Social policy in Latin America has traditionally failed to benefit the poor. Throughout most of the twentieth century, the main redistributive efforts in the region went into building welfare states. Yet unlike their European counterparts, these Latin American welfare states are highly “truncated,” meaning that whatever their nominal degree of universality, in fact they only cover those with formal employment.¹ The poor, being mostly outside the formal sector of the economy, are outside the ambit of the welfare state as well. Latin American social-insurance programs—maternity and family benefits, health insurance, old-age pensions, and disability benefits—typically began as emoluments meant for relatively small groups such as state employees, armed-forces personnel, and those working in certain favored industries.² The welfare state’s coverage gradually expanded throughout the twentieth century until most formal workers came under its umbrella, though even then agricultural workers were almost always left out.

Once nominally financed by contributions, most of these programs are now in fact funded more or less directly by taxes. Because “the regressivity in social insurance schemes has not been helped by any significant progressivity in tax financing,” these schemes foster a “reverse Robin Hood effect” in which the poor are made to pay for the benefit of the rich.³ Latin American social policy, in other words, has mostly worked backwards, making preexisting economic and social inequalities wider rather than narrower.

Although the size of the informal economy varies from country to
country, available estimates suggest that across Latin America as a whole more than half of all workers labor outside the formal sector—a figure that only goes up when poorer workers alone are considered. There are some social programs that do not require formal employment—most countries seek to provide, and some even constitutionally guarantee, universal schooling and health services—but significant gaps remain. Moreover, the quality of the education and health care to which the poor actually have access is often so dismal that the path to upward social mobility remains blocked and existing inequalities are made stronger.

Subsidies are another form of social policy commonly used in Latin America. During the era of industrialization via import substitution, governments often used them to hold down prices for food, electrical power, and transport (among other goods and services). These subsidies caused market distortions and tended to go disproportionately to the urban middle classes, who already benefited from social-insurance programs. With varying degrees of intensity, Bolivia, Brazil, El Salvador, Mexico, Nicaragua, and Venezuela also adopted land reform. Yet contrary to expectations, in most cases this has not taken a major bite out of preexisting inequalities.

If the tremendous income disparities that characterize Latin American life are not mitigated, the stability of the region’s democracies may be jeopardized. Figure 1 on page 38 shows a strong inverse correlation between levels of income inequality and levels of democratic support in 18 Central and South American countries. Those with higher income disparities enjoy significantly less social consensus on the proposition that democracy is the best form of government. Whereas most of the existing literature argues that inequality is bad for democracy because it makes the rich fearful of redistribution, the problem in Latin America appears to be that democracy’s failure to redistribute holds a threat to political stability. If the poor continue to be left outside existing social pacts (most of which date from the predemocratic era), they will increasingly be tempted to back populist and autocratic leaders who will not shy away from undermining democratic institutions.

Latin America’s biggest social-policy challenge is to extend benefits to those who are now excluded from social-insurance programs—or in other words, to reach the poor. The design of social policies to combat poverty must be informed by five main goals:

1) To make sure that every household is able to meet its basic needs for health services, nutrition, and education regardless of whether its members have formal employment;

2) To give priority to children and women so as to prevent the intergenerational transmission of poverty;
3) To deliver basic public services to poor communities that currently lack access to potable water, electricity, roads, health clinics, and schools;

4) To improve the quality of education in order to boost social mobility;

5) To give the poor access to microfinance in order to promote investment in small productive enterprises.

During the late 1980s and 1990s, Bolivia, Honduras, Mexico, Peru, and other countries began introducing new social funds designed explicitly to improve the social infrastructure and provision of public goods in poor communities. Empirical evaluations show that mixed results have come from these programs. In principle, each assigned benefits in a decentralized fashion in response to petitions from community organizations, while in practice, politicians and bureaucrats enjoyed wide discretion to choose which communities would get help. The same evaluations also showed, however, that social funds responding to decentralized community petitions can effectively reach the poor, which suggests that poor communities can overcome collective-action problems that might stand in the way of asking for government aid. Decentralized schemes appeared on the whole to work better than centralized ones, but the results of individual programs could vary, and there is no theoretical reason to expect that decentralization will always work better than centralized provision.
The main limitation of these social funds is their vulnerability to political manipulation. The programs in Mexico and Peru, for instance, were administered with an eye to incumbents’ electoral needs above all, and appear to have been riddled with official corruption and missing or abandoned projects. Incumbents’ reelection prospects surely benefited in both countries, while success at improving the lot of the poor in either was harder to confirm.

In the late 1990s, Latin America began to witness the introduction of a completely new form of social assistance, conditional cash-transfer (or CCT) programs. Brazil began the first one at the municipal level. The first to be done on a large scale was Mexico’s Program for Education, Health, and Nutrition (Progresa), launched in 1997 with the stated goal of preventing the intergenerational transmission of poverty. Progresa offers cash transfers to women who are selected according to a sophisticated formula designed to measure impoverishment. The grants are conditional on recipients’ keeping their children in school and taking them regularly to a health clinic. Having piloted CCTs of its own at the city level, Brazil expanded their reach to the national level with the Bolsa Escola and Bolsa Familia programs.

The significance of CCTs as tools for fighting poverty is threefold. First, these programs consciously and openly reach out to the poor, and as such mark an important effort to ameliorate the traditional truncation of Latin American social policy. Second, CCTs seek to prevent the intergenerational transmission of poverty by giving heads of households incentives to invest in the health and education of their children. Third, these programs establish entitlements for the poor and limit opportunities for the political abuse of antipoverty money.

Targeting and Discretion

Latin American social programs may be classified according to two criteria: the degree to which they are targeted to reach only the poor, and the degree to which they are discretionary. The better calculated a program is to reach the poor, the more targeted or progressive it is. Programs that take little or no care to reach the poor tend toward regressivity: Benefits flow disproportionately to those who already have more resources. Formal government discretion—defined as leeway to decide who benefits, when transfers are given, and when they are withdrawn—makes up the second criterion. Programs with little formal government discretion offer benefits that are assigned according to objective eligibility criteria (all persons over 65, for instance, or all women with children under 5), and which cannot be withdrawn unless a beneficiary fails to meet previously defined legal criteria. Programs that allow significant formal government discretion are more easily subjected to political manipulation, with poverty reduction often suffering as a result. These
programs allow politicians to assign transfers on the basis of political criteria (for example, being core or swing voters) and to stop benefits at will—because a beneficiary failed to vote for the incumbent, for example, or because elections are not near.

According to these criteria, traditional welfare-state benefits are nondiscretionary—every formal worker is eligible—but they are poorly targeted in Latin America because they exclude the poor. Subsidies for food, medicine, or transport, like social-insurance benefits, tend to be poorly targeted, but they are also discretionary, since politicians can often start, stop, or otherwise change benefits across the board by decree. Thus it is not uncommon to see food, medical, and transport subsidies rise during campaigns and fall once the voting is over. Still more discretionary than subsidies (which after all do not lend themselves to the exclusion of individuals) are outright clientelist transfers.

Conditional cash-transfer programs resemble social insurance in that they are nondiscretionary. They differ from social insurance, however, in being targeted (typically by the use of a poverty formula that recipients must fit). To complement CCTs, Brazil, Chile, and Mexico are introducing social-assistance instruments tailored to the specific needs of particularly vulnerable groups such as widows, orphans, the disabled, and the elderly poor. These programs are better targeted than social insurance and less discretionary than clientelist transfers.

We distinguish CCT programs from transfers that are also targeted at the poor but are highly discretionary. Mexico’s National Solidarity Program (Pronasol), for example, offered cash for credit subsidies and children’s scholarships in a targeted manner, but the government enjoyed absolute leeway to select beneficiaries and could yank any or all benefits from anyone at any moment. Other transfers, typically disbursed before elections, may include bags of food, sums of money, construction materials, titles to land, washing machines, and even livestock. These clientelist transfers consist of private, excludable benefits or favors that are discretionary, and though often well-targeted at the poor, can be given or taken away for purely political reasons. Such transfers differ from CCTs in the vast degree of formal discretion involved.

Lastly, social funds and programs for the provision of public goods—clean water, roads, electricity, schools, clinics, and hospitals—can also be classified according to the targeting and discretion criteria. These programs assign goods that are nonexcludable (they benefit everyone in a given town or locality, regardless of income) and they may or may not be highly discretionary. Pronasol and Peru’s Fujimori-era Foncodes program allowed politicians to choose which locales to aid and which to ignore. Mexico’s replacement for Pronasol, the Municipal Social Infrastructure Fund (FISM), assigns help to municipalities according to a predetermined poverty formula.
Alberto Díaz-Cayeros and Beatriz Magaloni

For most of the twentieth century, truncated (that is, poorly targeted) welfare states coexisted with an array of clientelist transfers that did reach the poor but were subject to immense government discretion. Because the poor benefit from clientelism—which has all too often been the only form of welfare available to them—it is unsurprising to find that there seems to be more satisfaction with democracy in countries where clientelist practices are traditionally more widespread and entrenched. This can be observed more clearly in Figure 2 above, which shows data from the Latinobarómetro surveys, as analyzed by the United Nations Development Programme (UNDP). On the horizontal axis one can see a classification of voters according to their “democratic” character—that is, the proportion of surveyed adults in each country who agree that democracy is the best system of government, even compared to an authoritarian regime that performs well. The vertical axis records public perceptions (as captured by Latinobarómetro surveys) of the frequency of clientelism.

Figure 2 shows a positive correlation between citizens’ expressions of support for democracy and their sense that clientelism is used during election campaigns. This suggests that voters in Latin America evaluate democracy more favorably when politicians deliver clientelistic transfers around election time, even if these same politicians have failed to offer social policies that promise greater justice and lasting poverty elimination. Over the last decade, Latin America has gradually begun to move toward social programs that combine more targeting with less discretion. This movement in the right direction is expanding benefits to the poor and granting them entitlements that are less vulnerable to manipulation.

The key to this progress has been the trend toward CCT programs.
Several factors are driving it. During the era of structural adjustment and neoliberal reform, Latin American governments found themselves facing serious budgetary constraints and thus a need for policies that did not cost too much. By tightly targeting only the most severely impoverished citizens and using resources (clinics, doctors, nurses, schools, and teachers) that are already in place, CCTs could remain relatively cheap. So far they have exerted little upward pressure on taxes, and the wealthy and middle classes—probably seeing CCTs as bulwarks against social unrest—have shown no resistance to paying for them.

The rapid spread of CCTs bespeaks the critical failure of the region’s social pacts to include the poor. Latin American societies are rife with arrangements, left over from an authoritarian past, that are not sustainable in a democratic era. In countries where a significant percentage of the population is excluded from preexisting social pacts and income inequality runs high, we can expect to observe the introduction of CCTs.

Although the introduction of CCTs is a step in the right direction, it is hard to imagine successful poverty relief based solely on these policies. They are not meant to make up for shortages of health clinics, schools, potable water, roads, and other public goods that are essential for poverty reduction. Supplying such goods means building social infrastructure, and that is costly. Indeed, the scarcity of such public goods in Latin America’s poorest communities blunts both CCTs’ ability to expand and their effectiveness at reaching those mired in the worst kinds of poverty. Many countries, including Bolivia, Brazil, Colombia, Guatemala, Honduras, Mexico, Nicaragua, Paraguay, Peru, and Venezuela, contain large isolated areas that have long been desperately poor and have little or no infrastructure, social or otherwise. In these hard-to-reach places, new social-policy innovations that provide incentives for migration and relocation will be necessary.

Whatever their other virtues, moreover, CCTs are not designed to mitigate risks due to health problems, accidents, old age, or natural disasters. Latin American welfare states must become truly universal in order to accomplish the large-scale risk pooling that is required in order to guard against such life hazards. But this too is expensive. Without sustained economic growth and significant increases in taxation, universal social welfare will not be possible. Finally, CCTs will not be able to ease limits on social mobility unless the quality of the schooling and health services actually available to the poor becomes dramatically better than it is now.

A Poverty-Fighting Weapon

Despite these limitations, CCT programs in the last decade have become the main weapon for fighting poverty in Latin America. These programs spring from a belief that direct transfers of funds can induce poor households to seek more schooling and health care for their youngsters.
By causing households to adopt and stick to certain changes in behavior, the programs aim to measurably improve health and human-capital formation.\(^{10}\) Whereas poor families might once have been inclined to send their school-age children to work instead of the classroom, now these families are paid to keep the children at their studies.\(^{11}\)

After Mexico pioneered Progresa in rural areas in the late 1990s—teaming money transfers for food with both scholarships to keep children in school and incentives to seek health care more often—President Vicente Fox renamed the program Oportunidades and extended it to the cities as well. By the end of 2005, Oportunidades covered five-million poor households, most of them in rural areas.

In part thanks to Progresa’s success, most Latin American countries have created their own CCT programs (see Table 1 on page 44). Mexico and Brazil have the largest programs in terms of absolute numbers of people included, while Ecuador’s Bono de Desarrollo Humano covers the largest share of a national population. Opportunity NYC, a pilot CCT program launched by New York’s Mayor Michael Bloomberg in 2007, is a sign that the success of CCT programs in Latin America has encouraged rich countries to start their own initiatives along these lines.

Despite their common features, CCT programs can also differ significantly from one another in any one or more of five basic ways: 1) selection of beneficiaries; 2) levels of benefits; 3) means of distributing benefits; 4) methods by which beneficiaries can meet conditions; and 5) methods of evaluation and oversight.

In order to select beneficiaries and discern a baseline against which program effects can be measured, some CCT schemes begin with an effort to survey and map the likely target population. In some countries, information about where the target population lives and whether school and health facilities are accessible enough to make conditionality feasible is used to select localities that will be included in the program. Some CCT programs allow local governments to choose individual beneficiaries, while others give potential beneficiaries incentives to self-select. Still others seek to cover just about everyone living in certain very poor areas, with little attention paid to individual differences in poverty levels. One upshot of the differences in how beneficiaries are identified and selected is that Latin American CCTs vary widely when it comes to striking a balance between errors of overinclusion and errors of underinclusion.

Benefit levels mark an additional area of difference. Some programs calibrate benefits according to the school year to which a child belongs as well as the child’s gender—for example, some programs provide larger transfers to keep girls and older children in school. Researchers continue to discuss how much money is needed to induce lasting changes in behavior, and to ask how much additional money will maximize program impact over time. Transfers vary in amount from country
Transfer payments may come directly from the national government, or may be routed through the banking system or local-government bureaucrats. The methods used to verify that beneficiaries are meeting conditions depend in part on the methods used to deliver the benefits. Some programs impose conditions with such strictness that the coordinated efforts of several health and education bureaucracies are required. In other programs, beneficiaries must display fairly extreme amounts of noncompliance in order to be stricken from the rolls.

Finally, each program resorts to its own favored evaluation mechanisms. The more innovative CCTs include embedded experiments designed to yield scientifically testable results, while others rely on more traditional evaluation methods.

In general, evaluation reveals highly positive results from CCTs. Progresa, which is arguably the most studied of all such programs, has been

<table>
<thead>
<tr>
<th>Country</th>
<th>Program</th>
<th>Year Created</th>
<th>Coverage (ca. 2006)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Plan Familias</td>
<td>2006</td>
<td>500,000</td>
</tr>
<tr>
<td>Brazil</td>
<td>PETI, Bolsa Escola/Bolsa Familia</td>
<td>1996, 2001 (1995), 2003</td>
<td>11,100,000</td>
</tr>
<tr>
<td>Chile</td>
<td>Chile Solidario (CS)</td>
<td>2002</td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>Families in Action (FA)</td>
<td>2001</td>
<td>4.6%</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>Solidaridad</td>
<td>2005</td>
<td>230,000 families (10%)</td>
</tr>
<tr>
<td>Ecuador</td>
<td>Bono de Desarrollo Humano (BDH)</td>
<td>2003</td>
<td>1,000,000 families (40%)</td>
</tr>
<tr>
<td>El Salvador</td>
<td>Red Solidaria</td>
<td>2005</td>
<td>24,000 families</td>
</tr>
<tr>
<td>Honduras</td>
<td>Programa de Asignación Familiar (PRAF)</td>
<td>1998 (1990)</td>
<td>240,000 (15%)</td>
</tr>
<tr>
<td>Jamaica</td>
<td>Program of Advancement through Health and Education (PATH)</td>
<td>2001</td>
<td>180,000 (8%)</td>
</tr>
<tr>
<td>Mexico</td>
<td>Progresa Oportunidades</td>
<td>1997, 2000</td>
<td>5,000,000 families</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>Red de Protección Social (RPS)</td>
<td>2000</td>
<td>30,000 families</td>
</tr>
<tr>
<td>Paraguay</td>
<td>Red de Protección y Promoción Social (Abrazo Tekopora)</td>
<td>2005</td>
<td>5,000 families (pilot program)</td>
</tr>
<tr>
<td>Peru</td>
<td>Programa Nacional de Apoyo Directo a los más Pobres Juntos</td>
<td>2005</td>
<td>336,000 families</td>
</tr>
</tbody>
</table>

Note: This Table excludes unconditional-transfer programs, programs that are not targeted specifically at poor households or individuals, and programs that omit the goal of disrupting the intergenerational transmission of poverty. Programs left out therefore include Argentina’s Jefes de Hogar, Bolivia’s Bono Solidario (Bonosol), and Venezuela’s Misiones.
found to be associated with increased consumption, declines in school-dropout rates, increases in children’s average height and weight, and lower infant mortality, among other indicators. The largest (in absolute terms) of all Latin American CCT programs, Brazil’s Bolsa Familia, can point to similarly promising results. Colombia’s Families in Action boosted school enrollments and healthcare access, though it failed to show any effect on nutritional levels. There also have been studies, mostly from Brazil and Mexico, associating CCTs with reduced inequality. According to one, a fifth of the movement toward greater equality in income distribution in those two countries over the last few years is directly attributable to CCT payments. Development economists, experts in public health and schooling, and policy makers will continue to study CCTs to see how well they are working. Yet the need to maintain a process of permanent evaluation, preferably of the embedded, experimental type, does not seem to be widely understood.

Explaining the Adoption of CCTs

Conditional cash-transfer programs are more than just a means of handing income supplements to the poor. Implicit in these programs is a set of ideas about what role the state should play in alleviating poverty among its citizens. Why did some countries emerge as early adopters of CCTs, while others have yet to adopt them even today, despite all the positive press and evaluations they have received? The adoption of a CCT signals a government’s willingness to depart from the common forms of truncated welfare states, generalized food subsidies, or discretionary clientelistic transfers.

A way to think about the adoption of these programs is through what is known as a survival model, which uses statistics to represent the time lag involved in the adoption of a policy, in this case a CCT program. A standard way to think about the process is that in any given year there is a probability that a program will be initiated.

Table 2 on the following page shows the results we got when we examined how various circumstances might affect the likelihood that a CCT program will be adopted. As mentioned above, widespread income inequalities and poverty should make the need to adopt poverty-relief strategies more pressing. Poverty and inequality are not the same thing, but as structural characteristics, they tend to be highly correlated. A high income level, as measured by per capita GDP, should also make it more likely that a country can become an early adopter of CCT programs. But while high per capita GDP may speed CCT adoption, rapid economic growth can make addressing the plight of the poor less pressing, so we expect to find a negative correlation between growth and the adoption of CCT programs. Finally, CCT programs presuppose an infrastructure for the delivery of health and educational services, since otherwise con-
Adoption makes no sense. In many ways, the quality and density of that infrastructure reflect “state capacity”: The more capable a state is, the more likely it should be to create a program involving the kinds of administrative burdens that CCTs (with their targeting and conditions) require. On the political front, we also include a control for state capacity as measured by the years that have passed since the inception of the democratic regime, plus a measure of the government’s ideological tendency.

Our data cover the 21 most populous countries in Latin America and the Caribbean (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela). The dependent variable is the adoption of a CCT program (such as those listed in Table 1), with the caveat that the initiation date is taken to be when a nationwide program is adopted, not just when an early pilot study gets underway (the results do not hinge on this coding decision).

We test whether governments leaning ideologically to the right and center are more likely to adopt CCT programs than those on the left. Using the 2006 version of the Database of Political Institutions (DPI), we grouped those political parties that controlled executive branches into “left” and “center” categories. The DPI does not code ideology for a significant number of cases, particularly during autocratic periods. Except for some very ambiguous and short-lived presidencies in Ecuador, we have decided to use our own coding for the missing values on the basis of the political biographies of key individual leaders (this decision has allowed us to keep Guatemala, Haiti, Nicaragua, Panama, and Venezuela in the analysis). The DPI is also our source for figures on regime durability, measured by the number of years that the regime has remained in place.

To measure inequality, we use the average Gini coefficient calculated for each given year from the UNU-WIDER World Income Inequality

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**Table 2—Factors Influencing the Adoption of CCTs**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>Z-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inequality</td>
<td>1.166</td>
<td>0.051</td>
<td>3.53</td>
</tr>
<tr>
<td>GDP per Capita</td>
<td>1.000</td>
<td>0.000</td>
<td>-2.61</td>
</tr>
<tr>
<td>Measles Immunization</td>
<td>1.081</td>
<td>0.026</td>
<td>3.21</td>
</tr>
<tr>
<td>Left</td>
<td>0.715</td>
<td>0.392</td>
<td>-0.61</td>
</tr>
<tr>
<td>Center</td>
<td>1.477</td>
<td>0.468</td>
<td>1.23</td>
</tr>
<tr>
<td>Growth</td>
<td>0.902</td>
<td>0.040</td>
<td>-2.31</td>
</tr>
<tr>
<td>Durability</td>
<td>1.029</td>
<td>0.013</td>
<td>2.33</td>
</tr>
</tbody>
</table>

*Notes:* No. of subjects = 251, No. of failures = 68, Time at risk = 635, Chi2 = 57.41, Log likelihood = -258.62.
Database (WIID). Given that income inequality changes only gradually, we keep the reported average in subsequent years when there is no calculation of income inequality, until another calculation is available. For the level of development, we use GDP per capita figures at purchasing power parity (PPP) from the World Development Indicators (WDI). This same source is used for growth rates, which refer to the overall economy as measured in current U.S. dollars. We take as a measure of state capacity the rate of immunization against measles (also compiled by the WDI dataset, although the original source of that information is UNICEF and the World Health Organization).

Coefficients larger than 1 indicate a positive effect that increases the probability, while those less than 1 denote a negative influence. Inequality increases the likelihood that a program will be adopted in a significant way. The level of development also seems to have a significantly positive effect, although the magnitude is very small. Economic growth, which can tempt a government to put off enacting a CCT program, appears to have a negative effect on the likelihood of CCT adoption. Greater state capacity as reflected by measles-immunization rates yields more likelihood that a program will be adopted. And regimes that have been in place for a long time are more likely to adopt these programs. But once the model controls for these factors, there is no evidence suggesting that the choice of these programs is more or less likely to come from presidents who occupy a particular location in the ideological spectrum. All things considered, governments with solid bureaucratic capacity facing widespread inequality and poverty are more likely to have adopted CCT programs early on, with the caveat that economic growth (with its presumable trickle-down to the poor) may induce delay. The data fail to bear out the initial suspicion that these programs have a particular ideological orientation, which suggests that the convergence we see when it comes to poverty-fighting strategies may have to do with dilemmas that all Latin American governments must face, whatever their own or their supporters’ ideologies and policy preferences.

If social programs have clear effects on elections, what does that imply for considerations of democratic quality and governmental accountability? Much of the debate over CCT programs and social funds has focused on finding the “right” bureaucratic systems that will solve the lack of accountability, establish oversight and control mechanisms, lay down clear norms and systems for surveillance, and weigh the usefulness of social audits and public-information transparency. But in the end, none of these more or less technical solutions gets to the heart of things. The best judge and referee of the government’s performance remains the citizen, exercising his or her right to vote in order to turn out a bad government and bring in one that offers better programs and more hope for the future. As the cases of Brazil and Mexico suggest,
success in social policy may be the clearest path toward winning re-
election and may be the main instrument to keep populist leaders out
of power.

NOTES


8. Authors’ communication with officials of the Mexican Secretaría de Hacienda y Crédito Público.


16. In order not to drop Cuba from the data set, we imputed a per-capita GDP value of US$5,000 at PPP for the island.