Inequality in Focus

Taxes, Transfers, and Income Redistribution in Latin America

Nora Lustig

How much reduction in inequality and poverty does Latin America accomplish through taxes and transfers? How progressive are revenue-collection and social-spending patterns? An in-depth fiscal incidence analysis applied to Argentina’s urban areas, where three-fourths of the population lives, as well as to Bolivia, Brazil, Mexico, Peru, and Uruguay, finds the following:

1. The extent of income redistribution and poverty reduction varies significantly across countries.
2. There is little correlation between government size and the extent and effectiveness of redistribution and poverty reduction.
3. Large-scale targeted cash transfers that cover a high proportion of the poor can achieve significant reductions in extreme poverty.
4. At present, personal income taxes achieve little in the form of redistribution.
5. When indirect taxes are taken into account, the net income of the poor and the near poor can be lower than it was before taxes and cash transfers.
6. The poor and near-poor benefit substantially from in-kind transfers in education and health. These in-kind transfers are quite progressive in all countries studied.2

How Much Redistribution Is Achieved Through Personal Income Taxes and Cash Transfers?

The reduction in income inequality and extreme poverty from personal income taxes and direct cash transfers varies considerably across countries, as shown in figure 1. In our sample, the income tax and cash transfer systems of Argentina and Brazil are the most redistributive. Peru has the least redistributive system. Although governments have become more redistributive in Latin America, the extent of inequality and poverty reduction attained through taxes and transfers is still far lower than what is observed in OECD countries. On average, taxes and transfers reduce inequality seven times more in OECD countries than they do in Latin America.3

Interestingly, the size of government spending and the extent of redistribution do not necessarily match. For instance, Argentina and Bolivia have similar ratios of primary spending (i.e., all government spending excluding debt servicing) to GDP (close to 40 percent) but these two countries are on opposite sides in terms of the extent of inequality reduction. Uruguay’s primary spending to GDP is considerably lower than that of Bolivia (below 30 percent), yet the reduction in both inequality and poverty is higher in Uruguay. Brazil spends the most on direct cash transfers as a proportion of GDP, yet it achieves less poverty reduction than Uruguay, which allocates less to cash transfers. Bolivia spends a substantially higher share of its GDP on direct transfers than Mexico, but reduces poverty by a smaller proportion.

Direct Cash Transfers and Poverty Reduction

Research results suggest that merely increasing the overall spending capacity of the state or the capacity to spend on direct transfers will not necessarily reduce extreme poverty by as much as one might expect.4 In order for direct transfers...
to make a noticeable dent on extreme poverty, two things must happen. First, cash transfer programs must cover a very high proportion of the extreme poor. That is, the existing range of safety net programs must be designed and implemented in such a way as to cover as close to the universe of the extreme poor as possible. Second, spending on direct cash transfers and the proportion of benefits to the extreme poor must be large enough so that transfers per beneficiary closely match the poverty gap, that is, the average distance between the poverty line and the per capita income of the poor.

Of the six countries considered, Argentina and Uruguay achieve the largest reductions in extreme poverty per dollar transferred in cash. Mexico and Peru have well-targeted programs but the amounts these countries transfer in cash are too small. Moreover, direct cash transfer programs in these two countries exclude approximately 25 and 40 percent of the extreme poor, respectively, as shown in figure 2. Interestingly, although Brazil transfers the most of all six countries in cash, (4.2 percent of GDP), the extent of poverty reduction is smaller than what is obtained in Argentina. This is because the share of transfers going to the poor in Brazil is considerably smaller than the share in Argentina. Note that the largest Brazilian cash transfer program—the Special Circumstances Pension—is not targeted to the poor.

Although Argentina and Mexico are similar in terms of per capita GDP, Argentina spends more on cash transfers (3.0 percent vs. .75 percent of GDP) and a larger percentage of the extreme poor are transfer beneficiaries in Argentina than in Mexico (92.5 vs. 66.8 percent). Unsurprisingly, transfers in Argentina reduce extreme poverty by a considerably greater amount.

Bolivia spends almost three times as much as Mexico on transfers as a share of GDP, but because Bolivia’s GDP is lower, the transfers per beneficiary are smaller than in Mexico. However, the main factor making Bolivia’s redistributive machine less effective is that more than 60 percent of the benefits of its largest transfer program—Renta Dignidad, a non-contributory universal pension (1.4 percent of GDP)—go to the non-poor. Meanwhile, only 43 percent of the extreme poor benefit from any of Bolivia’s flagship transfer programs, as shown in figure 2. Bolivia’s emphasis on universal direct cash transfers (as opposed to targeted ones) substantially diminishes the capacity of such programs to reduce extreme poverty.

Bolivia could improve the targeting of its safety net programs to the poor, or consider substantial increases in the amount spent on these programs. Mexico and Peru could consider increasing the amount spent on direct cash transfers. Brazil, Mexico, and Peru—and above all Bolivia—should adapt or expand the range of safety net programs to cover a larger share of the extreme poor. Brazil has already started addressing the limitations of its anti-poverty programs (including those of Bolsa Família, a conditional cash-transfer program to induce education and health investments in children) with the recent launch of Brasil Sem Miséria (literally, Brazil without extreme poverty) and Brasil Carinhoso.

Who Bears the Burden of Taxes?

Income taxes are progressive; the proportion paid in income tax rises with income in Argentina, Brazil, Mexico, Peru, and Uruguay. However, from public accounts one knows that personal income taxes represent a small proportion of total tax revenues. Bolivia doesn’t even have income taxes. Furthermore, one cannot really assess the progressivity of income taxes without having access to the information reported in tax returns. Latin American governments should consider making the information from tax returns public on a regular basis the same way that advanced OECD-member countries do and...
have been doing for decades. Any tax reform in the future should seriously examine the redistributive potential coming from higher income taxes on the rich, and this will require revealing the current effective tax rates of the top earners.

Indirect or consumption taxes (mainly Value Added Taxes or VATs) are regressive because the poor consume a higher share of their incomes, and therefore pay a higher proportion of what they earn in consumption taxes than the rich. Perhaps more importantly, in five out of the six countries studied, people in the second, third, and fourth deciles of the income distribution pay more in taxes than what they receive in benefits once we take into account the impact of indirect taxes on incomes (figure 3). Furthermore, indirect taxes can make the poor worse off in a nontrivial way. For example, in Brazil—even after all the benefits from cash transfers (except for the recently launched Brasil Carinhoso) are taken into account—due to indirect taxes about 15 percent of the moderate poor become extremely poor and, on average, their income declines by 14 percent. This result, however, does not take into account what the state gives back in the form of free access to education and health services, to which we turn in the next section. Nonetheless, governments may want to revisit their tax and cash transfer systems to ensure that the purchasing power of the poor is protected: i.e., that people are not pushed into poverty or greater poverty after indirect taxes.

How Much Gets Redistributed Through Public Spending in Education and Health?

Governments redistribute and improve living standards not just with cash transfers but also through the provision of free or subsidized government services, especially in the areas of education and health. When we impute the “value” of those transfers to the households that use public education and health services, the extent of redistribution rises significantly. In figure 4 we trace the evolution of the Gini coefficient through its fiscal path. Disposable income equals market income minus income taxes plus cash transfers. Post-fiscal income equals disposable income minus indirect taxes. Final income equals post-fiscal income plus the “income” transferred in the form of public education and health. As one can observe, the largest decline in inequality is due to in-kind transfers in education and health.

In all six countries analyzed here, spending on education and health is progressive. That is, the share of transfers as a proportion of market income declines with income. In fact, education and health spending are often progressive in absolute terms; that is, the per capita benefits decline with income. The main problem, however, is not access but the low quality of these services, in particular for the poor. Thus, even though access to education and health services is quite equitable in the region, opportunities are not equalized. Low quality education and health condemn poor children to limited earning-power in the future. And today’s inequality in the quality of education might halt the auspicious declining inequality momentum of the past decade.

Concluding Remarks

The effectiveness of taxes and transfers in reducing poverty and inequality varies considerably among countries in Latin America. While governments in our sample of six countries became more redistributive in the past decade, the extent of redistribution is still significantly smaller than that observed in OECD countries. The latter have more redistributive tax and cash transfer systems.
The redistributive potential of personal income taxes is grossly underutilized in the countries studied. Although progressive, these taxes represent a small share of total revenues, and some countries do not even have personal income taxes. Any tax reform in the future should examine the redistributive potential coming from higher income taxes on top earners.

The potential to reduce extreme poverty through cash transfer programs can be improved by expanding their coverage of the extreme poor and increasing the value of benefits so that transfers per beneficiary more closely match the poverty gap. Depending on the country, this will require (1) an expansion of the coverage of existing programs and/or introducing new ones and (2) higher overall spending on direct cash transfers or better targeting.

Because indirect taxes are regressive, Latin American governments may want to revisit their cash transfers and tax systems to reduce, if not eliminate, the undesirable impact of indirect taxes on the purchasing power of the poor. Nevertheless, such revisions should take into account that the revenues collected through indirect taxes may benefit the poor through the provision of public goods.

In fact, our results indicate that governments in Latin America redistribute mostly through public spending on education and health. While inequality of access to basic services in education and health has ceased to be a major problem in many countries, vast differences between the quality of services available to the rich and those available to the poor are still a major challenge. Opportunities for the poor cannot be equalized while such disparities persist.

All dollar amounts are U.S. dollars unless otherwise indicated.

Nora Lustig is Samuel Z. Stone Professor of Latin American Economics, Tulane University (Department of Economics; Stone Center for Latin American Studies and CIPR); nonresident fellow at Center for Global Development and Inter-American Dialogue. The author is very grateful to Sean Higgins, Juan Carlos Monterrey, and Emily Travis for their excellent research assistance.

Notes
1 A tax is said to be progressive if the proportion paid rises with income. That is, the rich pay more as a share of their income than the poor. A transfer is said to be progressive in relative (absolute) terms if the proportion (absolute amount) received declines with income. That is, the poor receive more as a share of their income (in per capita terms) than the rich.

2 Some caveats are in order. Because the analysis presented here uses household survey data, the information on personal income taxes suffers from the usual problem of under-representation of rich households. The incidence of inflation tax is not covered. Transfers in-kind include education and health only; public spending includes many other categories such as infrastructure, defense, police, subsidies to agriculture and industry, and so on, whose incidence at the household level is difficult if not impossible to calculate. Last but not least, the results rely on standard incidence analysis without behavioral, life cycle, or general equilibrium effects. The analysis does not look into the macroeconomic sustainability of taxation and social spending patterns. And, inequalities attributable to differences in the quality of services are not measured. Nonetheless, the studies summarized here are among the most detailed and comparable for Latin American countries to date. For other

3 When making comparisons across countries, however, one should be careful not to jump to sweeping conclusions. Some of the differences might be due to higher living standards, demographics, geography and institutional factors prevailing in rich OECD countries, and not just to differences in commitment to equity.

4 Extreme poverty is defined using the international poverty line of US$2.30 per day in purchasing power parity.


Income Inequality in Europe and the U.S.: Regional vs. Social-Class Inequality

Branko Milanovic

Is the United States more unequal than Europe? If asked that question, most would likely answer yes. Europeans are known for their greater concern with equality than Americans. While Americans emphasize equality of opportunity, many Europeans find unacceptable the levels of income inequality observed in the U.S. However, in 2007, after the latest round of the European Union enlargement (as Bulgaria and Romania became members), the overall income inequality in the EU, composed of 27 member countries, and in the United States, composed of 50 states, was about the same. The Gini coefficient in both is just above 40. The United States is commonly perceived as more unequal than individual European countries such as France, Spain, or Germany, but its inequality is the same as in the EU as a whole.

Yet the underlying structure of these two inequalities is very different. In the European Union 23 points of the total 40 Gini points are due to inequality—differences in mean incomes—among the member nations. In the United States, fewer than five Gini points (out of the same total of 40) are due to the differences among average incomes of the states.

Simply put, this means that the main cause of inequality in the EU is that its member countries are different: They are either rich or poor. In the United States, the main cause of inequality is that regardless of state, there are rich and poor people. They are not, as in Europe, geographically concentrated in some states. They are dispersed across all 50 of them. In other words: Income inequality in the U.S. is determined by disparities across social classes; in the EU it is mostly determined by location.

The EU is comprised of countries that span the spectrum from Luxembourg, the richest country in the world, with a GDP per capita of more than $70,000 in purchasing power parity terms (PPP), to Romania with a GDP per capita (adjusted for the lower price level in Romania) of only $6,000 in PPP terms. The ratio between the averages is thus 7 to 1. It is not surprising, given that the European within-national income distributions are relatively compressed, that if we divide the populations of Luxembourg and Romania into groups of 5 percent of population each (the “ventiles”), running from the poorest to the richest, the poorest Luxembourgish ventile would have a much higher income than the richest Romanian ventile. In other words, Luxembourg’s and Romania’s distributions do not overlap at all: Where Romania’s income distribution spans the spectrum from Luxembourg, Luxembourg’s income distribution is just beginning. Practically, this means that all Luxembourgeois are richer than all Romanians. The situation is not as dramatic but is nevertheless very similar if we compare Denmark or Finland (whose poorest population ventiles are, together with Luxembourg’s, the best off in the EU) with countries such as Lithuania and Bulgaria. For example, the poorest people in Denmark are richer than 85 percent of the Bulgarian population.
The picture of inequality in the United States is entirely different. The ratio between the per capita incomes of the richest state (New Hampshire) and the poorest state (Arkansas) is only 1.5 to 1. The average incomes of the states are all very closely bunched together: That can be seen in the almost uniform shade of the United States in the map in Figure 1, which shows relative state GDPs per capita, contrasted with much greater variability of average income exhibited by European Union members. The bunching of mean incomes across the U.S. states, called “convergence,” has been going on for the past 50 years. However, each individual state itself is very unequal. The state-level Gini coefficients start at 33 points in South Dakota and Wisconsin (the two most equal states) and end with Texas and Tennessee, whose Gini coefficients are almost at Latin American levels, about 45 Gini points. This is contrasted with inequality in European countries that ranges from the most equal, Hungary and Denmark, with Ginis of about 24–25, to the most unequal, Great Britain and Estonia, with Ginis of 37.

In other words, looking at states or countries alone, European high-inequality countries like Great Britain would, in the U.S. context, be considered fairly egalitarian. If it were a U.S. state, Great Britain would rank as the sixteenth most equal state. Figure 2 contrasts inequalities in the two continents, showing again an almost uniform dark coloring, indicating high Gini inequality, across the United States and much greater variability as well as generally lower Gini among European Union countries.

In the United States, inequality is a matter of individuals or social class; in the European Union, it is a matter of location or countries. Consequently, policies to address inequality and poverty must be different, too. In the United States, social policies must target poor individuals regardless of where they live; in the European Union, social policies (called “cohesion” policies) must

---

Figure 1 Income Inequality in the U.S. and EU, around 2005

High inequality among regions combined with low inequality within regions is also observed within some countries in Europe. In Italy, where regional inequalities are notoriously great, the gap between the richest region (Valle d’Aosta in the north, on the border with Switzerland) and the poorest (Calabria, in the southeast) is 3 to 1. In Spain, a country not exempt from regional tensions, the gap between the richest region (Madrid) and the poorest (Extremadura) is 1.7 to 1.

Interestingly, while overall interpersonal income inequality in the federations of the Soviet Union and Yugoslavia under communism was very low, both countries were extremely heterogeneous in terms of the income levels of their constituent states (called “republics” at the time). Low levels of interpersonal inequality coexisted with large differences in mean incomes between republics. This implies that within each republic interpersonal income inequality must have been extremely small. The Soviet Union consisted of 15 republics. In 1991, at the time of the breakup, the gap, measured by GDP per capita, between the richest republic (Russia) and the poorest (Tajikistan) was 6 to 1.

Which one is better? Is it better to have people with low incomes geographically concentrated or dispersed? Surely, a large discrepancy in mean incomes is hardly a recipe for a successful union, especially if it comes atop other characteristics that differentiate people: ethnicity, language, culture, and history. Income cleavage and other cleavages reinforce each other. “Translated” in the U.S. context, it would be as if the income gap that currently reinforces the racial cleavage were to be also geographically concentrated, with populations of poorer states being dominantly African American and that of richer states almost wholly Caucasian. A lesson from the collapse of the target poor countries (or regions like the Mezzogiro in southern Italy) because they contain a disproportionate number of poor people.
The Inequality in Focus series aims at informing the public debate on equity, inequality of opportunity, and socioeconomic mobility. It features articles written by World Bank staff, as well as researchers and policy makers from the broad development community. The views and interpretations in the articles are those of the authors and do not necessarily represent the views of the World Bank, its Executive Directors, or the countries they represent.

The Inequality in Focus series is not copyrighted and may be reproduced with appropriate source attribution.

Editorial Committee: Pedro Olinto (managing editor), Jaime Saavedra, Francisco Ferreira, Luis-Felipe Lopez-Calva, John Newman, and Gabriel Demombynes

Editor: Mary Anne Mulligan
Production: Anna Reva

communist federations is that an important part of the reason for the breakup lies in the inability of the communist authorities—despite their successful policy to contain and reduce interpersonal inequality—to reduce huge, historically inherited income differences among the constituent members.

The European Union’s framers were aware of the long-run unsustainability of a very economically unequal union, and hence policies have for years been directed toward helping the growth rates of the poorer members. In terms of reducing regional inequality, Europe has indeed been successful in raising the incomes of the members that were poorer when they joined. When each joined the EU, Spain, Portugal, Greece, and Ireland all were poor relative to the Union-wide average. In 1986, when Portugal became a member of the EU, its GDP per capita was 45 percent below the then Union-wide mean. Twenty years later, its GDP per capita is only a third smaller than the Union-wide average (more exactly, the average of the Western European countries that made up the EU when Portugal joined in 1986). The convergence has obviously experienced a setback during the current crisis, as poorer members have been affected to a greater degree. However, it has not reversed it: The relative incomes of both Spain and Portugal, compared to Germany’s, are today some 10 percentage points higher than they were when the two countries joined the Union in 1986. If the crisis continues, and the negative impact remains to be felt disproportionately in poorer countries, then some of the convergence gains may be eroded, and perhaps even the future of the Union may come to look bleaker than it did only a few years ago.

All dollar amounts are U.S. dollars unless otherwise indicated.

Branko Milanovic is Lead Economist, the World Bank.