**UN/POP/MIG/SYMP/2006/09**
26 June 2006

**INTERNATIONAL SYMPOSIUM ON INTERNATIONAL MIGRATION AND DEVELOPMENT**
Population Division
Department of Economic and Social Affairs
United Nations Secretariat
Turin, Italy, 28-30 June 2006

# INTERNATIONAL MIGRATION AND ECONOMIC DEVELOPMENT*

J. Edward Taylor**

*The views expressed in the paper do not imply the expression of any opinion on the part of the United Nations Secretariat.

**University of California, Davis.

The international migration of labor is an important component of globalization and economic development in many less developed countries (LDCs). The number of international migrants, or people residing in a country other than their country of birth, has increased more or less linearly over the past 40 years, from an estimated 76 million in 1965 to 188 million in 2005, as illustrated in Figure 1.

International migration raises both hopes and concerns for the LDCs from which international migrants come. The migrants include millions of highly educated people from countries in which human capital is relatively scarce (e.g., see Özden and Schiff, 2005), but also significant flows of relatively low skilled workers whose productivity and wages are far higher abroad than at home. International migration also produces benefits. The most tangible of these are remittances, the income that migrants send home.

The flow of international migrant remittances has increased more rapidly than the number of international migrants, from an estimated US$2 billion in 1970 to US$216 in 2004.[1] While the growth in international migration has been linear, the growth in remittances has been nonlinear, as one can see in Figure 2. On average, each of the world's international migrants is sending home more remittances today than in the past. There is not a single convincing explanation as to why this is so, but it has important implications for economic development. Nearly 70% of all remittances go to LDCs. It is likely that these remittance figures understate true international remittance flows, which include an undetermined amount of remittances in cash that does not enter countries through formal banking channels along with the goods that migrants send or carry home.

However much these official figures may understate remittances, people are the most important "export" of many LDCs in terms of the foreign exchange that they generate. For example, in 2004, remittances were equivalent to 78% of the total value of exports in El Salvador and 108% in Nicaragua. International migrant remittances are also an increasing share of *national income* in many countries. For example, in 2004, remittances represented 11% of the gross domestic product of Guatemala, more than double the share in 2001. In the same year, remittances constituted 16% of the total GDP of El Salvador. International migration is playing an increasingly important role in developing country economies.

There is little information on where, within countries, the international migration

nternational migrants has been nearly as large as the number

---

[1] Part of this sharp increase is probably due to an improved accounting of migrant remittances; however, the actual amount of remittances probably is higher than these numbers indicate, for reasons detailed below.

of male migrants. Today, the share of females in the world's international migrant population is close to one half, but there are differences among sending and receiving countries. The share of females in migration to some countries is higher than that of males. The share to other countries is lower for females. Some countries of emigration send more females than males abroad, and others do the opposite. What explains these differences in international migration between the genders is just now becoming a focus of international migration research.

Researchers used to ask whether migration has a positive or negative effect on development. Today they are more likely to ask: "Why does international migration seem to promote economic development in some cases and not in others?" and "Can policies be designed to influence migration's impacts in migrant-sending economies?"

Negative effects of international migrat

researchers and policy makers. Paradoxes and puzzles abound. We begin by looking at some of these puzzles and what recent economics research has to say about them. Then we consider some implications for development policy.

*Migration and Underdevelopment: Chicken or Egg?*

There is little doubt that the loss of human resources to international migration can have negative effects on economic development in migrant-sending areas. If, as is likely to be the case, international migrants come from relatively labor-abundant areas, then sacrificing these individuals to foreign labor markets may not have a very large impact on production at the origin, as eloquently explained by Nobel laureate W. Arthur Lewis back in 1954.[3] However, if individuals who migrate abroad more skilled and highly educated than those who stay behind, and if this "human capital" contributes to productivity in rural areas, then international migration could reduce production and make those who stay behind less productive than they were before. (Actually, recent research suggests that the opposite may be true; in some cases migration may create a "brain gain" instead of a "brain drain," as discussed below.)

A big problem that researchers have in trying to test whether migration affects development is that underdevelopment also drives emigration. One usually does not see streams of migrants leaving economies that are dynamic centers of employment creation. If migration and underdevelopment seem to go hand in hand, it might be because the loss of people to migration retards development. Or it might be that people migrate away from underdeveloped areas, which have little to offer them if they stay. Naturally, both may be true; the question is which dominates. It is difficult to separate out cause from effect.

*Income and Emigration: Whither the Connection?*

Low incomes create an incentive for people to emigrate—which is the first part of the chicken-and-egg question. Yet, paradoxically, there are many cases where incomes are increasing and international migration is, too. It is usually not the case that the poorest households send migrants abroad. When a social scientist goes out to a village and asks which households the international migrants come from, the answer is usually households that are somewhere in the middle or upper middle of the village's income distribution.

There is a simple explanation for this. It has to do with incentives versus constraints. The very poorest households have an incentive to send migrants abroad and reap the reward of remittances far beyond what family members could earn at home. However, they know that international migration is costly and risky. The poorest households do not have the savings to pay the labor recruiter, the cost of a voyage, or the human smuggler. They are not likely to find a bank or informal moneylender who is willing to lend them such a large sum. And even if they did, they might not be willing to

[3] Lewis, W. Arthur, 1954, Economic Development with Unlimited Supplies of Labour, Manchester School of Economic and Social Studies 22:139-91.

there. If she does migrate, it is likely that her sibling will arrange for a trusted coyote, or smuggler, to take her across the border. It is also likely that the sibling will pay the smuggler fees, after the woman is safely in the United States. The sibling will also provide housing, food, and job market contacts. In this way, family migration networks reduce the economic costs and risks of international migration while offering many other benefits, including a familiar face in a foreign land.

The benefits that a network affords are likely to be more valuable for international migration, which usually has high costs and risks—but also high economic returns—compared with internal migration. Recent findings suggest that the value of networks may be higher for women than for men, because female migrants appear to be more deterred by risky border crossings, uncertain prospects abroad, and concerns for personal safety. Research also suggests that the benefits created by networks are not limited to the households that have the family members abroad; access to networks eventually spreads across households in migrant-sending areas. The more households in a village that have migrants, the more likely that *other* households in the village eventually will send migrants abroad.

*International Migration, Inequality and Poverty in Sending Areas*

These two findings—that the "pioneer" migrants tend to come from households at the upper-middle of the income distribution, and that access to migration networks eventually spreads across households—can help us understand the effect of international migration on two measures of welfare in migrant-sending areas: income inequality and poverty.

Studies have come up with conflicting findings about how international migrant remittances affect income inequality in migrant-sending areas. Some find that inequality goes up when remittances flow in, and others find the opposite, that remittances are income equalizers. There may be a simple explanation for this disagreement among researchers.

Because the pioneer migrants come from households that can afford the costs and risks of international migration, these migrants send remittances primarily to households at the upper-middle of the income distribution. This increases income inequality directly, and it has little effect on poverty. However, over time, as more and more households (including poorer ones) gain access to international migration networks, the effect of remittances becomes less unequalizing. If the poorest households eventually gain access to international migrant networks, remittances could become income-equalizers, and they could reduce poverty in migrant-sending areas. That is, the effect of remittances on inequality could first go up and then come down—like an inverted "U." The effect on poverty could start out small and then become large.

Some colleagues and I explored this possibility using data from rural Mexico. We lined up Mexico's census regions by incidence of international migration, from the lowest to the highest percentage of households with migrants abroad. We then estimated the effect of a 10% increase in international remittances in each region on (a) inequality,

as measured by a Gini coefficient, and (b) poverty, as measured by a Foster-Greer-Thorbecke index.[4]

Our findings are illustrated in Figures 3 and 4.[5] Figure 3 shows, sure enough, that remittances from international migrants increase inequality in regions where only a small percentage of households have migrants abroad, but remittances *reduce* inequality in the highest-migration region (the effect on the Gini coefficient there, one can see in the Figure, is less than zero). Figure 4 shows that remittances from international migrants have little effect on poverty in regions where only a few households have migrants (because most of the "pioneer migrant" households are not poor). However, in high-migration regions, increases in international remittances reduce poverty significantly. It appears that even poor households gain access to foreign migration opportunities in regions where international migration has really taken off.

*Remittance Use, the Quarter and the Lamppost*

An old joke tells of a man who comes upon an economist on his hands and knees,

farmers do not have access to credit or insurance, the migrant can become the financial intermediary, the credit or insurance substitute.

International migration is more attractive than intiochan i

transforms rural homes into offices.) In the UK, 2% of the workforce is in agriculture and 11% of the population lives in rural areas.

*The Gender Question*

The 2000 U.S. Decennial Census found more male than female immigrants from El

$\notin$

## 2. Policy Options

The international migration and development puzzles presented above lead us to a rich set of potential policy implications. Some examples are presented below.

*The Mistake of Designing Policies to Keep People at Home*

This might appear to be controversial and highly provocative, but it is really common sense. History teaches us convincingly that trying to keep people at home is not only very costly, it is futile. As we saw in Figures 5 and 6, increased mobility is a concomitant part of economic success: as per capita incomes grow, people leave the agricultural sector, and they move out of rural areas. Even in countries with the biggest rural development success stories, the share of the workforce in agriculture is decreasing. The countries that have been most successful at "keeping people on the farm" have been precisely those that have been least successful at raising their people's living standards and developing their agricultural economies.

This does not at all mean that governmenl ecost23 Tw[(rt sthouldnot aredoubletheir aeforct to K]

*The Error of Being Passive*

Once international migration begins to take off in a particular community or region, it seems to take on a life of its own and is very difficult to stop. It might seem, then, that if countries want to limit the loss of people to foreign lands, they should concentrate their development efforts on regions where international migration has yet to take hold. But this creates a conundrum for policy makers

sound development policies. The good news is that migration can provide a remittance income stream that improves the livelihood of households that do not have access to other opportunities. As we have seen, after international migration "takes off," it increasingly can benefit the poor. The bad news is that, without the right economic environment, international migration can turn sending areas into "nurseries and nursing homes" instead of dynamic economies that over time can offer economic alternatives to migrating. Governments need to actively partner with international migration in order to make migration a tool for development.

*Migration as a Development Tool*

Migration is neither a cure nor a curse for development. However, there are ways to enhance migration's contribution to economic development in migrant-sending areas. This is especially true for international migration, because remittances per migrant abroad tend to be much larger than those from internal migrants (around 15 times greater in the case of rural Mexico), and remittances from foreign migrants are likely to have a low correlation with local income, making international migrants an ideal income-insurance policy. These are some of the ways in which governments and foreign aid donors have begun to think about and design policies to make migration a more productive tool for development:

*a. Reducing Remittance Transaction Costs.*

Sending money home is not a simple matter. Western Union, Moneygram and other agencies have amassed a fortune by charging migrants high fees for wiring remittances. It has been estimated that transaction costs constitute up to 15-20% of the total value of remittances. The alternative of sending cash, even with friends and relatives, can be prohibitively risky.

When you and I travel abroad, matters are simpler: simply insert your ATM card upon arrival at the foreign airport, and currency magically appears, for a low fee of perhaps 2-3% of the amount of the transaction. However, this requires having a bank at each end of the remittance transaction anp, ctweeter

have partnered to provide services specifically designed for the Mexican immigrant population. In 2002, Bank of America partnered with Grupo Financiero Santander Serfin, and Citibank entered into a partnership soon afterward with Banamex. Earlier this year, the Federal Reserve System initiated FedACH International, an automated clearinghouse that enables any financial institution in the United States to send payments to Mexico. Largely as a result of these initiatives, the transaction cost of U.S.-to-Mexico remittances has fallen to between 2 and 7 percent of the amount transferred through First Data Corp's

funding made available by remittances for civic projects. It also promotes community-based development and creates an incentive for migrants abroad to contribute more income to their communities at home. Tres por uno has supported a wide range of small infrastructure projects including water and sanitation, road pavement, rural electrification, micro-enterprises and small and medium enterprise development. The benefits of these matching programs generally are limited to the communities that have a critical mass of emigrants who can form an association and generate a sufficient remittance base for projects. One can imagine alternative strategies that might overcome these limitations. For example, "migrant bonds" could be sold to migrants abroad, guaranteeing them a reasonable rate of return while making proceeds available for community-based development projects. Associations of hometown associations may be able to pool resources for projects across more than one community.

A third way in which the investment potential of remittances can be multiplied is through government collateralizing of remittance flows. Government borrowing can be collateralized with future receipts, not only with existing assets. Remittances are an example of such receipts. Collateralized future receipts (CFR) arrangements, common in the commercial sector, have recently begun to grow in the public sector. It should be noted that not everyone believes that this is a good idea. The International Monetary Fund (IMF) Board's view has been cautious:[14]

> "Collateralized borrowing, if held under appropriate restraint, could be a helpful device for regaining capital market access during difficult periods, and could pave the way for uncollateralized borrowing [but]...extensive granting of collateral reduces a country's flexibility inmobilizing and managing foreign exchange and could increase its potential vulnerability to shocks."

*c. Increasing the Contribution to Development.* Migrant remittances have the biggest potential effect on economic development when they do more than simply hand income to migrant-sending households or communities. The trick is to create an environment in which remittance multipliers can flourish. When a dollar sent home by a migrant creates more than a dollar of new income in migrant-sending areas, both migrant and nonmigrant households can benefit. Remittance multipliers can take different forms, as can government programs to increase them.

Remittances create income multipliers within remittance-receiving household in the short run when they relax constraints on household purchases of inputs for production activities. For example, the money a migrant sends home might make it possible to buy both food for the family and fertilizer for a crop, which in turn creates more value when

[14] International Monetary Fund, 2003. "A

the crop is harvested and sold (or consumed by the family). The remittances might make it possible for the family to grow the crop with a more productive technology, for example, a higher-yielding seed variety, or to buy inputs for a non-agricultural enterprise.

Remittances can create long-run income multipliers for migrant households when they facilitate investments in capital, both physical and human. For example, a household with remittances invests in livestock, and the income multiplier is realized when the animal products or grown animals are sold. A household with remittances opens up a store in the village, buys a vehicle, or makes some other investment that give it access to a new stream of income. If remittances increase schooling expenditures, they may create multipliers in the form of more productive family members at home or higher wages for educated children, who in turn may share their wages with their parents.

Both short-run and long-run multipliers in migrant households will not happen if the remittances do not trigger the purchase of the inputs or the productive investment. What creates the incentives to invest if you are a remittance-receiving household? You have to be convinced that the investment will pay off and be worth the risk. That means having (or being able to obtain) the know-how to efficiently perform the production

There are two keys to the effectiveness of all of these programs. First, they must create incentives by helping to make investments in migrant-sending areas more profitable and less risky. Second, they must loosen the constraints that keep households from responding to these incentives. This includes getting resources (including remittance-induced savings) into the hands of people who will invest them.

The primary aim of government programs as complements to international migration is to raise the development potential of international migration, including making international migration a more effective tool for poverty alleviation in LDCs. A by-product may be that emigration pressures eventually subside somewhat. Creating the right economic environment so that international migration can contribute to development can also increase remittances. Studies demonstrate convincingly that the best way to maximize the volume of remittances is to have an appropriate exchange rate and economic policies that promise growth.[15]

*The Need for Gendered Migration and Development Policies*

Researchers are becoming increasingly aware that gender is important when studying the motivations, outcomes, and barriers to international migration. In fact, Kanaiaupuni (2000) states that "migration is a profoundly gendered process and the conventional explanations of men's migration in many cases do not apply to women." To ignore the gender-specificity of societal norms, history, social networks, labor markets, and migration benefits, costs and risks would overlook important determinants and effects of migration. Policies, like research, that focus only on male migration easily produce unintended effects and miss opportunities to increase the development potential of international migration. Examples abound; a few will suffice to illustrate this point.

If countries wish to make labor exports part their development strategies, then it is critical to understand both the gender segmentation of export-labor markets and differences in migration behavior by men and women. There is no reliable information on what share of the world's remittances is sent home by women, but it is almost certain that this share is large and rising, making women increasingly important sources of foreign exchange and capital for development. Countries that think about gender when investing in human capital and when negotiating labor export agreements with foreign countries can tap opportunities that may be missed by other countries. The vulnerability of female migrants working abroad may expose women to gender-specific risks, for which monitoring and protections are needed as part of these labor-export programs.

There is growing evidence that women remit different amounts and for different reasons than men. A study in Mexico found that female migrants send home more remittances, on average, than male migrants, and females are more likely to send home money when their households in Mexico suffer income shocks due, say, to a parent's

[15] For example, see Ratha, Dilip. 2003. Workers' Remittances: An Important and Stable Source of External Development Finance. Chapter 7 in Global Development Finance 2003. World Bank. http://www.worldbank.org/prospects/gdf2003/

illness.  That is, in addition to being more committed remitters, female migrants seem to play more of an “insurance” role for their households than do male migrants.

Women may migrate for different reasons than men.  The reasons for moving abroad are numerous and complex.  On balance, it appears that men are more likely to make the move for purely economic reasons, while women are more likely than men to be “tied movers.”  There are many documented cases in which women migrate abroad to follow a spouse, even when their income and psychic well being would be higher at home.  There are many other cases in which a woman’s income would be higher by migrating abroad but the woman remains behind to care for other family members, especially children who would be costly to move.

Nevertheless, female labor migration is increasingly important on a world scale, and there are a number of countries in which women have become a vital element of labor exports, e.g., nurses from the Philippines.  It is crucial for governments to recognize differences between men and women in terms of the factors shaping international migration, remittances7 Tc0.1743 Tw[,e.g.,m1 gs0 oin0 oin7(m7ndio TD)-0.3( a)-lts toe(inc3(e)-5.s9.21 )

intent has been to present a non-academic discussion that is grounded in findings from international migration research. There are many preconceived notions about what drives international migration and how it affects development. This paper has tried to dispel some of these, as a first step towards thinking realistically about international migration and designing sound policies that can use international migration as an instrument for development.

In general, it does not make sense for governments to make a goal out of trying to keep their populations in rural areas and in farm jobs. No country in the world has succeeded in doing this without condemning itself to low income and widespread poverty. However, government policies have a critical role to play in an international migration context. The ability of countries to create an environment that is conducive to broad-based economic growth can shape the economic landscape in migrant-sending areas, the contributions of migration to development, and the non-migration options available to those who stay behind.

Figure 1. Upward Trend in Total International Migration, 1965-2005

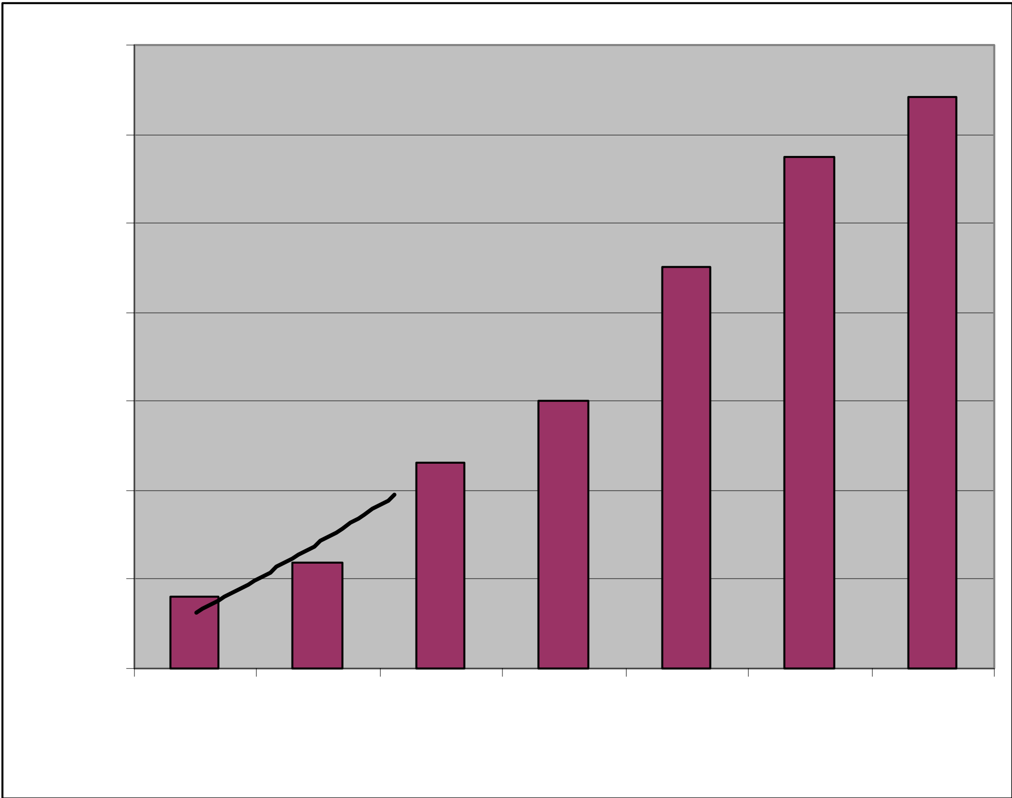


Figure 2. Growth in Total International Migrant Remittances, 1970-2004

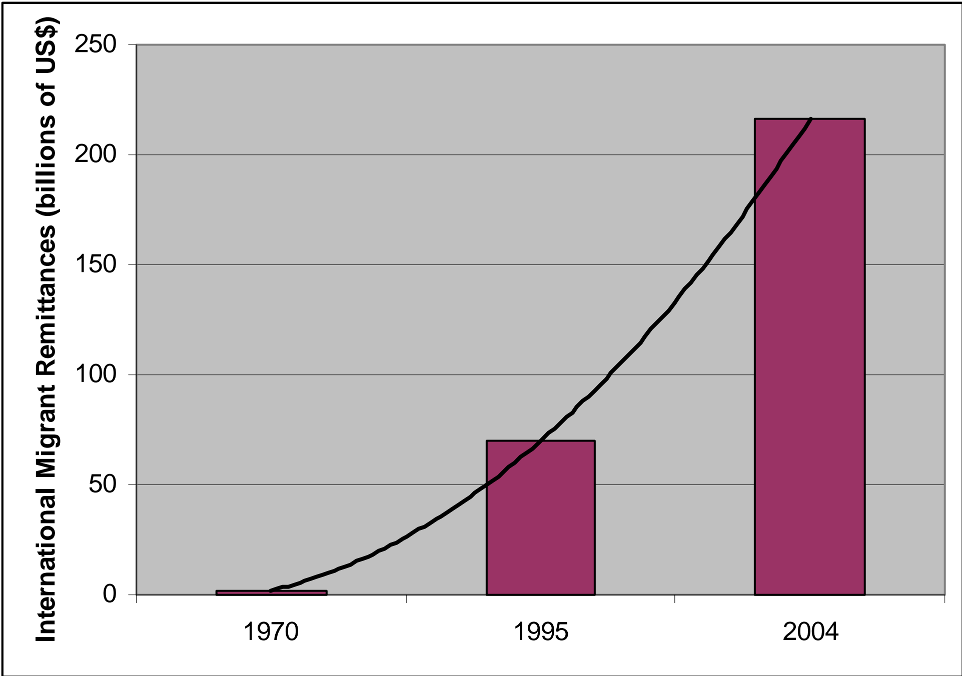
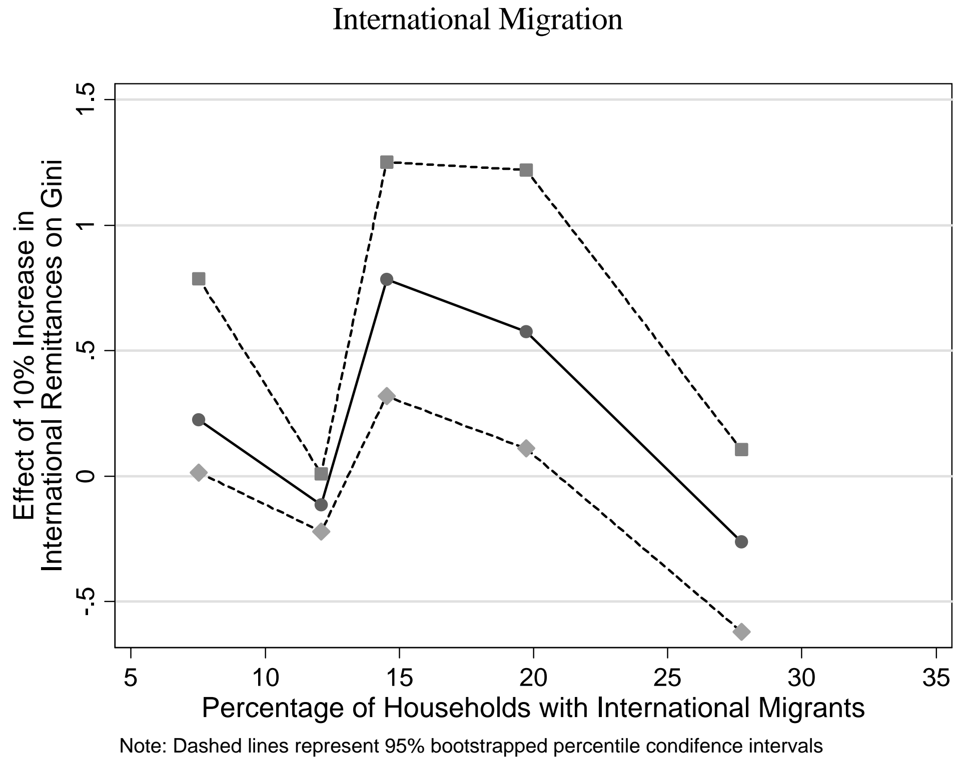


Figure 3. Relationship Between Regional Percentages of Households with Migrants and Effect on Gini of a 10% Increase in Remittances, by Migrant Destination

International Migration

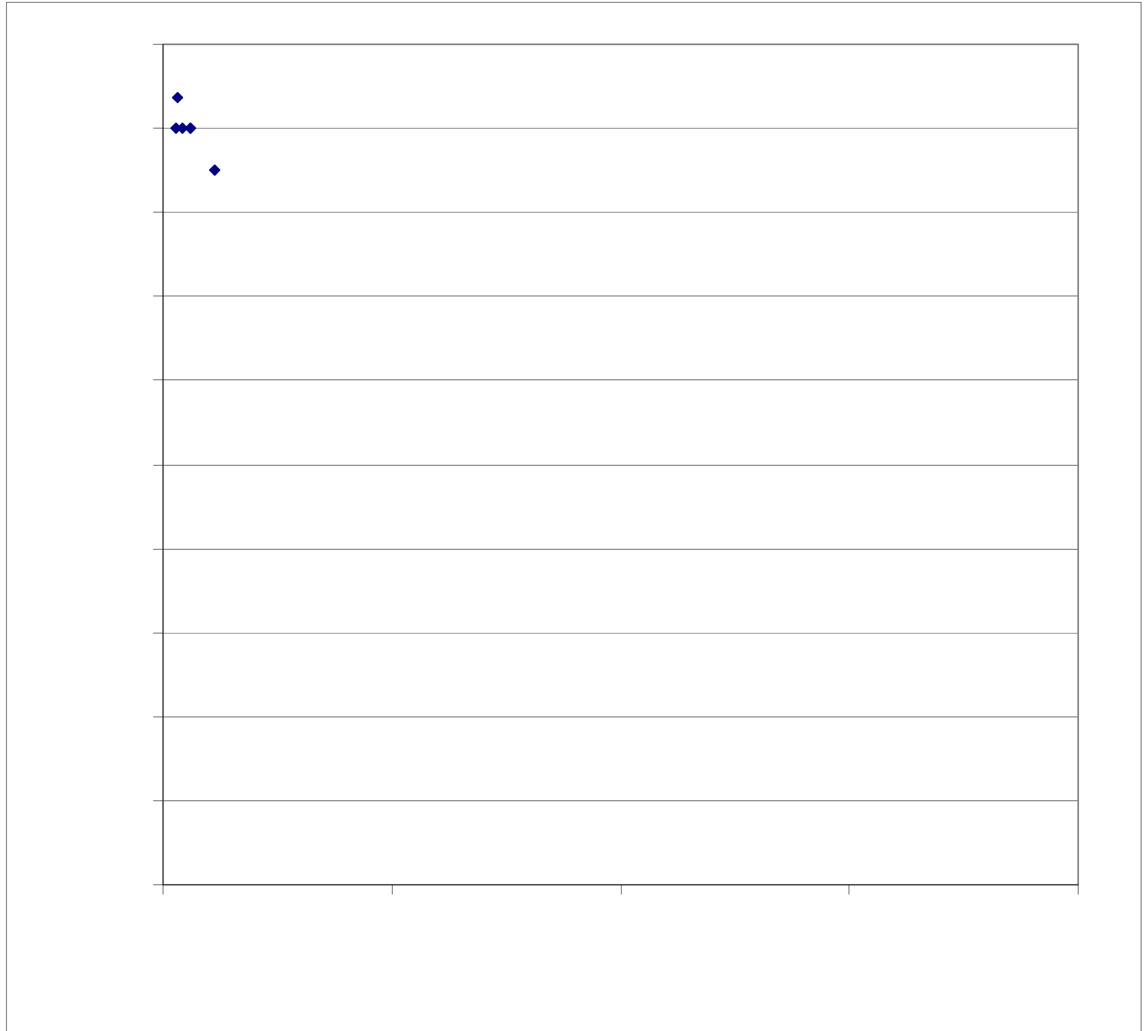



Source: Taylor, Mora, Adams and Lopez-Feldman (2005)

Figure 4. Relationship Between Poverty Elasticity of Migrant Remittances and Regional Percentage of Households with International Migrants (FGT Index, $\zeta=2$)

International Migration

Figure 5. Percentage of Country Work Forces in Agriculture and Per-capita Income (PPP Adjusted)



Sources of Data to Construct Figure: The World Bank (http://devdata.worldbank.org/dataonline/) and CIA Factbook 2005 (http://www.cia.gov/cia/publications/factbook/fields/2048.html).

Singh, I., L. Squire, and J. Strauss. 1986. Agricultural Household Models, Extensions, Applications and Policy. Baltimore: The World Bank and the Johns Hopkins University Press.

Skoufias, E. (1994). Using Shadow Wages to Estimate Labour Supply of Agricultural Households, *American Journal of Agricultural Economics* 76: 215-227.

Stark, O (1991). The Migration of Labour, Cambridge: Basil Blackwell.

Strauss, J. (1986). The Theory and Comparative Statics of Agricultural Household Models: A General Approach inM Singh, I., Squire, L. and Strauss, J. Ed. Agricultural Household Models - Extensi