"The results of in-depth analyses for Argentina, Brazil, and Mexico reveal two main factors that explain this phenomenon: a fall in the premium that favors skilled over unskilled labor, and more progressive government transfers targeting the poor."

Latin America's Inequality Success Story

NORA LUSTIG

Latin America was already a region of sharp income inequality before the debt crisis and structural reforms of the 1980s and 1990s, when inequality rose in most countries. Around 2000, however, the rising trend not only came to a halt, but was reversed. According to the Socio-Economic Database for Latin America and the Caribbean (or SEDLAC, a project of the World Bank and the National University of La Plata), by 2010 income inequality had declined in all 17 Latin American countries for which comparable data exist. Most impressively, this decline has occurred even as inequality has risen elsewhere, including in China, India, South Africa, and most advanced countries.

Inequality On the Rise
Fifth in a series

Inequality in Latin America has always been linked to the capture of the state by predatory elites, capital market imperfections, lack of access to credit for the poor, inequality of opportunities (in particular, in terms of access to high-quality education), labor market segmentation, and discrimination against women and non-whites. This means that the observed fall in inequality is good news both in terms of fairness and overall economic efficiency.

What were the principal causes of the decline in inequality in Latin America in the 2000s? A number of factors were at work, including shifts in the demand and supply of skilled versus nonskilled labor, minimum wages and unionization rates, and direct government transfer programs in Argentina, Brazil, and Mexico, the region's three largest economies.

The results of recent research show that both labor and non-labor income inequality declined during the decade, and the data point to two underlying phenomena in the three countries in question. First, a fall was observed in the premium to skilled labor (that is, the relative wage of employees with higher levels of education vis-à-vis those with no or lower levels). Second, the governments of these countries implemented more progressive antipoverty transfer programs.

The decline in the premium to skilled labor can be attributed, in turn, to changes in the composition of the demand and supply of skilled and nonskilled labor (that is, to market dynamics), and to institutional factors such as rising minimum wages and unionization (that is, to state action). The relative strength of these factors has varied substantially by country.

Although lower than in the 1990s, income disparities in Latin America remain high relative to the rest of the world—in some cases sharply higher. Moreover, the momentum of the past decade's redistributive process could prove hard to sustain. While educational attainment has become significantly more equal, the same cannot be said about the distribution of educational quality. The threat of backsliding adds another reason, however, for trying to understand how the region's leading economies have succeeded in reducing extreme inequality.

A NEW POLICY REGIME

Studies by the National University of La Plata's Leonardo Gasparini and Guillermo Cruces show that Argentina experienced a sharp increase in inequality between 1990 and the beginning of

NORA LUSTIG *is a professor of economics at Tulane University and a non-resident fellow at the Center for Global Development and the Inter-American Dialogue. This essay is based on research for an October 2012 article in* World Development *by Nora Lustig, Luis F. Lopez-Calva, and Eduardo Ortiz-Juarez: "Declining Inequality in Latin America in the 2000s: The Cases of Argentina, Brazil, and Mexico."*

2000, and a decline in inequality in the aftermath of the country's 2001–02 macroeconomic crisis. This period covers two very different economic policy regimes. During the 1990s, Argentina underwent a series of far-reaching market-oriented reforms, within a context of weak labor market institutions and limited social protection. During the 2000s, on the other hand, state intervention in the economy was more pervasive, labor market institutions were stronger, and social protection schemes were implemented to redistribute income to unskilled and semi-skilled workers. The 2000s in Argentina were also characterized by rapid GDP and employment growth, while in the 1990s economic growth was modest and unemployment was high.

The most common measure of income dispersion is the Gini coefficient, with zero expressing perfect equality and one maximal inequality. Data from SEDLAC show that between 1992 and 2002, the Gini for the distribution of per capita household income in urban Argentina rose from 0.450 to 0.533. Studies carried out by Gasparini and Cruces suggest that this growth in inequality was due to an increase in the wage gap between skilled and low-skilled workers. A higher skill premium was associated with the modernization of the Argentine economy's productive and organizational structures, which in turn can be attributed to programs aimed at liberalizing the country's trade and investment sectors.

The momentum of the past decade's redistributive process could prove hard to sustain.

Another factor behind the rise in earnings inequality was a weakening of Argentina's labor unions. There is evidence that labor union membership and activity diminished significantly between 1991 and 2001. The decline in union activity coincided with reforms carried out in the 1990s, such as the privatization of public enterprises, trade liberalization, and price stabilization. These reforms had the effect of reducing union power, given a drastic drop or complete annihilation of the rents that unions had previously received from state-owned enterprises and protective tariffs. It is not surprising that the decline in union activity during the 1990s coincided with rising wage inequality.

Following the 2002 Argentine economic crisis, the country's Gini coefficient (in urban areas) fell from 0.533 to 0.442 in 2010. This drop in inequality accounted for 40 percent and 50 percent of the decline in extreme and moderate poverty, respectively. During this period, inequality shrank for both labor income and non-labor income (including income from capital such as dividends, interest, profits, and rents, as well as pensions and government cash transfers). Gasparini and Cruces argue that the fall in labor income inequality can be explained by a number of factors, including: an expansion of employment generated by rapid economic recovery; a shift (as a result of the devaluation of the Argentine peso) in favor of sectors intensive in unskilled or less-skilled labor; a fading out of the impact of skill-biased technical change in the 1990s; and a resurgence in the influence of labor unions. All of these factors caused the skills premium to fall.

The post-crisis period was characterized by unprecedented per capita GDP growth. Between 2003 and 2010, Argentina's per capita GDP rose by 8 percent per year (except during the global economic crisis year of 2009), and unemployment fell from over 20 percent to 8 percent. Although the currency devaluation initially had a negative impact on real wages, this effect diminished as a cheaper peso stimulated output in labor-intensive sectors. By the early 2000s, the process of large-scale technological upgrading was probably coming to an end. This reduced the upward pressure on wages for skilled labor, which had been an unequalizing force. A pro-union and pro-workers government raised minimum wages, mandated lump-sum increases in wages in the private sector, and promoted collective bargaining. The revival of union activism coincided with a period of falling wage inequality after 2002.

As regards the decline observed in non-labor income inequality, Gasparini and Cruces and Carola Pessino and I have linked this phenomenon to a more progressive fiscal policy. The significant devaluation of the peso in 2002 had an indirect equalizing impact in terms of income inequality after taxes and transfers. The devaluation initially had a negative impact on real wages and a positive effect on rents to land owners, which was compounded by a substantial improvement in the terms of trade resulting from a global commodity boom. However, the initially negative (and unequalizing) effect on real wages was in part compensated by the expansion of progressive export taxes, which were used to finance antipoverty programs. Social spending, boosted by new revenues, became more progressive with the implementation of large-scale cash transfer programs such as Jefes y Jefas de Hogar Desocupados (Program for Unemployed Heads of Households), which reached two million households in 2003.

As Pessino and I have shown in a new study, cash transfers—especially the huge expansion of noncontributory old age pensions—are an important factor behind the equalizing effect of the changes in the distribution of non-labor income. In addition, excise taxes have had an indirect redistributive impact because they keep domestic prices of traded goods below their international levels, which is particularly important for food prices. Although these policies have also benefited the non-poor and have created economic inefficiencies, they have had an equalizing impact, at least in the short term.

Gasparini and Cruces conclude that underlying Argentina's recent decline in inequality has been a fading of effects from technological upgrading, coupled with strong, labor-intensive growth. Also, state action has complemented market forces. A pro-union and pro-poor government has been redistributing the windfall from very favorable terms of trade (associated with the global commodity boom), both through active labor market policies and cash transfers.

Between 50 and 60 percent of the decline in Brazil's extreme poverty can be attributed to reduced inequality.

Progress against poverty

Brazil is known for having one of the highest inequality rates in the world. The economist Ricardo Barros and others remind us that there have been years when Brazil's Gini coefficient was 0.630, almost an historical and global record in terms of income inequality. After rising in the 1970s and 1980s and remaining virtually unchanged in the 1990s, Brazil's Gini has been steadily declining since 1998, and even more so since 2002. Between 2002 and 2009, the income of the country's bottom 10 percent grew at almost 7 percent per year, nearly three times the national average of 2.5 percent. Meanwhile, the income of the county's richest 10 percent grew at only 1.1 percent a year. Depending on the definition one chooses for the poverty line, between 50 and 60 percent of the decline in Brazil's extreme poverty can be attributed to reduced inequality.

During the 2000s, labor and non-labor income inequality in Brazil declined, and wage differentials narrowed between workers with different skills, living in different locations, and working in different sectors. Also during this period, the real minimum wage increased and public transfers rose (both in terms of average benefits and coverage). How important were these factors in explaining the decline in overall inequality?

The fall in inequality in the distribution of labor income per working adult is determined, among other things, by both a quantity and a price effect of changes in the distribution of schooling. According to Barros and others, the 1990s and 2000s in Brazil were marked by an accelerated expansion of basic education. The Gini coefficient for education, measured in years of formal schooling, declined from 0.479 in 1990 to 0.349 in 2009. This changed the composition of the labor force by educational level, with low-skilled and unskilled workers becoming relatively less abundant. However, while some studies show that the decline in education inequality and in the price effect (the skill premium) has led to a decrease in income inequality, others show that the quantity effect of education (increased access) has in fact tended to increase inequality. More research is needed to establish the source of the discrepancy.

Barros and others argued in a 2010 study that the decline observed in labor income inequality is also accounted for by a reduction in spatial and sectoral labor market segmentation. Wage differentials between similar workers in metropolitan areas and those in medium-sized and small municipalities have declined, as have wage differentials between urban and rural workers, and between those employed in the primary and other sectors, suggesting the presence of equalizing forces in the labor market.

This study shows, too, that almost half of the decline in income inequality is due to a more equal distribution of household non-labor income per adult, mostly thanks to the presence of large-scale, equalizing government cash transfer programs. Since 2001, the government has increased the average amount of all transfers and broadened the coverage of well-targeted programs such as Brazil's signature conditional cash transfer program Bolsa Família (Family Allowance). While the country's contribution-based social security program has the broadest coverage—about 30 percent of the Brazilian population lives in households receiving contribution-based social security benefits—the largest expansion in coverage was observed in Bolsa Família, which reported an increase in coverage of close to 10 percentage points between 2001 and 2007, reaching 17 percent of Brazil's households.

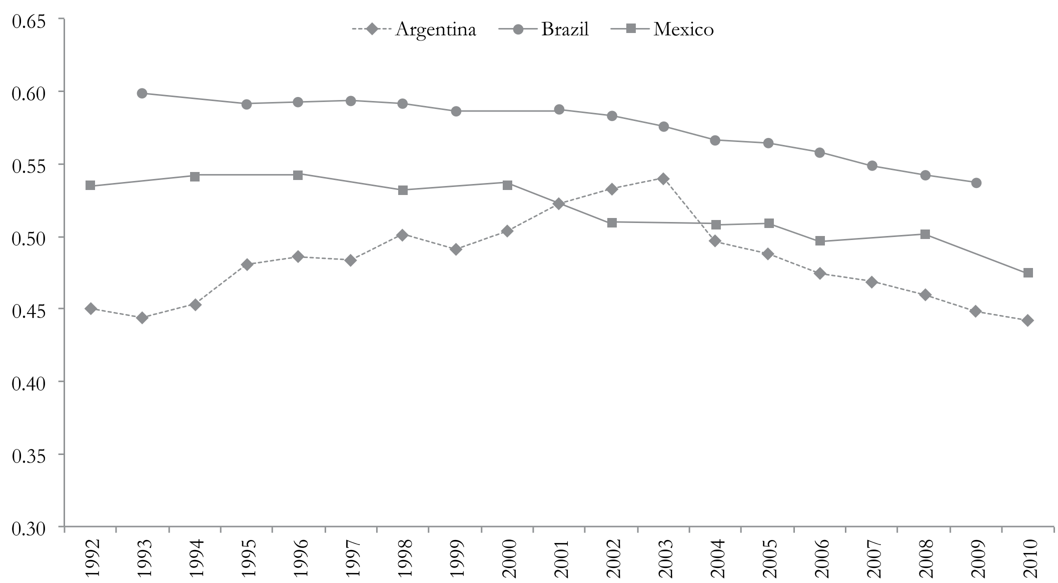
In summary, the decline in inequality in Brazil during the 2000s was a consequence of declining levels of both labor and non-labor income inequality. Factors such as changes in the share of the population that is unemployable, including young children and the elderly, as well as employment and unemployment levels among the poor, have been found to be of relatively limited importance. The decline in labor income inequality in Brazil is the result of two main factors: a lower skill premium (that is, a lower wage gap between skilled and unskilled workers), which in turn is caused by changes in the composition of supply and demand, coupled with a rise in the minimum wage; and a reduced spatial and sectoral segmentation of labor markets. As is the case with Argentina, the decline in non-labor income inequality is due primarily to an expansion in coverage of government cash transfer programs that target the poor.

A SMALLER SKILL PREMIUM

A study carried out by the economist Gerardo Esquivel, John Scott, and myself shows that, after a period of rising inequality during the 1980s and the first half of the 1990s, income inequality in Mexico has declined. Between 1996 (the peak year for inequality) and 2010, Mexico's Gini coefficient fell from 0.547 to 0.475. Nearly 60 percent of the country's decline in poverty can be attributed to a reduction in inequality, with the income of the country's bottom 10 percent growing more than twice as fast as that of the top 10 percent. Even more notable is the fact that the faster growth of those at the bottom of the distribution occurred during a period of lackluster overall economic growth.

The decline in inequality coincided with the implementation of the North American Free Trade Agreement (NAFTA), and a shift in government spending patterns. Starting in the early 1990s, public spending on education, health, and nutrition became more progressive. In 1997 the Mexican government launched the Progresa conditional cash transfer program (called Oportunidades since 2002), a large-scale anti-poverty initiative that currently covers 5.8 mil-

Inequality in Three Countries



Gini Coefficient in Argentina, Brazil and Mexico; c.1990–c.2010. Source: Based on data from SEDLAC (CEDLAS and The World Bank), March 2012 (http://sedlac.econo.unlp.edu.ar/eng/). Note: Data for Argentina are for urban areas only. They represent 66% of total population.

lion poor households—around 19 percent of households in 2012.

By applying a more in-depth statistical analysis to the Gini coefficient data, one finds that labor incomes had an equalizing effect in 2000, 2004, and 2006, but were unequalizing in 1994 and 2010. This also shows that the unequalizing effect of income from capital for all the years studied was offset by the large equalizing effect of government transfers. There is evidence to suggest it was a change in relative hourly wages that caused labor income to switch from having an equalizing to an unequalizing effect, and then back again between 1994 and 2010.

THE RETURN ON EDUCATION

Starting in the mid-1990s, the skill premium—measured by the gap between the wages of workers with tertiary (or secondary) education and workers with no schooling or incomplete primary school—fell systematically. Between 1984 and 1994, changes in the returns to education accounted for a significant share of the rise in household per capita income inequality. In-depth analyses for Mexico suggest that during the period of declining inequality (from the mid 1990s to 2006), the opposite occurred: that is, returns to education (the price effect) became an equalizing factor.

The income premium for skilled work has declined as the supply of skilled workers has risen.

What factors are behind the decline in the skill premium? Since the relative supply of skilled workers rose while the relative returns declined, either supply outpaced demand, institutional factors moved in favor of the unskilled, or both. Raymundo Campos, Esquivel, and I have shown that the real minimum wage and the unionization rate did not change after 1996, and in addition, the minimum wage in Mexico is not binding. It is therefore unlikely that changes in institutional factors affected the wage structure for the period after 1996. Market forces, then—that is, changes in the composition of labor demand and supply by skill—should explain what happened to the returns on education.

Under some plausible assumptions, the reduction in the skill premium can be attributed to both an increase in the supply of and a fall in the demand for skilled workers, but with the increased supply effect being larger. A study by Campos and others appears to give more weight to the impact of changes in the composition of the labor supply by skill than to changes in demand.

Another interesting question is raised by the switch of labor income to being an unequalizing factor in 2010. It is unclear whether this switch was a result of the knock-on effects of the global great recession of 2007–09 or a new trend. If it is the latter, the era of declining inequality in Mexico may have come to an end.

The rise in the relative supply of skilled workers was probably due to changes in public spending on education during the 1990s, which significantly expanded basic and middle schooling. Esquivel and others state that public spending on education during the 1970s and 1980s was heavily biased toward higher education, and that this changed dramatically in the 1990s. Additional resources invested on the supply side and the implementation of demand-side subsidies for education through Progresa/Oportunidades changed the incidence of public spending on education from being slightly regressive in 1992 to being progressive in 2006.

The fall in the premium to skills, therefore, can be linked to both market factors, which affected the demand for labor by skill, and state action in education spending. In addition, due to the country's demographic transition, the cohorts entering primary school have become smaller over time, liberating resources for secondary schooling.

Research carried out by Esquivel and others shows that the marginal increase of government transfers was equalizing throughout the period, increasing its marginal contribution over time. Progresa/Oportunidades is an example of redistributive "efficiency": With a budget equivalent to as little as 0.36 percent of GDP, Progresa/Oportunidades accounts for 18 percent of the change in the pre- versus post-transfers difference in the Gini coefficient. Using standard incidence analysis, the World Bank's Luis Felipe López-Calva and others in 2012 showed how Mexico's cash transfers significantly increased their contribution to reducing poverty and inequality from the mid-1990s to 2010.

As with Argentina and Brazil, the decline in inequality in post-NAFTA Mexico can be explained by two main factors. First is the fall in the premium to skills (using an education-based skills indicator). The second factor has been the expansion of cash transfer programs that target the poor. The decline in the skills premium, in turn, is primarily due to the rise in the supply of skilled workers. The increase in the relative supply of skilled workers is associated with significant efforts by the government to expand basic education.

HARD WORK AHEAD

During the first decade of this century, income inequality in most countries in Latin America declined. This is a very positive development, and not only in terms of fairness. Because inequality in the region is tied to imperfect and segmented markets, discrimination, and unequal opportunities, reducing inequality may unleash new forces for economic growth.

The results of in-depth analyses for Argentina, Brazil, and Mexico reveal two main factors behind the drop in inequality: a fall in the premium that favors skilled over unskilled labor, and more progressive government transfers targeting the poor. The fall in the skill premium seems to be associated with an increase in the relative supply and a decrease in the relative demand for skilled labor. In the case of Argentina, the demand side of the story dominates, while in Mexico, the supply side does. In Brazil, on the other hand, both supply and demand of skilled labor appear to be equally important.

The increase in the relative supply of skilled labor, in turn, appears to be associated with an expansion in access to basic education, which has made low-skilled labor relatively less abundant. The distribution of human capital has become more equal and—everything else remaining unchanged—the gap in returns to schooling by level has narrowed. Changes in demand for labor by skill level also have moved favorably toward the unskilled. There is some evidence that positive terms of trade had something to do with this change in the 2000s. The exact mechanism remains to be identified.

The momentum of this redistributive process, however, may be hard to sustain. Educational attainment has become significantly more equal; distribution of the quality of education has not. The experience of the United States should serve Latin America as a warning of what may be yet to come. In the United States, earnings inequality has increased significantly since the 1980s due to a rise in the skill premium. Returns to skills have risen because of a slowing of the rate at which workers with post-secondary education have entered the labor market (and to a lesser extent because of skill-biased technical change). The inadequate quality of education in preceding levels generated many high school graduates who are not "college ready," and, as a result, educational upgrading stalled. Meanwhile, favorable terms of trade can be fleeting. Throughout its history, Latin America has experienced recurrent ups and downs associated with the terms of trade.

Thus, the much-acclaimed decline in inequality in Latin America cannot be taken for granted. There is still much that needs to be done to ensure not only that the gains achieved so far are not lost, but also that the process of reducing poverty and inequality can continue throughout a region that still features the highest levels of inequality in the world. This will require focused attention and hard work on the part of both policy makers and society. ■