

KNOWLEDGE IN DEVELOPMENT NOTES

International Migration and Development

About 180 million people (3 percent of the world's population) live outside their country of birth, including millions of highly educated people who moved to developed countries from developing countries, which already suffer from low levels of human capital. The flow of formal remittances to developing countries exceeds \$110 billion annually, surpassing foreign aid and representing the largest source of foreign exchange for some countries. Future pressure for international migration will be great, driven by differences in demographics between countries (particularly ageing in Europe and developed Asia) and in real incomes.

The effects of migration on fundamental development issues are surrounded with question marks. For example, how does migration affect growth and poverty, especially in the source countries? Are the poor among the beneficiaries of migration and the recipients of remittances? What are the net effects of the emigration of the skilled workers on the countries of origin? After years of neglect as a topic for economic research, we now need to understand the underlying causes of migration, identify the gainers and losers, and find policies to realize and distribute the gains efficiently and equitably. Research is starting to uncover some of the answers, but in several cases has so far yielded only tentative conclusions. Given the importance of the World Bank in global policy advice, we must be careful not to over-claim in this critical area.

Our understanding to date

Income differentials, as well as political and demographic forces determine migration patterns

Where permitted, migration is a major equilibrating mechanism—globally in the nineteenth century¹ and currently between regions within countries. It releases the pressures created by differences in demographic trends and permits greater equality in incomes per head between regions. Within countries, population growth shows more variability between regions than does income growth; between countries, the opposite applies.² Migration also responds to political turmoil and repression, but the principal driver is differences in the real incomes that may be expected in different locations, corrected for the costs of moving.³ The latter reflect the distance moved, the existence of networks in the potential recipient country that can provide information and support during acclimatization, and the cost of raising capital to finance the move.⁴

International migration boosts world incomes

By allowing workers to move to where they are more productive, migration allows an increase in aggregate output and income. Early analysis suggested that free migration could double world income,⁵ and more recently it has been estimated that increasing immigration into OECD countries by the equivalent of just 3 percent of their work forces would generate gains of more than \$150 billion a year.⁶ These gains would be fairly evenly split between

developed and developing countries and owe more to the mobility of less-skilled than of more-skilled workers. Major gains accrue to the migrants themselves, to consumers and complementary factors of production in the recipient countries (capital, land, and labor, other than the mobile type), and to remittance recipients and labor in the sending country.

Remittance rates vary with cost and need

The most direct impact of migration on those left behind is probably the flow of remittances they receive from migrants. These tend to vary with the income gap between the family members in the host and home countries, cushioning shocks for the latter.⁷ Remittance costs are high (maybe as high as 10-20 percent of the principal), and some evidence suggests that if they fell, flows would increase.⁸

Remittances reduce the level and severity of poverty

Remittances generally reduce poverty and alter the distribution of income, but the extent and direction of these effects depends on who receives them. The evidence on this from a variety of countries (the Philippines, Egypt, Pakistan, Mexico, and India) is mixed. Among the more convincing studies are those based on household surveys. For example, the 2003 Mexico National Rural Household Survey suggests that internal and international remittances have an equalizing effect on incomes in high-migration areas but not in low-migration ones, that international remittances reduce rural poverty by more than internal remittances, and that the larger the share of households with migrants in a region, the more favorable the effect of changes in remittances on rural poverty.⁹ A national household survey conducted by the Instituto Nacional de Estadística in Guatemala suggests that both internal and international remittances reduce the number of people in poverty, as well as the severity and depth of poverty of those remaining poor.¹⁰

Remittances lead to higher human capital accumulation, educational expenditure, investment, and entrepreneurship

Remittance recipients usually say that they invest the money, but since they may shift their spending from other sources of income in the opposite direction, this does not prove that investment is increased. Even if it is, we rarely know whether investment increased because of remittances or remittances (i.e., their preceding migration) reflect a prior desire to invest. One resolution of this dilemma is to study unforeseen changes in remittance flows, as is possible using a survey of Filipino households following the major exchange rate changes of the 1997-98 Asian crises.¹¹

Such unanticipated increases in remittances lead to enhanced human capital accumulation and entrepreneurship in origin households, with greater child schooling, more hours worked in self-employment, and a higher rate of entry into capital-intensive enterprises.¹² Whether such investment stimulates growth remains unproven, however. Some research suggests “yes,”¹³ while other work suggests that remittances induce reductions in recipients’ labor effort, which cuts growth.¹⁴

The brain drain exhibits significant regional differences and dynamics

A brain drain is among the commonest concerns of developing countries about migration. At the heart of this fear is the belief that the highly educated generate positive externalities for society, so their departure imposes losses beyond their own output and remuneration. Among these externalities are the effects on the productivity of others, the provision of key public services such as medicine, and the provision of fiscal resources, especially given that education is publicly provided in many countries.

Reliable and extensive data for answering these questions have only just become available. Building on data for the United States for 1990,¹⁵ a new World Bank database combines census and survey data from OECD countries and provides robust measures of the brain drain broken down by educational attainment, five receiving zones (United States, Canada, Australia, EU, the rest of OECD), and 170 source countries. The initial analysis reveals that there are large differences in the regional distributions of the brain drain and their dynamics. But these are narrowing in a global convergence toward a worldwide average migration rate.¹⁶

Cross-country analyses of brain drain need to be complemented by country studies. For example, there are striking differences in their labor market placement among highly educated immigrants from different countries, even after controlling for age, experience, and education.¹⁷ Specifically, U.S. immigrants from Latin America and Eastern Europe are more likely to end up in unskilled jobs than are immigrants from Asia. And a large part of the variation can be explained by attributes of the country of origin that influence the quality of human capital, such as educational expenditure, and factors that influence selection effects such as U.S. immigration policies and language.

Current and future research directions

How can we use the household surveys for the analysis of migration patterns and remittance flows?

Household surveys are key tools for revealing the impact of migration and remittances on poverty, inequality, expenditure patterns, entrepreneurship, and the like. So Bank research revolves substantially around existing household surveys conducted variously by Bank Staff (Pakistan), consultants (Mexico, Norway, Albania), official statistical agencies (the Philippines), and the Bank's Living Standards Measurement Study (Guatemala and Ghana). In addition, new household surveys are being planned for Morocco, New Zealand, Fiji, and Tonga.

An extensive household survey in Morocco includes questions on migrant characteristics (such as education) that have surprisingly been absent in almost every previous survey. A new survey is just starting in the Pacific region to exploit a unique experiment. New Zealand immigration policy admits an annual fixed quota of Fijians and Tongans who fulfill minimal age and English language restrictions through a lottery. The survey will collect household and individual data of households with family member(s) accepted under the quota, households that applied for the lottery but were not successful, and households that did not apply. The comparison of successful and unsuccessful lottery entrants will separate the

consequences of migration from the propensity to migrate, a confusion that plagues nearly all existing studies. (The initial plan to work on the larger and longer lived Samoan lottery had to be shelved in the face of political opposition from the government of Samoa.)

How can we go beyond household surveys?

The experience of individuals and families over time cannot be easily captured in a household survey conducted at a single point in time. Panel analysis can reveal important answers to many questions on return-migration, labor market exclusion, effects of remittance expenditure, and participation in public assistance programs. An extensive database of immigrant groups in Norway over 1967-2003 provides the tools for such analysis. The data include information on demographics, skills, labor market participation, and public transfers—in order to study lifecycle employment patterns of immigrant groups.

How temporary is temporary migration?

A third issue is the temporary movement of persons for the delivery of services, Mode 4 of the General Agreement on Trade in Services (GATS). This has so far served primarily to facilitate exploratory business visits and the movement of high-level personnel within multinational corporations, but developing countries are now pushing for greater openness for independent professionals and for less-skilled workers. The issue is among the most actively debated in the WTO. Initial estimates of the mutual benefits stemming from the liberalization of the temporary movements of natural persons from developing to industrial countries found them to be significantly larger than those from trade liberalization.¹⁸ These estimates are being updated with newly collected data on bilateral migration flows.

One key issue identified by the developed countries is concern about migrants overstaying as illegal migrants and creating social and economic burdens on host countries. Research is thus examining measures that might help guarantee the return of migrants at the end of their contracts and thus make the policy more attractive to destination countries.¹⁹

What are the linkages between trade, FDI, and migration flows?

Another key issue is the spillover between migration (movement of labor), FDI (of capital), and trade (of goods). For example, in the special case of the Chinese diaspora, research has found significant positive spillovers between migrant networks and trade flows, due to information flows and other network externalities.²⁰ Similarly Saxenian provides many examples of the role of Indian engineers in establishing links between their home countries and Silicon Valley.²¹

Based on the literature on immigrants building the key information and contractual networks to conduct international transactions, a major effort is starting to compile a database combining trade, migration (Mode 4), and FDI in both manufacturing and service sectors. Preliminary analysis shows that outflows of U.S. FDI from a specific sector to a specific country are significantly increased by the existing share of employees in that sector from that country.²²

Migration is potentially a major contributor to development but one that, because of political sensitivities, has been under-researched by economists. Several organizations are

working to correct this omission, and through its own program the Bank is both enhancing the quality and influencing the focus of this global effort.

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Endnotes

Most Bank documents cited in this summary are available through the documents and reports portal of the World Bank <http://www-wds.worldbank.org/>. The word “processed” describes informally reproduced works that may not be commonly available through library systems.

¹ K. O’Rourke and J. Williamson. 1999. *Globalization and History: The Evolution of a Nineteenth-Century Atlantic Economy*. Cambridge and London: MIT Press.

² L. Pritchett. 2004. “Boom Towns and Ghost Countries: Geography, Agglomeration, and Population Mobility.” Development Research Group, World Bank, Washington, D.C. Processed.

³ X. Clarke, T. Hatton, and J. Williamson. 2002. “Where Do U.S. Immigrants Come From, and Why?” NBER Working Paper 8998. National Bureau of Economic Research, Cambridge, Mass.

⁴ For example, D. McKenzie, and H. Rapoport. 2004. “Network Effects and the Dynamics of Migration and Inequality: Theory and Evidence from Mexico.” BREAD Working Paper 063.

⁵ B. Hamilton and J. Whalley. 1984. “Efficiency and Distributional Implications of Global Restrictions on Labour Mobility: Calculations and Policy Implications.” *Journal of Development Economics* 14(1–2): 61–75.

⁶ L. A. Winters, T. Walmsley, Z. Wang, and R. Grynberg. 2002. “Liberalising Labor Mobility under GATS.” Economic Paper 53. Commonwealth Secretariat, London.

⁷ G. Clarke and S. Wallsten. 2004. “Do Remittances Protect Households in Developing Countries Against Shocks? Evidence From a Natural Disaster in Jamaica.” World Bank, Washington, D.C. Processed.

⁸ *Global Economic Finance*. 2003; and S. Stanton Russell. 1996. “Remittances from International Migration: A Review in Perspective.” In Robin Cohen, ed., *The Sociology of Migration*. Elgar Reference Collection. International Library of Studies on Migration, vol. 3; and World Bank. 2003. *Global Development Finance*. Washington, D.C.: World Bank.

⁹ J. Mora and J. E. Taylor. 2005. “Remittances, Inequality and Poverty: Evidence from Rural Mexico.” Processed.

¹⁰ R. Adams. 2004. “[Remittances, Household Expenditure and Investment in Guatemala](#).” Policy Research Working Paper 3532. World Bank, Washington, D.C.

¹¹ D. Yang. 2005. “[International Migration, Human Capital and Entrepreneurship: Evidence from Philippine Migrants’ Exchange Rate Shocks](#).” Policy Research Working Paper 3578. World Bank, Washington, D.C.

¹² Other studies of expenditure by remittance receivers also find increases in these investment activities—such as A. Cox Edwards and M. Ureta. 2003. “International Migration, Remittances, and Schooling: Evidence from El Salvador.” *Journal of Development Economics* 72(2): 429–61. Because these remittances flows were not unanticipated, we can’t be sure that remittances “caused” expenditure rather than vice versa.

- ¹³ R. H. Adams, Jr., and J. Page. 2003. "[International Migration, Remittances, and Poverty in Developing Countries.](#)" Policy Research Working Paper 3179. World Bank, Washington, D.C.
- ¹⁴ R. Chami, C. Fullenkamp, and S. Jahjah. 2003. "Are Immigrant Remittance Flows a Source of Capital for Development?" IMF Working Paper WP/03/189. International Monetary Fund, Washington, D.C.
- ¹⁵ W. Carrington and E. Detragiache. 1999. "International Migration and the Brain Drain." *Journal of Social, Political and Economic Studies* 24(2): 163–71.
- ¹⁶ F. Docquier and A. Marfouk. 2004. "[Measuring International Mobility of Skilled Workers.](#)" Policy Research Working Paper 3381. World Bank, Washington, D.C.
- ¹⁷ A. Mattoo, C. Neagu, and C. Ozden. 2004. "[Brain Waste? Educated Immigrants in the U.S. Labor Market.](#)" Policy Research Working Paper 3581. World Bank, Washington, D.C.
- ¹⁸ L. A. Winters. 2003. "The Economic Implications of Liberalising Mode 4 Trade." In A. Mattoo and A. Carzaniga, eds., *Moving People to Deliver Services*. Oxford University Press; and L. A. Winters, T. L. Walmsley, Z. K. Yang, and R. Grynberg. 2002. "Liberalising Labor Mobility under GATS." Economics Discussion Paper 87. University of Sussex, United Kingdom.
- ¹⁹ M. Schiff. 2004. "When Migrants Overstay Their Legal Welcome: A Proposed Solution to the Guest-Worker Program." IZA Discussion Paper 1401; L.A. Winters and others (cited above).
- ²⁰ A comprehensive survey in J. Rauch. 2001. "Business and Social Networks in International Trade." *Journal of Economic Literature* 39(4): 1177–203.
- ²¹ A. Saxenian. 1999. "Silicon Valley's New Immigrant Entrepreneurs." Public Policy Institute of California, San Francisco.
- ²² B. S. Javorcik, Ç. Özden, and M. Spatareanu. 2004. "Substitutes or Complements? Linkages between Migration and FDI." Processed.