perspective about its income distribution. According to CEPAL (2006), the Gini coefficient fell 2 points between 1989 and 1998, and by about 2 additional points by 2002. Indicators from the annual ENEI survey also record a fall in inequality since 2002.

During the 1990s the income distribution in Honduras did not change much. Inequality increased in the early 2000s (around 4 Gini points between 1999 and 2006), and has not significantly decreased since then.

The economy of Nicaragua was hardly hit by the crisis of the 1980s, and it has been recovering since the early 1990s. The income distribution has also become less unequal: the Gini fell from 56.3 in 1993 to 52.3 in 2005. 18

<sup>&</sup>lt;sup>16</sup> Székely (2003) finds a similar pattern for the 1990s, and CEPAL (2007) broadly coincides with our figures for the whole period under analysis.

<sup>&</sup>lt;sup>17</sup> See Paes de Barros *et al.* (2005) for a thorough analysis of income distribution in Central American countries.

<sup>&</sup>lt;sup>18</sup> CEPAL (2008) reports a more modest fall in income inequality in the 1990s. In contrast, the Gini over the distribution of per capita consumption from official sources dropped 9 points in that period (World Bank, 2007).

Panama is the Latin American country with the most stable income distribution. The Gini coefficient fluctuated around 55.5 in the 1990s, increased by almost a point in the early 2000s, and fell to around 55 since 2004.

The data for Mexico indicates a slow, although continuous, reduction in income inequality since the early 1990s. The largest fall occurred between 2000 and 2002, as in the official figures provided by SEDESOL (Szekely, 2005). The Gini in 2006, at around 50, was almost 5 points lower than in 1992.

Finally, it should be noted that information for Caribbean countries is not presented since there is no consistent information available for the early 1990s. Unfortunately, the statistical system of most Caribbean countries does not include periodic household surveys, which makes it difficult or impossible to trace inequality changes. The Dominican Republic has implemented a consistent household survey (ENFT) since 2000, and the levels of inequality have not shown any significant changes over the period.<sup>19</sup>

#### Convergence?

It is worthwhile to point out that the dispersion in inequality levels across countries has diminished in the period under analysis, as suggested by the comparison of the Gini coefficients in the two panels of figure 3.7. In fact, the coefficient of variation of the national Ginis fell from 0.10 in 1992 to 0.07 in 2006. This narrowing of the range in inequality levels in the region reflects some degree of convergence, since it is the result of increased inequality in some low-inequality countries, such as Uruguay, Argentina, Venezuela and Costa Rica, and a fall in inequality in some high-inequality countries as Brazil. This incipient convergence arises when comparing the mid 2000s to the early 1990s, but also when comparing the mid 2000s and the early 2000s, and the latter period with the early 1990s (see figure 3.8). While the number of observations is small to ascertain the presence of regional convergence in inequality, this is certainly an issue worth exploring in further research.

#### 3.3. Global inequality in Latin America

There has been a recent surge in the analysis of global income inequality, *i.e.* inequality among individuals in a large region (or in the world) with each individual assigned his or her own income (Milanovic, 2005; Anand and Segal, 2008). The key steps in these studies are (i) choosing an appropriate "income" aggregate comparable across countries, and (ii) setting an exchange rate to convert local currency units into a common numéraire. Table 3.5 presents a set of inequality indices for the distribution of per capita

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<sup>&</sup>lt;sup>19</sup> See also the World Bank Poverty Assessment (2007).

income – converted to PPP US dollars – for Latin America as a whole, *i.e.*, considered as one single country. When using this methodology, income inequality seems to have fallen slightly in Latin America during the period 1992-2006 (see figure 3.9). The pattern is similar to that of the cross-country inequality aggregates: an increase in the 1990s, and a fall in the 2000s.

These changes in global inequality can be analyzed further by means of a between-within decomposition. The results in the first panel of table 3.6, taken from Gasparini *et al.* (2008), show that between-country inequality accounts for a small but growing share of overall Latin American global inequality. The second panel presents the results of a decomposition of the change in the Theil index (Tsakloglou, 1993). Global Latin American inequality, as measured by that index, fell 4.2 points between 1992 and 2006. That reduction is fully accounted by a drop in within country inequalities, since the between component is positive. <sup>20</sup>

These results deserve further inspection. The within component of the decomposition is a weighted average of the changes in the Theil index in each country. Given that the weights are the shares of each country in total LA income, Brazil and Mexico have a decisive role in the result –both countries account for around 72% of the total income in the sample. The fall in the within component is strongly affected by the fact that inequality significantly fell in these two largest Latin American countries.

The results in table 3.6 indicate that between inequality also increased, suggesting increasing differences in income across countries. Gasparini *et al.* (2008) report that this result is not driven by growing disparities within each supranational region – Southern South America, Andean region and Central America – but instead by increasing disparities across these regions: while mean income of the richest region, Southern South America, grew by 25%, it fell by 11% in the Andean region.

While these results were obtained from the SEDLAC household surveys, section 5 below presents more evidence on global inequality using the Gallup World Poll, a unique internationally comparable data source. This source is available for only one year and captures household income with lesser accuracy than national household surveys, but it covers most countries in the world with a similar questionnaire, allowing for worldwide comparisons.

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<sup>&</sup>lt;sup>20</sup> Londoño and Székely (2000) also find that both the level and the change of overall inequality are mainly due to differences within countries. They report an increase in global LA inequality between the 1980s and the mid 1990s, despite a slow convergence in per capita income across countries.

#### Box 3.2. Inside the countries: regional inequality

Income inequality in Latin America has a spatial dimension, with significant income differences across geographical regions within countries. In Bolivia, mean income in the region of Santa Cruz is 3 times higher than in Potosi, while in Peru mean income in Costa Central is 3.2 times higher than in Sierra Norte. Figure B.3.2.1 displays a map of per capita income (in PPP US\$) in each region identified in the national household surveys. Table B.3.2.1, taken from Gasparini, Gluzmann, Sánchez and Tornarolli (2008), shows the result of Theil decompositions of inequality by region. The first column shows the Theil index for the country, the second presents the Theil across regions, while the third column reports the (weighted) mean of the within-region Theil indices. For instance, the overall Theil index in Argentina in 2006 was 45.2, but the inequality among the 5 regions in the country accounts for only 3.1% (1.4 points) of the overall index. On average, regional differences in LAC account for 7% of national inequality. It should be stressed, however, that this share depends crucially on how the regions are defined.

The results in the same table indicate that regional inequality has been mildly decreasing in several countries, although its contribution to the fall of overall inequality has been small in some countries and negligible in others. Table B.3.2.2 reproduces the results of a regional decomposition for the change in the Theil. For instance, inequality, as measured by that index, fell 13.3 points between 1993 and 2005 in Brazil. There was a reduction in the income disparities across Brazilian regions, although the impact of this shrinking regional gap seems to be very small – less than half a point in the change of the Theil.

#### 3.4. A turning point?

The evidence presented so far in this document points out to a widespread fall in inequality levels from the early to the mid 2000s, but as discussed above, this result is neither conclusive nor generalized to all countries in the region. However, in most Latin American countries there are signs of falling income inequality. As reported above, inequality significantly fell in 12 out of the 17 continental Latin American countries, where the average Gini fell by around one point and a half between the early and the mid 2000s. This result, while not extraordinary, still contrasts sharply with the significant increase of the 1980s and 1990s.

There are many plausible factors behind this fall in inequality in the region. Among them, we can highlight (i) employment growth, (ii) a change in relative prices, (iii) realignments after reforms, (iv) realignments after macro shocks, (v) cash transfer programs, and (vi) increased concerns for inequality. A thorough examination of these factors for the whole region is well beyond the scope of this paper, and thus we only present a sketch of the arguments in what follows.

Fueled by the exceptional international conditions, LAC has experienced a period of strong growth since the early 2000s. While per capita GDP fell at almost 1% yearly between 1999 and 2002, it increased at a rate of almost 3% per year from 2003 to 2008. In almost all countries, growth has been accompanied by a surge in employment.<sup>21</sup> A stronger labor market is associated with fewer jobless workers and higher wages, which are both factors that tend to lower income inequality.

The region has also been favored by a surge in the international prices of the commodities it exports. The terms of trade in 2006 were 31% higher than in the 1990s. These price changes are likely to benefit rural areas, which are typically poorer than the rest. The urban-rural income ratio shrunk in almost all Latin American countries from the early to the mid 2000s. When considering the income distribution of LAC as a whole (and adjusting all incomes for PPP), the urban-rural income ratio dropped from 2.5 in 2002 to 2.2 in 2006. In addition, the devaluations in some economies have implied changes in relative prices that have favored more unskilled intensive sectors (*e.g.* Argentina, Uruguay).

Many Latin American countries implemented market-oriented reforms in the late 1980s and the 1990s. These reforms included trade and financial liberalization, privatizations and deregulations, which, among other consequences, stimulated a surge in physical capital accumulation and a substantial technical upgrade. These structural reforms also were accompanied by increasing levels of unemployment, and the technical change was usually skilled-biased. Several authors have attributed some of the increase in income inequality in the region to the effects of these reforms.<sup>22</sup> The pace of the market-oriented reforms was much slower in the 2000s, and in fact some of them were undone. In a more stable scenario, the strongly unequalizing initial impact of the reforms should have lost strength over time. An inequality "overshooting" has been documented for some of these episodes of structural reforms,<sup>23</sup> as it takes time for the displaced (mostly unskilled) workers to be reallocated in the economy.

Several countries in the region suffered severe macroeconomic crises in the late 1990s and early 2000s. Per capita GDP fell 12% in Argentina in 2002, 6% in Colombia 1999, 8% in Ecuador 1999, 12% in Uruguay 2002, and 11% in Venezuela 2002. These substantial shocks, which seriously disrupt the functioning of the economy, are associated to large jumps in inequality levels. However, their impact on inequality indicators is often

<sup>&</sup>lt;sup>21</sup> CEPAL (2007) reports that the unemployment rate for LAC rose from 5.8 in 1990 to 9.3 in 1995, and 11.0 in 2002, and then dropped to 8.7 in 2006.

<sup>&</sup>lt;sup>22</sup> See Sánchez Páramo and Schady (2003), Behrman et al. (2003), Goldberg and Pavnick (2007), Gasparini and Cruces (2008) and the references therein for examples of this extensive literature.

<sup>&</sup>lt;sup>23</sup> See, for instance, Behrman *et al.* (2003).

short-lived: as economic relationships return to normality, inequality rapidly falls.<sup>24</sup> The significant drop in income inequality in Argentina, Colombia, Ecuador, Paraguay, Uruguay and Venezuela from the early to the mid 2000s can be at least partially attributed to the quick recoveries from severe macroeconomic crises.

After the successful experience of Progresa in Mexico, several Latin American countries adopted or expanded conditional cash transfers programs (CCTs).<sup>25</sup> These programs combine monetary subsidies with the requirements that the family group of the beneficiary complies with a set of conditions related to human capital accumulation, such as enroll children in schools and attend medical check ups for pregnant women. Unlike other redistributive policies that deliver in-kind subsidies (*e.g.* education or health), CCTs are computed as income by the household surveys and hence have full impact over the income inequality statistics. The evidence suggests that CCTs in LAC are well targeted on the poor, and are thus highly progressive. However, most of these programs have a modest impact on inequality, due to their relatively low coverage and the low level of monetary transfers.<sup>26</sup>

In the 2000s, Latin America seemed to enter a new stage of the political cycle. In several countries, new administrations came into power with a promise of promoting a more active role of the state in the economy, and with more ambitious redistributive policies. Besides the rhetoric, some governments indeed engaged in a more active role in the labor market, widened the scope and coverage of social policy, nationalized some enterprises, intervened in some markets, and subsidized goods and services. While it is likely that some of these initiatives had equalizing results, much more work is needed for a complete assessment of their effective impact on the income distribution, including the actual progressiveness of the subsidies established, and the long-term consequences of these policies.

The fall in inequality in the 2000s suggested by the evidence, however, does not necessarily imply a substantial reversal of the trend that started in the 1980s and 1990s. A significant share of the current distributional improvements are either based on natural

<sup>&</sup>lt;sup>24</sup> It should be noted, however, that there are compelling arguments stating that these large crisis might still have a long term impact on inequality through "hysteresis" effects. The evidence on this issue is still relatively scarce, but this constitutes an important issue for further research.

<sup>&</sup>lt;sup>25</sup> Some of the most important CCTs in the region include *Oportunidades* (the continuation of Mexico's *Progresa*), *Bolsa Familia* in Brazil, *Bono Solidario* in Ecuador, PATH in Jamaica and *Familias en Acción* in Colombia. Cash transfer programs with some conditionalities but related to specific economic crises were implemented in Argentina (*Programa Jefes y Jefas de de Hogar Desempleados*) and Uruguay (*PANES - Plan de Asistencia Nacional a la Emergencia Social*), among others. See Veras Soares *et al.* (2007) for a comparative review of recent experiences in the region.

<sup>&</sup>lt;sup>26</sup> The impact is larger when using indices which place relatively higher weights in the lower tail of the distribution. See Soares et al. (2007) for a discussion.

realignments after shocks of the 1990s, or dependent on the favorable international scenario faced by the region in the 2000s. In fact, if we exclude the countries where a significant share of the drop in inequality can be attributed to the recovery from severe macro crisis (such as Argentina, Uruguay and Venezuela), the average fall in inequality in Latin America from the early to the mid 2000s is just 1 Gini point. After analyzing changes in the components of household income and the LAC distribution in a world perspective, the document studies the evolution of the assets of the poor (human capital, land), to assess whether there are changes in the fundamentals that might lead to a more permanent reversal in the inequality trend.

#### **Box 3.3.** Income polarization

There has been a growing interest for the concept of polarization, a characteristic of the income distribution different from – though related to – income inequality. While the latter refers to differences across individuals, the concept of polarization adds a concern for the identification with members of a group. Polarization is high in a society where it is easy to identify large groups composed by people with similar characteristics, but very different from the rest. Gasparini, Horenstein, Molina and Olivieri (2008), however, conclude that in the case of Latin America and the Caribbean the results from the analysis of polarization are qualitatively similar from those obtained with the more conventional inequality indicators. The CEDLAS webpage (<a href="www.cedlas.org">www.cedlas.org</a>) presents a set of income polarization indicators computed for all countries in LAC.

#### 4. Inside household income

The inequality measures presented in the previous section are based on the distribution of household per capita income. This section's objective is to analyze the components of household income, and to establish whether the trends in these inequality measures can be traced out to any of these elements.<sup>27</sup>

Labor earnings account for the bulk of household income, as documented for Latin America and the Caribbean, and for other regions of the world as well. Table 4.1 presents the shares of total household income corresponding to labor and non labor sources. This information confirms the previous findings: the unweighted average share of labor

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<sup>&</sup>lt;sup>27</sup> The time span of the comparisons in inequality over time is more limited than in the previous section, which compared the Gini coefficient of household per capita income for the period between the early 1990s and the mid 2000s for most of the countries in the sample. This is because even without access to the microdata, the National Statistical Offices published this indicator for earlier period (as detailed in the appendix). This is not the case for the Gini coefficient of other household income variables.

income represents about 81 percent of total household income, with relatively lower levels in Guyana, Peru, Dominican Republic, Brazil and Argentina.

Table 4.2 presents the level of inequality (as measured by the Gini coefficient) of hourly wages in the main job for all workers, and for prime age male workers by education levels. Given the large share of labor in household income and the high levels of inequality reported in the previous section, it is not surprising to find a high average unweighted Gini of 0.501 for hourly wages in Latin American countries. This number is lower but still close to the 0.519 for per capita household income reported in table 3.1. There does not seem to be a significant difference between the inequality of hourly wages for all workers and for prime age male workers, as reported in the second column of table 3.1. However, there are large differences in inequality levels within educational groups. Gini coefficients are similar on average in the low and middle education groups (with a few notable exceptions, mainly in Central America, with much higher inequality for the low category), with averages around 0.418 and 0.411 respectively for Latin American countries. The level of inequality is markedly higher within the high education group for most countries, with an average Gini of 0.445 for Latin America.

Figure 4.1 presents the change in the Gini of hourly wages for all workers for the widest available range for each country. As in the results presented in the previous section for household per capita income, there have been substantial changes in inequality of hourly wages. There have been significant drops of more then 4 Gini points in El Salvador, Venezuela, Ecuador, Brazil and Guatemala, and lesser falls in Mexico and Nicaragua, while the Ginis increased by two points or more in Argentina, Uruguay, Colombia and Panama.

Figure 4.2 depicts the evolution of labor income as a share of total household income for the widest possible date range for each country. The first noticeable fact from this figure is that the share of labor income has fallen for most of the countries, with an average fall of 2.8 percentage points – a 4.6 percentage point reduction for countries where the share fell, and 1.7 percent increase in countries where this share grew over the observation period. The distributive impact of an increase in the share of non-labor income, however, is ambiguous: it depends on which components of non-labor income have increased, and their concentration.<sup>28</sup>

<sup>&</sup>lt;sup>28</sup> The share of labor income has fallen in countries where inequality in household per capita income increased, like in Uruguay and Bolivia, but also in countries where inequality has fallen substantially, like in Mexico and Brazil. It is noticeable that the last two countries have implemented major Conditional Cash Transfer programs, and Brazil has also vastly increased the coverage of pensions for the rural population over the period. Part of the reduction in inequality might be attributed to this increase in the share of equalizing non labor income sources.

Non labor income is composed of income from capital, rents and profit, pensions, interhousehold transfers and remittances, government transfers and the implicit rent from owned property. Household surveys, however, do not usually provide reliable estimates of capital and related income, and this is especially true for the data collection efforts in the region. Most of income from this source is concentrated in the higher levels of the income distribution – households in the fifth quintile of per capita income account, on average, for around 80 percent of this source. Moreover, as reported in the third column of table 4.3, capital and related incomes only account for 2.7 percent of individual total income on average, which is far from the estimates obtained by national accounts or other methodologies. This distribution and the high probability of underreporting of capital income probably imply a downward bias in inequality measures in the region.

The information on non labor income from other sources, however, tends to be more reliable, especially in terms of pensions and transfers from the government and from other households. Table 4.3 presents the share of different sources in total individual income, and the Gini coefficient for these sources. As with household income, labor income represents on average 80 percent of individual income, and pensions and transfers account for about three-quarters of non labor income. The right hand side panel of table 4.3 indicates that non labor individual income tends to be significantly more concentrated than labor income, which is driven by the high concentration of capital income and transfers, as reflected by the Gini coefficients for these sources. The distribution of government transfers, pensions and implicit rents, on the other hand, present lower levels of inequality than the distribution of individual income or labor income.

The evidence presented so far indicates that the countries in Latin America and the Caribbean exhibit high levels of inequality, as does the region when considered as a whole. The following section compares the distribution of income in the region with other regions of the world.

# 5. LAC in world perspective

Latin America has been traditionally regarded as the most unequal region of the world. This assessment, although plausible, was not based on strong grounds, as differences in the data sources undermine the regional comparability of the results. Although we are still far from having international, fully-comparable inequality statistics, our view of inequality in the world becomes less blurred as new and better data becomes available.

One key initiative in compiling inequality statistics is the UNU/WIDER World Income Inequality Database (WIDER, 2007).<sup>29</sup> Figure 5.1 shows Gini coefficients drawn from

<sup>&</sup>lt;sup>29</sup> The UNU/WIDER World Income Inequality Database uses the results from SEDLAC as its source for most of its indicators for Latin America and the Caribbean.

that source for several countries in the world. The observations included in the figure dataset meet several criteria: (i) they are rated by WIDER as high quality (1 or 2 in their ranking), (ii) the income sharing unit is the household or the family, (iii) the unit of analysis is the person, and (iv) the coverage of the survey is national, or when urban, the share of the urban population is higher than 80%. The observations in the figure belong to the latest available survey for the period 1995-2006.<sup>30</sup>

LAC countries rank among the most unequal in the world in terms of income. From the 15 most unequal countries in the WIDER database (based on income data), 10 belong to LAC. The average Gini in LAC is 52.9, a value exceeded only by the mean Gini of those few African countries in the WIDER income database (56.5). Instead, income inequality is substantially lower in the high-income countries, and in countries from the former Soviet block (Russie, Eastern Europe and the those from former Soviet Union). Some Asian countries are as unequal as in LAC (e.g. Thailand, Nepal), but in most of Asian economies income is more equally distributed. Compared to LAC, the average income Gini is 8 points lower in Asia, 18 in Eastern Europe and Central Asia and 20 in the developed countries. When using consumption or expenditure as the base for the Gini inequality indicator, LAC countries also rank among the most unequal in the world (figure 5.2). The estimates published in the World Development Report 2006 on Equity and Development (World Bank, 2006) provide a similar picture (figure 5.3). LAC countries are located among the most unequal economies both in terms of consumption and income.

There is a vast literature initiated by Kuznets (1955) that links inequality to economic development. This literature usually finds that the level of inequality in the Latin American countries is higher than predicted according to their level of development, usually captured by GDP per capita. This "excess inequality" constitutes a pervasive characteristic of the LAC societies (Londoño and Székely, 2000). Figure 5.4 illustrates this point based on WIDER data on income inequality. The LAC countries are all above

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<sup>&</sup>lt;sup>30</sup> In most countries, the Gini coefficient is computed over the distribution of household per capita gross income. In those European countries where equivalence scales are used, we estimate the Gini for per capita income based on results for countries for which both computations are available. We were unable to correct for the fact that in developed countries WIDER reports Ginis for household disposable income, while for developing countries these statistics are based, in principle, on gross income. Three elements alleviate the consequences of this comparability problem. First, since incomes recorded in developing countries usually do include monetary government transfers, and most salaried workers report their wages after taxes (which are deducted from the wage bill), the income concept captured by surveys is not exactly gross, but instead it is half way between gross and disposable. Second, direct taxes are unimportant in most developing countries, so the gap between these two concepts is small. Finally, developed countries are substantially less unequal than those in the rest of the world, and in particular than those in Latin America, even after adjusting for the difference in the income aggregate. For instance, in Finland, where the tax burden is high and then the gap between gross and disposable income is large, the difference in the Gini computed over the two income concepts (gross and disposable) is less than 5 points. This difference is small compared to the 20 points difference between the average Gini in LAC and that from the developed countries.

the smoothed regression line in the GDP per capita / Gini plane: Ginis for LAC countries are larger than expected according to their level of output per inhabitant. The coefficient of the LAC dummy in a linear regression is positive and highly significant: the Gini coefficient is around 10 points higher in LAC than in the rest of the world (based on income data from the WIDER database), after controlling for per capita GDP.

Tracing international inequality patterns over time is a difficult task with arguably too much noise in the results. In table 5.1, we update regional inequality figures in Gasparini (2003), where Gini coefficients are taken from a common sample of countries, and a small set of studies, and hence are methodologically more consistent. According to these estimates, the mean Gini across Latin American and Caribbean countries has been significantly higher than in Asia, the developed countries, and Eastern Europe in the last four decades.<sup>31</sup> There are signs of a small reduction in the inequality gap with Asia and Eastern Europe, two regions that experienced strong and potentially unequalizing economic transformations in the last two decades.

The recent Gallup World Poll provides some new evidence on the international comparisons of income inequality. The survey uses an identical questionnaire from national samples of adults from 132 countries, 23 of them from LAC. In particular, similar income questions are asked in all countries. Figure 5.5 and table 5.2 reproduce the main results in Gasparini, Marchionni, Olivieri and Sosa Escudero (2008), based on the the 2006 round of that survey. "Cross-country" inequality is computed as the non-weighted mean of the national Gini coefficients of the countries in each region. According to this definition, Latin America is the most unequal region in the world (excluding Africa, which is not in the sample). The cross-country Gini in Latin America is 49.9, slightly larger than in South Asia (48.9), and Eastern Asia and Pacific (47.1). The mean Gini in the Caribbean countries is 45.6. Countries in Eastern Europe and Central Asia (41.8), North America (39.2) and especially Western Europe (34.0) are the least unequal in the world.

As discussed above, it is also possible to evaluate the level of regional inequality by considering each region as a single unit, and computing inequality among all individuals in the region after translating their incomes to a common currency. The Gini coefficient of Latin America considered as a single large is 52.5. That value is again higher than in Western Europe (40.2), North America (43.8) and Eastern Europe and Central Asia (49.8); but it is now lower than in South Asia (53.2) and Eastern Asia and Pacific (59.4). Inequality in the Caribbean (56.1) is significantly larger than when taking an average over national Ginis.

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<sup>&</sup>lt;sup>31</sup> See also Bourguignon and Morrison (2002) and Deininger and Squire (1996) for similar conclusions.

This result of not-so-high within inequality in Latin America is driven by the fact that dispersion in country mean incomes is smaller in Latin America than in other regions, like Eastern Asia and the Pacific and the Caribbean. Milanovic (2002) finds a similar result when estimating the world income distribution from household surveys. Milanovic and Yitzhaki (2002) find that while only 7% of overall inequality in Latin America is due to between-country group inequality, the share is 72% in Asia. Gasparini *et al.* (2008) report that in the Gallup Poll the income ratio between the poorest and the richest countries (Bolivia and Chile) is less than 5 in Latin America; more than 8 in East Asia and Pacific (Cambodia and Hong Kong), and more than 10 in the Caribbean (Haiti and Puerto Rico).

To sum up, the evidence discussed in this section is not conclusive to the status of Latin America as the most unequal region in the world. Africa may be somewhat more unequal, and some Asian countries may also be more unequal than the LAC economies. In addition, the LAC excess inequality has probably diminished in the last 20 years, given the transformations in Eastern Europe, Central Asia and South East Asia. Finally, when computing global inequality, Latin America does not rank as the most unequal region in the world. In any case, regardless its position in the global ranking, Latin American and the Caribbean is a region with very unequal national income distributions. It is interesting to notice that this characterization has been unchanged for decades, and probably for centuries, despite substantial changes in the demographic, economic, social and political environment. There seems to be some underlying factors that are stronger determinants of the level of inequality in the region.

# 6. Inequality in education

The discussion in the previous pages covered the evolution of income distribution in Latin America and the Caribbean. The remaining of this document discusses inequality in other socio-economic outcomes. In this section we focus on education, analyzing patterns of educational attainment, on the one hand, and of school enrollment, on the other. As discussed in section 4, labor accounts for the bulk of household income, and as the main productive asset for the working age population, the level and distribution of human capital provides important insights on the patterns of income inequality. On the other hand, differences in school enrollment for children and completion rates for younger workers provide valuable information on the future of the income distribution, and are closely related with the concept of equality of opportunities.

#### 6.1. Educational attainment for the working age population

The average number of years of education provides an approximation to the stock of human capital in a population. The first columns in table 6.1 present this information for all adults aged 25-65 in Latin America and the Caribbean, *i.e.* those deemed to have completed their education. The region presents some heterogeneity in the distribution of this indicator: only a minority of countries has an average of close to or more than 10 years of education for adults in the 25-65 age range, including those in the Southern Cone (Argentina, Chile, Uruguay), Panama, and Jamaica, while Haiti and some countries in Central America (El Salvador, Guatemala, Honduras and Nicaragua) have an average below 7.

The trends in this indicator for the last decades can also be deduced from the table, which presents average years of education for age groups in ten year intervals and for those aged 61 or more. In all the countries considered, average years of education are decreasing in age, indicating a secular growth in the stock of human capital. These increases are large: the difference between those aged 61 or over and those in their thirties ranges from 2.5 (Belice) to 6.5 years (Bolivia and Haiti). Moreover, there is convergence in this indicator: the larger relative and absolute increases between the two generations happened in the countries with the lowest levels of education for those aged 61 or over.

Table 6.1 also presents information on gender differences in education. For all adults with completed education (those aged 25-65), women have the same or a larger average number of years of educations in 12 out of the 23 countries listed in the table, and only in six countries the difference favors men for close to or more than one year (Mexico, El Salvador, Guatemala, Peru, Haiti and Bolivia). The advantage for women in this indicator is larger in countries with the highest average levels. This relative parity in the adult population responds to a generational shift: for those aged 61 or over, the average number of years of education is larger for men in most countries. For those in their twenties, however, years of education are larger for men only in Haiti, Guatemala, Bolivia, Peru, El Salvador, and Mexico, and for those aged 10 to 20 this is only true for the first three countries. The trend for the latter age group is also reflected in the discussion of enrollment rates presented below.

While table 6.1 presented generation and gender differences in education, table 6.2 provides information on the distribution of educational outcomes in the population aged 25-65. Two sets of indicators are provided: average years of education by quintile of equivalized household income (and the gap and the ratio between the richest and the poorest quintile), and the Gini coefficient computed over years of education. The quintile gap and the Gini provide complementary information in a context of secular growth in

the underlying indicator, accounting for absolute and relative differences among individuals.<sup>32</sup>

Table 6.2 indicates that the average difference in years of education for adults in the top quintile compared to those in the bottom quintile is very large, at around 6 years. The countries with the highest differences (of 7.4 or more years) are Mexico, Panama, Peru and Bolivia, while Caribbean countries have the lowest differences. The ratio of average years of education between the poorest and richest quintiles follows a similar pattern. The Gini for years of education varies over a wide range. It is about 0.4 or higher for Bolivia, El Salvador, Honduras and Nicaragua, and reaches levels of more then 0.55 in the two extreme cases, Guatemala and Haiti. However, it is below 0.25 for Southern Cone and most Caribbean countries.

The differences between the two sets of indicators (quintile differences and Ginis) become more apparent when analyzing their evolution. Figure 6.1 presents the change in the average years of education, in the Gini based on years of education and in the gap between the top and bottom quintiles for the earliest and latest survey in the sample for each country. The increase in years of education is strongly correlated with the fall in the Gini coefficient over the same period, reflecting the upwards compression of the distribution of years, which has a ceiling for tertiary or postgraduate university, and which grows mainly from an increase in secondary education, given high rates of primary completion, as detailed below. The changes in the quintile gaps in the bottom panel of figure 6.1 are not clearly correlated with the changes in years or in the Gini: it is possible for a country to experience large increases in years of education and important reductions in the Gini with only minor changes in the gap between quintiles, or even with increases in this gap. Most notably, the Gini for years of education has fallen for all the countries considered, while the gap between quintiles has increased or remained virtually unchanged for all but one country in the sample, Chile.

#### 6.2. School enrollment

While the previous pages concentrated on the educational attainment of the adult population, we now report the level and distribution of net enrollment rates for the region.<sup>34</sup> Table 6.3 reports these rates for primary, secondary and tertiary levels of

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<sup>&</sup>lt;sup>32</sup> The Gini coefficient is scale-invariant. This implies that, for instance, if years of education double for all the population, the Gini remains unchanged. The quintile gap, on the other hand, would rise.

<sup>&</sup>lt;sup>33</sup> The distribution is truncated in graduate education, as most surveys do not capture education at the postgraduate level.

<sup>&</sup>lt;sup>34</sup> The net enrollment rate is defined as the share of individuals in a given age group that attend the educational level corresponding to their age.

education, providing also a breakdown by gender and the gap and ratios in the rates between the top and the bottom quintile.

Primary enrollment rates are very high in the region, with most countries above a 95 percent rate. The rates are comparatively low in El Salvador (89.6), Guatemala (90.2) and Haiti (75.7). There is also some degree of heterogeneity within countries. Net enrollment rates for children in the poorest quintile are below 90 percent in Haiti, Guatemala, El Salvador, Nicaragua and Honduras, while some countries have achieved rates above 95 percent for children in this income group. This is reflected in the gap between the top and bottom quintile reported in table 6.3, which is higher than 10 percentage points for Haiti and the low income Central American countries, and extremely low for most of the others.

Enrollment rates in the secondary and tertiary levels are lower and more dispersed across countries in the region. Some countries have achieved close to or more than 70 percent enrollment rates for secondary schooling (Peru, Ecuador, Panama, Colombia, Venezuela, Mexico, Suriname, Uruguay, Argentina, Jamaica and Chile), but this rate is lower than 50 percent in Belice, Honduras, Nicaragua, El Salvador, Guatemala and Haiti. For tertiary education, only Ecuador, Peru, Mexico, Colombia, Uruguay, Venezuela, Chile and Argentina exhibit rates above 20 percent.

The enrollment gaps by income are substantially higher in the secondary and tertiary levels - the average difference between the top and bottom quintiles is higher than 30 points for both levels. While low income Central American countries have large gaps in secondary school, the gaps are low for the tertiary level, due to the low overall enrollment rate. The countries of the Southern Cone – Argentina, Chile and Uruguay – have relatively small gaps in secondary school, but large gaps in tertiary education.

With respect to gender differences, the gap for primary school is very low (with the exception of Nicaragua, where girls have 4.4 percentage points higher enrollment rates). Secondary enrollment rates are higher for boys only in Haiti, Mexico, Guatemala, Bolivia and Peru, but they favor girls by more than 5 percentage point in most other cases. That gap is also present, although with less intensity, at the tertiary level.

Figure 6.2 presents the change in enrollment rates and in the quintile gap for the three levels of education. Enrollment rates at all levels for all countries have increased. For primary education, the quintile gap has remained almost constant or fallen for all countries. Moreover, there is a clear relationship between higher enrollment and lower gaps, since the top quintile has historically being close to the 100 percent ceiling – any improvement would narrow the gap. Notably, a set of countries have achieved increases of more than 10 percentage point in net primary enrollment rates in relatively short periods of time, like Brazil (93-06), Colombia (96-04), Nicaragua (93-05) and El

Salvador (91-05). The increase was low for the countries that were already close to universal coverage at the time of the first available survey.

While net enrollment rates also increased substantially for secondary schooling (by 20 percentage points or more in Costa Rica, Mexico, Dominican Republic and Brazil), the quintile gap has increased in some cases, including Guatemala, Nicaragua, El Salvador, Honduras, Costa Rica, Dominican Republic and Brazil. Finally, the increases in tertiary enrollment have been accompanied by rising quintile gaps in all countries, which implies that the increase has happened mostly at the upper level of the income distribution.

In all, the evidence from years of education in the adult population and net enrollment rates for children indicate that countries in Latin America and the Caribbean have made substantial inroads in increasing overall levels of human capital, and in reducing some dimensions of inequality in education. There are however some caveats about the effect of these trends in future inequality. On the one hand, an expansion of the stock of human capital does not necessarily imply an immediate reduction in income inequality, as the "paradox of progress" suggests (Bourguignon et al., 2004). On the other hand, it might be difficult to sustain high quality schooling systems in the context of large increases in enrollment rates. While gaps in the quantity might be closing, it is possible that the gap in quality (especially between public and private schools) might be increasing in the region.

# 7. Inequality in other goods and services

Besides analyzing income distribution, which is the main objective of this paper, there are some other dimensions that should be addressed in order to get a more detailed picture of inequality. The previous section analyzed education, one the most relevant dimensions. We now continue this analysis by assessing inequality in the access to some basic services (adequate dwelling, running water, hygienic restrooms and electricity), durable goods (TV, fridge and car), and information technologies (PC, Internet and mobile phone).

#### 7.1 Inequality in the access to basic services

Table 7.1 presents information on the relative size of the dwelling (number of people per room) and its quality (quality of the materials used in the walls) for the poorest and richest quintiles and the difference between the two groups, along with the mean value for the total population of each LAC country.

Individuals in the poorest group live in houses with substantially less space per person than those in the highest income group: the Latin American averages are 2.2 and 0.9 people per room, respectively. This is the result of the combination of two reasons:

firstly, people from the bottom of the income distribution live in houses with fewer rooms; secondly, poor households usually have a larger number of members.

The indicators in table 7.1 suggest that inequality in terms of relative dwelling size is particularly important for Central American countries, with the exception of Costa Rica. The gap between the top and bottom quintile is smaller in Brazil, Chile, Dominican Republic and Mexico.

Figure 7.1 presents the evolution of this quintile gap. In 11 out of 16 countries the gap has shrunk, being Peru, Mexico, Paraguay and El Salvador the countries in which the change has been more significant. Nicaragua, Argentina, Guatemala and Colombia, on the other hand, are among the countries in which inequality in this housing dimension has increased.

Most household surveys in LAC also include information on the materials used for the walls, roof and floor of the dwellings. However, there are significant differences in the materials commonly used for houses in different countries: materials that are a clear indicator of poverty in one country (or region) may be extensively used by all the population in another country. Comparisons based on these variables should be made with care, as indicators are country-specific. In this section, we focus on the quality of the walls.<sup>35</sup> There are large differences in the share of people living in dwellings with low-quality walls between the top and the bottom quintiles. That gap seems particularly large in Guatemala, Bolivia, Paraguay, Ecuador and El Salvador. On the contrary, Brazil, Argentina, Costa Rica and Chile are among the countries with smaller gaps in this housing indicator.

Figure 7.2 shows that in most of the countries the gap in the quality of the materials used in the walls between the poorest and the richest quintile seems to have been reduced from the early or mid 1990s to the mid 2000s. This is especially true for Mexico, Dominican Republic, Chile, Ecuador and Paraguay.

Table 7.2 presents information on the access to running water, hygienic restrooms and electricity.<sup>36</sup> Access to electricity is widely extended across households in the region: approximately 90 percent of households in LAC have access to this service. The gaps between quintiles, however, show a great deal of regional heterogeneity: while access is almost universal in the region for the top quintile, it is below 50 percent for the bottom quintile in Bolivia, Honduras, Nicaragua, Panama and Peru. Access to running water is lower than access to electricity, although still over 80 percent as a regional average. The

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<sup>&</sup>lt;sup>35</sup> See the SEDLAC webpage for country-specific criteria for the definition of dwelling quality indicators.

<sup>&</sup>lt;sup>36</sup> Access to water refers to a source in the house or lot. Hygienic restrooms represent those with a toilet connected to a sewerage system or to a septic tank. Access to electricity refers to the presence of any source of power within in the house.

gap between quintiles in access to this running water is similar on average to the gap in access to electricity, although there are fewer cases of very large gaps. Finally, while indicators on access to hygienic restrooms are more country-specific (as questions differ significantly across surveys), the average rate is just below 70 percent. The gap between quintiles is very high for this indicator in most cases, with average access at almost 90 percent for the top quintile but below 50 percent in the majority of the countries for the bottom quintile.

Inequality in the access to basic services is not only explained by the fact that poorest households have fewer resources to pay for their access prices, but also because in many cases it is virtually impossible to have access to them since they are not provided in the areas where these households live, such as rural areas or neglected suburban areas.

The country-based analysis shows similar results: Argentina, Chile, Costa Rica and Uruguay are among the countries in which the coverage of these three services is high and the gap between extreme quintiles is relatively small.<sup>37</sup> In the case of Nicaragua, Peru, Bolivia and Honduras we find a different scenario. In these countries, the mean access to basic services is low, and the gap between quintiles is very pronounced. For instance, about 3 out of 10 households from the first quintile in Nicaragua and Peru have access to water, but this proportion is about 9 out of 10 for the upper quintile in those countries.

Figures 7.3 and 7.4 illustrate the evolution of the access gap between quintiles in the case of water and electricity. This gap has dropped in most of the countries. Paraguay is one of the countries with the largest reduction in the access gap between extreme quintiles. Other countries that have experienced a fall in the gap are Brazil, Chile, Colombia, El Salvador, Mexico, Peru and Uruguay.

#### 7.2. Inequality in the ownership of durable goods

Table 7.3 presents information about the possession of some durable goods (such as fridge, TV and car) for the poorest and the richest quintiles, and the mean value for the total population for each country in the sample. A high percentage of LAC households own a TV (over 80 percent) and, even though the gap between quintiles is high, in most of the countries it is lower than the gap observed for other variables. The proportion of households owning a fridge is approximately 67 percent, but in this case the gap between the poorest households and the richest ones is much more substantial, at 43 versus 86 percent. With respect to car ownership, the proportion is below 40 percent in all LAC

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<sup>&</sup>lt;sup>37</sup> The relatively better situation in Argentina and Uruguay according to this indicator is probably overestimated, since the respective surveys do not include rural areas.

countries, and in most cases of the countries this percentage drops below 5 percent when considering the poorest quintile of the income distribution.

We reach similar conclusions to those already discussed from the country-based analysis: the lowest levels of access and the larger levels of inequality are found in some Central American countries (Guatemala, Nicaragua<sup>38</sup>, Honduras and El Salvador) and in some Andean countries (Bolivia and Peru). On the contrary, Argentina, Chile, Costa Rica, Uruguay and Venezuela have a higher mean in access to durable goods, and a lower level of inequality as captured by the gap between the bottom and top quintiles. Brazil and Mexico fall in between, with lower access to the ownership of durable goods, and greater inequality levels than in the best positioned countries.

#### 7.3. Inequality in the access to information technologies

Table 7.4 shows information on the access to some information-related technologies: PCs, Internet and mobiles phones. On average, access to these technologies is not widespread, especially when referring to the access to PCs and the Internet. However, it is possible that this situation has improved from the time the surveys were conducted (mostly 2006), since these technologies are relatively novel and they show a steep increase in adoption from one year to another. This argument is also valid in the case of mobile phones: the LAC mean coverage of around 40 percent in 2006 is almost certainly higher in 2008.

In every LAC country there are important inequalities in the access to informational technologies, especially in the access to PCs and the Internet. Household from the poorest quintile of the income distribution have an almost no access to these technologies at home, although access to mobile phones seems to be much more generalized.

The relative situation of each country is similar to the one described in the previous subsections. Chile, Costa Rica and Uruguay are the countries with higher access rates,<sup>39</sup> while once again Bolivia, El Salvador, Guatemala, Honduras, Nicaragua and Peru are those with the most limited access to informational technologies, jointly with Paraguay in this case. The results for Brazil and Mexico are closer to those for the first group. With respect to the inequality in the access to these technologies, it is very high, with virtually no access to PCs and the Internet for the poorest households. Chile is the only country in

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<sup>&</sup>lt;sup>38</sup> Data for Nicaragua refers to the year 2001. It is thus likely that the relative situation of this country has improved.

<sup>&</sup>lt;sup>39</sup> The results for Argentina and Nicaragua are not directly comparable to those from the other countries, because they were obtained from surveys carried out in the year 2001, when the access to this kind of technologies was much more limited that at the time of the surveys in the rest of the countries.

which the access to computers for households in the bottom quintile is above 10 percent, while in Argentina (2001), Costa Rica and Mexico this proportion is over 5 percent.<sup>40</sup>

### 8. Concluding remarks

The evidence presented in this paper confirms that income inequality was and still is a pervasive and distinctive characteristic of the LAC economies. The discussion, however, has shed some light on the recent patterns and the evolution of inequality in the region. We found evidence of a significant and widespread fall in inequality in the 2000s, but it is still too early to assess whether this trend is transitory or permanent.

The discussion highlighted that a significant share of the distributional improvements from the early to the mid 2000s were either based on realignments after the strong shocks of the 1990s, or dependent on the favorable international scenario in terms of liquidity and commodity prices faced by the region. Moreover, there are no clear signs of a significant increase in the assets of the poor, especially in terms of human capital: while there is a secular tendency towards greater education access, the gap in enrollment rates at the tertiary level is still very high and, in many countries, has increased from the early or mid 1990s to the mid 2000s. The analysis did not uncover important changes in the structure of remunerations in the economy, nor progressive fiscal policy reforms. However, inequality fell significantly in a number of countries, and whether the change is permanent or not, the rising trend in inequality of the 1980s and 1990s has been reverted in the region, which is certainly a positive outcome that allows for a cautious and qualified optimism. All these caveats justify the question mark in the title of this document. Further research could concentrate on the country-specific policy changes that might be related to the fall in inequality.

Afterthought: at the time of publishing this working paper in March 2009, the international financial crisis was well underway, and it will probably have an impact on the variables covered in this study.

<sup>&</sup>lt;sup>40</sup> The disparities in the access to several goods and services were illustrated by the gaps between the bottom and the top quintiles of the income distribution. It is interesting to notice that many households that belong to the top quintile cannot be characterized as "rich", except in a strict relative sense. For instance, in Peru 10 percent of the households in the top quintile do not have access to water in their lots, 6 percents have dwellings built with low-quality materials, 7 percents do not have restrooms with a toilet connected to a sewerage system or to a septic tank, 75 percent do not have a car, and 66 percent do not own a computer.

### References

- Altimir, O. Beccaria, L., and Gonzalez Rozada, M. (2002). La distribución del ingreso en Argentina, 1974-2000. Revista de la CEPAL 78, 55-85.
- Amarante, V. and Vigorito, A. (2007). Evolución de la pobreza en el Uruguay, 2001-2006. INE, UNDP, UNFPA.
- Anand, S. and Segal, P. (2008). What do we know about global income inequality? *Jorunal of Economic Literature* XLVI (1), March.
- Barros, R.P., Carvalho and Franco. (2003). Distribucao da renda, pobreza e desigualdade no Brasil.
- Behrman, J., Birdsall, N. and Székely, M. (2003). Economic policy and wage differentials in Latin America. Center for Global Development, Working Paper 29.
- Bourguignon, F. and Morrison, C. (2002). Inequality among world citizens: 1820-1992. *American Economic Review* 92 (4), 727-743.
- CEDLAS (2006). ¿Quiénes se Benefician del Gasto Público Social en Honduras? Un estudio sobre la base de la ENCOVI 2004. Background paper for the World Bank Poverty Assessment of Honduras. CEDLAS/UNLP.
- CEDLAS (2007). La Distribución del Gasto Social en Nicaragua. Background paper for the World Bank Poverty Assessment of Nicaragua.
- CEDLAS (2007). Socio-Economic Database for Latin America and the Caribbean (SEDLAC). www.depeco.econo.unlp.edu.ar/cedlas/sedlac
- CEPAL (2006, 2007 and 2008). Anuarios Estadísticos de América Latina y el Caribe. Santiago, Chile, CEPAL.
- Contreras, D., Larrañaga, O., Litchfield, J., and Valdés, A. (2001). Poverty and income distribution in Chile 1987-1998. New evidence. Cuadernos de Economía 38 (114), 191-208.
- Deaton, A. (1997). The analysis of household surveys. A microeconometric approach to development policy. The Johns Hopkins University Press. The World Bank.
- Deaton, A. (2003). How to monitor poverty for the Millennium Development Goals. Research Program in Development Studies, Princeton University.
- Deininger, K. and Squire, L. (1996). Measuring income inequality: a new data set. *The World Bank Economic Review* 10, 565-91.
- Ferreira, F. and Litchfield, J. (1999). Calm after the storms: income distribution and welfare in Chile, 1987-94. The World Bank Economic Review 13 (3), 509-38.
- Ferreira, Leite y Litchfield, (2005) "The Rise and Fall of Brazilian Inequality: 1981-2004" World bank Policy Reserach Working paper 3867.
- Gasparini, L. (2003). Different lives: inequality in Latin America and the Caribbean. En Inequality in Latin America and the Caribbean: Breaking with History?, The World Bank.

- Gasparini, L., Gutiérrez, F. and Tornarolli, L. (2007). Growth and income poverty in Latin America and the Caribbean: evidence from household surveys. *Review of Income and Wealth*, 53 (2), June.
- Gasparini, L., Sosa Escudero, W., Marchionni, M. and Olivieri, S. (2008). Income, Deprivation, and Perceptions in Latin America and the Caribbean: New Evidence from the Gallup World Poll. IADB Latin American Research Network, 2008.
- Gasparini, L., and Cruces, G. (2008). A Distribution in Motion: The Case of Argentina. A Review of the Empirical Evidence. Working paper, UNDP.
- Gasparini, L., Gluzmann, P., Sánchez, R. and Tornarolli, L. (2008). Spatial Welfare Disparities in Latin America and the Caribbean. Manuscript, CEDLAS.
- Gasparini, L., Horenstein, M., Molina, E. and Olivieri, S. (2008). Income polarization in Latin America: patterns and links with institutions and conflict. *Oxford Development Studies*, forthcoming 2008.
- Goldberg, O. and Pavcnik, N. (2007). Distributional effects of globalization in developing countries. Journal of Economic Literature XLV (1), March.
- Goñi, E., López, J.H. and Servén, L. (2008). Fiscal redistribution and income inequality in Latin America. Policy Research Working Paper 4487. The World Bank.
- INEC (2007). Homologación Metodológica del Cálculo de la Pobreza y la Desigualdad a partir de las Encuestas de Condiciones de Vida. Ecuador.
- Kuznets, S. (1955). Economic growth and income inequality. *American Economic Review*, 45.
- Lambert, P. (2001). The distribution and redistribution of income. Manchester University Press.
- Lee, H. (2000). Poverty and income distribution in Argentina. Patterns and changes. World Bank (2000) Argentina. Poor people in a rich country. Background paper 1.
- Londoño, J. and Székely, M. (2000). Persistent poverty and excess inequality: Latin America, 1970-1995. *Journal of Applied Economics* 3 (1). 93-134.
- MERPD (2006). Metodología de medición y magnitud de la pobreza en Colombia. Bogotá, mimeo.
- MIDEPLAN (2006) "Distribución del Ingreso e Impacto del Gasto Distributivo Social", Serie Análisis de Resultados de la Encuesta de Caracterización Socioeconómica Nacional (CASEN 2006), Nro. 2.
- Milanovic, B. (2002). True world income distribution, 1988 and 1993: first calculation based on household surveys alone. *Economic Journal*, 51-92, January.
- Milanovic, B. (2005). Worlds Apart: measuring international and global inequality. Princeton University Press.
- Milanovic, B. and Yitzhaki, S. (2002). Decomposing world income distribution: does the world have a middle class? *The Review of Income and Wealth* 48 (2), 155-178.

- Morley, S. (2001). *The income distribution problem in Latin America and the Caribbean*. CEPAL, Santiago, Chile.
- Morley, S. and Vos, R. (1997). "Poverty and dualistic growth in Paraguay". Banco Inter-Americano de Desarrollo, mimeo.
- Neri, M. C. (2006). Poverty, inequality and stability. The second real. FGV.
- Ocampo, J. et al. (1998). Macroeconomía, ajuste estructural y equidad en Colombia: 1978-1996. In Ganuza, Taylor and Morley (eds.). *Política macroeconómica y pobreza en América Latina y el Caribe*. United Nations Development Programme (UNDP).
- Paes de Barros, R., de Carvalho, M., Franco, S., Ganuza, E. and Mendonca, R. (2005). Crecimiento con equidad. La lucha contra la pobreza en Centroamérica. PNUD, IPEA, ALFAOMEGA.
- Robinson, J. and Sokoloff, K. (2004). Historical roots of Latin American inequality. En World Bank (2004).
- Robles, M. (1999). Pobreza y distribución del ingreso en Paraguay, Encuesta Integrada de Hogares, 1997/1998. MECOVI-DGEEC Consultation Document.
- Sánchez-Páramo, C. and Schady, N. (2003). "Off and running? Technology, trade and rising demand for skilled workers in Latin America". Mimeo. Background paper for the report "Closing the gap in education and technology in Latin America, background paper", World Bank, Office of the Chief Economist for Latin America, Washington DC.
- Soares, S., Guerreiro Osório, R., Veras Soraes, F., Medeiros, M. y Zepeda, E. (2007), "Conditional Cash Transfers in Brazil, Chile and Mexico: Impacts upon Inequality", Working Paper No 35, International Poverty Centre.
- Székely, M. (2003). The 1990s in Latin America: another decade of persistent inequality, but with somewhat lower poverty. Journal of Applied Economics VI (2), 317-339.
- Székely, M. (2005). "Pobreza y desigualdad en México entre 1950 y el 2004", Serie documentos de investigación 24, Secretaría de Desarrollo Social (SEDESOL), México.
- Tsakloglou, P. (1993). Aspects of inequality in Greece measurement, decomposition and intertemporal change: 1974, 1982. *Journal of Development Economics* 40.
- Veras Soraes, F., Perez Ribas, R. y Guerreiro Osório, R. (2007), "Evaluating the impact of Brazil's Bolsa Familia: Cash transfer programmes in comparative perspective", UNDP-International Poverty Centre.
- WIDER (2007). UNU/WIDER World Income Inequality Database.
- Winkler, H. (2005). Monitoring the socio-economic conditions in Uruguay. CEDLAS Working Paper 26, Universidad Nacional de La Plata.
- Wolfson, M. (1994), When Inequality Diverges, American Economic Review, 84, 353-358.

- World Bank (2004). Inequality in Latin America and the Caribbean: Breaking with History?, The World Bank.
- World Bank (2005). World Development Report 2006: Equity and Development. The World Bank, Washington D.C.

## Methodological appendix

This appendix provides information on the construction of the inequality series in each country. All series are based on information taken from the SEDLAC database. In several countries we also use estimates from studies or official sources to fill holes in our database.

Data for **Argentina** comes from the EPH, which experienced several transformations since it was first carried out, in 1974. Chiefly among them, an increase in the number of urban areas covered in several years, and changes in the questionnaire, weights and frequency of visits in 2003. We take into account these changes to estimate a comparable series (see Gasparini and Cruces, 2008). The information of the infrastructure and services section is estimated using the ECV 2001.

Data from **Chile** comes entirely from our estimates from the CASEN survey. The same is true for **Brazil**, using the PNAD, and **Uruguay**, using data from the ECH, except for 2006 that is estimated based on Amarante and Vigorito (2007). In the case of **Paraguay** we use data from the national surveys implemented since 1995 (EH, EIH, and EPH). We estimate inequality in the early 1990s by extrapolating the patterns for Asunción (EH).

We use SEDLAC data from the **Bolivia**'s national household surveys (ENE and ECH) from 1997 to 2003. Ginis from 1992 to 1997 are estimated from patterns in urban areas drawn from the EIH and ENE surveys. The Ginis for 2005 and 2006 are computed based on data from UDAPE taken from the ECH.

**Peru** has two surveys: ENNIV and ENAHO. The last ENNIV was conducted in 2000, while ENAHO has been carried out since 1997. We use SEDLAC data for the last ten years (based in ENAHO) and complete these estimates with other sources of information (Gasparini (2003) and Jaramillo and Saavedra (2008)). However, having comparables indexes of inequality is very difficult, because there exist several differences in the sample frame, questionnaires and number of observations between both surveys.

Tracing the evolution of inequality in **Ecuador** is very difficult, because of the differences between the surveys carried out in the period under analysis (ECV, EPED and ENEMDU). We calculated the approximated evolution of inequality in this country combining our estimates from the data of three surveys.

In **Colombia** we take SEDLAC estimates from 2001 and 2005 based on the ECH, but given various methodological jumps, we use the official MERP (2006) to estimate changes between 1992 and 2001. We base our estimations of the section 7 on data from the ECV 2003.

In the case of **Costa Rica**, we obtain our estimates based on data from the EHPM. Regarding this survey, there has been an important change in the weights in 2000, so data

before and after that year is not strictly comparable. We do not have enough information to make any adjustment. Data from **Panama** comes from our estimates from the EH, but in the section of infrastructure and services we use data from the ENV 2003.

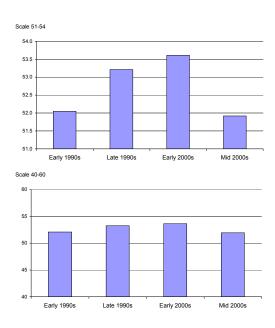
The source of information for our estimations of **Mexico** statistics is the ENIGH, while in the case of **Venezuela** we use the EHM. Both countries have a long tradition in household surveys, so there are not comparability problems in their series of inequality.

**Nicaragua**'s statistics come from our estimates using the EMNV. Because this survey was carried out only four times (1993, 1998, 2001 and 2005), we suppose a linear evolution between years in which the survey was collected. Another country with relatively few household surveys is **Guatemala**. In this case, we estimate inequality measures using data from ENCOVI (2000 and 2006) and ENEI (from 2002 to 2004). We also use estimates from CEPAL of the inequality level at the beginning of the 1990s.

We measure the levels of inequality in **El Salvador** utilizing data from the EHPM, while for **Dominican Republic** our estimates are based on information from the ENFT. In the last country, significant changes in the surveys have been introduced since 2000 generating serious comparison problems with previous surveys. In **Honduras** we take SEDLAC estimates (based on EPHPM) from the second part of the 1990s up to the present, and estimate inequality in the first part of the 1990s combining our information with data from WDI.

## **Figures**

Figure 3.1
Inequality in Latin America
Gini coefficient
Distribution of household per capita income, unweighted averages



Source: own calculations based on SEDLAC (CEDLAS and World Bank). Note: Both graphs are identical, except for the scale in the vertical axis.

Figure 3.2 Inequality in Latin America, by region Gini coefficient Distribution of household per capita income, unweighted averages

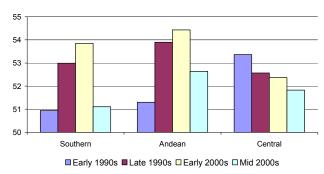


Figure 3.3 Inequality Gini coefficient Distribution of household per capita income Around 2006

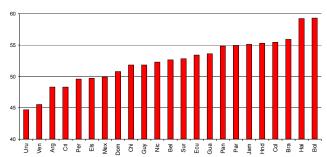
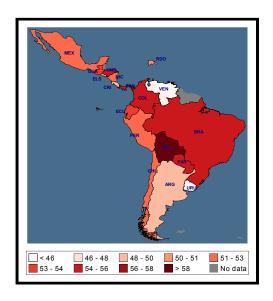


Figure 3.4 A map of inequality in LAC Gini coefficient Distribution of household per capita income Around 2006





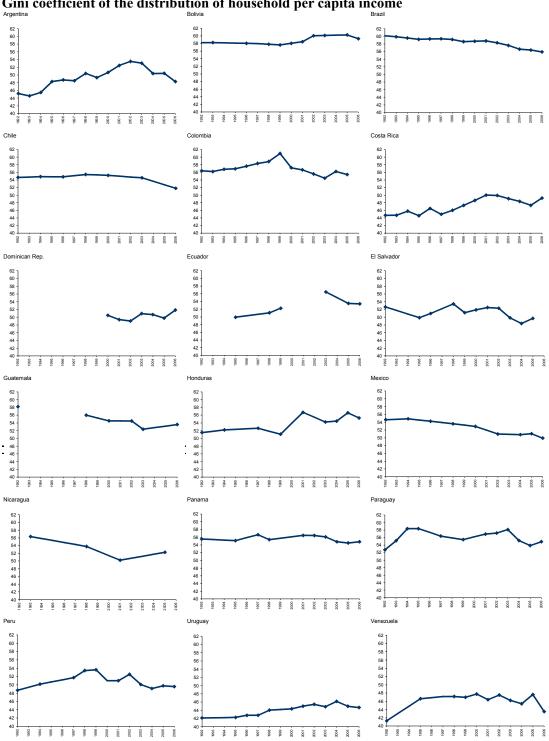


Figure 3.6 Inequality Change in Gini coefficient Distribution of household per capita income

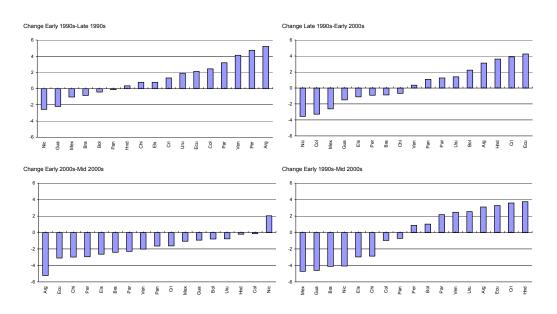


Figure 3.7 Inequality Gini coefficient Distribution of household per capita income

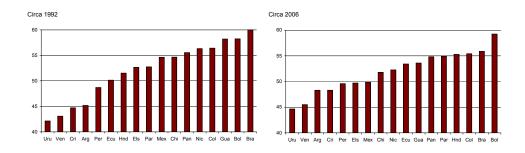


Figure 3.8

Convergence in Gini coefficientes

Early 1990s - mid 2000s Early

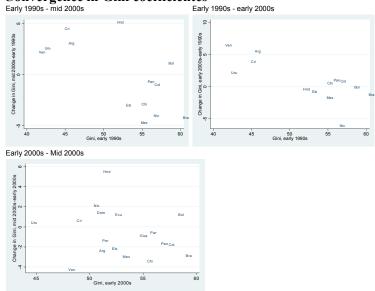


Figure 3.9 Global inequality in Latin America Gini coefficient

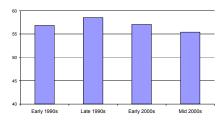


Figure 4.1 Change in the Gini coefficient of hourly wages, all workers

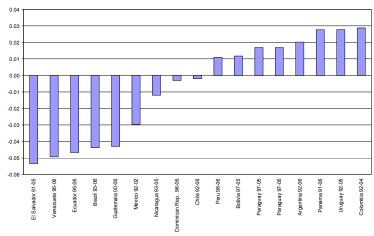


Figure 4.2 Change in labor income as a share of total household income

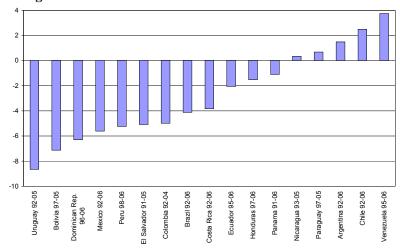


Figure 5.1 Gini coefficient Household per capita income dsitribution Last available observation in period 1995-2005

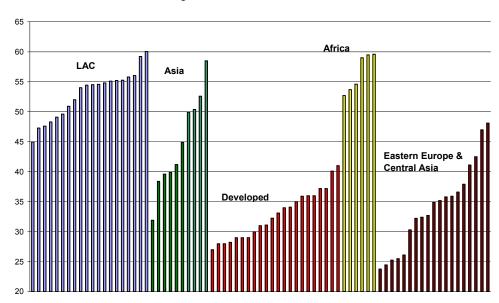
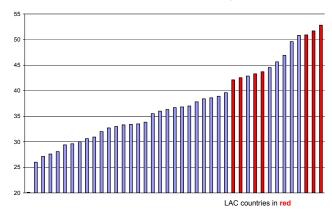
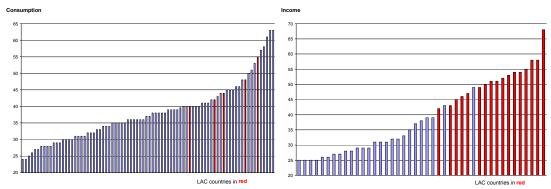


Figure 5.2
Gini coefficients
Distribution of per capita consumption/expenditures
Countries around the world, around year 2000



Source: own calculations based on WIDER.

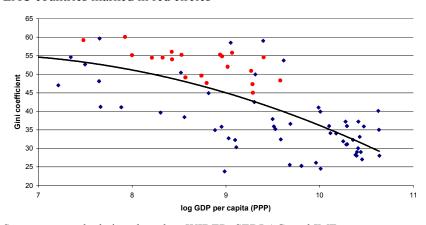
Figure 5.3
Gini coefficients
Distribution of per capita consumption and income
Countries around the world, around year 2000
From the World Development Report 2006



Source: own calculations based on World Development Report 2006.

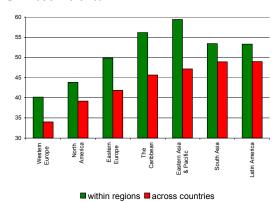
Note: The WDR includes one observation per country (either income or consumption).

Figure 5.4
LAC excess inequality
Scatterplot log per capita GDP (PPP) and Gini coefficient, around 2003
LAC countries marked in red circles



Source: own calculations based on WIDER, SEDLAC, and IMF.

Figure 5.5 Gini coefficients



Source: Gasparini, Marchionni, Olivieri and Sosa (2008) for IADB based on Gallup World Poll 2006.

Figure 6.1 Change in years of education, Gini of years of education and in years gap between Q5 and Q1, population 25-65

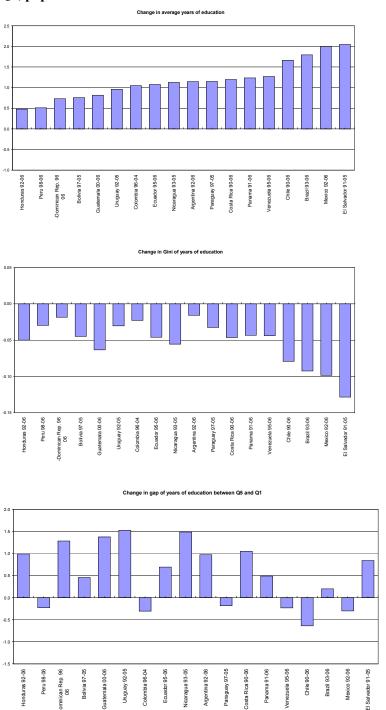


Figure 6.2 Change in net enrollment rates and in Q5-Q1 gap in enrollment rates, primary, secondary and tertiary

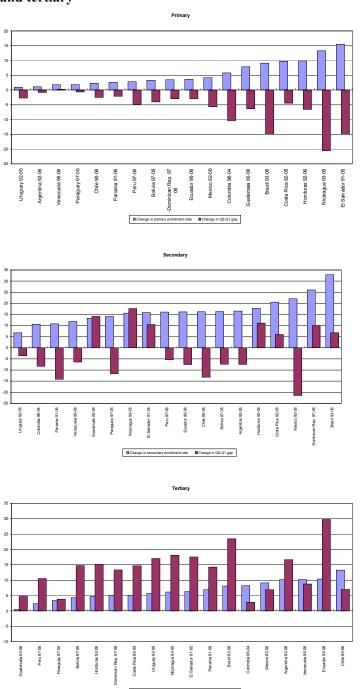


Figure 7.1
Persons per room
Changes in the difference between quintile 1 and quintile 5

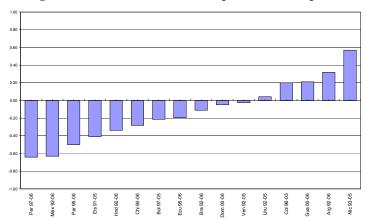


Figure 7.2 Dwellings of low-quality materials Changes in the difference between quintile 1 and quintile 5

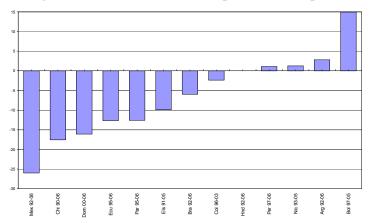


Figure 7.3 Access to water Changes in the difference between quintile 1 and quintile 5

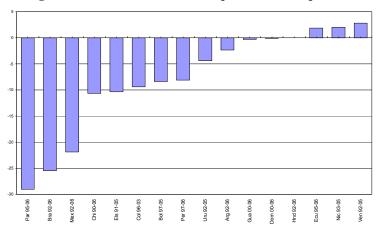


Figure 7.4 Access to electricity Changes in the difference between quintile 1 and quintile 5

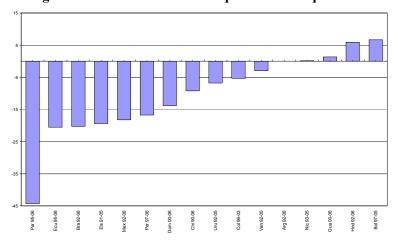
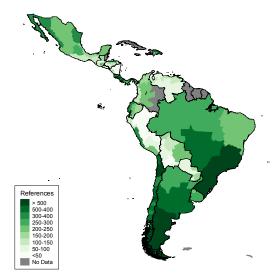


Figure B.3.2.1 The map of incomes in Latin America Per capita income (in PPP US\$), 2006



Source: Gasparini, Gluzmann, Sánchez and Tornarolli (2008).

## **Tables**

Table 2.1 Household Surveys in Latin America and the Caribbean

Country		Name of the Survey	Coverage
Argentina	1986-1991	Encuesta Permanente de Hogares (EPH)	Greater Buenos Aires
	1992-1998	Encuesta Permanente de Hogares (EPH)	Urban - 15 cities
	1998-2003	Encuesta Permanente de Hogares (EPH)	Urban - 28 cities
	2003-2005	Encuesta Permanente de Hogares - Continua (EPHC)	Urban - 28 cities
	2006	Encuesta Permanente de Hogares - Continua (EPHC)	Urban - 31 cities
Bolivia	1993	Encuesta Integrada de Hogares (EIH)	Urban
	1997	Encuesta Nacional de Empleo (ENE)	National
	2000-2004	Encuesta Continua de Hogares - MECOVI (ECH)	National
Brazil	1990-2006	Pesquisa Nacional por Amostra de Domicilios (PNAD)	National
Chile	1990-2006	Encuesta de Caracterización Socioeconómica Nacional (CASEN)	National
Colombia	1992	Encuesta Nacional de Hogares - Fuerza de Trabajo (ENH)	Urban
	1996-2000	Encuesta Nacional de Hogares - Fuerza de Trabajo (ENH)	National
	2001-2004	Encuesta Continua de Hogares (ECH)	National
Costa Rica	1990-2006	Encuesta de Hogares de Propósitos Múltiples (EHPM)	National
Dominican R.	2000-2006	Encuesta Nacional de Fuerza de Trabajo (ENFT)	National
Ecuador	1995-2006	Encuesta de Condiciones de Vida (ECV)	National
	1995-1998	Encuesta Periódica de Empleo y Desempleo (EPED)	Urban
	2000	Encuesta Periódica de Empleo y Desempleo (EPED)	National
	2003-2006	Encuesta de Empleo, Desempleo y Subempleo (ENEMDU)	National
El Salvador	1991-2005	Encuesta de Hogares de Propósitos Múltiples (EHPM)	National
Suatemala	2000-2006	Encuesta Nacional sobre Condiciones de Vida (ECV)	National
Juatemaia	2002-2004	Encuesta Nacional de Empleo e Ingresos (ENEI)	National
Honduras	1992-2006	Encuesta Permanente de Hogares de Propósitos Múltiples (EPHPM)	National
Mexico	1989-2006	Encuesta Nacional de Ingresos y Gastos de los Hogares (ENIGH)	National
Nicaragua	1993-2005	Encuesta Nacional de Hogares sobre Medición de Nivel de Vida (EMNV)	National
Panama	1995-2006	Encuesta de Hogares (EH)	National
Paraguay	1990	Encuesta de Hogares - Mano de Obra (EH-MO)	AMA
• •	1990-1995	Encuesta de Hogares - Mano de Obra (EH-MO)	National
	1997-2001	Encuesta Integrada de Hogares (EIH)	National
	1999-2006	Encuesta Permanente de Hogares (ÉPH)	National
Peru	1997-2006	Encuesta Nacional de Hogares (ENAHO)	National
Jruguay	1989-2005	Encuesta Continua de Hogares (ECH)	Urban
Venezuela	1989-2006	Encuesta de Hogares Por Muestreo (EHM)	National
The Caribbea	n		
Belice	1993-1999	Labour Force Survey (LFS)	National
Haiti	2001	Enquête sur les Conditions de Vie en Haïti	National
Jamaica	1990-2002	Jamaica Survey of Living Conditions (JSLC)	National
ramaioa	1990-2002	Labour Force Survey (LFS)	National
Surinama	1999	Evpenditure Household Sunrey (EHS)	Urban/Paramarika
Suriname	1999	Expenditure Household Survey (EHS)	Urban/Paramaribo

Table 3.1
Inequality in Latin America
Distribution of household per capita income.
Mean and median Gini coefficient across LA countries

	Mean	Median	Mean
			weighted
Early 1990s (c. 1992)	52.0	52.7	54.9
Late 1990s (c. 1998)	53.2	53.6	55.5
Early 2000s (c. 2002)	53.6	54.5	54.7
Mid 2000s (c. 2006)	51.9	52.3	52.7

Table 3.2 Inequality in Latin America, by region Distribution of household per capita income, unweighted means

	Southern	Andean	Central
Early 1990s (c. 1992)	50.9	51.3	53.4
Late 1990s (c. 1998)	53.0	53.9	52.6
Early 2000s (c. 2002)	53.8	54.4	52.4
Mid 2000s (c. 2006)	51.1	52.6	51.8

Source: own calculations based on SEDLAC (CEDLAS and World Bank).

Table 3.3 Inequality in Latin America Statistically significant ups and downs in Gini coefficient

	Latin	America		Sout	thern		Ar	ndean		Ce	entral	
	Ups	Downs	Stable	Ups	Downs	Stable	Ups	Downs	Stable	Ups	Downs	Stable
Early 90s-Late 90s	10	4	3	4	1	0	4	0	1	2	3	2
Late 90s-Early 00s	8	7	2	3	2	0	2	1	2	3	4	0
Early 00s-Mid 00s	1	12	4	0	5	0	0	3	2	1	4	2
Early 90s-Mid 00s	7	6	4	3	2	0	2	0	3	2	4	1

Table 3.4 Inequality in Latin America Gini coefficients by country

Southern South America

	Argentina	Brazil	Chile	Paraguay	Uruguay
Early 1990s (c. 1992)	45.2	60.0	54.7	52.7	42.1
Late 1990s (c. 1998)	50.4	59.2	55.5	55.9	44.0
Early 2000s (c. 2002)	53.5	58.3	54.8	57.2	45.4
Mid 2000s (c. 2006)	48.3	55.9	51.8	54.9	44.7

## **Andean Countries**

	Bolivia	Colombia	Ecuador	Peru	Venezuela
Early 1990s (c. 1992)	58.2	56.4	50.1	48.7	43.1
Late 1990s (c. 1998)	57.8	58.8	52.2	53.4	47.2
Early 2000s (c. 2002)	60.1	55.6	56.5	52.5	47.5
Mid 2000s (c. 2006)	59.3	55.4	53.4	49.6	45.5

Central America, Mexico and Dominican R.

	Costa Rica	El Salvador	Guatemala	Honduras	Nicaragua	Panama	Mexico	Dominican R.
Early 1990s (c. 1992)	44.7	52.7	58.2	51.5	56.3	55.5	54.6	
Late 1990s (c. 1998)	46.0	53.4	56.0	51.9	53.8	55.4	53.6	50.5
Early 2000s (c. 2002)	49.9	52.3	54.5	55.5	50.2	56.4	51.0	49.0
Mid 2000s (c. 2006)	48.3	49.7	53.6	55.3	52.3	54.8	49.9	50.8

Source: own calculations based on SEDLAC (CEDLAS and World Bank).

Table 3.5
Global inequality in Latin America

	Gini	Theil	CV	Atk(0.5)	Atk(1.0)	Atk(2.0)	E(0)	E(2)
National								
1998	58.4	0.710	1.980	0.286	0.479	0.898	0.652	1.960
2002	57.1	0.675	2.058	0.273	0.459	0.815	0.614	2.118
2006	55.4	0.628	1.774	0.258	0.439	0.751	0.579	1.573
Urban								
1998	56.3	0.652	1.835	0.264	0.440	0.690	0.580	1.684
2002	55.3	0.628	1.940	0.255	0.428	0.677	0.559	1.881
2006	53.7	0.583	1.655	0.240	0.407	0.713	0.523	1.370

B. 13 Latin /	B. 13 Latin American countries									
	Gini	Theil	CV	Atk(0.5)	Atk(1.0)	Atk(2.0)	E(0)	E(2)		
National								<u></u>		
1992	56.8	0.677	1.971	0.272	0.457	0.800	0.610	1.942		
1998	58.5	0.713	1.982	0.287	0.481	0.909	0.656	1.963		
2002	57.0	0.674	2.063	0.272	0.458	0.827	0.613	2.128		
2006	55.4	0.626	1.759	0.257	0.440	0.761	0.579	1.547		
Urban										
1992	55.6	0.644	1.885	0.259	0.433	0.712	0.568	1.776		
1998	56.6	0.659	1.845	0.266	0.444	0.693	0.586	1.702		
2002	55.6	0.634	1.959	0.257	0.433	0.683	0.567	1.919		
2006	53.9	0.587	1.654	0.242	0.412	0.724	0.531	1.368		

Source: own calculations based on SEDLAC (CEDLAS and World Bank). Note: the first panel shows indices computed over the income distribution of the aggregate of 17 LA countries. The second panel restricts the sample to 13 countries with comparable information since 1992.

Table 3.6
Global inequality in Latin America
Decomposition of inequality, by country
Theil index
A. Decomposition of the level

A. Dec	ompositi	omposition of the level						
		Overall	Between	Within	% Between			
Nation	al							
	1992	67.8	2.3	65.5	3.4%			
	2006	63.7	3.9	59.8	6.1%			
Urban								
	1992	64.2	1.3	63.0	2.0%			
	2006	60.7	2.5	58.3	4.1%			

B. Decomposition of the change								
	Overall	Within	Participation	Between				
National	-4.2	-7.2	-0.2	3.3				
Urban	-3.5	-5.8	0.0	2.4				

Source: Gasparini, Gluzmann, Sánchez and Tornarolli (2008).

**Table B.3.2.1** Decomposition of inequality, by regions Theil index

		Overall	Between	Within	% Between	# regions
Argentina						
Bolivia	2006	45.2	1.4	43.8	3.1%	5
	2003-04	59.0	3.7	55.2	6.3%	9
Brazil	2006	63.5	4.5	59.0	7.0%	5
Chile	2000	03.3	4.5	39.0	7.070	3
Colombia	2003	66.5	3.5	63.0	5.3%	13
Coloribia	2000	63.7	2.1	61.6	3.4%	5
Costa Rica						
Dominican Rep.	2006	47.9	2.3	45.6	4.8%	6
Ecuador	2006	56.3	5.5	50.8	9.8%	9
Ecuador	2006	52.7	0.9	51.7	1.7%	3
El Salvador						
Guatemala	2004	43.5	4.5	39.0	10.3%	6
Honduras	2004	43.1	2.7	40.4	6.3%	8
	2006	68.1	8.4	59.8	12.3%	6
Mexico	2005	56.5	2.2	54.3	3.9%	8
Nicaragua	2000	00.0		0 1.0	0.070	Ü
D	2005	60.1	4.1	55.9	6.9%	4
Panama	2004	53.2	3.7	49.5	7.0%	4
Paraguay	0000		0.4	F0 F	F 00/	-
Peru	2006	55.7	3.1	52.5	5.6%	5
Herene	2006	47.9	9.8	38.1	20.5%	7
Uruguay	2005	36.7	2.2	34.5	6.0%	5
Venezuela						
	2005	46.3	0.9	45.4	1.9%	6
The Caribbean						
Belice	1999	56.7	4.0	52.8	7.0%	6
Guyana	1000 1000					10
Haiti	1992-1993	65.1	5.1	60.0	7.8%	10
Jamaica	2001	75.2	10.2	65.0	13.6%	9
	2002	69.3	0.0	69.3	0.0%	3

Source: Gasparini, Gluzmann, Sánchez and Tornarolli (2008). Note : Theil index multiplied by 100.

**Table B.3.2.2** Decomposition of changes in inequality, by regions Theil index

	Overall change	Within	Participation	Between	# regions
Argentina					
1992-2006	6.9	6.7	0.2	0.0	5
Bolivia	40.4	44.0			
1997-2003/04 Brazil	-12.4	-11.8	0.1	-0.6	9
1993-2006	-13.3	-12.9	-0.1	-0.4	5
Chile	-10.0	-12.5	-0.1	-0.4	3
1990-2003	1.7	-0.3	0.0	2.5	13
Colombia					
1992-2004	14.1	15.0	-2.7	1.6	5
Costa Rica					
1992-2006	9.9	9.0	-0.3	1.2	6
Rep. Dominicana					
2000-2006	1.8	3.4	-0.3	-1.3	9
Ecuador	40.4	40.0			
1998-2006 El Salvador	-13.1	-13.6	-0.5	0.7	3
1991-2004	-13.3	-9.5	-0.1	-4.0	5
Honduras	-13.3	-9.5	-0.1	-4.0	3
1997-2006	9.6	8.7	-1.8	2.6	6
Mexico					
1992-2005	-8.8	-7.4	-0.3	-1.1	8
Nicaragua					
1993-2005	-4.5	-3.5	0.1	-0.9	4
Panamá					
1991-2004	-4.9	-4.1	-0.5	-0.3	4
Paraguay					
1997-2006 Perú	-6.3	-0.1	-0.7	-5.2	5
1997-2006	-10.2	-7.6	-0.1	-2.5	7
Uruguay	-10.2	-1.0	-0.1	-2.5	,
1992-2005	4.7	6.4	0.2	-1.7	5
Venezuela	•••		<u>-</u>		-
1992-2005	15.5	17.1	-0.2	-1.6	5

Source: Gasparini, Gluzmann, Sánchez and Tornarolli (2008). Note: Theil index multiplied by 100.

Table 4.1 Share of different income sources in total household income

Country	Year	Labor	Non-labor
Latin America			
Argentina	2006	77.0	23.0
Bolivia	2005	81.7	18.3
Brazil	2006	75.9	24.1
Chile	2006	84.7	15.3
Colombia	2004	81.4	18.6
Costa Rica	2006	86.9	13.1
Dominican Rep.	2006	75.9	24.1
Ecuador	2006	87.4	12.6
El Salvador	2005	81.9	18.1
Guatemala	2006	86.0	14.0
Honduras	2006	79.5	20.5
Mexico	2006	88.6	11.4
Nicaragua	2005	88.6	11.4
Panama	2006	77.5	22.5
Paraguay	2005	85.9	14.1
Peru	2006	72.3	27.7
Uruguay	2005	64.4	35.6
Venezuela	2006	86.6	13.4
The Caribbean			
Belice	1998	97.1	2.9
Guyana	1992-1993	69.7	30.3
Jamaica	2002	86.7	13.3
Suriname	1999	92.7	7.3

Table 4.2 Inequality in hourly wages

			wages in m		
		N			
	All				
Year		All	Low	Mid	High
2006	42.0	39.7	32.8	34.9	37.9
2005	59.2	56.4	53.0	51.8	45.5
2006	55.1	55.0	44.3	46.2	46.7
2006	53.7	52.7	42.0	44.1	50.3
2004	51.3	50.6	34.4	38.1	44.0
2006	44.6	44.0	32.8	37.1	41.9
2006	47.3	44.5	41.3	40.7	41.5
2006	50.2	47.1	41.5	42.5	50.5
2005	46.7	45.6	41.4	39.1	40.0
2006	53.5	53.3	46.2	41.0	42.1
2006	50.7	49.4	42.6	41.1	38.9
2006	50.9	49.3	40.3	38.8	45.2
2005	51.1	53.6	49.7	40.4	49.3
2006	50.5	49.3	44.2	37.6	47.3
2005	54.6	54.7	45.2	49.6	52.7
2006	53.1	51.7	51.0	44.8	47.4
2005	48.2	47.2	37.6	40.1	45.6
2006	38.0	35.5	32.2	32.1	34.0
1999	50.1	50.1	50.6	38.4	32.2
2001	71.0	69.2	65.1	63.4	62.8
2002	44.9	48.1	36.1	49.3	30.9
1999	43.2	42.3	35.1	38.7	39.4
	2006 2005 2006 2004 2006 2006 2006 2006 2006 2006	2006 42.0 2005 59.2 2006 55.1 2006 53.7 2004 51.3 2006 44.6 2006 47.3 2006 50.2 2005 46.7 2006 53.5 2006 50.7 2006 50.9 2005 51.1 2006 50.5 2006 53.1 2006 33.1 2006 33.1 2006 33.1 2006 48.2 2006 38.0	Year         All         All           2006         42.0         39.7           2005         59.2         56.4           2006         55.1         55.0           2006         53.7         52.7           2004         51.3         50.6           2006         44.6         44.0           2006         47.3         44.5           2006         50.2         47.1           2006         53.5         53.3           2006         50.7         49.4           2006         50.9         49.3           2005         51.1         53.6           2006         50.5         49.3           2005         54.6         54.7           2006         53.1         51.7           2005         48.2         47.2           2006         38.0         35.5           1999         50.1         50.1           2001         71.0         69.2           2002         44.9         48.1           1999         43.2         42.3	Male workers           All         Low           2006         42.0         39.7         32.8           2005         59.2         56.4         53.0           2006         55.1         55.0         44.3           2006         53.7         52.7         42.0           2004         51.3         50.6         34.4           2006         44.6         44.0         32.8           2006         47.3         44.5         41.3           2006         50.2         47.1         41.5           2005         46.7         45.6         41.4           2006         53.5         53.3         46.2           2006         50.7         49.4         42.6           2006         50.7         49.4         42.6           2006         50.7         49.3         40.3           2005         51.1         53.6         49.7           2006         50.5         49.3         44.2           2005         54.6         54.7         45.2           2006         53.1         51.7         51.0           2005         48.2         47.2         37.6 </td <td>Male workers aged 25-Education           Year         All         Low         Mid           2006         42.0         39.7         32.8         34.9           2005         59.2         56.4         53.0         51.8           2006         55.1         55.0         44.3         46.2           2006         53.7         52.7         42.0         44.1           2004         51.3         50.6         34.4         38.1           2006         44.6         44.0         32.8         37.1           2006         47.3         44.5         41.3         40.7           2006         50.2         47.1         41.5         42.5           2005         46.7         45.6         41.4         39.1           2006         53.5         53.3         46.2         41.0           2006         50.7         49.4         42.6         41.1           2006         50.7         49.4         42.6         41.1           2006         50.5         49.3         40.3         38.8           2005         54.6         54.7         45.2         49.6           2005         54.6</td>	Male workers aged 25-Education           Year         All         Low         Mid           2006         42.0         39.7         32.8         34.9           2005         59.2         56.4         53.0         51.8           2006         55.1         55.0         44.3         46.2           2006         53.7         52.7         42.0         44.1           2004         51.3         50.6         34.4         38.1           2006         44.6         44.0         32.8         37.1           2006         47.3         44.5         41.3         40.7           2006         50.2         47.1         41.5         42.5           2005         46.7         45.6         41.4         39.1           2006         53.5         53.3         46.2         41.0           2006         50.7         49.4         42.6         41.1           2006         50.7         49.4         42.6         41.1           2006         50.5         49.3         40.3         38.8           2005         54.6         54.7         45.2         49.6           2005         54.6

Table 4.3
Share of different income sources in total household income

Share different sources in total individual income Gini coefficient - distribution of individual income Labor Non-labor Capital Pensions Transfers Other Non-labor Capital Pensions Transfers Government Country Implicit Labor Latin America Latin America
Argentina
Bolivia
Brazil
Chile
Colombia
Costa Rica
Dominican Rep.
Ecuador
El Salvador
Giustamala 1.7 5.2 3.9 1.3 0.8 0.0 1.2 44.4 56.2 53.8 53.2 51.3 45.4 48.4 55.8 46.8 56.9 51.6 50.9 50.6 51.6 52.5 51.9 50.1 38.4 60.6 55.6 66.5 24.7 24.8 52.2 56.5 2006 2005 2006 2004 2006 2006 2006 2005 2006 2006 2005 2006 2005 2006 2005 2006 2005 2006 2005 2006 2005 80.9 81.7 76.0 84.8 82.1 86.5 75.9 87.4 81.9 86.0 79.2 88.6 88.5 77.6 86.1 74.1 64.4 86.9 19.1 18.3 24.0 15.2 17.9 13.5 24.1 12.6 18.1 14.0 20.8 11.4 11.5 22.4 13.9 25.9 35.6 13.1 12.2 4.3 19.4 7.2 10.0 6.8 1.9 3.3 3.9 2.0 1.9 4.9 1.8 12.6 4.6 0.0 24.5 1.2 45.3 56.9 54.5 58.9 53.4 50.1 56.4 60.2 48.2 66.5 53.0 51.4 63.4 52.9 51.7 47.9 40.2 46.0 64.4 57.3 67.1 62.8 62.6 73.2 70.9 53.2 72.8 69.2 62.3 68.9 73.5 57.5 63.2 49.9 33.6 25.9 46.4 38.4 40.5 55.9 48.6 40.8 39.2 49.2 54.9 48.9 55.5 54.5 36.4 44.7 56.8 54.2 38.3 65.8 60.3 8.7 0.7 6.7 3.9 3.1 3.2 3.0 0.9 2.4 1.9 1.1 1.8 2.3 2.5 3.8 4.0 0.3 17.1 6.4 13.3 9.6 24.9 4.6 8.6 5.5 7.0 11.5 7.3 55.1 67.7 68.9 55.9 62.4 60.7 65.0 63.1 67.7 65.8 64.1 70.8 61.2 58.9 43.2 74.4 66.9 54.0 70.0 62.6 68.4 66.4 53.9 63.7 52.2 49.9 3.3 1.9 0.2 19.3 8.9 48.7 51.8 44.2 41.0 42.6 56.1 55.9 48.0 60.4 Guatemala Guatemala Honduras Mexico Nicaragua Panama Paraguay Peru Uruguay 2.5 0.0 11.9 0.0 5.5 0.0 0.0 0.8 0.4 52.4 67.7 33.8 42.3 44.9 53.5 50.7 Venezuela The Caribbean Bahamas 68.3 56.8 68.2 44.4 44.6 31.8 30.5 31.7 14.5 25.9 21.2 25.9 11.6 0.0 0.6 0.0 0.3 2001 68.2 5.3 6.3 5.3 0.4 0.6 0.0 2.2 0.0 0.0 68.7 74.4 79.3 74.3 79.3 65.1 59.3 56.6 59.3 65.2 72.8 44.0 69.5 68.3 85.5 0.7 0.6 2.4 54.9 68.6 64.0 63.2 74.3 65.2 58.3 72.7 64.0 54.6 44.1 60.3 1992-1993 2001 Suriname 1999 7.2 51.2 92.8 0.0

Table 5.1 Gini coefficient Averages by region and decade

Region	1970s	1980s	1990s	2000s
Levels				
Latin America and the Caribbean	48.8	51.2	52.5	52.1
Asia	39.0	39.3	40.1	44.2
Developed	28.2	28.4	29.8	30.3
Eastern Europe	25.6	26.5	29.7	34.1
Changes		70s-80s	80s-90s	90s-00s
Latin America and the Caribbean		2.4	1.3	-0.5
Asia		0.2	8.0	4.1
Developed		0.2	1.4	0.4
Eastern Europe		0.9	3.2	4.4
Difference in Gini points: LAC vs.				
Asia	9.8	11.9	12.5	7.9
Developed	20.6	22.8	22.7	21.8
Eastern Europe	23.2	24.7	22.9	18.0

Source: own calculations based on WIDER, Gasparini (2003), and SEDLAC (CEDLAS and World Bank).

**Table 5.2 Inequality in the world**Estimates from the Gallup World Poll

	Within regions	Across countries
Latin America	52.5	49.9
The Caribbean	56.1	45.6
LAC	52.7	48.6
Geographic regions		
Eastern Asia & Pacific	59.4	47.1
Eastern Europe & Central Asia	49.8	41.8
South Asia	53.4	48.9
Western Europe	40.2	34.0
North America	43.8	39.2

Source: Gasparini, Marchionni, Olivieri y Sosa Escudero (2008).

Table 6.1 Years of education, by age and gender

			(25-65)			(10-20)			(21-30)			(31-40)			(41-50)			(51-60)			(61+)	
Country	Year	Female	Male	All	Female	Male	All	Female	Male	All	Female	Male	All	Female	Male	All	Female	Male	All	Female	Male	All
Latin America																						
Argentina	2006	10.9	10.5	10.7	8.2	7.8	8.0	11.9	11.4	11.7	11.5	10.9	11.2	10.9	10.3	10.6	9.9	9.8	9.9	7.8	8.6	8.1
Bolivia	2005	6.8	8.8	7.7	7.2	7.3	7.3	9.6	10.6	10.1	7.5	9.4	8.4	6.2	8.3	7.2	4.4	7.3	5.8	2.6	4.8	3.6
Brazil	2006	7.4	7.0	7.2	6.5	5.9	6.2	9.2	8.5	8.9	8.0	7.4	7.7	7.2	6.9	7.1	5.8	5.9	5.9	3.6	4.0	3.8
Chile	2006	10.5	10.7	10.6	8.1	7.9	8.0	12.4	12.3	12.4	11.3	11.4	11.4	10.4	10.6	10.5	8.8	9.4	9.1	7.0	7.5	7.2
Colombia	2004	7.7	7.7	7.7	7.1	6.6	6.8	9.6	9.1	9.4	8.6	8.2	8.4	7.4	7.5	7.4	5.8	6.5	6.1	4.0	4.8	4.4
Costa Rica	2006	8.5	8.3	8.4	6.8	6.4	6.6	9.5	9.0	9.2	8.7	8.4	8.6	8.8	8.5	8.7	7.2	7.8	7.5	4.9	5.0	4.9
Dominican Rep.	2006	8.3	7.9	8.1	7.5	6.6	7.0	10.4	9.1	9.8	9.1	8.3	8.7	8.0	7.9	8.0	5.9	6.5	6.2	3.5	4.1	3.8
Ecuador	2006	8.4	8.7	8.5	7.2	7.0	7.1	9.8	9.6	9.7	9.3	9.4	9.4	8.1	9.0	8.5	6.4	7.1	6.7	4.1	4.8	4.5
El Salvador	2005	6.3	7.2	6.7	6.1	5.9	6.0	8.5	8.8	8.6	7.3	7.8	7.5	5.5	7.0	6.1	4.2	5.5	4.8	2.4	3.5	2.9
Guatemala	2006	4.3	5.4	4.8	4.5	4.8	4.6	5.7	6.7	6.1	4.7	6.2	5.3	3.8	4.9	4.3	2.7	4.3	3.4	2.0	2.5	2.3
Honduras	2006	5.5	5.5	5.5	5.9	5.4	5.6	6.9	6.2	6.6	6.1	5.9	6.0	5.3	5.5	5.4	4.0	4.5	4.2	2.4	2.7	2.5
Mexico	2006	8.0	8.8	8.4	7.6	7.4	7.5	9.7	9.9	9.8	8.8	9.3	9.0	7.9	9.0	8.4	5.7	7.2	6.4	3.7	4.8	4.2
Nicaragua	2005	5.8	5.8	5.8	5.7	5.0	5.3	7.7	6.9	7.3	6.5	6.1	6.3	5.2	5.8	5.5	3.8	4.3	4.0	2.3	2.5	2.4
Panama	2006	9.8	9.4	9.6	7.4	7.1	7.3	10.9	10.3	10.6	10.4	9.8	10.1	10.0	9.6	9.8	8.2	8.5	8.4	5.9	6.2	6.1
Paraguay	2005	7.7	7.9	7.8	6.7	6.3	6.5	9.5	9.5	9.5	8.5	8.6	8.5	6.8	7.5	7.1	5.9	6.0	6.0	4.5	5.2	4.9
Peru	2006	7.9	9.2	8.6	7.3	7.3	7.3	10.0	10.4	10.2	8.8	9.8	9.3	7.6	9.1	8.3	5.8	8.1	6.9	3.7	5.6	4.6
Uruguay	2005	9.9	9.5	9.7	7.6	7.2	7.4	10.9	10.1	10.5	10.6	10.0	10.3	10.1	9.7	9.9	9.1	8.8	9.0	6.7	6.7	6.7
Venezuela	2006	9.3	8.6	9.0	7.5	7.0	7.2	10.8	9.5	10.2	10.0	9.0	9.5	9.0	8.5	8.8	7.7	7.8	7.7	4.8	5.6	5.2
The Caribbean																						
Belice	1999	8.0	8.2	8.1	7.2	6.9	7.0	8.9	8.6	8.8	8.5	8.4	8.4	7.6	8.0	7.8	7.0	7.8	7.4	6.3	6.3	6.3
Guyana	1992-1993	7.2	7.5	7.4	7.5	7.4	7.5	8.2	7.9	8.1	7.7	7.8	7.7	6.9	7.2	7.0	5.8	6.2	6.0	5.1	6.0	5.5
Haiti	2001	4.0	5.6	4.7	6.2	6.3	6.2	7.1	8.7	7.8	4.6	6.4	5.4	2.8	4.2	3.5	1.7	2.8	2.2	1.0	2.0	1.5
Jamaica	2002	9.5	9.2	9.4	7.6	7.5	7.6	10.5	10.2	10.3	10.5	10.0	10.3	9.5	9.3	9.4	7.7	7.6	7.6	6.7	6.7	6.7
Suriname	1999	10.6	10.5	10.6	8.7	7.7	8.2	12.4	11.1	11.8	11.2	10.5	10.9	9.4	10.8	10.0	9.3	10.4	9.9	6.8	8.3	7.4

Table 6.2 Years of education by equivalized income quintiles Adults aged 25 to 65

				By i	ncome qu	intile				
Country	Year	Mean	Q1	Q2	Q3	Q4	Q5	Q5-Q1	Q5/Q1	Gini
Latin America										
Argentina	2006	10.6	7.8	8.8	9.8	11.3	13.7	5.9	1.8	21.5
Bolivia	2005	7.7	3.6	5.5	7.2	8.6	11.7	8.1	3.2	39.9
Brazil	2006	7.2	4.2	5.2	6.0	7.5	11.1	6.9	2.7	37.0
Chile	2006	10.6	8.6	9.2	9.9	11.0	13.4	4.8	1.6	20.6
Colombia	2004	7.6	5.6	5.5	6.3	7.6	11.5	5.9	2.1	35.7
Costa Rica	2006	8.3	5.5	6.4	7.2	8.6	12.2	6.7	2.2	29.3
Dominican Rep.	2006	8.1	5.2	6.2	7.4	8.8	11.4	6.2	2.2	36.0
Ecuador	2006	9.1	5.5	7.0	8.2	9.4	13.1	7.6	2.4	33.0
El Salvador	2005	6.7	3.4	4.3	5.9	7.2	10.8	7.4	3.1	44.4
Guatemala	2006	4.8	1.4	2.3	3.4	5.2	9.0	7.7	6.7	56.0
Honduras	2006	6.1	3.1	3.9	5.1	6.4	10.1	7.0	3.3	44.8
Mexico	2006	8.4	5.1	6.5	7.5	8.8	12.3	7.2	2.4	32.8
Nicaragua	2005	5.8	2.7	3.8	5.0	6.2	9.4	6.8	3.5	47.3
Panama	2006	9.6	5.6	7.6	8.8	10.1	13.4	7.8	2.4	28.1
Paraguay	2005	7.8	4.9	6.0	6.7	8.2	11.5	6.6	2.4	32.9
Peru	2006	8.6	4.4	6.2	8.0	9.8	12.2	7.8	2.8	33.9
Uruguay	2005	9.7	7.1	8.0	8.8	10.4	13.3	6.1	1.9	23.6
Venezuela	2006	8.9	6.8	7.3	8.1	9.3	11.6	4.9	1.7	28.4
The Caribbean										
Belice	1999	7.4	5.8	6.6	6.9	7.6	9.0	3.2	1.5	22.7
Guyana	1992-1993	7.4	6.8	6.9	7.3	7.7	8.0	1.2	1.2	19.9
Haiti	2001	4.6	2.9	2.9	3.6	4.2	8.7	5.8	3.0	63.7
Jamaica	2002	9.6	9.4	8.9	9.2	9.3	10.5	1.1	1.1	16.3
Suriname	1999	10.6	9.5	8.4	9.2	10.9	13.2	3.6	1.4	26.2

Table 6.3
Net enrollment rates
Share of children in primary school age attending primary school
By gender, and gaps between highest and lowest quintile of equivalized household income

			Pr	imary e	ducation	ı			Sec	ondary e	educatio	n			Te	rtiary ed	lucation	1	
			Gen	der					Gen	der					Gen	der			
Country	Year	Total	Female	Male	Q1	Q5	Q5-Q1	Total	Female	Male	Q1	Q5	Q5-Q1	Total	Female	Male	Q1	Q5	Q5-Q1
Latin America																			
Argentina	2006	99.1	99.1	99.0	98.8	99.4	0.6	81.0	84.3	77.8	67.2	95.1	28.0	32.9	37.9	27.7	12.1	56.7	44.6
Bolivia	2005	95.1	94.3	96.0	92.3	98.2	6.0	67.1	66.0	68.2	40.3	80.5	40.2	18.2	19.3	17.0	1.9	42.8	41.0
Brazil	2006	97.7	97.9	97.5	96.4	99.6	3.2	53.4	59.4	47.4	29.2	87.7	58.4	14.3	16.7	11.9	2.0	49.0	47.1
Chile	2006	98.9	99.0	98.9	98.3	99.6	1.3	81.8	84.4	79.3	73.2	92.6	19.3	27.6	28.6	26.7	13.1	53.3	40.3
Colombia	2004	96.8	97.4	96.2	96.2	99.1	2.9	72.7	76.8	68.7	58.7	92.0	33.3	21.8	24.2	19.4	16.2	45.8	29.6
Costa Rica	2005	98.7	98.9	98.5	97.7	99.9	2.2	61.8	66.4	57.1	44.7	87.5	42.8	14.9	16.5	13.5	4.6	36.5	31.9
Dominican Rep.	2006	97.6	98.1	97.0	96.2	98.9	2.7	52.4	61.5	44.3	34.6	77.9	43.3	15.6	20.3	11.0	3.2	38.6	35.5
Ecuador	2006	97.7	97.9	97.5	96.7	99.5	2.9	70.4	70.3	70.6	56.2	94.9	38.6	20.3	22.4	18.2	7.3	53.7	46.4
El Salvador	2005	89.6	89.9	89.2	84.2	97.1	12.9	33.3	34.8	31.9	15.8	62.7	46.9	13.6	14.8	12.4	3.1	39.5	36.4
Guatemala	2006	90.2	89.4	91.0	83.4	96.6	13.2	40.2	38.5	41.9	18.1	74.0	55.9	6.8	6.5	7.2	0.3	23.7	23.4
Honduras	2006	92.9	93.3	92.5	88.5	96.4	7.9	44.4	48.3	40.6	21.9	78.5	56.6	9.9	10.7	9.1	1.3	32.6	31.3
Mexico	2006	98.0	98.1	97.9	95.6	99.1	3.5	74.6	76.2	73.0	62.2	89.4	27.2	21.0	20.3	21.7	14.5	41.5	27.0
Nicaragua	2005	90.6	92.9	88.5	86.0	97.3	11.3	42.4	49.1	35.8	16.2	79.4	63.2	8.6	10.7	6.7	1.1	25.5	24.4
Panama	2006	97.8	98.3	97.4	95.6	100.0	4.4	71.5	75.3	67.9	46.1	93.1	47.0	17.6	21.2	14.0	2.7	47.5	44.7
Paraguay	2005	95.6	96.5	94.7	91.6	99.2	7.5	67.2	69.1	65.4	48.9	90.2	41.3	12.4	14.3	10.6	1.5	32.1	30.5
Peru	2003	97.7	97.6	97.8	95.1	100.0	4.9	69.9	67.3	72.4	43.3	94.0	50.7	20.6	23.6	17.6	3.3	47.2	44.0
Uruguay	2005	98.6	98.6	98.7	98.6	99.1	0.5	79.5	82.6	76.4	61.3	97.2	36.0	22.6	26.8	18.5	3.4	56.6	53.2
Venezuela	2006	97.6	97.8	97.4	95.8	99.6	3.8	73.3	77.1	69.7	67.4	85.2	17.8	25.1	30.8	19.5	16.3	44.6	28.3
The Caribbean																			
Belice	1999	96.4	95.8	96.9	96.2	97.2	1.0	44.2	50.8	37.8	34.5	50.4	15.9	13.2	14.5	11.8	2.3	22.8	20.5
Guyana	1992-1993	98.3	98.9	97.7	96.6	100.0	3.4	58.9	61.8	56.2	48.1	81.6	33.4	5.2	5.9	4.5	1.8	12.9	11.1
Haiti	2001	75.7	76.4	74.9	72.1	86.9	14.9	5.2	4.8	5.6	3.7	11.7	8.0						
Jamaica	2002	96.3	95.7	96.8	94.9	95.2	0.3	81.7	85.5	77.9	82.6	91.8	9.2	7.0	9.4	4.7			
Suriname	1999	93.5	92.2	94.9	90.7	94.4	3.7	75.1	83.5	66.7	72.1	78.9	6.9						

Table 7.1
Inequality in housing conditions
By country and quintile of the income distribution

			Persons pe	r room		Dwellin	gs of low-q	uality mater	rials (%)
Country	Year	Total	Q1	Q5	Q5-Q1	Total	Q1	Q5	Q5-Q1
Argentina	2006	1.3	2.2	8.0	-1.4	2.1	7.1	0.3	-6.8
Bolivia	2005	2.0	2.2	1.3	-0.8	57.1	94.0	27.4	-66.6
Brazil	2006	0.6	0.9	0.4	-0.5	2.1	6.8	0.1	-6.8
Chile	2006	0.8	1.1	0.5	-0.6	9.7	17.8	3.6	-14.2
Colombia	2003	1.4	1.9	8.0	-1.1	13.9	28.1	3.4	-24.7
Costa Rica	2005	8.0	1.0	0.6	-0.4	5.2	9.8	1.4	-8.4
Dominican Rep.	2006	1.2	1.6	8.0	-0.7	23.5	42.0	7.6	-34.4
Ecuador	2006	1.0	1.5	0.6	-0.9	20.0	46.6	5.2	-41.5
El Salvador	2005	2.3	3.5	1.2	-2.3	27.0	49.7	9.1	-40.6
Guatemala	2006	2.9	4.4	1.4	-3.0	46.6	83.7	15.1	-68.5
Honduras	2006	1.7	2.3	0.9	-1.4	14.5	26.9	2.0	-24.9
Mexico	2006	0.9	1.2	0.6	-0.7	14.0	26.7	6.2	-20.5
Nicaragua	2005	2.7	3.9	1.5	-2.4	13.7	29.4	5.1	-24.3
Panama	2003	1.6	2.6	0.9	-1.8	9.1	28.3	1.7	-26.6
Paraguay	2006	1.8	2.7	1.0	-1.7	31.5	56.7	13.2	-43.5
Peru	2006	1.6	2.4	0.9	-1.4	15.0	20.7	5.5	-15.2
Uruguay	2005	1.0	1.7	0.6	-1.0				
Venezuela	2006	1.5	2.1	1.0	-1.1	9.4	17.8	2.6	-15.2

Table 7.2
Inequality in access to basic services
By country and quintile of the income distribution

			Wa	ater			Hygienic f	Restrooms			Elec	tricity	
Country	Year	Total	Q1	Q5	Q5-Q1	Total	Q1	Q5	Q5-Q1	Total	Q1	Q5	Q5-Q1
Argentina	2006	98.9	95.5	100.0	4.5	87.0	63.0	98.9	36.0				
Bolivia	2005	80.5	52.5	93.5	41.1	69.2	29.3	89.8	60.4	73.9	29.8	94.0	64.2
Brazil	2006	91.1	75.3	99.4	24.1	70.3	47.0	89.9	43.0	97.7	93.4	99.8	6.4
Chile	2006	96.5	93.4	98.6	5.2	91.6	81.5	98.2	16.7	99.4	98.5	99.8	1.3
Colombia	2003	86.7	72.6	95.7	23.1	84.6	64.5	96.7	32.2	95.7	89.1	99.3	10.2
Costa Rica	2005	98.5	95.7	99.6	4.0	95.8	87.5	99.6	12.1	99.0	96.8	99.9	3.1
Dominican Rep.	2006	71.9	54.0	87.8	33.8	62.9	34.2	87.5	53.2	90.1	83.1	95.7	12.6
Ecuador	2006	81.3	58.5	95.4	36.9	86.7	61.1	98.7	37.7	97.5	90.8	99.7	8.9
El Salvador	2005	61.6	38.3	83.2	44.9	37.0	11.3	69.3	58.0	87.5	69.1	98.3	29.2
Guatemala	2006	76.4	59.8	89.6	29.8	47.3	13.3	80.2	66.9	81.8	55.3	96.2	40.9
Honduras	2006					51.1	15.6	83.1	67.5	78.2	38.8	97.1	58.3
Mexico	2006	90.3	79.3	96.3	17.0	65.0	34.9	91.0	56.1	99.2	97.1	99.9	2.8
Nicaragua	2005	64.6	31.2	83.1	51.9	29.3	4.4	58.2	53.7	73.7	39.8	90.3	50.5
Panama	2003	91.4	78.4	97.8	19.5	58.4	21.9	87.1	65.2	84.1	47.7	97.3	49.6
Paraguay	2006	76.4	52.9	91.7	38.8	64.0	28.0	90.8	62.8	96.7	91.7	99.7	8.0
Peru	2006	65.9	33.1	89.8	56.7	68.8	35.7	92.6	56.9	77.0	41.6	96.5	54.9
Uruguay	2005	98.8	97.8	99.6	1.8	94.2	76.6	99.9	23.2				
Venezuela	2006	90.4	82.1	96.9	14.8	92.2	85.8	97.1	11.3	99.3	98.4	99.7	1.4

Table 7.3
Inequality in access to durable goods
By country and quintile of the income distribution

			Refrig	erator			Tele	vision			С	ar	
Country	Year	Total	Q1	Q5	Q5-Q1	Total	Q1	Q5	Q5-Q1	Total	Q1	Q5	Q5-Q1
Argentina	2001	94.1	81.9	98.4	16.5	94.7	86.3	98.0	11.7	36.0	16.6	56.8	40.2
Bolivia	2003-04	27.8	3.3	59.6	56.3	61.2	18.3	83.8	65.5	7.9	0.9	22.6	21.7
Brazil	2006	89.2	70.4	98.8	28.4	93.2	84.7	98.9	14.2				
Chile	2006	88.7	76.4	96.3	20.0								
Colombia	2003	67.0	35.0	89.9	54.8	82.9	61.9	94.6	32.7	11.1	1.6	31.7	30.1
Costa Rica	2005	90.8	79.2	97.5	18.3	92.7	81.3	98.4	17.1	31.0	10.7	62.2	51.5
Dominican Rep.	2006	68.2	46.4	85.9	39.5	81.7	70.4	90.9	20.5	19.1	2.5	46.2	43.6
Ecuador	2006	74.3	40.7	92.8	52.1	91.2	73.0	98.0	25.1	18.4	2.2	45.7	43.6
El Salvador	2005	54.7	24.4	83.0	58.5	79.5	56.6	95.4	38.8	14.8	4.8	38.3	33.5
Guatemala	2006	38.9	5.8	77.9	72.1	68.6	27.3	92.4	65.1	10.3	0.2	33.1	32.8
Honduras	2006	52.6	15.2	84.0	68.8	70.2	27.1	93.4	66.4	17.3	3.8	42.7	38.9
Mexico	2006	80.6	57.0	93.9	36.8	94.1	83.1	97.7	14.6	28.8	6.7	58.7	52.0
Nicaragua	2001	20.5	7.3	43.3	36.1	59.6	35.0	81.2	46.2	5.3	0.3	16.8	16.5
Panama	2003	65.6	32.0	88.3	56.2	80.8	51.9	93.0	41.1	26.1	5.3	54.5	49.2
Paraguay	2006	74.2	42.6	92.1	49.4	82.1	59.7	94.1	34.4	17.9	3.4	44.1	40.7
Peru	2006	34.6	3.8	72.4	68.6	69.0	27.5	92.6	65.0	8.1	0.8	24.5	23.8
Uruguay	2005	95.7	83.4	99.5	16.1	92.4	77.9	98.1	20.2	27.1	5.6	51.6	46.0
Venezuela	2006	88.2	76.5	95.2	18.7	93.0	85.3	97.0	11.7	21.6	7.4	43.6	36.2

Table 7.4 Inequality in access to information technologies By country and quintile of the income distribution

			Personal	Computer			Internet a	t Home			Cell F	hone	
Country	Year	Total	Q1	Q5	Q5-Q1	Total	Q1	Q5	Q5-Q1	Total	Q1	Q5	Q5-Q1
Argentina	2001	19.8	5.6	42.4	36.8	7.8	1.9	21.7	19.8	20.0	7.5	38.5	31.0
Bolivia	2003-04	7.2	0.5	23.6	23.1					37.5	6.0	62.5	56.5
Brazil	2006	21.6	4.0	55.4	51.5	16.3	2.5	47.0	44.5	64.1	42.0	85.7	43.6
Chile	2006	33.3	11.7	63.7	52.0	19.3	3.7	46.9	43.2	60.9	49.6	80.2	30.6
Colombia	2003	11.2	0.9	34.2	33.2	5.3	0.4	18.2	17.7	17.5	3.6	42.5	38.9
Costa Rica	2005	26.3	5.9	57.7	51.7					49.1	16.2	83.1	66.8
Dominican Rep.	2006	11.9	1.1	33.8	32.6					59.9	43.8	79.5	35.7
Ecuador	2006	20.2	1.6	46.9	45.4	2.9	0.3	9.5	9.1				
El Salvador	2005	7.4	0.7	22.4	21.6	2.1	0.2	7.4	7.2	34.8	18.5	56.7	38.2
Guatemala	2006	10.7	0.4	32.5	32.2	1.8	0.0	6.8	6.8	54.8	20.3	81.1	60.8
Honduras	2006	8.9	1.5	26.9	25.3					8.2	2.1	12.4	10.3
Mexico	2006	20.0	5.0	46.7	41.8	8.4	1.4	24.9	23.5	49.3	18.5	77.3	58.8
Nicaragua	2001	1.8	0.0	6.5	6.5	1.4	0.0	4.9	4.9	3.6	0.3	10.3	10.0
Panama	2003	12.7	2.3	34.0	31.6	5.0	0.5	15.4	14.9	42.3	12.1	66.2	54.2
Paraguay	2006	8.1	0.5	24.7	24.3	1.6	0.0	5.9	5.9	64.4	38.9	83.1	44.3
Peru	2006	10.3	0.3	33.1	32.9	4.7	0.1	17.2	17.1	28.1	2.5	58.2	55.7
Uruguay	2005	22.1	2.7	46.3	43.6	13.5	0.6	34.4	33.8				
Venezuela	2006	11.7	2.6	28.6	25.9	3.7	0.7	11.2	10.5	37.1	22.9	47.6	24.7

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