



Economic Letter

International Migration Remains the Last Frontier of Globalization

by Mark A. Wynne

ABSTRACT: Allowing greater international migration, though controversial, offers the potential of outsized economic output gains relative to what's possible with further liberalization of trade or capital flows.

The cross-border flow of people, or international migration, is by far the most politically charged aspect of globalization and the one with seemingly the least progress in recent decades.

Aggregate data suggest that, scaled by world population, international migration today is as important as it was during the great migrations of the late 19th and early 20th centuries. Host countries gain through larger markets; home (or sending) countries gain through migrant remittances.

This movement of people is one of four dimensions of globalization. Cross-border flows of goods are the most tangible manifestation of globalization—the ubiquitous “Made in China” label is a constant reminder. Others are cross-border flows of capital, allowing savers to invest where returns are highest, and the flow of ideas through which lower-income countries adopt technologies and practices developed elsewhere and catch up with living standards in more advanced economies.

Who Moves and Where?

The Latin motto *E Pluribus Unum* (“one from many”), which appears on U.S. coins, is a reminder that the United States is a nation of immigrants. There

were more than 40 million foreign-born individuals living in the U.S. as of 2012.¹ The foreign born made up 13 percent of the total population of 309 million, the highest share since the great migrations. While the U.S. remains one of the most popular destinations for international migrants, other countries have a similar, or even larger, share of the foreign born in the total population.

The World Bank compiles data on international migration for every country in the world.² Table 1 lists the 10 countries in which the share of the foreign-born population is largest and the 10 countries with the largest number of foreign-born residents, as of 2010. Note that the countries for which the foreign-born share is greatest tend to be very small. The total population of Qatar, where the foreign born make up close to three-quarters of the population, is less than 2 million, and the population of Kuwait (the largest in this group) is less than 3 million.

In terms of absolute numbers, the U.S. remains far and away the most popular destination for international migrants, with more than three times as many as the next country, Russia. The three largest Western European countries (Germany, France and the U.K.) also host large numbers of international migrants, as does

▶ *International migration is a truly global phenomenon, although there are a lot more legal restrictions on the cross-border movement of people today than 100 years ago.*

Table 1 International Migrant Stocks in Selected Countries

	International migrant stock as a percentage of the population		Total international migrant stock (millions)
Qatar	74.6	United States	42.8
Andorra	71.7	Russian Federation	12.3
Kuwait	70.1	Germany	10.8
Cayman Islands	64.3	Saudi Arabia	7.3
Monaco	64.0	Canada	7.2
Virgin Islands (U.S.)	58.2	France	6.7
Macao SAR, China	56.1	United Kingdom	6.5
Isle of Man	52.3	Spain	6.4
American Samoa	51.0	India	5.4

NOTES: Data as of 2010. According to the data used for this table, the international migrant stock in the Northern Mariana Islands exceeded 100 percent of the population. It was therefore excluded from the table.

SOURCE: World Bank *World Development Indicators*.

Table 2 Estimated Voluntary World Migration Movements, 1815–2010

	1815–1914	1919–1939	1945–1980	1980–1990	1990–2010
Total migrants (millions)	82.1	13.9	24.8	22.5	73.9
Average number of migrants per year (millions)	0.821	0.663	0.688	2.25	3.7
Population, median year (millions)	1,240	2,000	3,200	4,864	6,128
Yearly migrants per million of world inhabitants	660	330	215	446	603

SOURCES: Data for the periods 1815–1914, 1919–1939 and 1945–1980 are from *The Rise of “The Rest”: Challenges to the West From Late-Industrializing Economies*, by Alice Amsden, Oxford University Press, 2001, Table 1.11. Data for the periods 1980–1990 and 1990–2010 are from the World Bank’s migration and remittances database and the United Nations world population database.

Canada. Indeed, relative to the size of these countries’ total populations, international migrants account for a share comparable to that in the United States (and in the case of Canada, a considerably larger share).

Historical Perspective

International migration is a truly global phenomenon, although there are a lot more legal restrictions on the cross-border movement of people today than 100 years ago. The great migrations of the late 19th and early 20th century occurred during the first era of globalization, which is generally agreed to have existed from around 1870 to 1914. Most of the flows were from the Old World of Europe to the

New Worlds of North and South America and Australia.

During the 20th century, rates of migration relative to the size of the world’s population declined. The yearly migration rate fell from 660 per million world inhabitants in the 19th century, to 215 per million world inhabitants in the period between World War II and 1980 (*Table 2*).³ Migration rates picked up in the 1980s, to 446 per million world inhabitants, and then increased again after 1990 to an average annual rate of 603 per million world inhabitants in the new era of globalization. In fact, the rate of international migration over the first decade of the 21st century exceeded that of the 19th century.

There are many more formal barriers to international migration today than a century ago, when not even a passport was needed to travel internationally. This makes it difficult to reconcile the comparable levels of cross-border migration in the current and earlier eras of globalization. Formal barriers to migration—such as the need to obtain a work permit or other authorization before working in a country not of one’s birth—are not the only deterrent to cross-border flows of workers. Migration is costly, both personally and financially, and these costs can limit migration even in the absence of formal legal barriers.

“Until well into the nineteenth century, the cost of the move [from Europe to the New World] was too great for most potential migrants,” write economists Kevin O’Rourke and Jeffrey Williamson in their study of the earlier era of globalization.⁴ “Declining time and financial costs of passage, augmented by family resources generated by economic development at home, and financial help from previous pioneer emigrants’ remittances would all serve to change these conditions as the century progressed.”

Table 3 Global Bilateral Migrant Stocks (millions)

		Host countries	
		Advanced	Emerging
Home countries	Advanced	32.3	6.3
	Emerging	85.6	91.5

NOTES: Data as of 2010. Classifications based on the International Monetary Fund’s definition of advanced and emerging economies.

SOURCE: World Bank Bilateral Migration and Remittances, Bilateral Migration Matrix 2010.

Similarly, in the latter decades of the 20th century, despite the existence of formal barriers to (but not outright prohibitions on) international migration, advances in transportation and information technology lowered the formal and informal costs of migrating.

Chart 1 shows the top 15 migration corridors worldwide based on the number of migrants as of 2013.⁵ Far and away the most important, in terms of sheer numbers, is the Mexico–U.S. corridor. Some of the other major corridors reflect longstanding economic relationships (such as the Turkey–Germany corridor), while others are more likely

rooted in political developments in the latter decades of the 20th century (such as Ukraine–Russia or Bangladesh–India). Importantly, the depiction shows that not all migration is from poor to rich countries; a significant amount of labor movement occurs between low-income or less-developed countries.

There were just over 32 million citizens of advanced economies living in other advanced economies as of 2010 (Table 3). For example, the Single Market program in the European Union makes it easy for citizens of one EU country to live and work in another. That same year, there were more than 85 million citizens of emerging-market economies living in advanced economies, with Mexico–U.S. migration being a prime example. But there were also large numbers of citizens of emerging-market economies living in other emerging-market economies—91 million, more than the number living in advanced economies.

Gains from International Migration

The scale of international migration today is comparable to that seen in the late 19th and early 20th centuries, but it

Chart 1 Top Corridors for Global Population Movements and Remittances



SOURCES: World Bank calculation based on data from International Monetary Fund Balance of Payments Statistics database and data releases from central banks, national statistical agencies and World Bank country desks.

is less than would exist in the absence of barriers to movement. Put differently, migration is one aspect of globalization with significant room for progress.

The world has made so much progress on financial globalization that the gains from the elimination of remaining barriers to international capital mobility would only amount to 0.1 to 1.7 percent of global gross domestic product (GDP), according to one survey.⁶ Likewise, the global trading system is so integrated that the elimination of the remaining barriers to international trade in goods would only add 0.3 to 4.1 percent to global GDP. However, if all remaining barriers to international migration were eliminated, global GDP would be 67 to 147.3 percent bigger.

Although global GDP might be higher if there were fewer barriers to international migration, the distribution of the gains would not necessarily be equal. A recent study posed the hypothetical question of how much worse off host and home countries would be if, instead of the observed levels of migration seen today, cross-border flows of workers were absolutely prohibited.⁷ The authors found that rich countries that host large immigrant populations tend to benefit because of the wider range of products for consumption and use as intermediate inputs in production that a larger population makes possible.

While sending countries might be expected to lose out for the same reason (since their populations decline as a result of migration), this effect is offset by remittances sent by migrants from their

host to home countries. For some poorer countries, migrant remittances can amount to 5 percent or more of GDP.

More Open Borders?

Migration is a truly global phenomenon, and the cross-border movement of people today is arguably on the same scale as during the great migrations at the turn of the 20th century. By most estimates, the average citizen of the world would be better off with more open borders. However, these estimates are typically predicated on strong assumptions about how the world works, such as the interaction between migration and the provision of public goods and services such as education, Social Security and unemployment insurance.

While the cross-border flow of workers may never be as free as the cross-border flow of goods and capital or ideas, even the levels of migration that prevail today may generate significant welfare gains to host and home countries.

Wynne is a vice president and associate director of research for international economics in the Research Department at the Federal Reserve Bank of Dallas.

Notes

¹ U.S. Census Bureau, Current Population Survey Data on the Foreign-Born Population, March 2012 Detailed Tables.

² The terms “migrant” and “foreign born” are used interchangeably, although there is an important distinction. The foreign-born population of a host country will include asylum seekers and refugees from political or military conflicts, in addition to migrants who moved in search of economic opportunity.

³ Average annual flow rates were calculated as simple differences between the data on migrant stocks, expressed as an annual rate. Missing observations were replaced with zeroes. These estimated flow rates were then combined with global population estimates from the United Nations to express the estimated annual migration flows in units of per million of world population.

⁴ *Globalization and History: The Evolution of a Nineteenth-Century Atlantic Economy*, by Kevin H. O'Rourke and Jeffrey G. Williamson, Cambridge, Mass.: MIT Press, 1999, p. 119.

⁵ Ideally we would like to measure the flows in each corridor on an annual basis but can't due to data limits.

⁶ Table 1 of “Economics and Emigration: Trillion-Dollar Bills on the Sidewalk?” by Michael A. Clemens, *Journal of Economic Perspectives*, vol. 25, no. 3, 2011, pp. 83–106.

⁷ “A Global View of Cross-Border Migration” by Julian di Giovanni, Andrei A. Levchenko and Francesc Ortega, *Journal of the European Economic Association*, vol. 13, no. 1, 2015, pp. 168–202.



Economic Letter

is published by the Federal Reserve Bank of Dallas. The views expressed are those of the authors and should not be attributed to the Federal Reserve Bank of Dallas or the Federal Reserve System.

Articles may be reprinted on the condition that the source is credited and a copy is provided to the Research Department of the Federal Reserve Bank of Dallas.

Economic Letter is available on the Dallas Fed website, www.dallasfed.org.

Mine Yücel, *Senior Vice President and Director of Research*

Carlos E.J.M. Zarazaga, *Executive Editor*

Michael Weiss, *Editor*

Jennifer Afflerbach, *Associate Editor*

Ellah Piña, *Graphic Designer*

Federal Reserve Bank of Dallas

2200 N. Pearl St., Dallas, TX 75201