Comments

Andrea Tokman R.: Globalization has been a hot topic for the last decade or so. While historically discussions have focused on trade liberalization and capital flows, they have recently shifted to include the flow of people between countries—that is, migration—and the reverse resource flows it generates in the form of remittances. The latter are the fastest-growing and arguably the most stable capital flow to the developing world. For some countries, they are as large as FDI and exceed official aid and non-FDI private capital flows. They will likely continue to grow given intercountry wage differentials and persistent labor shortages in developed economies, combined with the decreasing costs of remitting.

Policymakers have started to realize that if channeled efficiently, remittances can contribute considerably to development and poverty alleviation. Beyond having a potentially large impact on the welfare of migrants' families—be it in terms of access to basic necessities or improved health and education—they may also generate spillover effects that provide opportunities to extended families and local communities. Other positive effects include the reduction of income volatility and increased knowledge flows, as well as further development of financial systems and increased access to foreign exchange and financial products. Some potentially negative aspects associated with remittances are brain drain, increased income inequality in receiving communities, reduced labor effort, Dutch disease, and the delay of desirable reforms.

In this context, careful studies of the effects of remittances are essential, and this study finds evidence of net positive effects on education, health, and poverty outcomes in Mexico. Its focus on Mexico is appropriate because this is one of the major remittance-receiving countries in the world. Even so, external validity is almost always an issue: benefits to different countries can vary depending on the structure of the local economy and related policies and regulations, such as foreign exchange controls, taxation, and financial sector regulations.

For the case of Mexico, one of this paper's contributions is to show that the precise choice of outcomes is not trivial: education, health, and poverty are all relevant, but the way they are affected by remittances is complex. With regard to schooling, for example the paper shows that sometimes one finds no effect when using averages and not allowing for the possibility of different effects at different educational levels. Specifically, the effect is positive for the lowest education levels and negative for the highest levels. This age-differentiated impact is consistent with a story in which future migrants are the children of present-day migrants. Since many of them expect to end up in unskilled or low-skilled jobs abroad, they may have little incentive to invest in human capital beyond a certain level, and they may save remittances to finance future migration.

In the case of poverty, the effects of remittances differ for extreme versus "normal" poverty, with effects observed for the latter but not the former. This may reflect the fact that the poorest families are not the ones sending out migrants or receiving remittances, probably because they cannot afford the costs of migration. However, remittances may have important indirect effects on the extremely poor that are not considered. For instance, an increasing demand for labor-intensive goods (such as construction) and a redirection of social spending away from remittance-receiving families may help improve their living conditions. These less direct effects are essentially absent from the current research.

Another relevant point is that isolating the effects of remittances from those of migration itself is complex, and, as recognized by the author, it is not fully achieved in the paper. In the case of health, for instance, it is not clear whether the effect of remittances works through increased income or through the flow of health-related information when migrants keep in touch with their families.

Despite these difficulties, the paper points to a positive net effect of remittances, and it therefore calls for policies designed to enhance them. As the author points out, the costs of remitting are still high; data are not comprehensive, uniform, or systematic, thereby impeding informed policymaking; few financial institutions meet the needs of transnational families; and few public initiatives enable households to leverage these flows and channel them to productive uses. Therefore, there is scope for proactive policies to encourage remittances and enhance their development impact.

For instance, the costs of remitting are falling, but they remain too high. These vary greatly from country to country and according to the remittance method used. They entail a significant loss to immigrants and their families, ranging from 10 to 20 percent for Latin America and the Caribbean, according to the Inter-American Development Bank and the Pew Hispanic Center. The lack of banks serving poor and rural populations, the low confidence in formal channels, and the high costs involved have forced many migrants to use informal channels. Nonetheless, banks and credit unions are introducing new services, bank branches or at least money receivers are expanding to more rural areas, and standard or preferential exchange rates are being set. All of these developments have the potential to cut costs and shift migrants and their families into the formal banking system. There, funds become more secure, can earn interest, and perhaps leverage business loans. In the longer run, the effect on development and growth comes from encouraging a productive use of remittances.

Eric A. Verhoogen: Ernesto López-Córdova's paper brings welcome attention to an enormously important topic. The paper does a good job of highlighting the economic significance of remittances, setting the issue in a larger context, and characterizing the basic empirical patterns in the Mexican case. The fact that remittance flows are now larger than FDI flows into Mexico is particularly striking. In this comment, I express some concerns with the instrumental variables (IV) estimation procedure and end by raising some broader questions about the role of remittances in development.

The Instrumental-Variables Estimation Procedure

The basic model of the paper has the following form:

$$Y_{ij} = \gamma \ln\left(\mathrm{RRH}_{ij}\right) + \mathbf{X}'_{ij}\, \mathrm{B} + \varepsilon_{ij}, \tag{1}$$

where i indexes municipalities; j indexes states; Y_{ij} is one of a variety of outcome variables; $\ln(\mathrm{RRH}_{ij})$ is the log of the fraction of households receiving remittances; $\mathbf{X}_{ij}$ contains other observable municipality characteristics and state dummies; and ϵ_{ij} is a disturbance term. The data are a cross-section of municipalities, with information coming mainly from the 2000 Mexican population census. As the author rightly points out, one might be concerned about the endogeneity of $\ln(\mathrm{RRH}_{ij})$. For instance, an expansion of investment opportunities in a municipality might generate both greater remittances and improved schooling and health outcomes, generating a positive correlation between remittances and outcomes even in the absence of a causal effect of the former on the latter.

The author's strategy for addressing this issue is to instrument for remittances with two variables: the coefficient of variation of rainfall over the course of a year in each municipality, and the distance of each municipality to Guadalajara. The justification the author gives for the first instrument is that households in municipalities with higher seasonal concentration of rainfall have greater need to smooth consumption over the year than households in municipalities with less concentration of rainfall, and hence have greater need for remittances. The justification for the second is that historical migration rates were closely linked to the development of the railroads in Mexico (because labor recruiters from the United States would travel by rail to Guadalajara and other west-central towns) and that the historical pattern of development of the railroads is arguably related to municipality-level welfare outcomes only through the effect on migration.

In order for the IV estimates of γ to be estimates of the causal effect of remittances on the outcomes, it must be the case that the instruments affect the outcomes only through their effect on remittances. In the first case, this assumption—the exclusion restriction—is undermined by the argument for using rainfall concentration as an instrument. That argument—that remitters want to insulate the receivers from the negative consequences of rainfall concentration—presumes that rainfall concentration has direct consequences on household welfare and, by extension, on the sort of development outcomes included on the left-hand side of equation 1. Either there are such direct consequences or rainfall concentration is not a motivation to remit. One cannot have it both ways. Most of the stories that come to mind about the direct effect of rainfall concentration would tend to generate a negative correlation between remittances and development, but this cannot be assumed a priori.

Perhaps a more promising approach to this issue is to use the instrument proposed by Munshi, which is mentioned in this paper.[1] The idea is that past deviations from normal rainfall patterns (three to six years ago) predict the number of migrants in the United States—and hence the extent of remittances—today. This instrument has the advantage that deviations from normal rainfall patterns three to six years ago are arguably less likely to have a direct effect on current education and health outcomes than is current seasonal rainfall concentration.

The author's second instrument, the distance to Guadalajara, strikes me as more defensible.[2] Some unobserved municipal characteristic unrelated to

1. Munshi (2003).
2. This instrument was first used by Woodruff and Zenteno (2001).

remittances could be correlated with both the distance to Guadalajara and development outcomes, but this is arguably unlikely, especially since the author includes state dummies in all regressions. Also, if the real determinant of historical migration patterns was the railroad, then distance to the railroad would seem to be a more precise instrument than distance to Guadalajara, but this change may have little effect on the results.

The problem here is not so much with the choice of instrument as with one of the additional covariates (in the $\mathbf{X}_{ij}$ matrix above). As a proxy for historical migration rates, the author includes in some regressions the distance to a point on the railroad plus the distance from that point to the U.S.-Mexico border. The goal is to control for migration separately from remittances. This is a quixotic goal, given the high correlation between migration and remittances and the lack of an instrument affecting the latter separately from the former. More importantly, including the distance variable as a covariate undermines the argument for the distance-to-Guadalajara instrument. Distance to the railroad is correlated with distance to Guadalajara—indeed, that is the justification for using the distance to Guadalajara as an instrument—but if the distance to the railroad plus the distance to the border is included directly as a covariate, then readers cannot at the same time be expected to believe the exclusion restriction. As the author notes, however, including the historical migration proxy as a covariate does not much affect the key IV estimates of the effect of remittances on development outcomes.

In short, these concerns with the IV strategy suggest that caution is warranted before giving the estimates a causal interpretation. This is particularly true of the argument that the impacts of remittances have been successfully isolated from those of migration.

The Implications for Policy

Even given the above concerns, it seems quite plausible that, all else being equal, remittance flows help to improve the lives of children and households in the receiving communities. It seems uncontroversial to argue that interventions to increase competition in the wire-transfer business or otherwise reduce the cost of remitting would also contribute to the welfare of the poor in Mexico. The author's conclusion that policymakers should do more to harness the development potential of remittances strikes me as clearly right. The issue I would like to raise has more to do with how this argument may be interpreted, beyond what López-Córdova says here. My worry is that a policy of facilitating migration and remittances may come to be seen as a substitute for policies to promote local economic development in the migrant-sending communities.

Consider the decision of a potential migrant from a poor rural community in Mexico. It is difficult to measure the cost of getting across the U.S. border illegally, but anecdotal evidence suggests that it is on the order of several thousand dollars. One might ask why so many choose to invest that money in migrating, rather than in becoming an entrepreneur or improving productivity on their farms. One can presume that migrating is optimal for the migrants, given the constraints they face, but from a policy perspective, the question centers on identifying the barriers to the development of agriculture and small-scale industry in rural communities. Why are motivated individuals not able to find viable investment opportunities in their home communities? Credit constraints are an obvious possibility, in that potential migrants may be able to borrow against future income in the United States but not against future income from starting a small business. Other possibilities include the lack of legal enforcement of contracts, corruption of local government, or some sort of coordination failure among potential local investors. For instance, local investments may be viable only in the presence of other local investments, and some sort of local "big push" may be required.[3] All of these barriers might potentially be mitigated by effective policy, and they should be the subject of policy debate.

I do not want to overstate this argument. A revealed preference argument would suggest that migration has benefits for the migrants themselves, and this paper and others suggest that remittances have important benefits for the receiving communities. In addition, many migrants move to the United States precisely to accumulate capital with which to return to Mexico to start small businesses in their home communities.[4] Migration also has costs, however: it does not generate the sort of backward and forward linkages that local businesses do, and it may also weaken the social fabric of the communities that the migrants leave. It would be a shame if, in a rush to harness the potential of remittances, policymakers overlooked the potential of local economic development.

3. Rosenstein-Rodan (1943); Murphy, Shleifer, and Vishny (1989).
4. Woodruff and Zenteno (2001).

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