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Migration can help stabilize poor countries

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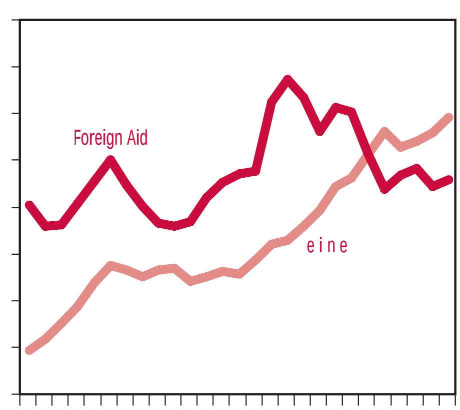
Globalization has come under increasing attack in recent years, not only because of the current headlines about outsourcing and job losses. Opponents of globalization argue that even if it benefits poor countries in the long run, in the short run it may increase economic volatility and uncertainty. Most of the debate about globalization to date, however, has focused on trade in goods and services, and more recently on jobs outsourced to other countries. In contrast, migration of workers and the effect it might have on volatility has received far less attention, at least in terms of its effects on developing countries.

Migration can have large economic impacts. Worker remittances—money sent home by family members working abroad—are increasingly important sources of income in developing countries. According to the World Bank, in 2001 (the latest year for which data are available), gross remittances to low-, lower-middle-, and upper-middle-income countries topped $58 billion. By contrast, in 2001 total official foreign aid to those countries was approximately $45 billion. And while the level of foreign aid is about the same as it was in 1975, remittances are nearly double what they were a decade ago and about five times more than in 1975 (Figure 1). Given the size and growth rate of these flows, remittances might have a large and growing impact on economic development.

Figure 1

Remittances and Foreign Aid
Billions of constant 2002 US Dollars



Source: World Bank

In particular, remittances might reduce income volatility for households in developing countries if they increase (or at least don't decrease) when domestic income takes a hit. Previous research suggests that remittances and domestic income do move in opposite directions, but two crucial questions remain unanswered. First, the direction of causality is unclear. Families at home might, for example, work less when they start to receive regular payments from relatives abroad. Such "moral hazard" would generate a negative correlation in the data between remittances and income, but would not necessarily mean that remittances have a stabilizing or insurance effect. Second, researchers have not yet been able to estimate how much remittances might change in response to economic downturns. Our research, discussed in this brief, shows that remittances do serve as a form of insurance and can replace about 25 percent of income lost to exogenous economic shocks.

We explored these questions in Jamaica, which has one of the highest per-capita levels of remittances in the world.[1] We compiled a household-level dataset that includes information on remittances and damage inflicted on the household by hurricane Gilbert. The exogenous nature of the economic catastrophe, our ability to track the same families over time, and information on damage the hurricane caused to individual households allow us to deal with the potential for reverse causation and estimate how much remittances changed in response to the disaster. We find that remittances increase when the household is hit by an economic shock. However, the results suggest that remittances offer only partial insurance, increasing by about 25 cents for every dollar of hurricane damage. If our results are correct, then at least one aspect of globalization—migration—can, in fact, help stabilize developing economies.

Why do workers send money home?

Workers may send money home for several reasons. One is self-interest: The migrant hopes to return home someday and wants to retain good relations with his family in order to, for example, insure an inheritance. A second possibility is that remittances repay an intra-family loan to help talented younger members migrate. A third motivation may be intra-family altruism: Migrants simply care about their families' well-being. Finally, migrants might send remittances home in order to help their families protect themselves from economic downturns. The true reason migrants send money home is, of course, likely to be some combination of all these possibilities.

And any of the motivations for sending money home may generate similar behavior. For example, a purely self-interested migrant might send additional money home when his family experiences a sudden economic loss if he believes such actions will increase his probability of receiving an inheritance. Likewise, even if remittances primarily repay intra-family loans, they can serve as insurance if economic shocks are uncorrelated in the sending and receiving countries. Finally, an altruistic migrant would certainly increase payments back home if his family is enduring especially hard times.

Because all of these reasons may generate similar behavior, it is generally not possible to distinguish among them with any available data. The key question, though, is how remittances respond to changes in household wealth or income. And while we cannot completely understand the underlying motivation for sending money, a new look at household-level data allows us to understand whether remittances can act as a stabilizing force for poor families.

Jamaica: Remittances and hurricanes

The Jamaican economy relies heavily on remittances. According to the World Bank, in 2000, remittance receipts equaled approximately 10 percent of Jamaica's GDP, 24 percent of exports of goods and services, 59 percent of gross receipts from tourism, and 173 percent of foreign direct investment. Moreover, the flow of remittances increased from about $105 million in 1980 to $178 million in 1990 to $906 million in 2001 (in constant 2001 U.S. dollars).[2] The increased ease of electronic transactions and foreign currency market liberalization in the early-mid-1990s caused some migrants to shift from informal to formal money transfer systems, meaning that these aggregate data may overstate the true growth in remittances. Nonetheless, other data confirm remittances' growing importance. For example, according to the Jamaica Survey of Living Conditions (JSLC), in 1990 only about 24 percent of Jamaican households received remittances, but by 1999 nearly one-third did. Payments also increased: The median payment for households receiving remittances increased from US$162 to US$380 over this period, from 6 percent to 11 percent of household expenditures.

Jamaica, like many Caribbean islands, is highly vulnerable to natural disasters. Between 1980 and 2002, Jamaica was hit by four hurricanes, several tropical storms, and other natural disasters (primarily floods). Hurricane Gilbert, which struck in September 1988, was by far the most destructive, causing more than US$1 billion in damage, or about 28 percent of GDP.[3] Nearly three-quarters of Jamaican households reported some damage from Gilbert and 21 percent reported serious damage to their house. The average amount of damage reported was about 21 percent of average household income.

Despite (or perhaps in part because of) frequent natural disasters, housing insurance is uncommon in most low- and middle-income countries in the Caribbean. According to the

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[1] *Clarke, George R. G., and Scott Wallsten. "Do Remittances Protect Households in Developing Countries Against Shocks? Evidence from a Natural Disaster in Jamaica." Working Paper, January 2004.*

[2] *Data for 1980 and 1990 are from the World Bank, World Development Indicators. Data for 2001 are from the Bank of Jamaica 2001 Annual Report.*

[3] *Data from EM-DAT: The OFDA/CRED International Disaster Database (http://www.cred.be/emdat), Université Catholique de Louvain, Brussels, Belgium.*

JSLC, in 1999 only about 10 percent of Jamaican households reported having any insurance, roughly the same percentage that reported having a mortgage, which one generally cannot obtain without insurance.

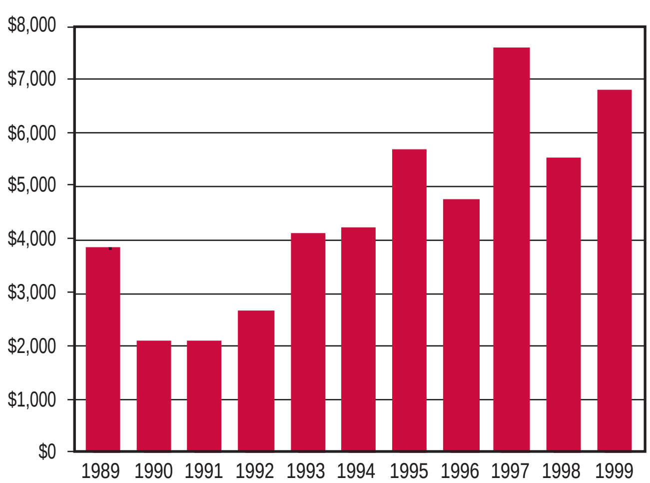
Absent formal insurance, households might self-insure against economic downturns by diversifying labor income through international migration. For the same reasons that economic growth tends to be volatile in small economies-openness, heavy reliance on a few products, and frequent natural disasters-it is difficult to diversify income, assets, and even labor domestically. Families may therefore encourage some members to migrate so that they can remit part of their earnings to their family in their home country.

Analyzing remittances, households, and the economy

Two surveys, the JSLC and the Jamaica Labor Force Survey, allow us to investigate the effects of economic downturns on remittances. The survey data include information not only on remittances received by households but also on household income, physical characteristics of the family's home, individual characteristics of the household head, and, of course, damage caused by the hurricane.

The aggregated survey data suggest a negative correlation between reduced income and remittances. While comparable data prior to 1989 don't exist, Figure 2 shows what appears to be a spike in the year the hurricane hit (1989), and another in the worst year of a recession, when the economy contracted by 2 percent (1997). These clues suggest that across the Jamaican economy remittances increase in response to economic downturns, consistent with the idea that remittances can be a form of self-insurance.

Figure 2
Average Real Remittances per Household in Jamaica
1989 – 1999



Source: Authors' calculations based upon data from the JSLC. All figures are in 1995 Jamaica dollars, converted using consumer price indices from the World Bank.

But these broad trends are only suggestive and, moreover, demonstrate only a correlation, not a causal link. Our econometric strategy allows us to control for two possible sources of reverse causality. The first is that households facing more risk (and thus incurring more damage) may be more prone to encourage household members to migrate. Because we follow the same households over time, we can control for household-specific risk factors that might affect household members' propensity to migrate. The second problem is potential moral hazard: Households that receive remittances may be less likely to protect their properties from damage. We deal with this problem by using regional damage averages calculated from other households in the region not otherwise included in our sample (usually because those households were not included in post-hurricane surveys).

We find that each dollar of hurricane damage led to an increase of about 25 cents in remittances. The results, in other words, suggest that remittances do help stabilize income shocks, though only partially. Migrants may provide only partial insurance because they worry about moral hazard, or perhaps because the damage from the hurricane was simply too large for them to reimburse from their wages, which though high by the standards of their home countries are usually quite low by the standards of their host country.

Conclusion

Increasingly, people worry that globalization can destabilize poor countries in the short run, even if it is good for long-run growth. Our results, however, suggest one way that globalization may help stabilize some poor economies, even in the short run. Remittances sent home by migrant workers, an amount of money that far exceeds official foreign aid and whose growth rate is continuing to accelerate, appear to help families cushion shocks, if incompletely. While migration tends to play a relatively small role in debates about the effects of globalization on poor countries, our results suggest that its true effects may be large.

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About the Author

Scott Wallsten is a fellow at the AEI-Brookings Joint Center for Regulatory Studies and resident scholar at the American Enterprise Institute. Before joining the Joint Center, he had been an economist at The World Bank, a researcher at the Stanford Institute for Economic Policy Research, and a staff economist at the U.S. President's Council of Economic Advisers. His interests include industrial organization and public policy, and his research has focused on regulation, privatization, competition, and science and technology policy.

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