IDEA
Ideas for Development in the Americas

Inter-American Development Bank
Research Department

Volume 28
May – August, 2012

Financing the Family

Workers' remittances—funds sent by emigrant workers to persons, usually family members, in their home country—are a major source of income for many Latin American and Caribbean economies. More importantly, remittances are a lifeline for many poor households and the justification for splitting up families, sometimes permanently.

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Nowhere is this more true than in Central America. From 2005 through 2009, the average Central American country (excluding Belize) received remittances equivalent to just over 10% of its GDP (Figure 1). To be sure, countries varied greatly around that average: while Honduras and El Salvador received remittances equivalent to 18.8% and 17.5% of their respective GDPs, Costa Rica received only 2.0% and Panama a mere 0.8%. But the remaining two Spanish-speaking countries, Nicaragua and Guatemala, also received considerable income from remittances, equal to 13.0% and 11.3% of GDP, respectively. The Dominican Republic, included in the average above because of its similarity to the other countries in size, income per capita, and proximity to the United States, received remittances equal to 7.2% of its GDP. Thus, remittances make sizable contributions to five of the seven economies in this extended group.

Scaling remittances against GDP is just one, relatively crude way of gauging their importance. Perhaps a better way is to compare remittances with other financial inflows. Remittances loom even larger in such a comparison. In 2007, for example, the average of foreign direct investment (FDI) flows to the seven countries, at 5.3% of GDP, was little more than half the average flow of remittances that year. Only in the two countries with the smallest remittance flows, Panama and Costa Rica, did FDI exceed remittances in 2007; elsewhere remittances ranged from about double (Dominican Republic and Nicaragua) to 34 times FDI (El Salvador). Overseas development assistance—foreign aid—was typically even smaller relative to remittances: the average aid flow to these seven countries in 2007 was a mere 2.9% of GDP, or less than a third of average remittances. Only Nicaragua received (barely) more in foreign aid, 14.8% of GDP, than from remittances; for most of the others, remittances ranged from about 5 times (Honduras) to almost 25 times (Dominican Republic) what the country received in aid that same year. Trade flows are yet another important yardstick, because remittances can be thought of as supplying foreign exchange to the home country that can be used to purchase essential imports. Between 2005 and 2009, remittances financed between 80% and 100% of imports in El Salvador, Guatemala, Honduras, and the Dominican Republic, and 40% in Nicaragua. Even with these remittance inflows, however, most Central American countries run current account deficits in most years.

The above figures demonstrate the macroeconomic importance of remittances but provide only a bird's-eye view. Arguably what matters most about remittances is the support they offer not to these economies as a whole, but to the poorest households in them. Many Central American families depend on remittances

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Financing the Family

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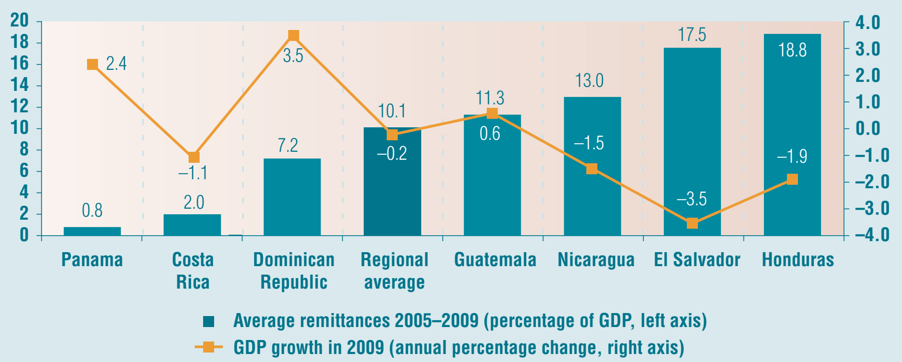
Figure 1. Remittances and Growth in Central America



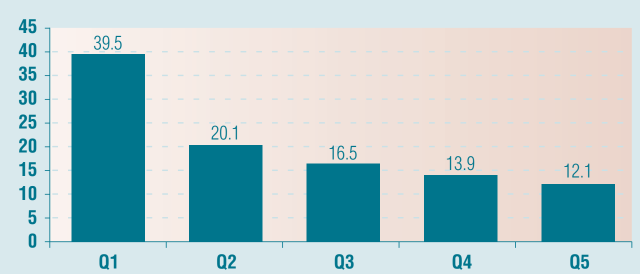
Source: Inchauste and Stein, *Financing the Family.*

to avoid extreme poverty. In El Salvador, for example, almost 40% of households in the lowest income quintile, and 20% of the second-lowest, receive remittances, and the funds received account for, on average, 37% and 14% of these households' spending, respectively (Figures 2 and 3). Thus, remittances appear better targeted than some other types of financial inflows to reach the poor. On the other hand, even 12% of households in the top quintile in El Salvador receive remittances, as do many near the top of the income distribution in the other countries receiving large remittance volumes. In short, whether one focuses only on the most needy households or looks at countries—or the entire subregion—as a whole, the importance of remittances is hard to overstate.

Given that importance, and the fact that the vast majority (estimates are around 80%) of remittances to Central America come from emigrants working in the United States, the deep recession and slow recovery of the U.S. economy of the last few years are cause for great concern. After rising year after year almost without pause for several decades, remittances to Central America fell by 10% in 2009—more than double the percentage decline in output in the United States itself. These losses, combined with the other effects of the recession on these already struggling economies, are producing hardship across the subregion and across the income distribution—but, as is so often the case, especially for the poorest.

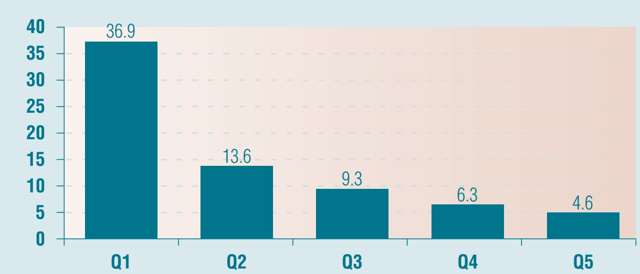
A reexamination of workers' remittances to Central America is thus timely. A forthcoming Inter-American Development Bank book edited by Gabriela Inchauste and Ernesto Stein, *Financing the Family: Remittances to Central America in a Time of Crisis,* explores the patterns of remittances to Central America, both historically and in the recent crisis, and their effects. It also considers what policymakers might do to improve the well-being of both the recipient households and the migrant workers themselves. This issue of *IDEA* discusses some of the book's main findings. It begins by taking a more fine-grained look at the statistics on migrants and remittances, to see more precisely what impacts remittances are having on the recipients' lives. It then focuses on the decline in remittances since 2007, to attempt to explain why the impact on remittances of the Great Recession and its aftermath was so large. The issue concludes with some ideas gleaned from the report about how policy can enhance the development impact of remittances, and so improve the welfare of recipients, the migrants themselves (and their countries), and the region as a whole.

Figure 2. El Salvador: Households that Receive Remittances, by Quintiles *(% of households in each quintile)*



Source: Inchauste and Stein, *Financing the Family.*

Figure 3. El Salvador: Share of Remittances in Household Spending *(% of spending of households that receive remittances)*



Source: Inchauste and Stein, *Financing the Family.*

Assessing the Impacts

Packing up and leaving home is no easy task—for a migrant or for those left behind. Is it worth it? Do the benefits outweigh the costs? These are difficult questions and the answers are not always expected.

With incomes per capita in 2011 ranging from $1,243 in Nicaragua to $3,702 in El Salvador, the five economies of Central America that send the most workers abroad are among the poorest in the hemisphere. (Income per capita in the Dominican Republic was only modestly higher in 2011, at $5,530.) As documented above, remittance flows to these small, low-income economies are large by whatever measure one chooses and a large portion goes to less-affluent households. But the spending of remittances by poor and less-poor households alike reverberates throughout these economies, and both the direct effects on recipient households and the indirect effects on the broader economy remain largely unmeasured. An accurate assessment of the development outlook for these economies—and for their poorer residents—depends in large measure on a better understanding of remittances and their impacts. Those impacts are at times more complicated, and less unambiguously positive, than may appear at first glance.

The most obvious economic impact of worker migration, and perhaps the easiest to observe and quantify, is on the earnings of the migrant workers themselves. On average, Central American workers in the United States earn about four times what their counterparts earn back home. This simple comparison, however, overlooks the fact that migrants tend to be better educated and more skilled than the average nonmigrant. Migration is also likely to appeal more to those workers who are more ambitious and harder-working. Thus, a simple comparison of migrant with nonmigrant workers will tend to overstate the difference between wages earned abroad and wages earned at home for a given worker, because the migrants would likely have had above-average earnings even had they stayed home. When adjustment is made for this difference, however, migration is still found to more than double the average migrant's wages.

The impacts of remittances on the recipient families are more difficult to measure, for several reasons. One reason again relates to differences in education, skill, and ambition: more-capable and harder-working migrants may tend to come from households with those same characteristics, who have better economic prospects even in the absence of remittances than other households. Thus, simply comparing the fortunes of recipient and nonrecipient families will tend to overstate the positive impact of remittances. On the other hand, households who have experienced an adverse shock to their wealth might be more likely to send family members to work abroad, thus contributing to a *negative* correlation between remittances and household welfare. Moreover, some recipient households might respond to remittances by reducing their own work activity, also leading to a negative correlation.

The net effect of these offsetting considerations is hard to predict, and indeed studies of the impact of remittances on poverty and related variables have yielded mixed results. A recent World Bank study of remittances to Latin America found no diminution of poverty in most of the countries examined, and positive results in only three (one of which was Guatemala); remittances to the Dominican Republic and Nicaragua were found actually to *raise* extreme poverty, but only slightly. Two other studies, also conducted in Latin America, found that remittances do reduce poverty, but the effect was typically small and varied widely across countries. Research into the effect of remittances on income inequality has also produced ambiguous findings.

As to whether remittances raise household consumption or household investment, the answer seems to be "both," but mainly the former: for example, a 2007 study found that Salvadoran survey respondents devoted 84% of remittance receipts to food and only 13% to investments in health, education, and family businesses, or to savings. Poorer households tend, appropriately, to devote a larger share of their remittance income to needed consumption; more affluent recipients are more likely to use remittances to keep their children in school or for other human capital investments. Recipients of remittances also tend to be healthier than nonrecipients, both because they can afford more medical care and because their relatives abroad pass along knowledge learned about better health practices, including preventive care. One study found that infants born to recipient households had a 3.7% lower mortality rate and weighed an average of 350 grams more at birth than infants born to nonrecipients. Finally, other evidence suggests that many remittance recipients do reduce their own working hours, but whether they increase their consumption of leisure commensurately or use the time for other productive activities is unclear.

The economic impact of remittances on households has one last, but hardly least important, dimension: besides increasing recipients' incomes,

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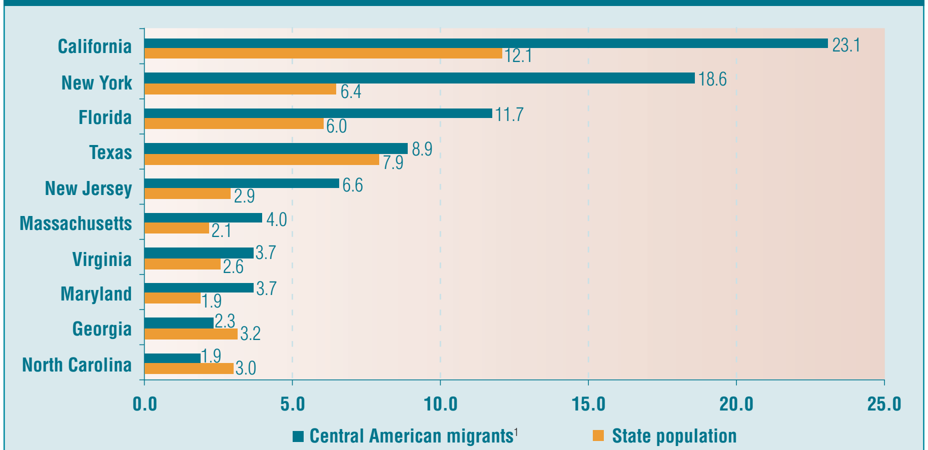
Coping with the Crisis

The last few years seem the ultimate vindication of the cliché that "when the United States sneezes, Latin America catches cold." As already noted, remittances to Central America fell by around 10% in the wake of the financial crisis. Honduras, Guatemala, and El Salvador were the worst affected, with declines in remittances of 10.8%, 9.3%, and 8.3%, respectively; Nicaragua lost 6.1% and the Dominican Republic a much smaller 4.5%. In general, countries with higher precrisis remittances suffered larger percentage declines in GDP during the crisis—evidence that the fortunes of Central American migrants and their families are closely linked to that of the U.S. economy. The previous U.S. recession, in 2001, also had a disproportionate effect on remittances to Central America, but as that recession was unusually mild, so, too, was the fall in remittances, and by 2002 the lost ground had been reclaimed. In contrast, remittances in 2010 were still no higher than what they had been in 2007.

Why did this period of economic distress in the principal host country for Central American migrants have such an amplified effect on their remittances? Surely part of the explanation is that migrant workers tend to enjoy less job security than native-born workers. Across all industries that hire migrants, and across all parts of the United States, migrants are likely to be among the first laid off when business slows. But in the recent recession, another important factor has been at work: many Central American migrants had the misfortune to be employed in precisely those industries and regions that suffered the worst economic hits.

As Figure 4 shows, a majority of Central American migrant workers in the United States live in just three states: California, New York, and Florida. (Two-thirds live in these three plus Texas and New Jersey.) These states are among the very largest by total population, but even so they employ many more Central American migrants per capita than the United States as a whole.

Figure 4. Distribution of Central American Migrants vs. Total Population across States
(percent of total)



Source: American Community Survey, 3-year estimates 2006–2008.
[1] Includes: Dominican Republic, El Salvador, Guatemala, Honduras, and Nicaragua.

Two of these three states—California and Florida—were among the worst affected by the crisis and ensuing recession, with disproportionately large numbers of the subprime mortgage-financed homes that were at the heart of the crisis. From peak to trough, employment in those two states declined by 8.9% and 7.3%, respectively, well above the national average of 5.4%.

One reason that the declines in remittances differed so much across Central American countries is that emigrants from different countries tend to concentrate in different states. Large pluralities of Guatemalans and Salvadorans travel to California to work, Dominicans overwhelmingly settle in New York and neighboring New Jersey, and Nicaraguans are primarily concentrated in Florida. (Hondurans are more equally distributed.) These patterns help explain why Dominican migrant workers weathered the crisis and recession much better than their counterparts from other countries—but not why Nicaraguans fared almost as well.

Central American migrant workers are also concentrated within certain industries: slightly under two-thirds work in 5 of the 15 major sectors that make up the U.S. economy. And just as migrants are concentrated in the most crisis-affected states, they also happen to be concentrated in the worst-hit sectors. First on the list is construction, which on the eve of the crisis employed about 16% of Central American migrants, but less than 8% of U.S. workers. The bursting of the housing bubble devastated this sector, erasing almost 20% of its jobs. Also among the top five are manufacturing, which lost 14% of its employment, and professional and administrative services, which lost 9%.

When one looks at the breakdown

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Coping with the Crisis

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by industry for workers from each Central American country, the differences are less stark than for the analysis by geographic area. With few exceptions, the same industries show up among the top five for each country of origin. Only Honduras has more than a quarter of its migrants in one industry (construction), and only among Dominican workers is construction not the largest employer. Nicaraguan workers are less concentrated by industry than workers from the other four countries, which may help explain the relative resilience of remittances to that country. Also, many Nicaraguan workers migrate to Costa Rica where their remittances were not affected as much by the downturn.

These patterns of employment make it hardly surprising that remittances to Central America fell so sharply after the crisis. Indeed, a disaggregated analysis by U.S. region and sector finds strong statistical relationships between host-country conditions and remittances where more aggregate approaches have failed.

But what have been the impacts of the crisis on the families left behind? Findings of research in Honduras and El Salvador provide some clues. Although data on actual outcomes were not yet available, researchers used past data to model the relationships between remittances, on the one hand, and poverty and income inequality, on the other. They then used the model to simulate the effect that the observed decline in remittances would have on these key outcome variables.

The results differed between the two countries and might seem in some ways counterintuitive. Declining remittances were projected to have relatively little effect on the incidence of poverty in Honduras, largely because poor Honduran households, especially in urban areas, respond in the model by increasing their own participation in the domestic labor market. In contrast, the poverty rate was projected to rise sharply in El Salvador, where remittances play a larger role in the income of the poor. This expected rise in poverty was observed for both urban and rural areas in that country.

Income inequality was projected to increase in El Salvador as the crisis pushed remittances down, even though remittances to that country are more evenly spread across the income distribution than in Honduras. The reason seems to be that wealthier Salvadoran households tend to have more and better opportunities in the domestic labor market and thus are better able to offset lower remittances by increasing their own working hours. Again, in contrast, Honduras was projected to see inequality fall by most measures, consistent with the fact that remittances to that country mainly benefit the higher income quintiles.

Another study, reported in Chapter 6 of the volume, surveyed Salvadoran migrants in the Washington, D.C. area and their families at home before and after the crisis. That study, unique in its matching of family members in the two countries, confirms some of the results of the first study's simulations. The migrants themselves reported substantial declines in hours worked (especially among those working in construction) and in earnings, savings, and remittances between the precrisis survey in late 2007 and the follow-up survey in the first half of 2009. Their families at home corroborated the large drop in remittances, but they also reported large increases in their own supply of labor, consistent with the simulations. Thus, they were able, on average, to maintain their precrisis level of spending, to keep their children in school, and to avoid suffering any significant loss in health status. More

In the recent recession, many Central American migrants were employed in precisely those industries and regions that suffered the worst economic hits.

ominously, however, the families also coped in part by increasing their indebtedness, and some 14 percent reported in the follow-up survey that they were behind on their debt payments.

This second study documents a remarkable ability on the part of Salvadoran households to cope with a profound shock to the remittances they had grown accustomed to receiving. Although the reported decline in remittances far exceeds official figures, the fact that these households on average weathered a sharp loss of remittance income without major adverse impacts on their consumption or their human capital investment testifies to considerable resilience. On the other hand, their growing indebtedness in response to the shock is an indication that their response is not necessarily sustainable. Many poor households in El Salvador and elsewhere who should have been participating in their country's economic progress have been forced by the crisis merely to tread water—and find themselves more vulnerable than before to further shocks. It is one thing to cope, quite another to thrive, and for many throughout Central America, thriving has been put on indefinite hold.

How Might Policy Help?

Much remains uncertain about the effects of remittances on recipient households, but the balance of evidence indicates that the net effects are positive. This is not surprising; people would not long continue to uproot themselves and seek work in an unfamiliar country and culture if the benefits did not outweigh the costs. Remittances also seem to have net positive spillover effects on the recipient countries, but with some important caveats. From this it follows that policy may have a role in encouraging remittances and in influencing how they are used.

In principle, there are two ways for policy to increase total remittances. It can encourage a larger flow of migrant workers, or it can encourage the existing workers to increase the amount of remittances they send. One way that remittances-receiving countries could encourage emigration is to give their emigrant workers the right to vote in domestic elections. Unlike, for example, U.S. citizens working abroad, not all emigrants from Central America have this right. Granting it would likely boost not only total cash remittances, but also the "social remittances"—greater community involvement and political participation—as more emigrants observe these democratic practices in the host country. Growth of expatriate communities would also promote the building of stronger supporting institutions, including employment networks, for emigrants, which in turn would encourage more migration.

Such a virtuous cycle could also have its vices, however. Additional emigration would put further pressure on the already-strained welcome that migrant workers now receive in some host countries. In addition, if, as has been suggested, the most skilled and ambitious workers are the most likely to emigrate, further emigration could come at the expense of a weaker home-country economy, ever more dependent on the flow of remittances.

What, then, about the alternative approach, that of increasing the amount of remittances per migrant worker? Here various strategies are possible. An important one involves lowering the transaction cost of sending remittances. The greater the share of remittances that recipients are allowed to keep, the more the sender is likely to send.

Policymakers could, for example, better inform migrant workers about the going market price for funds transfers, thus helping them avoid high-priced agencies. Workers could also be encouraged to open bank accounts that offer lower-cost transfers. Beyond that, policy could intervene directly in the remittances market by subsidizing such transfers. Subsidization not only would reduce the transaction cost directly, assuming the subsidy is passed along, but also would encourage competitors to enter the funds-transfer market, putting further downward pressure on prices. Besides this direct, supply-and-demand effect, lower transaction costs might increase remittances for another reason. Many agencies charge a flat fee for remittances up to a certain (fairly large) amount, and this leads migrants to accumulate funds and send them less frequently than they would otherwise. To the extent that lower transaction costs encourage more frequent transfers of remittances, it removes the temptation to spend the accumulating funds before they are sent.

An experiment randomly assigned discounts of different amounts on the remittance fees charged to Salvadoran workers in the United States. This randomization allowed precise identification of the effect of the discount, and the collection of data directly from the funds-transfer agency avoided reliance on possibly biased self-reporting. The study found a remarkably large response to the discount: for each $1 fee reduction (from a nondiscounted fee of $9), workers sent an average of $25 more in remittances per month. (The response was not, however, large enough to increase the total fees collected by the transfer agency.) The results also confirmed that lower fees encouraged more frequent remittances, but this effect was modest—about one additional transaction annually. The researchers were able to verify that the increase in remittances was real and not the result of shifting remittances from more expensive channels. Nor did it appear that workers were simply shifting their remittances forward in time to take advantage of the discount. Thus, the findings indicate that a policy aimed at lowering remittance-transaction fees can increase remittances substantially at a low cost.

Remittances per worker might also be increased by giving the sender more control over how the remitted funds are spent. Migrant workers are likely to have strong preferences about how their family members back home use their hard-earned savings—they might, for example, prefer that the money go toward investment in a family business, or for basic consumption needs, rather than to other, more frivolous uses. But how to ensure that their wishes are followed when sender and recipient are hundreds or thousands of miles apart?

Here a potentially useful intervention is the creation and dissemination of new financial instruments expressly designed to give the sender greater control. In another experiment reported on in *Financing the Family,* Salvadoran migrants and their families back home were offered bank accounts in a home-country

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How Might Policy Help?

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bank that were controlled either by the migrant alone or jointly by the migrant and a nonmigrant relative. The study first established, through separate surveys of the migrants and their relatives, that the two groups did indeed have different preferences regarding the use of remitted funds: on average, workers wanted only about $42 out of a hypothetical $100 in additional remittances to be used for daily consumption, whereas the recipient family members would have preferred to spend an average of $65 out of the $100. The differences in desired savings were even greater: $21 versus less than $3, respectively.

Migrant-recipient pairs were then assigned to three treatment groups and offered new savings accounts at a Salvadoran bank: the first group was given the option of opening both an account controlled by the migrant only and one controlled jointly by the migrant and the recipient, the second group had the option to open only a joint account, and the third was offered an account to be controlled by the recipient. (A fourth, [control group] was offered no new account, but its subsequent choices were recorded to provide a baseline for comparison.) Of the first group, 39.6% accepted the offer, compared

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Assessing the Impacts

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remittances help to smooth that income over time. The reason is straightforward. Natural disasters and other shocks that disrupt the home-country economy will have minimal impact on migrant workers' fortunes in the United States. Thus, remittances usually continue unabated, and indeed migrants often choose to increase their remittances in response to the shock. A greater predictability of income from year to year should encourage investment by remittance recipients, while reducing their anxieties about whether they can make ends meet.

Do the benefits of remittances spread beyond the recipient families to the home-country economy as a whole? The answer for Central America might seem an obvious yes, given the sheer size of remittances relative to GDP and the fact that most remittances are spent within the receiving country (or saved in its domestic financial institutions and thus made available for local lending). But in fact little evidence has emerged to show that remittances boost economic growth. The reasons are again partly methodological. But remittances are also thought to have an effect on exchange rates that tends to offset any positive impact on growth. When remittances in dollars are exchanged for local currency, the dollar price of that currency tends to rise. This makes the home economy less competitive internationally—exports fall and imports rise, crowding out home-country output. This phenomenon is reflected in the fact that all of the Central American countries with high remittance flows also have persistent current account deficits.

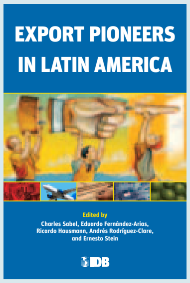
Although the jury is still out on whether remittances contribute to economic growth in the recipient country, it has been shown that they do play a role in stabilizing the economy, smoothing variations in the business cycle just as they smooth fluctuations in recipient households' income. Indeed, remittances seem to operate as a kind of macroinsurance, rising when the home country suffers an adverse shock as the country's migrants abroad increase their remittances to compensate. One recent study of 13 Caribbean countries found that each 1% recessionary loss to GDP was associated with a 3% rise in remittances.

Finally, research has also found some positive noneconomic effects—but also raised concern about some negative ones. On the one hand, countries with stronger migrant worker networks demonstrate greater support for democratic principles and greater participation in local community affairs. These same countries are also less prone to civil war, perhaps because the stabilizing effect on incomes lessens social tensions. On the other hand, possible adverse effects on children may arise when their parents are absent for extended periods of time. Growing up without parents may increase the possibility that children become subject to risky behaviors or safety issues. These concerns are particularly hard to assess, since any adverse effect is partly offset by the additional income sent home by the migrant parent and would only emerge over a long period. More research of a detailed nature into the dynamics of migrant families is clearly needed to complete the picture.

New Publications

Available in English only unless otherwise stated.

BOOKS



Sabel, Charles, Eduardo Fernández-Arias, Ricardo Hausmann, Andrés Rodríguez-Clare, and Ernesto Stein

Export Pioneers in Latin America (IDB-BK-107)

Export Pioneers in Latin America analyzes a series of case studies of successful new export activities throughout the region to learn how pioneers jump-start a virtuous process leading to economic transformation. The cases of blueberries in Argentina, avocados in Mexico, and aircraft in Brazil illustrate how an initially successful export activity did not stop with the discovery of a single viable product, but rather continued to evolve. The book explores the conjecture that costly burdens to entrepreneurial self-discovery (due to the deterrent effects of imitation by competitors) have held back potential exporters in post-reform Latin America. It also considers the conjecture that new export activities are a complex enterprise that can only come to fruition when innovative contributions of many actors are somehow provided jointly.

WORKING PAPERS

Powell, Andrew, and Pilar Tavella

Capital Inflow Surges in Emerging Economies: How Worried Should LAC Be? (IDB-WP-326)

This paper analyzes capital inflow surges in emerging economies from 1980 to 2005. The results indicate that the composition of inflows and the extent of financial reform are significant determinants of outcomes. Estimated models are applied to the Latin American post-2005 inflow surge and find relatively high estimated probabilities for banking crises and recessions. This suggests that recent inflow surges, characterized by high portfolio and banking inflows, are a potential cause for concern and that the results constitute a prima facie case for macro prudential interventions.

Caro, Lorena, Arturo J. Galindo, and Marcela Meléndez

Credit, Labor Informality and Firm Performance in Colombia (IDB-WP-325)

This paper explores the links between labor formality, access to credit, and firm performance in Colombia using Annual Manufacturing Survey data for 2000–09. A significant, though small, relationship is found between access to credit and informality. The results suggest that a 10% increase in the ratio of credit to sectoral output increases labor formality between 0.76 and 1.14 percentage points. This effect vanishes as a firm's financial constraint increases. The paper also reports a strong correlation between labor formality and firm performance measured as output and employment growth. A one percentage point increase in labor formality is associated with an 8.5% increase in output and an 11% increase in employment growth.

Caballero, Julián

Do Surges in International Capital Inflows Influence the Likelihood of Banking Crises? Cross-Country Evidence on Bonanzas in Capital Inflows and Bonanza-Boom-Bust Cycles (IDB-WP-305)

This paper explores whether bonanzas (surges) in net capital inflows increase the probability of banking crises and whether this is necessarily through a lending boom mechanism. A fixed-effects regression analysis indicates that a baseline bonanza, identified as a surge of one standard deviation from trend, triples the chances of a banking crisis—even in the absence of a lending boom. Larger capital windfalls increase the odds of a crisis eightfold. A bonanza coupled with a lending boom increases these odds even more. Decomposing flows into FDI, portfolio equity, and debt indicates that bonanzas in all flows increase the probability of crises when the windfall occurs together with a lending boom.

Morón, Eduardo, Edgar Salgado, and Cristhian Seminario

Financial Dependence, Formal Credit and Firm Informality: Evidence from Peruvian Household Data (IDB-WP-288)

This paper examines the link between financial deepening and formalization in Peru. The sample is divided into three firm-size categories, and two formality measures are assessed. Using the accounting books specification, robust results support a significant and positive effect of credit growth on formalization only for the self-employment firms category. Alternatively, using the pension enrollment specification, the channel is found to be positively significant only for firms with more than 10 workers; there is a smaller effect for firms with two to 10 workers.

Micco, Alejandro, Eric Parrado, Bernardita Piedrabuena, and Alessandro Rebucci

Housing Finance in Chile: Instruments, Actors, and Policies (IDB-WP-312)

The Chilean system of housing finance is a mixture of public and private elements that has arguably been very successful. This paper provides an up-to-date review of the main instruments, actors, and government policies of the Chilean system of housing finance. It concludes that, while the system is indeed functioning well, the increasingly important role of *BancoEstado* warrants further analysis of the role of public banks in a modern, fully developed housing finance system.

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New Publications

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Gandelman, Néstor, and Alejandro Rasteletti

The Impact of Bank Credit on Employment Formality in Uruguay (IDB-WP-302)

This paper examines the effect of bank credit on employment formalization in Uruguay. Using a difference-in-differences methodology proposed by Catão, Pagés, and Rosales (2011), the paper proposes that financial deepening decreases informality, especially in more financially dependent sectors. The effect is also found to be greater among women and younger workers. Despite the severe economic crisis and the resulting sharp contraction in bank credit, there is no evidence that the effect of bank credit on employment formality has changed over time.

Miller, Sebastian, and Bok-Keun Yu

Mobilizing Resources for Supporting Environmental Activities in Developing Countries: The Case of the GEF Trust Fund (IDB-WP-329)

Mobilizing sufficient resources is essential for supporting environmental activities in developing countries, and cofinancing is generally considered an important tool to help developing countries increase the resources they need. Moreover, cofinancing should increase ownership of projects by local authorities while improving accountability. The literature, however, has not explored why certain projects receive higher levels of cofinancing than others. This paper attempts to fill this gap by examining the cofinancing ratio and its determinants using projects financed by the GEF Trust Fund. The empirical results confirm that the rules of the fund, requiring different minimum cofinancing ratios by size and focal area of the GEF projects, do matter. Other important factors include funds' origins (foreign vs. domestic), types of cofinancing sources (reimbursable vs. non-reimbursable) and the particular GEF agencies involved.

Ardanaz, Martín, Marcelo Leiras, and Mariano Tommasi

The Politics of Federalism in Argentina: Implications for Governance and Accountability (IDB-WP-327)

This paper proposes that the effects of policies and institutional reforms are contingent on the structure of political incentives for national and subnational political actors. The paper studies political incentive structures at the subnational level and the mechanisms through which they affect politics and policymaking at the national level in Argentina—a highly decentralized middle-income democracy. The Argentine political system makes subnational political power structures very influential in national politics. Moreover, most provinces in Argentina are local bastions of power dominated by entrenched elites and characterized by scarce political competition, a weak division of powers, and clientelistic political linkages. Political dominance in the provinces and political importance at the national level are mutually reinforcing, forcing the Argentine political and policymaking system to be a reflection of the practices and features of its most politically backward regions.

Busso, Matías, Lucía Madrigal, and Carmen Pagés

Productivity and Resource Misallocation in Latin America (IDB-WP-306)

Total factor productivity (TFP) in Latin America has not increased relative to the U.S. since the mid-1970s, and in many countries it has declined. Moreover, resource misallocation can lower aggregate TFP. This paper presents evidence based on firm-level data from 10 Latin American countries to quantify the heterogeneity of firm productivity and the degree of resource misallocation within countries. Productivity heterogeneity and resource misallocation are found to be much larger than in the United States. Achieving an efficient allocation of resources could boost manufacturing TFP between 45% and 127%, depending on the countries and years considered.

Brosio, Giorgio

Reducing Reliance on Natural Resource Revenue and Increasing Subnational Tax Autonomy in Bolivia (IDB-WP-298)

This paper addresses options for restructuring the tax systems of Bolivia's subnational governments, particularly prefectures. It emphasizes reducing dependence on natural resources and strengthening subnational tax autonomy. It also identifies tax instruments or tax bases that could be assigned exclusively to regional governments or shared with the central government, and assesses the main advantages and disadvantages of these instruments through a simulation of revenue generation. The results show that several options exist for increasing the tax autonomy of local governments with relatively low administrative costs. In fact, the taxes proposed would not require establishing new agencies, but could instead be collected by existing ones. Energy and fuel taxes could be collected by firms that produce and distribute energy and fuel.

OUTSIDE PUBLICATIONS

Bastos, Paulo, and Julián Cristia

Supply and Quality Choices in Private Child Care Markets: Evidence from São Paulo

Journal of Development Economics, Volume 98, Issue 2, July 2012, Pages 242–255. http://dx.doi.org/10.1016/j.jdeveco.2011.08.001, How to Cite or Link Using DOI.

Many developing countries have adopted the market approach for expanding the supply of child care, but little is known about the economic behavior of independent providers. Drawing on uniquely rich census data on child care providers from São Paulo, this paper documents three main facts: (1) the stock of private

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suppliers is considerably larger in high-income city districts; (2) the quality of private provision—as measured by teachers' schooling, group size, and equipment—is highly heterogeneous across space and increases systematically with local household income; and (3) a considerable share of centers operates below recommended (but not regulated) quality standards, especially in low-income districts. Market-driven heterogeneity in the quality of provision across space is an important consideration for the design of regulations in child care markets.

Cavallo, Eduardo and Ilan Noy

Natural Disasters and the Economy — A Survey

International Review of Environmental and Resource Economics, 2011, 5: 63–102.

This paper surveys the state of the economic literature examining the aggregate impacts of natural disasters. It reviews the main disaster data sources available, discusses the determinants of the direct effects of disasters, and distinguishes between short- and long-run indirect effects. The paper then examines some of the relevant policy questions and follows up with a survey of current projections about the likelihood of future disasters. The paper ends by identifying several significant gaps in the literature.

Cavallo, Eduardo, Andrew Powell, and Roberto Rigobón

Do Credit Rating Agencies Add Value? Evidence from the Sovereign Rating Business

International Journal of Finance & Economics. Article first published online: 21 MAR 2012. DOI: 10.1002/ijfe.1461.

The debt crisis in several European Union nations has resulted in downgrades in sovereign ratings, sparking a lively debate on whether these opinions actually matter. Ratings and bond spreads may both be considered noisy signals of fundamentals. Ratings only add value if, controlling for spreads and observable country fundamentals, they help explain other market variables. The paper employed a unique dataset of over 75,000 daily observations on emerging countries around rating actions by the three major agencies. It found that ratings do indeed add information, and this finding is robust to a variety of different tests.

Flabbi, Luca, and Andrea Moro

The Effect of Job Flexibility on Female Labor Market Outcomes: Estimates from a Search and Bargaining Model

Journal of Econometrics, Volume 168, Issue 1, May 2012, Pages 81–95.

This paper estimates the parameters of a search model of the labor market where jobs are characterized by wages and work-hour flexibility. Flexibility is valued by workers and is costly for employers to provide. The model parameters are empirically identified because the theoretical wage distributions of flexible and inflexible jobs are directly related to the preference for flexibility parameters. Results show that more than one-third of the women place a small, positive value to flexibility. Women with a college degree value flexibility more than women with only a high school degree. Counterfactual experiments show that flexibility has a substantial impact on the wage distribution but not on the unemployment rate. These results suggest that wage and schooling differences between males and females may be importantly related to flexibility.

Lora, Eduardo, and Andrew Powell

A New Way of Monitoring the Quality of Urban Life

In Latin American Urban Development into the Twenty-First Century: Towards a Renewed Perspective on the City. Dennis Rodgers, Jo Beall, and Ravi Kanbur, editors. Palgrave Macmillan. 2012.

A growing number of cities around the world have established systems of monitoring the quality of urban life. Many of those systems combine objective and subjective information and attempt to cover a wide variety of topics. This paper introduces a simple method that takes advantage of both types of information and provides criteria to identify and rank the issues of potential importance for urban dwellers. The method combines the so-called "hedonic price" and "life satisfaction" approaches to value public goods. Pilot case results for six Latin American cities are summarized and policy applications are discussed.

Kang, Joong Shik, Alessandro Prati, and Alessandro Rebucci

Aid, Exports, and Growth: A Time-Series Perspective on the Dutch Disease Hypothesis

Review of Economics and Institutions, Vol. 3, No. 2, Spring 2012.

The available evidence on the effects of aid on growth is notoriously mixed. This paper uses a novel empirical methodology to study the dynamic response of exports, imports, and per capita GDP growth to a "global" aid shock (the common component of individual country aid-to-GDP ratios). It finds that the estimated cumulative responses of exports and per capita GDP growth to a global aid shock are positively correlated, and both responses are inversely related to exchange rate overvaluation measures. This evidence is consistent with the Dutch disease hypothesis. However, in countries with less overvalued real exchange rates, exports and per capita GDP growth respond positively to a global aid shock. This evidence suggests that preventing exchange rate overvaluations may allow aid-receiving countries to avoid the Dutch disease.

Scartascini, Carlos, and Mariano Tommasi.

How (Not) to Produce Effective Policies? Institutions and Policymaking in Latin America. In Javier Santiso and Jeff Dayton-Johnson (eds.)

The Oxford Handbook of Latin American Political Economy, pages 263–284. New York: Oxford University Press. 2012.

Analysts and practitioners have always

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searched for policy recipes to solve the economic and social problems of developing countries. This document reports on one line of inquiry that argues that the relevant economic and social outcomes depend not so much on the titles of those recipes (whether the pension system is "public pay-as-you-go" or "private defined contribution") but on characteristics of the actual implementation of those policies, such as their stability, their capacity to adjust to changing circumstances, their enforcement, etc. Countries able to generate policies with such attributes reap the benefits of specific initiatives more than others. If the policies adopted do not have such attributes—no matter how good they look on paper—they are unlikely to achieve good development outcomes. These characteristics, in turn, are derived from the process by which policies are discussed, decided, implemented, evaluated, and modified; that is, from the *policymaking process* (PMP) of each country.

Scartascini, Carlos and Mariano Tommasi.

The Making of Policy: Institutionalized or Not?

American Journal of Political Science. Doi>10.1111/j.1540–5907.2012.00591. x. Jun. 22,2012.

This article attempts to build bridges in the formal study of policymaking across polities of different degrees of institutional development. It explores the reasons why policymaking is fairly institutionalized in some polities but not in others. It suggests extending standard models of institutionalized policymaking to allow for a wider set of actions, including the threat of violence or of damage to the economy. It engages the discussion of institutions as rules and institutions as equilibria, delivering multiple equilibria with different degrees of institutionalization. The likelihood of institutionalized policymaking increases as the cost of alternative political actions increases, as the damage these alternatives cause decreases, and as the economy becomes wealthier. In cases in which the distribution of de jure political power is more asymmetric, it is more likely to observe use of alternative political technologies as well as low degrees of institutionalization.

How Might Policy Help?

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with 28.3% of the second group and only 22.9% of the third; a much smaller share of the control group, 6.4%, opened new accounts of their own accord. Given that both the migrant and the family member at home had to agree on what kind of account to choose, the higher uptake rates for the first and second options indicate a strong desire on the migrants' part for control of how their remittances are used.

This part of the study also confirmed that giving migrants more control over the remitted funds led to a higher rate of saving out of those funds. Savings after 6 months were dramatically higher—almost $200 on average—among the group that was offered both joint and migrant-controlled accounts than among the control group, which saw only a $14 increase (the differences between the other two groups and the control were much smaller and not statistically significant). Interestingly, most of the savings by the first group were held in the joint, not the migrant-controlled accounts—evidently the migrants were somehow able to restrain spending by the recipient family member from these accounts.

Importantly, however, the increase in saving by this group did *not* come about through an increase in total remittances. Rather, households saved an increasing fraction of a roughly constant remittances flow. If these results are confirmed by other studies, they indicate that other interventions (such as those described in the transaction fee study above) are needed if the intent of policy is to increase remittances. On the other hand, the increase in saving is itself a noteworthy result: higher saving is a first step toward higher investment by these families, which ultimately should improve their welfare—provided the saving does not come from forgoing essential consumption needs. Moreover, the increase in saving was largest among the least financially literate participants, and a follow-up survey found that households in the experiment also tended to increase their saving at other financial institutions. These findings indicate that the intervention raised the financial awareness of participants, suggesting considerable scope for increased financial education among this population.

Finally, it is interesting to view this study's results in the context of the current widespread interest in microfinance. Arguably, just as microfinance can efficiently substitute for conventional lending where the amounts in question are too small to attract the interest of conventional lenders, so it appears that control of remittances by migrant workers themselves can substitute for conventional aid conditionality: giving control over remitted funds to the worker who earned them ensures, perhaps more effectively than any aid agency could, that the funds are not diverted to less-desirable uses. The potential scope for such "microconditionality" seems well worth exploring further.

Network News

Eighth Meeting of the Latin American Financial Network (LFN)

Co-organized by:
Central Bank of Barbados
Inter-American Development Bank
World Bank's Office of the Chief Economist for the Latin American and Caribbean Region

Bridgetown, Barbados
Sept. 13–14, 2012

This year's LFN workshop will focus on the changing face of global and regional finance. The workshop will feature the following papers, selected from the call for proposals.

- *Nicholas Coleman*: Bank Ownership, Lending, and Local Economic Performance in the 2008 Financial Crisis
- *Luca Ricci*: International Capital Flows and Development: Financial Openness Matters
- *Alister Hodge*: Does Speed Kill: Credit Booms and Their Implications for Financial Stability
- *Marcio Garcia:* Can Sterilized FX Purchases under Inflation Targeting Be Expansionary?
- *Tiago Cavalcanti*: The Effects of Credit Subsidies on Development
- *Claudia Ruiz-Ortega*: From Pawn Shops to Banks: The Impact of Formal Credit on Informal Households
- *Ronald Fischer*: Effects of Financial Liberalization and Competition
- *Benjamin Tabak*: The Relationship between Banking Market Competition and Risk-Taking
- *César Calderón*: The Cyclical Behavior of Public Lending: International Evidence from Aggregate Credit to the Private Sector
- *Eduardo Levi Yeyati*: Financial Globalization in Emerging Economies: Much Ado about Nothing?

A complete agenda is available at:
http://www.iadb.org/res/events/semagenda/smengagenda245.pdf

www.iadb.org/res/researchnetwork

This issue of IDEA was prepared by Rita Funaro and Michael Treadway and is based on the forthcoming book, *Financing the Family: Remittances to Central America in a Time of Crisis*, edited by Gabriela Inchauste and Ernesto Stein.

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IDEA (Ideas for Development in the Americas) is an economic and social policy newsletter published three times a year by the Research Department, Inter-American Development Bank. Comments are welcome and should be directed to IDEA's managing editor, Rita Funaro, at Ritaf@iadb.org.

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