

# Poverty and Inequality Monitoring: Latin America and the Caribbean

# Social Gains Show Signs of Stagnation in Latin America

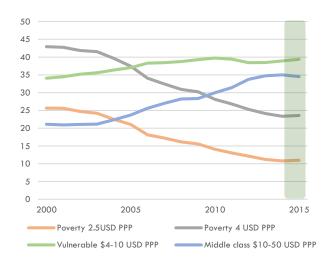
- Poverty reduction in the Latin American (LA) region came to a halt in 2015, as the region's economy contracted, and middle class growth stagnated.
- Poverty rates were effectively unchanged in 7 out of 13 countries as most countries faced an economic slowdown, and thus convergence towards low poverty reduction continued.
- Income growth of the bottom 40 percent of the LAC income distribution turned negative in 2015, but the income drop among the richest 10 percent was even larger, driving an overall decrease in inequality.
- Preliminary data suggests poverty outcomes are likely to continue to deteriorate into 2016.

Poverty reduction in the Latin American (LA) region came to a halt in 2015, as the region's economy contracted. The protracted economic slowdown since 2012 turned into a contraction of 1.4 percent in regional GDP in 2015 and led to a halt in poverty reduction. Although poverty in the LA region had continued to decrease through 2014 even amid the economic slowdown, the most recent data suggests that poverty rates in 2015 have stagnated. Neither overall poverty nor extreme poverty registered a significant change. Overall poverty marginally increased from 23.3 to 23.6 percent between 2014 and 2015, while extreme poverty increased by 0.2 percentage points (10.8 to 11 percent) (see Figure 1). The halt in poverty reduction has put in jeopardy the social gains of the previous decade.

Similarly, in 2015 the middle class stagnated. The middle class had been on pace to become for the first time the largest population group in LA, but it has been negatively impacted by the economic slowdown and the 2015 economic contraction. As with poverty, the growth of the middle class has stagnated, registering a marginal decrease from 35 percent of the population in 2014 to 34.5 percent in 2015. The vulnerable population, those households who are not in poverty nor in the middle class, is increasing since 2012 and continues to be the largest share of the LA population (39.4 percent in 2015). In previous years, the net increase in the vulnerable share was due to more households moving out of poverty into the

vulnerable category than those moving from the vulnerable into the middle class. However, in 2015, the net increase is due to a shift in composition from mainly former-poor households to former-middle-class households.

Figure 1: Reversal of social gains in 2015? Halt to poverty reduction and middle class growth



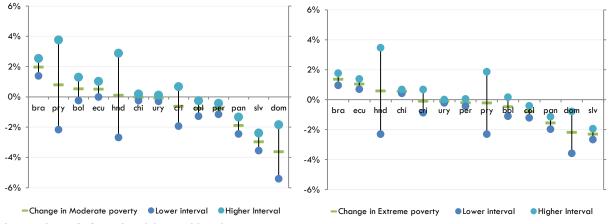
Source: LAC Equity Lab tabulations using SEDLAC data (CEDLAS and the World Bank)

Poverty rates were effectively unchanged in 7 out of 13 countries as most countries faced an economic slowdown. Although GDP per capita contracted only in Brazil and Ecuador, GDP growth was slow for most other countries. At the household level, income movements varied across the 13

countries for which there is microdata in 2015. Per capita household income decreased for 5 of the 13 countries, increased strongly for Panama and the Dominican Republic, and experienced minor to moderate increases for the remaining six. The resulting impacts on poverty then depended on how this income growth was distributed within the country, and what happened to prices faced by the poor. Out

of 13 countries for which there is microdata in 2015, seven experienced poverty changes that were not statistically significant, with only Brazil showing a statistically significant increase in moderate poverty<sup>ii</sup> (Figure 2). The poverty reduction achieved by the remaining countries was not substantial, with the exception of Panama (-1.9), El Salvador (-3.0), and the Dominican Republic (-3.6) (see Annex 3).

Figure 2. Moderate and Extreme Poverty change from 2014 to 2015

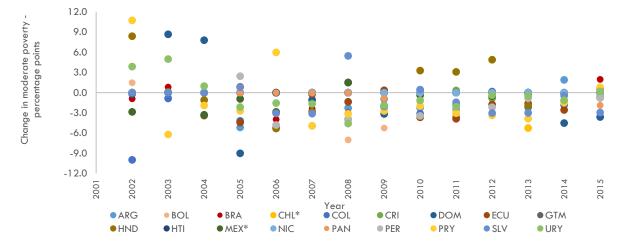


Source: SEDLAC (CEDLAS and the World Bank)

Across countries, convergence towards low poverty reduction continued. Unlike previous years, poverty movements (up or down) were small between 2014 and 2015 for the bulk of LA countries (Figure

3). The range of the poverty changes were smaller in 2015 than in any other year, and were clustered near zero. In addition, Brazil in 2015 shows for the first time the highest poverty increase in the region.

Figure 3: Convergence towards low poverty reduction continues in 2015



Source: LAC Equity Lab with tabulations using SEDLAC data (CEDLAS and the World Bank)

#### **BOX 1. Brazil's Economic Crisis and Poverty**

Brazil experienced a decade of success in reducing poverty and inequality, based on a policy of social inclusion, amidst a booming economy and favorable external conditions. As the largest country in the Latin America and Caribbean region, its success has helped drive down the region's poverty rate. However, the 2015-2016 economic crisis in the country is posing a threat to the sustainability of these welfare gains. Brazil's economy underwent a deep recession in 2015, with Gross Domestic Product decreasing by 3.8 percent in 2015 and 3.6 percent in 2016. Almost 1.6 million formal sector jobs were lost in 2015 and average monthly real wages fell 4.2 percent. From 2014 to 2015, Brazil's moderate poverty increased from 18.1 to 20.1 percent (under the US\$4-a-day poverty line in 2005 PPP) and extreme poverty increased from 7.8 to 9.2 percent (US\$2.5-a-day poverty line).

Without Brazil, poverty in the LAC region would have decreased slightly in 2015. Brazil's current economic crisis is behind the LAC region's increase in poverty and decrease in the middle class. With almost 38 percent of the LAC population and 43 percent of its total household income in 2015, Brazil tells the overall story of poverty in LAC. If Brazil were excluded from the regional aggregate, moderate poverty in LAC would have decreased from 26.5 to 25.7 percent (see Figure 4), while extreme poverty would have decreased from 12.6 to 12.1 percent. Similarly, the region's slight reduction in the middle class is mainly explained by the substantial drop of the middle class in Brazil (-2.2 pp) from 2014 to 2015. If Brazil were excluded from the regional aggregate, the vulnerable and middle class populations would have increased slightly.

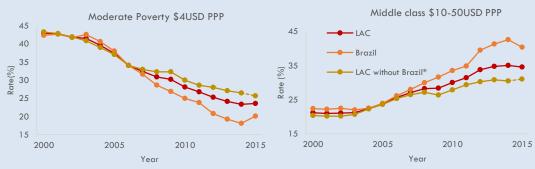


Figure 4. Poverty and Middle Class with and without Brazil

Source: SEDLAC (CEDLAS and the World Bank)

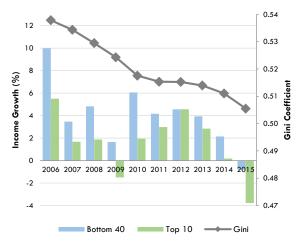
Recent technical work has focused on analyzing how Brazil's current economic downturn could affect poverty and shared prosperity (see: "Safeguarding Against a Reversal in Social Gains During the Economic Crisis in Brazil"). The note summarizes the poverty and distributional impacts for 2016 and 2017 under two different scenarios for GDP, employment, and unemployment. It is based on the recently released 2015 Pesquisa Nacional de Amostra de Domicilios (PNAD), Brazil's National Household Sample Survey, collected in October 2015. The microsimulation analysis suggests that poverty rates will rise in 2016 and remain high in 2017. The authors found that the crisis has likely primarily impoverished skilled, white, slightly younger people that live in urban areas, mainly in the southeast, and previously working in the service sector. Given the importance of Brazil in the LAC region, it is likely that regional poverty estimates for 2016 and 2017 will also show a further decline in welfare.

The Brazil analysis also estimates that a 4.7 to 6.9 percent increase (depending on the alternative scenario considered) in the budget from 2015 to 2017 would be needed to target the most needy among the "new poor" households and prevent the extreme poverty rate from increasing beyond the 2015 rate. The analysis suggests that "the depth and duration of the current economic crisis... gives rise to the opportunity to expand the role of Bolsa Familia from an effective redistribution program to a true safety net program that is sufficiently flexible to expand its coverage to the 'new poor' households generated by the crisis."

Note: The technical note "Safeguarding Against a Reversal in Social Gains During the Economic Crisis in Brazil" was prepared by Emmanuel Skoufias, Shohei Nakamura, and Renata Gukovas from the LAC Poverty and Equity Global Practice, December 2016.

Income growth of the bottom 40 percent of the LA income distribution turned negative in 2015, but the income drop among the richest 10 percent was even larger. The share of the bottom 40 percent in total LA income increased from 11.6 to 11.8 percent, while the top 10 share decreased from 39.9 to 39.4 percent between 2014 and 2015. This means that, in 2015, the richest 10 percent of the population had 3.3 times the total income of the poorest 40 percent, as compared to 3.4 times in 2014. A loss of income in the higher deciles has a comparatively higher distributive effect when inequality is very high, and thus this has impacted more strongly regional inequality. Over time, it can be seen that when the growth of the bottom forty is about two times higher than the growth of the top ten or the growth of the latter is negative, inequality in the region decreases (e.g., 2006-2009, 2015). In contrast, when both bottom forty and top ten grow at relatively the same rate, inequality remains stagnant.

Figure 5 Growth in Per Capita Household Income (year to year) by Decile and Gini

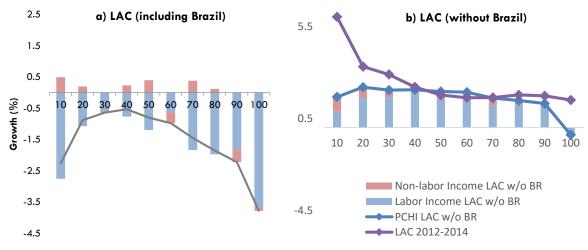


Source: SEDLAC and own calculations

Although the negative income growth between 2014 and 2015 was driven by developments in Brazil, the rest of the region experienced on average lower income growth than during the 2012-2014 period. Taking the region as a whole all deciles experienced negative income growth (see left panel in Figure 6). However, when Brazil is taken out of the LA aggregate, income of the bottom 9 deciles shows growth between 1.3 and 2.2 percent, with positive impacts from both labor and non-labor income (Figure 6b). Only the richest 10 percent of the distribution experienced negative growth, as its income decreased by 0.4 percent in the period. Nevertheless, the increase in incomes without Brazil is less than the income growth experienced by the region during the 2012-2014 period, highlighting how the slowdown is impacting countries across LA (Figure 6b). In addition, income growth for LA overall was particularly adverse for the top and bottom ten percent of the income distribution. The top 10 percent of households saw their incomes decrease by 3.8 percent between 2014 and 2015, while the bottom 10 percent saw income reductions of 2.3 percent.

The strong contraction in the top income decile led to a larger reduction in inequality in LA between 2014 and 2015 than in the previous three years combined. After four years of inequality stagnation, the Gini coefficient decreased from 0.511 to 0.505 between 2014 and 2015, larger than the 0.004 point drop between 2011 and 2014 (Figure 5). The reduction of inequality in 2015 was not driven by a redistribution of income from the richest to the poorest, but by a general contraction of income along the distribution that affected more severely the richest 10 percent. Seven countries—out of 13—decreased income inequality from 2014 to 2015, with Colombia, Paraguay, and Brazil showing the strongest drops. If these three countries were excluded from the aggregate, inequality in LA would have remained unchanged.

Figure 6 Growth Incidence curve (2014-2015) of the region, with and without Brazil



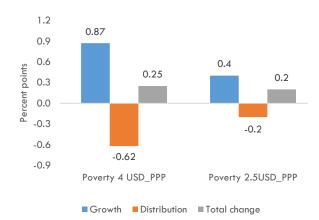
Source: SEDLAC and own calculations

Changes in the distribution of income contributed positively to the decline in poverty in the region, while income growth had a negative, and larger, impact. Per capita household income (PCHI) growth was negative in the region as a whole (-2.4 percent). A growth-distribution decomposition of poverty changes from 2014 to 2015 shows that the contraction in mean income was the more important factor in the poverty increase, but it was partly offset by the beneficial impact from the change in its distribution (Figure 7). The poverty increase in the region in 2015 would have been 3.5 times more severe if only the contraction in mean income had occurred.

Drilling down on the income component, both labor and non-labor income equally drove the poverty decrease for the region without Brazil. A Shapley decomposition by sources of income shows the outweighing effect of Brazil's labor and non-labor income in the change of poverty. The labor income declines in Brazil outstripped the small but positive effect on poverty of the aggregate labor income in the rest of the region from 2014 to 2015. If Brazil were taken out from the regional estimates, the story would have changed substantially, for both labor and non-labor income contributed in similar amounts to reduce poverty in 2015 (Figure 8).

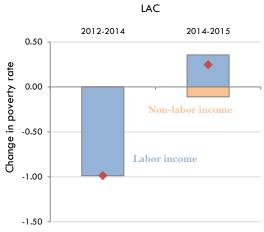
Figure 7. Growth-redistribution decomposition of poverty changes

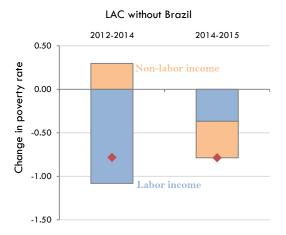
Moderate and extreme Poverty (2015-2014) Growth and distribution decomposition- Datt Rayallion



Source: Own calculations using SEDLAC

Figure 8. Shapley decomposition of poverty changes by sources of income





Source: Own calculations using SEDLAC

In the labor market unemployment increases were larger among poorer households. Unemployment in the region increased from 5.6 percent in 2014 to 7.9 percent in 2015. However, households in the lower deciles received most of the unemployment shock, due to unemployment increases for the less well-off in Brazil. For instance, the unemployment rate of the first decile increased from 13 to 21 percent between 2014 and 2015. In contrast, unemployment in the tenth decile increased by only 0.5 percent (Figure 9). At the country level, unemployment rates increased from 2014 to 2015 for four out of the six countries that experienced an increase in moderate poverty. Namely, Brazil (2.7 percentage points), Bolivia (1.1 pp), Ecuador (1.04 pp), and Uruguay (0.9 pp).iv In the same vein, countries for which poverty decreased, unemployment decreased as well, in particular in the Dominican Republic (-0.2 pp), El Salvador (-0.2 pp), and Costa Rica (-0.62 pp). Unemployment in Peru remained unchanged (-0.03 pp). Finally, a safety net program in Panama (covering 30 percent of total income for the poorest 40 percent of households), helped offset an increase in the unemployment rate and resulted in a 1.8 percentage point decrease in poverty.

Preliminary data suggests poverty outcomes are likely to continue to deteriorate into 2016. A microsimulation analysis undertaken for Brazil based on 2016 and projected 2017 macro data suggests that poverty in Brazil will increase in 2016 and stay high in 2017 (see Box 1). Given Brazil's importance

to the LA region in terms of population and in terms of the number of poor, it is likely that regional poverty will increase in 2016. In addition, the Labor Income Poverty Index (LIPI), which is based on the most recently available quarterly data on labor incomes, shows increases in 2016 for five of the six currently available countries (Figure 10). Given the importance of labor incomes for poverty reduction, the LIPI results suggest that poverty in countries other than Brazil may also increase in 2016.

Figure 9 Unemployment rate by decile in LA

Unemployment rate by decile in LAC

25%

20%

15%

10%

5%

0%

0 2 4 6 8 10

Source: Own Calculations based on SEDLAC

2.60 72.40 (2.40) 2.20 2.00 1.80 1.60 1.40 1.20 1.00 0.80 0.60 2010 2012 2013 2016 2005 2006 2008 2009 2014 2007 201 201 ■ Brazil (PNADC) ----Argentina ----Chile -Colombia **ElSalvador** CostaRica Ecuador Guatemala Mexico -Peru **─**Uruguay

Figure 10 Preliminary 2016 labor income data suggests poverty will increase

Source: Own Calculations based on LABLAC

Boosting economic growth and protecting the vulnerable are increasingly important areas to avoid a reversal in the social gains of the last decade. The growth agenda, with its impact on labor markets, continues to be critical, as labor income continues to be the most important driver of poverty reduction. The commodity-fueled growth of the past may need to be replaced by growth based on sustainable investments, including in universal public

education and labor market reforms. The region should also focus on ways to protect the poor and those susceptible to falling back into poverty (the vulnerable), while maintaining investments in human capital. For the region, non-labor income is an important component in poverty reduction. To maintain this while growth is slow will require increasing the focus and the efficiency of programs in the face of trade-offs.

# Annex 1.

### About this Brief

This brief was produced by the Latin America and Caribbean Team for Statistical Development (LAC TSD) in the Poverty and Equity Global Practice of the World Bank. The core team consisted of Carolina Diaz-Bonilla, Andrés Castañeda, Jorge Soler, and Christian Gomez. The team worked under the guidance of Oscar Calvo-Gonzalez and received valuable contributions from Laura Moreno, Martha Viveros, Germán Reyes, Natalia Garcia-Peña, María Ignacia Contreras, and María Laura Oliveri.

The numbers presented in this brief are based on a regional data harmonization effort known as SEDLAC, a joint effort of the World Bank and CEDLAS at the National University of La Plata in Argentina (see Annex 4 for the list of surveys used in this brief). They increase cross-country comparability of selected findings from official household surveys. For that reason, the numbers discussed here may be different from official statistics reported by governments and national offices of statistics. Such differences should not be interpreted in any way as a claim of methodological superiority, as both sets of numbers serve the same important objectives: regional comparability and the best possible representation of the facts of individual countries. Indicators for LA are calculated using data from Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, and Uruguay (LA-17).

Annex 2.

Household surveys used from SEDLAC harmonization

Country	Name of survey	Circa 201 <i>5</i>	Coverage	
Argentina	Encuesta Permanente de Hogares- Continua	2014	Urban-31 Cities	
Bolivia	Encuesta Continua de Hogares- MECOVI	2015	National	
Brazil	Pesquisa Nacional por Amostra de Domicilios	2015	National	
Chile	Encuesta de Caracterización Socioeconómica Nacional	2015	National	
Colombia	Gran Encuesta Integrada de Hogares	2015	National	
Costa Rica	Encuesta Nacional de Hogares	2015	National	
Dominican R.	Encuesta Nacional de Fuerza de Trabajo	2015	National	
Ecuador	Encuesta de Empleo, Desempleo, y Subempleo	2015	National	
El Salvador	Encuesta de Hogares de Propósitos Múltiples	2015	National	
Guatemala	Encuesta Nacional de Condiciones de Vida	2014	National	
Honduras	Encuesta Permanente de Hogares de Propósitos Múltiples	2015	National	
Mexico	Encuesta Nacional de Ingresos y Gastos de los Hogares	2014	National	
Nicaragua	Encuesta Nacional de Hogares Sobre Medición de Niveles de Vida	2014	National	
Panama	Encuesta de Hogares	2015	National	
Paraguay	Encuesta Permanente de Hogares	2015	National	
Peru	Encuesta Nacional de Hogares	2015	National	
Uruguay	Encuesta Continua de Hogares	2015	Urban- Montevideo and Interior > 5,000 inhabitants	

Annex 3.

International Poverty Rates by Country

	Poverty	Poverty Rates at USD 4.0 a day (%) - 2005				Poverty Rates at USD 2.5 a day (%) - 2005					
	2011	2012	PPP 2013	2014	2015		2011	2012	PPP 2013	2014	2015
Argentina	11.6	10.8	10.9	12.8			4.6	4.7	4.5	5.4	
Bolivia	29.0	29.2	27.2	25.9	26.5		16.1	1 <i>7</i> .1	14.4	14.0	13.5
Brazil	23.8	20.8		18.1	20.1		11. <i>7</i>	9.6	0.0	7.8	9.2
Chile	13.2		7.9		7.9		4.4	0.0	2.4	0.0	2.9
Colombia	32.8	32.9	30.8	28.9	28.2		16.8	1 <i>7</i> .6	15.2	14.5	13.7
Costa Rica Dominican	13.0	12.2	12.2	12.0	11.4		5.1	4.7	4.6	4.6	4.5
Republic	33.3	33.3	33.1	28.6	25.0		14.0	14.6	13.9	11.6	9.4
Ecuador	29.5	27.8	26.1	23.6	24.1		13.6	12.9	10.5	9.3	10.4
El Salvador	37.9	34.8	31.8	31.4	28.4		16.6	14.7	12.7	12.3	10.0
Guatemala				60.3						37.3	
Honduras	56.4	61.3	59.3	58.1	58.2		37.4	42.4	39.6	38.4	39.0
Mexico		27.6		27.5				11.4		11. <i>7</i>	
Nicaragua				36.0						16.1	
Panama	21.2	20.9	20.4	18. <i>7</i>	16.9		11.6	11.8	9.9	10.2	8.6
Paraguay	27.5	24.1	20.2	18.8	19.6		14.3	12.0	8.3	9.0	8.8
Peru	24.3	22.1	21.3	20.1	19.3		11.8	10.9	9.9	9.2	9.0
Uruguay	8.7	8.1	7.8	6.9	6.8		2.5	2.5	2.3	2.0	1.9
LAC	26.8	25.3	24.1	23.3	23.6		13.1	12.1	11.2	10.8	11.0

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Poverty is measured based on the \$4-a-day international poverty line in 2005 Purchasing Power Parity (PPP) prices. Extreme Poverty is based on the \$2.5-a-day international poverty line in 2005 PPP prices.

Poverty increase in Bolivia (0.54 pp), Brazil (1.97 pp), Ecuador (0.52 pp), Honduras (0.11 pp), Paraguay (0.8 pp), and Uruguay (0.18 pp)

III Argentina, Mexico, Guatemala, Nicaragua, and Haiti do not have microdata available for 2015.

<sup>&</sup>lt;sup>iv</sup> If Brazil were excluded from the aggregate, unemployment in the region would have increased as well from 5.1 percent in 2014 to 6 percent in 2015.