

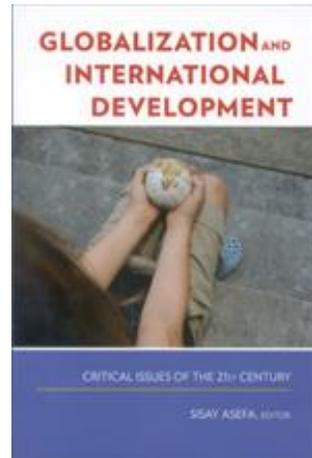
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# International Migration, Remittances, and Economic Development

Susan Pozo  
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# 3

## **International Migration, Remittances, and Economic Development**

Susan Pozo  
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Ask almost anyone today whether we live in a more globalized economy and you will likely hear, “Of course we do, the world is ‘smaller’ today than a century ago.” While I agree that countries interact much more than in the past, many do not appreciate the history of that process, tending to characterize the increased globalization through trade, finance, and migration as novel. I begin this chapter by discussing economic history for a number of countries, over different time periods, and concerning different facets of globalization.

My goal is to convey three basic points concerning the world economy. The first is that globalization—sometimes referred to as economic integration—is not so new. If we look more carefully at the evidence surrounding us we find that the intermingling of people located in different corners of the globe along with their economic interactions is not unique to the present period. People and goods have crisscrossed the globe for centuries, leaving behind changes in commerce, technology, culture, and know-how.

The second point is that while the globalization process has been taking place for some time, it does in several respects manifest itself differently today. Facets of globalization and economic integration that we observe today do differ in important ways from what we observed in the past. These differences are due in part to dramatic technological advances that have taken place with respect to transportation and communication. These advances have drastically reduced prices and have expanded in many dimensions the modes that can be availed of to transport people, goods, and information.

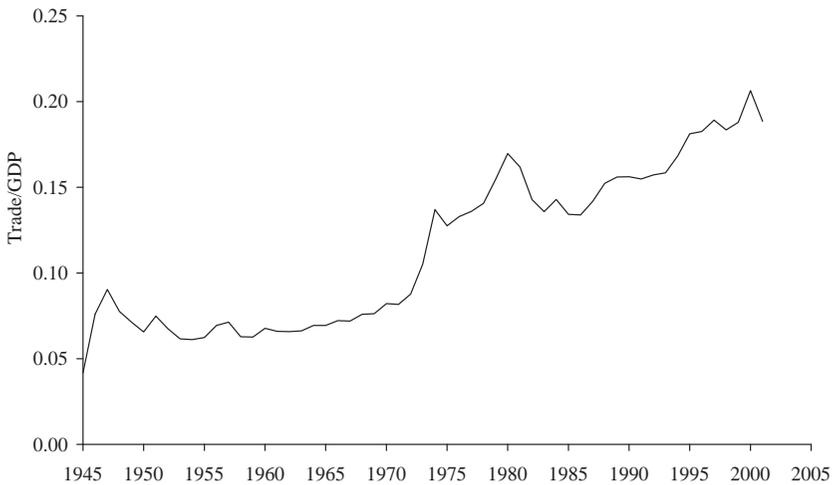
The third point is with respect to globalization's impact on economic development. While it is often claimed that globalization disadvantages the less fortunate, causing labor dislocations and increasing income disparities around the globe, it is also the case that globalization through migration can be a powerful force with the potential to significantly improve the lot for out-migration communities in many areas of the globe (Goldberg and Pavcnik 2007). It is this facet of globalization—the spread of international migration—upon which this chapter ultimately focuses.

## **GLOBALIZATION IS NOT SO NEW**

Countries interact with each other in a number of ways—through trade in goods and services, by borrowing and lending financial assets, and by migration. While this chapter focuses on international migration as it relates to globalization and economic development, it begins with a detour into more familiar and established territory for most readers. I first present data on globalization as measured by the share of international trade in GDP—an openness index. This particular index or one of its close variants is what researchers usually cite when making the case that the world is much more integrated today, that economies today interact substantially more with each other relative to the past.

The notion that globalization is of recent vintage probably originates from the analysis of an openness index relative to its value 50 or 60 years ago. For example, take the case of the United States. Figure 3.1 shows the ratio of U.S. international trade flows (U.S. exports plus U.S. imports) to U.S. national income (GDP) since 1945. The graph clearly suggests that international trade (as a share of GDP) was relatively level to 1970 and then consistently grew. Diagrams such as the one plotted in Figure 3.1 are the basis of the general perception that the U.S. economy was fairly closed economically with respect to the rest of the world until fairly recently.

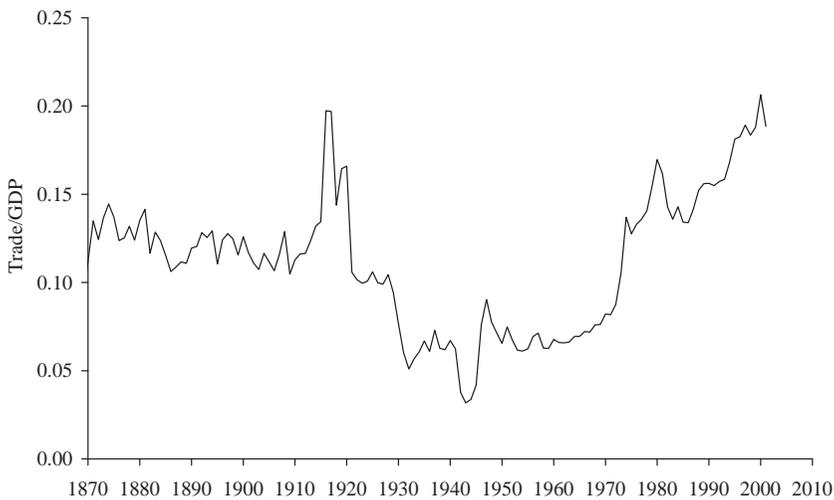
By contrast, an examination of Figure 3.2, where this same series is plotted from 1870 to the present, provides us with an entirely different impression. What emerges from this broader timeline of U.S. economic history is that today's relatively high fraction of trade in U.S. GDP is

**Figure 3.1 Trade as a Share of GDP in the United States, 1945–2001**

SOURCE: Author's calculations from Carter et al. (2006, Series Ee419, Ee422, Ca10).

neither unique nor new. In 1916 merchandise trade as a share of GDP was 19.7 percent, exceeding the 18.9 percent share observed in 2001. The plot suggests that the argument that globalization is new is generally derived from an examination of data since World War II. But if we instead peer further back, a totally different picture emerges. We observe relatively low trade flows during and surrounding the interwar period (World War I through World War II). The interwar period and period immediately surrounding it with its relatively low share of trade in GDP appear as an exception to the rule. Both before and after that period, international trade played larger roles in the U.S. economy.

It is understandable that researchers tend to analyze economic flows since World War II, generally disregarding or shying away from economic data series prior to the interwar period. Since World War II, governments and international organizations have become more interested in collecting economic data in a systematic and consistent manner.<sup>1</sup> International organizations such as the United Nations, the World Bank, the OECD, and the International Monetary Fund have expended considerable effort and resources to facilitate and coordinate the collection of data so that economic information is readily available and compa-

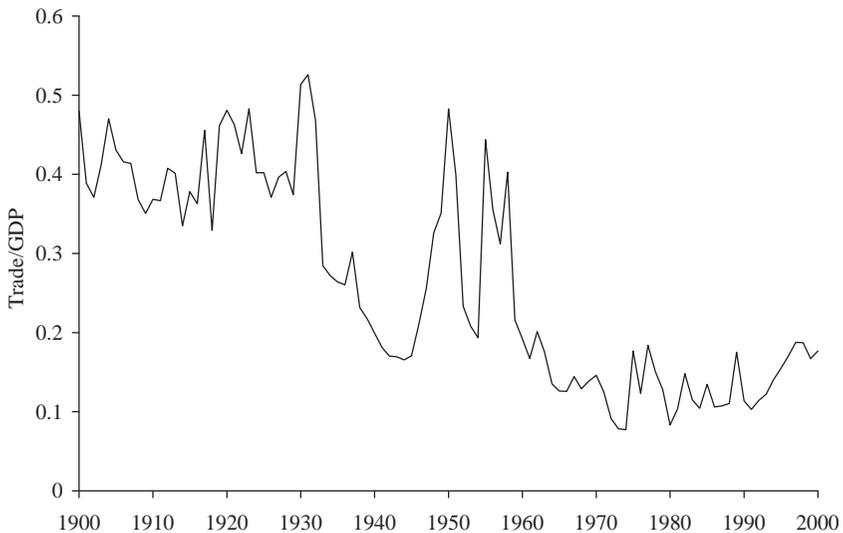
**Figure 3.2 Trade as a Share of GDP, United States**

SOURCE: Author's calculations from Carter et al. (2006, Series Ee416, Ee417, Ee419, Ee422, Ca10).

table across countries and over time.<sup>2</sup> Consequently, series since World War II have become more reliable, tempting researchers to restrict their research to the analysis of recent data, or at a minimum, the post–World War II period. There are drawbacks, however, to limiting our analysis to more recent data. We fail to appreciate important changes and turning points in the time series of flows, compromising our understanding of economic activity both in the short and long run.

Yet another picture emerges of globalization through trade if we examine a century of data for Argentina. Figure 3.3 displays an index of openness obtained by expressing the sum of Argentina's exports and imports as a share of GDP. While total merchandise trade was equal to about half of Argentina's GDP at the turn of the last century (i.e., in 1900), Argentina's trade accounted for less than one-fifth of GDP in 2000. Using simple indexes of openness, Argentina appears less globalized today relative to yesterday. In the Southern Cone, globalization through international trade has faltered rather than grown.

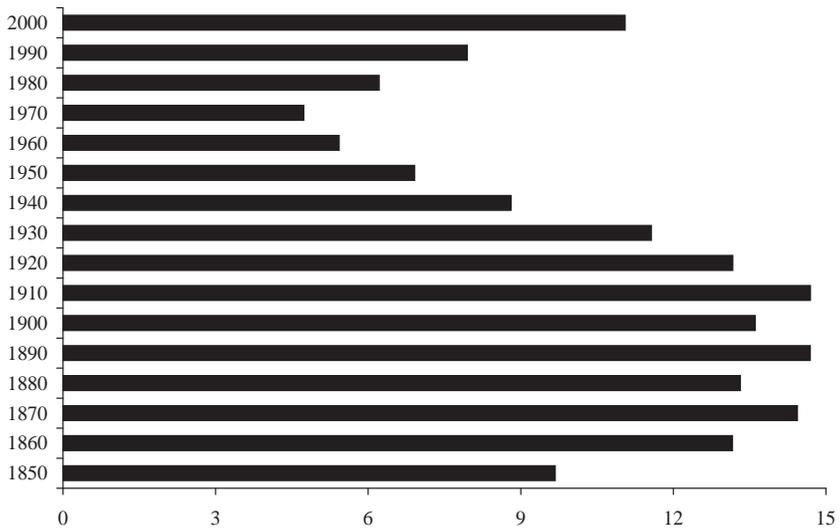
Misconceptions regarding the globalization of economies through migration also arise if we similarly limit ourselves to analyzing recent

**Figure 3.3 Trade as a Share of GDP, Argentina**

SOURCE: Computed from Astorga et al. (2002).

data on migration. U.S. data on the percentage of the U.S. population that is foreign born is presented in Figure 3.4. These data are from the U.S. decennial census. If we restrict the analysis to data from the 1970s to the present we observe that the U.S. population has become increasingly foreign born, from about 5 percent to 12 percent of the U.S. population. However, a longer-run view reveals that during the late 1800s and early 1900s, an even greater percentage of the U.S. population was foreign born, hovering at 15 percent.

Economic history provides us with many examples of globalization from earlier time periods that parallel the process we see occurring today. For example, Molina (2008) suggests that legal changes with respect to China, both in 1882 and in 2001, in turn impacted Mexican-U.S. migratory flows in substantial ways. The Chinese Exclusion Act of 1882, which effectively shut down Chinese immigration to the United States, was followed by a substantial rise in Mexican immigrants to the United States, presumably due to labor shortages caused by the exclusion of Chinese labor. One hundred twenty years later, the acceptance

**Figure 3.4 Percentage of U.S. Population That Is Foreign Born**

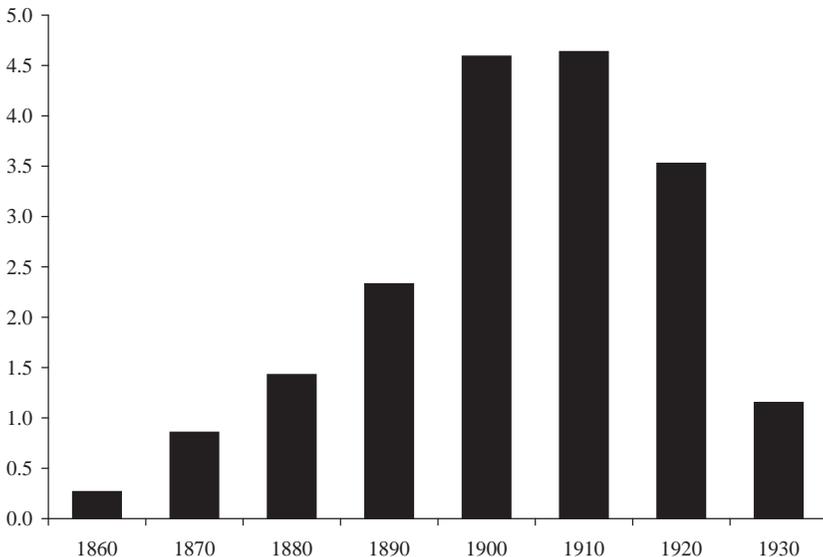
SOURCE: Author's calculations from Carter et al. (2006, Series Ad354, Aa2).

of China into the World Trade Organization seems to have had a similar impact, that of stimulating Mexican-U.S. immigration. With China a formal member of the world trading system, the relative competitiveness of Mexican industry seems to have been reduced, causing an excess supply of Mexican labor. The excess supply seems to have found an outlet in the U.S. labor market, which proved relatively eager to absorb that Mexican labor. Hence both in 1882 and in 2001, changes in immigration statutes with respect to Chinese nationals have impacted Mexico-U.S. economic flows. The interactions across countries that we observe today and are attributed to “globalization” are similarly found in yesterday’s world.

Another example of economic integration both in the past and today is with respect to workers’ remittances. As of late, the popular press has consistently reported on the large flows of immigrants’ earnings that are sent to their home communities (DeParle 2007, 2008). The main point in these articles is that these flows of money have not been adequately recognized in the past, in part because they were relatively small and

have only recently been of much significance. But the notion that remittances were not important or significant in earlier time periods is not corroborated by the historical data I have collected on Italian remittances. Figure 3.5 shows the ratio of remittances sent by Italian emigrants relative to Italian GNP in order to measure the relative size of the flows over time.<sup>3</sup> The figure shows averages of this ratio for each decade from the 1860s through the 1930s. Around the turn of the century, cross-border money flows from Italian-origin immigrants to their families remaining in Italy accounted for about 4 or 5 percent of Italian national income. The remarkable aspect of this value is that remittances to Mexico are currently considered to be at their highest, but not even reaching 3 percent of Mexico's national income.<sup>4</sup> Hence, in relation to national income, remittances were more important to Italy in 1900 than they are to Mexico today, even though the levels of remittances to Mexico now are considered to be extraordinarily large and newsworthy.

**Figure 3.5 Remittance Receipts as a Percentage of GNP: Italy 1860–1930**



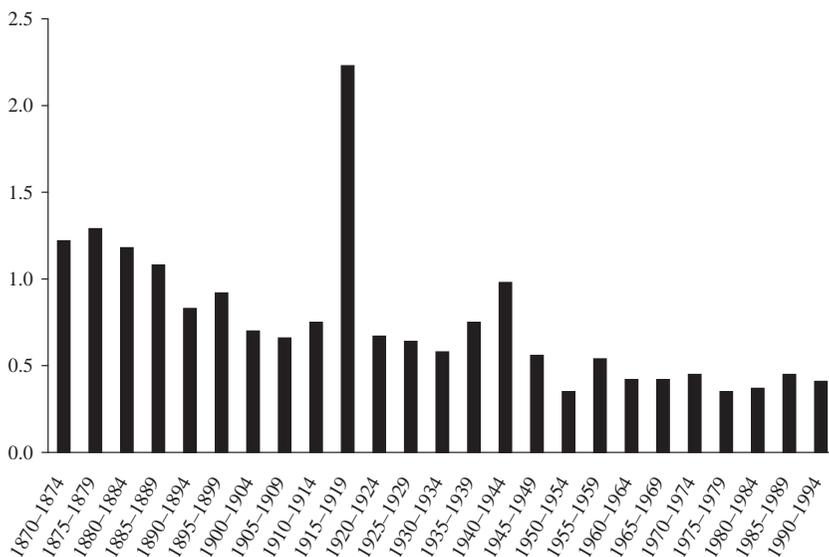
SOURCE: Author's calculations from information contained in Mitchell (1998) and Cinel (1991).

## **GLOBALIZATION MANIFESTS ITSELF DIFFERENTLY TODAY RELATIVE TO YESTERDAY**

There is considerable evidence that the interchange of goods, the migrations of people, and the international flows of financial assets have a long economic history. The case can be made, however, that today's interactions differ in important respects from the interactions of economies yesterday. Technological advances have changed the nature of international trade and the context in which immigration, emigration, and international money flows take place. This section discusses how two economic sectors—transportation and communication—have affected the globalization process.

While commentaries today tend to suggest that the observed increased trade globalization is a result of changes in the willingness of countries to open up to foreign markets (such as through the formation of global, regional, and bilateral trade liberalization pacts), economic historians are placing more weight on technological change as the main driving force. It has become substantially cheaper to transport goods, people, and ideas today than it was a century ago, and these reductions in costs are generally attributed to technological advances. Figure 3.6 displays Mohammed and Williamson's (2004) calculations of a real global tramp shipping price index, showing that shipping rates in 1994 were about one-third of 1870 rates in real terms. These reduced transportation costs have certainly played a role in allowing trading patterns to become more complex, to involve more nations, and to change direction at a moment's notice.

While declining transportation costs have played an important role in stimulating trade, they also are responsible for inducing increased flows of people, ideas, and financial assets. Lower transportation costs, of course, make migration more likely due to the easing of financial burdens associated with moving from one country to another, but there are other channels by which declining transportation costs promote migration. Lower transportation costs ease the pain and risks that accompany migration, inducing more migration to take place. If the migrant discovers that work is not as plentiful or lucrative in the destination area, lower fares will permit the return of the migrant to her point of origin or to another destination. The reversibility of migration is likely to induce

**Figure 3.6 Real Global Transportation Cost Index: 1870–1994**

SOURCE: Data from Mohammed and Williamson (2004, Table 3).

a greater volume of flows and a more diverse set of migrants. Temporary immigrants are likely to be more plentiful, and migrants can afford to travel farther away. Cheaper fares also promote tourism and the ability to learn about other unfamiliar regions of the world, facilitating subsequent migration. But most importantly for our focus, reduced transportation costs encourage continued interactions of migrants with their home communities, which is important for economic development—a point I argue in the next section.

While reductions in transportation costs have significantly facilitated the transport of goods and people, reductions in communication costs have been even more substantial and have likely resulted in even greater changes in global economic relations. Table 3.1 displays telephone rates for New York to London and New York to Buenos Aires (for a three-minute call) from the inception of telephone service in that market to 1981. The first two columns report nominal telephone rates, while the third and fourth columns express those same rates in real terms.<sup>5</sup> The inflation-indexed series indicates that transatlantic calls

were 130 times more expensive in 1927 relative to calls made in 1981. While the 1927 rate appears to be fantastically high, one must recall the capital stock that went into providing one telephone conversation at that time. For example, when telephone service was initiated from New York to San Francisco in 1915, the system could accommodate only one conversation at a time (Field 2006).

The ease with which migrants can now keep in touch with individuals living far away has substantially changed the relations that migrants have with the family members that did not accompany them. Migrants' ties with the home community are stronger and longer-lasting, with better information flows in both directions. Migrants can remain abreast of the continuing or the sporadic needs of the family back home. News of sickness, marriages, or business opportunities can now be quickly and relatively cheaply communicated. Money transfers, whether from migrant to family or family to migrant, are easily tracked and made more secure by the ability of the sender to pair the money transfer with a telephone call to the recipient.<sup>6</sup> And regardless of the migrant's or the family's ability to read and write, communication is easy and readily accessible.

In their study of international trade, Freund and Weinhold (2004) find that the Internet has increased the rate of growth of exports. It is logical to also presume that the Internet has changed the nature of human migration. It has vastly increased the ability of individuals, with or without migration networks, to secure pertinent information prior to migration. By obtaining such information, migrants increase the odds of having a successful migration. The Internet has also vastly reduced the costs of keeping in contact with family and friends left behind. This is likely to ease the pain of separation, further inducing migratory flows.

In sum, lower transportation costs and communications costs due to technological advances have had significant impacts on the environment in which international migration takes place. Lower transportation costs allow, of course, for a greater volume of overall migration, but also for more return migration. More temporary or short-term migration is also encouraged since migrants require smaller rewards in order to recover the costs of moving from one region of the world to another. Advances in communications technology keep migrants informed of home events, of the everyday or acute needs of the family, strengthening family and community migration networks, even among the illiterate.

**Table 3.1 Nominal and Real Telephone Rates from the Beginning of Telephone Service to 1981**

Year	Nominal prices for a 3-minute call from NY to:		Real prices for a 3-minute call from NY to:	
	London	Buenos Aires	London	Buenos Aires
1927	75.0	—	793.1	—
1928	45.0	—	484.2	—
1929	45.0	—	484.2	—
1930	30.0	36.0	330.5	396.6
1931	30.0	30.0	363.1	363.1
1932	30.0	30.0	402.9	402.9
1934	30.0	30.0	411.9	411.9
1936	21.0	21.0	277.9	277.9
1937	21.0	21.0	268.3	268.3
1939	21.0	15.0	277.9	198.5
1940	21.0	15.0	276.0	197.1
1941	21.0	15.0	262.8	187.7
1944	21.0	12.0	219.5	125.4
1945	12.0	12.0	122.6	122.6
1946	12.0	12.0	113.2	113.2
1952	12.0	12.0	83.3	83.3
1959	12.0	12.0	75.8	75.8
1960	12.0	12.0	74.5	74.5
1965	12.0	12.0	70.0	70.0
1967	12.0	12.0	66.1	66.1
1968	12.0	12.0	63.4	63.4
1970	9.6	12.0	45.5	56.9
1972	9.6	12.0	42.2	52.8
1973	9.6	12.0	39.7	49.7
1974	3.6	8.0	13.4	29.8
1975	3.6	8.0	12.3	27.3
1976	3.6	8.0	11.6	25.8
1977	3.6	8.0	10.9	24.2
1978	4.5	8.0	12.6	22.5
1980	4.8	7.0	10.7	15.7
1981	3.0	4.5	6.0	9.1

NOTE: Real prices are expressed in 2003 dollars. See note 5 for details.

SOURCE: Nominal telephone rates are from Carter et al. (2006). Real telephone rates are computed by the author applying a consumer price index from the same source.

## GLOBALIZATION AND ECONOMIC DEVELOPMENT

This section discusses a sampling of the channels by which migration and its by-products impact economic development. These channels have been fortified by the dramatic decreases in transportation costs that we have observed and by the improvements in communications technologies that continue to this date. These have greatly facilitated migration and the continued interactions between migrants living afar and the family back home. I begin with a discussion of migration's impact on economic growth in origin communities and follow with how emigrants' by-products affect growth and development back home.

Cheaper transportation and better communications across countries help to lower barriers to migration and therefore have the potential to greatly expand the level of temporary international migration that takes place. Take, for example, the nearly threefold increase in foreign student enrollments in the United States (from 1.4 percent of all U.S. students for the 1954–1955 academic year to 3.9 percent of U.S. higher education enrollment during the 2006–2007 academic year [Institute of International Education 2006]). Undoubtedly, lower transportation costs and the ease with which parents and students can communicate despite great distances has aided in that growth. Reductions in nonpecuniary and monetary costs must improve the cost-benefit ratio, encouraging foreign study, the subsequent return home, and the eventual transmission, to poor countries, of technical and scientific expertise by students originating from those countries.

The contribution toward economic development that students can make when they study abroad is not limited to the human capital that they repatriate home at the conclusion of their sojourn at universities abroad. Networks are created between these students and their professors, between international and domestic students, and between international students from one country and international students from other countries. In today's world, these networks are likely to prove stronger and longer lasting given the variety of ways by which we cheaply communicate to most areas of the world. Foreign study by students, therefore, results in the flow of knowledge and expertise to poor countries. This continued flow is especially possible today given the advent of

nearly costless forms of communication such as e-mail and Voice over Internet Protocol.

At this juncture it is appropriate to ask whether poor countries also pay a price for the facilitated flow of students across countries. While it may be easier for students to flow from poor countries to rich countries to acquire education, the flow also can go in the other direction. Individuals who have already received training or education in poor countries emigrate to richer countries with hopes of higher wages and expanded opportunities. This results in “brain drain,” weakening the prospects for development in poorer regions of the world as these nations lose scarce human capital. This concern is of paramount importance given that, as of late, developed countries have modified their immigration policies to favor skilled immigration over family reunification immigration, stimulating the exodus of educated individuals from all areas of the globe. Given the expected income differentials to migration, the highly educated from poorer regions of the world are particularly motivated. The origin communities are not only deprived of talented individuals, they are also put into the position of subsidizing human capital acquisition that ultimately benefits rich nations, since in many cases the education is acquired at the developing country’s expense. For example, one estimate for 2004 suggests that 26 percent of Somali-trained physicians practice abroad. During that same year there were 4 physicians per 100,000 persons in Somalia, a far cry from the U.S. ratio of 300 physicians per 100,000 population (Docquier and Bhargava 2006). The possibility that easier emigration can strip poor countries of scarce resources that are important for development is a real concern.

On the flip side of the brain drain debate is the argument that the emigration of the highly educated leads to “brain gain.” If there is the possibility of out-migration of the more highly educated (because of the possibility of accruing higher returns for one’s talents and expertise abroad), there will be greater competition for the “emigration slots,” leading to increases in overall investments in human capital accumulation as individuals attempt to distinguish themselves from others vying for visas. Stark, Helmenstein, and Prskawetz (1997) argue that the resulting brain gain exceeds the brain loss. Others, including Schiff (2006), disagree that the gains are greater than the losses and see the emigration of the highly skilled as generally disadvantaging the labor-exporting nations.

Individuals who emigrate on a temporary basis can also bring home expertise acquired in ways other than through formal education. For example, McCormick and Wahba (2001) find that temporary emigrants who have worked abroad in previously unfamiliar labor markets return home not only with capital to begin new businesses, but also with entrepreneurial abilities from that experience. By observing other forms of “doing business” and other uses of technology, emigrants learn how to become more flexible and to take advantage of opportunities that may await them in the communities to which they return.

Foreign direct investment has also vastly expanded in today’s world, and it is often credited with promoting economic development in capital-poor countries. But the acquisition of *physical* capital isn’t the only channel by which growth is stimulated when FDI takes place. Top-level managers, scientists, and engineers from the home office often accompany FDI. In the process of putting in place the physical capital—manufacturing the goods for sale and delivering the firm’s services—the home office employees tend to transfer technology and know-how from countries that tend to be well-endowed with these resources to more poorly endowed areas.

Social remittances, “a local-level, migration-driven form of cultural diffusion,” is yet another avenue by which migration may influence economic development (Levitt 1998). Return migrants resettling back home share ideas, technology, expectations, and familiarity with foreign institutions and foreign markets, which in turn can facilitate economic development. Those who visit home temporarily and communicate often with their families may also be helping to lift their home countries from poverty.<sup>7</sup>

Emigration has also been found to stimulate trade in goods and services between pairs of labor exporting and labor importing nations (Mundra 2005). This type of international trade is sometimes referred to as “nostalgic trade.” Mexican immigrants in the United States yearning for traditional foods and beverages demand these in the U.S. marketplace, stimulating merchandise trade and promoting agricultural production back home. After a while, these products can become known and favored by the host country population and stimulate that trade on a broader basis, as in the case of the popularity of Mexican cuisine in the United States today.

An extremely important by-product of migration is the flow of money that immigrants send home. These are referred to as workers' remittances and have gained the interest of bankers, academicians, and government policymakers. On a number of levels these flows have been credited with stimulating economic development.

Earlier we established that temporary migration is likely to be stimulated by the dramatic decreases that have taken place with respect to transportation costs. Likewise, by easing the continuation of contacts among families separated by long distances, reductions in communications costs make migration for the purpose of earning money abroad much more palatable. In short, increases in temporary migration to earn wages in a geographically distant land increase the flow of remittances across borders. In addition, given that money transfers today are less costly and more secure, it is more likely that resources flow back home on a periodic basis. The receipt of remittances can contribute toward economic development by compensating for liquidity constraints often encountered in poorer regions of the world. Remittances have been linked to investments in existing businesses in the Dominican Republic as measured by Amuedo-Dorantes and Pozo (2006), while Woodruff and Zenteno (2007) find that the existence of migration networks (which they presume signals greater access to remittance receipts) appears to increase profits and capital investment in Mexican microenterprises located in urban areas. Remittances have also been linked to increases in educational investments in a number of studies, including studies using Haitian, Dominican, and El Salvadorian data. (See Amuedo-Dorantes, Georges, and Pozo [forthcoming]; Amuedo-Dorantes and Pozo [2009]; and Edwards and Ureta [2003], respectively.)

Remittances have also been credited with reducing the incidence of "sudden stops" of capital inflows (Bugamelli and Paterno 2005). Countries that experience large inflows of remittances are thought to be less vulnerable to economic recessions and global crises given the belief that substantial levels of these flows are motivated by altruism. Altruistic inflows will tend to be countercyclical, reducing the damage that foreign investors may impart when they become concerned with a poorly performing economy and withdraw resources. The countercyclical nature of the flows from the emigrants who remit are likely to be stronger if they are better informed about the immediate situation and the economic needs of their families back home. If the emigrants know

that times are bad for their families, they will remit more. And as they learn that economic recovery is on the way, they are likely to remit less. It is logical to assume that cheaper and better communications have led to improvements in the timing of altruistic remittance inflows so that they can better serve in this countercyclical manner. Consequently, it is plausible that remittances reduce the threat of currency crises. Foreign investors are less likely to behave in ways that destabilize the currency in the face of this vast force of remitters who will naturally provide resources to the family back home as unfavorable shocks hit the economy.

Remittances have also been found to encourage the development of infrastructures that facilitate development. Demirgüç-Kunt et al. (2009) purport to find that the channelling of substantial sums of money by emigrants to their families in Mexico has provided incentives for financial intermediaries to locate in the migrant sending areas. Financial intermediaries are in effect taking advantage of increased demand for services that result from the money inflows that emigrants send home. This is especially important in the case of Mexico, given that there has traditionally been relatively more out-migration in Mexico's rural and less-developed areas of the country—the same areas that traditionally have been ignored by the banking system.

## **DISCUSSION AND CONCLUSIONS**

Globalization has been progressing for some time, rising and falling, but it is certainly not unique to our times. The perception that growth in these economic interactions is of only recent vintage might originate from limiting ourselves to examining data from the latter half of the twentieth century, where these patterns are not obvious, driving us to conclude that globalization is a product of the past 50 or so years. In contrast, once we examine data from earlier time periods, we find that globalization through trade, finance, and migration has a much longer history.

While the globalization process was certainly born before the past half century, there appear to be differences in the interactions of countries today relative to yesterday that are worth dwelling on. This chapter

focuses on international migration in particular, pointing to the context in which migration took place in the past relative to today. Technological advances have translated into widespread reductions in transportation and international communications costs. Migrants, potential migrants, and the families living back home all have access to much better information, reducing the risks involved with migration and increasing the flow of information between families living in different parts of the world. This has the potential to greatly improve the lives of migrants, their families, and the communities from which migrants originate.

Lower transportation and communications costs today keep emigrants abreast of events back home. Emigrants and the families from which they originate can easily and cheaply maintain ties with one another. Migrants know what is happening back home and what the needs of the family may be on a day-to-day basis. The families that remain in the home community have clearer perceptions of the lives and activities of their family abroad. In earlier time periods, these communications were less accessible and likely caused greater numbers of migrants to lose touch with their families back home, leading to lower flows of resources back home and fewer instances of the return of information that could be used to stimulate economic development.

It is interesting that there have been substantial calls for globalization in some dimensions and calls for restrictions in others. While arguments are made in favor of unimpeded flows of capital and of goods across countries, the same cannot be said about people flows. Economists often lobby for the free flow of capital from areas where capital is abundant and earning lower returns to areas where capital is scarce and earning higher returns, but we do not as often and as vigorously argue that labor should move from areas where its return is lower to areas where its return is higher. While we tend to claim that international trade in goods and services is not a zero-sum game, but rather benefits both importing and exporting nations in the aggregate, we do not as consistently attribute likewise to the migrations of people.

Despite the impediments to migration that we tend to observe, technological changes that have swept the transportation and communications sectors are likely to continue, propelling growth in migratory flows and their by-products. It is up to us to make the most of the potential gains from the movement of resources to areas where they reap the greatest gain, helping to free communities from poverty.

## Notes

1. For a discussion of the comparability of pre- and postwar data for the United States, see Romer (1986).
2. For example, see Lemaitre (2005) for a discussion of the harmonization of migration statistics across countries and Alexander, Cady, and Gonzalez-Garcia (2008) for discussion of the IMF's extensive program on data standards, harmonization, and dissemination.
3. I obtained nominal inflows of remittances to Italy from Cinel's (1991) historical account of Italian emigration, its impacts and by-products over the 1860 through 1930 period. Cinel does not provide remittance amounts for each year. Data on Italian GNP were obtained from Mitchell (1998). I computed a remittance to GNP value for each decade using the data that were available within each decade.
4. The Mexican Central Bank reports that remittances to Mexico were US\$23,969.5 million in 2007 while its GDP stood at US\$893,364 million. Remittances therefore accounted for only 2.68 percent of Mexico's national income.
5. Nominal telephone rates (for a three-minute call) are from Historical Statistics of the United States, series Dg60 and Dg63. Real telephone rates are computed by the author applying consumer price index series Cc1 from the same source. Given the base of the series, the rates are therefore expressed in 2003 dollars.
6. In some markets, Western Union's money transfer fee includes a three-minute telephone call from the sender of money to the money recipient. The call can be used, for example, to advise the recipient of the transfer, the amount being transferred, and how to retrieve it.
7. Social remittance can also transfer undesirable habits and culture that can have detrimental impacts on growth and development, as in the case of the rise of gang violence thought to be imported to Central America from Los Angeles. See Archibold (2007).

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