The Impact of the Global Financial Crisis on Migration and Remittances

Sanket Mohapatra and Dilip Ratha

Remittances sent by international migrants worldwide are an important source of external finance for many developing countries. The 2008–09 global financial crisis raised fears of a slowdown or even a reversal of migration flows and a consequent decline in remittance flows, especially to low-income countries. In this chapter, we present recent trends in, and the outlook for, migration and remittance flows for 2010–11.

Historically, remittances have been noted to be stable or even countercyclical and have tended to rise in times of financial crises and natural disasters because migrants living abroad send more money to help their families back home. For example, remittance inflows increased to Mexico following the country's financial crisis in 1995, to the Philippines and Thailand after the Asian crash in 1997, and to Central America after Hurricane Mitch in 1998.

Unlike past emerging market crises, however, the current crisis started in the high-income countries and has spread to the developing countries,

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resulting in a global crisis. Migrant destinations in both the North and the South have been affected to varying degrees, and that, in turn, is affecting employment and income opportunities for migrants. For the first time since the 1980s, remittances to developing countries are estimated to have declined by a modest 6 percent in 2009. Unlike private capital flows, remittance flows have remained resilient through the crisis and have become even more important as a source of external financing in many developing countries.

Recent Trends in Remittances in 2009

Officially recorded remittance flows to developing countries in 2008 reached US\$336 billion (see table 17.1). This is three times as large as overall official development assistance to developing countries, and larger than private capital inflows in many countries. The true size of flows, including unrecorded flows through formal and informal channels, is even larger. For many states, remittances are now the largest and least volatile source of foreign exchange, and for some countries—such as Lesotho, Moldova, Tajikistan, and Tonga—they exceed one-third of national income.

On the basis of high-frequency data for the first three quarters of 2009, we estimate that remittance flows to developing countries reached US\$316 billion in 2009, marking a 6 percent decline from 2008. This decline, however, masks significant variation across the developing regions. Remittance flows to South Asia grew strongly in 2008, despite the global economic crisis; but now there are risks that they may slow in a lagged response to a weak global economy. East Asia and Sub-Saharan Africa also face similar risks. By contrast, remittance flows to Latin America and the Caribbean and to the Middle East and North Africa were weaker than anticipated in 2009; but they appear to have reached a bottom already, with the expectation of a recovery in 2010 and 2011.

Remittance flows to South Asia and (to a lesser extent, East Asia) continued to grow in 2009, although at a markedly slower pace than in the precrisis years. Flows to Pakistan and Bangladesh increased by 23.9 percent and 19.4 percent, respectively, in 2009, but the growth of these flows has decelerated since the last quarter of 2009 in a lagged response to the debt crisis in Dubai. In the Philippines, a surge in the last quarter of 2009

Table 17.1 Remittance Flows to Developing Countries, 2006–11

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Remittance flows (US\$ billions)	2006	2007	2008	2009(e)	2010(f)	2011(f)
Developing countries	235.2	289.6	335.8	315.7	335.4	359.1
East Asia and Pacific	57.6	71.3	86.1	85.7	94.1	102.7
Europe and Central Asia	37.3	50.8	57.5	45.6	48.1	51.7
Latin America and the Caribbean	59.1	63.1	64.4	56.5	59.8	64.5
Middle East and North Africa	26.1	31.7	34.8	32.0	33.1	34.4
South Asia	42.5	54.0	71.7	75.2	78.7	82.8
Sub-Saharan Africa	12.6	18.7	21.3	20.7	21.6	22.9
Low-income countries	19.9	24.7	31.9	32.2	34.6	37.2
Middle-income countries	215.3	265.0	303.9	283.4	300.8	321.8
World	317.4	385.4	443.4	413.7	437.3	464.9
Growth rate (percent)						
Developing countries	18.4	23.1	15.9	-6.0	6.2	7.1
East Asia and Pacific	14.2	23.8	20.7	-0.4	9.8	9.2
Europe and Central Asia	24.1	36.0	13.3	-20.7	5.4	7.6
Latin America and the Caribbean	18.1	6.9	2.1	-12.3	5.7	7.9
Middle East and North Africa	4.6	21.4	9.8	-8.1	3.6	4.0
South Asia	25.3	27.1	32.6	4.9	4.7	5.2
Sub-Saharan Africa	34.8	48.5	14.1	-2.7	4.4	5.8
Low-income countries	23.9	24.0	29.4	1.0	7.2	7.7
Middle-income countries	17.9	23.0	14.7	-6.7	6.1	7.0
World	15.6	21.4	15.0	-6.7	5.7	6.3

Source: Ratha, Mohapatra, and Silwal 2010.

Note: e = estimate; f = forecast. Remittances are defined as the sum of workers' remittances, compensation of employees, and migrant transfers. For data definitions and the entire dataset, see http://www.worldbank.org/prospects/migration andremittances.

increased remittances by 5.6 percent as migrants sent money to help their families affected by typhoons Ondoy and Pepeng.¹

Remittance flows to countries in the Latin America and the Caribbean Region in 2009 show larger declines than expected. In Mexico, they fell by 15.7 percent in 2009, and flows to El Salvador decreased by 8.5 percent. However, the decline in flows appears to have bottomed out in most countries across the region. This reflects the fact that the

crisis in the United States and Spain (particularly in the construction sector)—key destination countries for Latin American migrants—started sooner than the crisis in other parts of the world. The Europe and Central Asia Region is estimated to have experienced the largest decline in remittance flows among all developing regions in 2009, in part because of depreciation of the Russian ruble relative to the U.S. dollar.

Remittances to the Middle East and North Africa Region were also weaker compared to the previous year. Flows to the Arab Republic of Egypt (the largest recipient in the region) declined by 18 percent, and flows to Morocco fell by 9 percent in 2009. Data on remittance flows to Sub-Saharan Africa are sparse, but these flows appear to have declined only modestly in 2009. Flows to Ethiopia, Kenya, and Uganda show higher growth or smaller declines than expected. Remittances to Cape Verde declined in U.S. dollar terms in 2009 but were almost flat in local currency terms.

Factors that Affected Migration and Remittance Flows in 2009

The trends in global migration and remittance flows in 2009 appear to have been influenced by the following factors: (a) effects of the economic crisis on migrant stocks, (b) diversification of migration destinations, (c) currency effects, and (d) the link between barriers to labor mobility and the impact of economic cycles on remittances. These factors are discussed below.

Effect of Global Financial Crisis on Migration Stocks and Flows. Contrary to popular perception, remittance flows in a given year are not directly related to migration flows during the same year; instead, remittances are sent by almost the entire existing stock of migrants (that is, cumulated flows of migrants over the years; see box 17.1). For an understanding of factors that influence the impact of the 2008–09 financial crisis on remittance trends, it is helpful to examine the impact of the crisis on the stock of international migrants. The following stock-flow equation for migration is useful in this context:

$$M_{t} = (1 - \delta)M_{t-1} - R_{t} + N_{t},$$
 (Eq. 1)

Box 17.1 Resilience of Remittance Flows Relative to Other Types of Flows during the Current Crisis

Despite the prospect of a sharper decline in remittance inflows than anticipated, these flows have remained more resilient than many other types of resource flows (such as private debt and equity flows and foreign direct investment, which declined sharply in 2009 as foreign investors pulled out of emerging markets). There are several reasons for the resilience of remittances in the face of economic downturns in host countries:

- Remittances are sent by the cumulated flows of migrants over the years, not only by the new
 migrants of the past year or two. This makes remittances persistent over time. If new migration
 stops, then remittances may stop growing over a period of a decade or so. But they will continue to increase as long as migration flows continue.
- Remittances are a small part of migrants' incomes, and migrants continue to send remittances when hit by income shocks.
- Because of a rise in anti-immigration sentiments and tighter border controls, especially in Europe
 and the United States, the duration of migration appears to have increased. Those people staying in the host country are likely to continue to send remittances.
- If migrants do return to their home countries, they are likely to take accumulated savings with them. This may have been the case in India during the Gulf War of 1990–91, which forced a large number of Indian workers in the Gulf to return home (Ratha 2003). Also, the "safe haven" factor or "home bias" may cause remittances for investment purposes to return home during an economic downturn in the host country. Migrants not only bring back savings; they also bring business skills. Jordan's economy performed better than many observers had expected between 1991 and 1993 because of the return of relatively skilled workers from the Gulf.
- Most high-income remittance source countries in the Organisation for Economic Co-operation and Development have undertaken large fiscal stimulus packages in response to the financial crisis. This increase in public expenditure, if directed to public infrastructure projects, will increase demand for both native and migrant workers. Taylor (2000) has found that public income transfer programs in the United States resulted in increased remittances to Mexico: when all other factors are equal, immigrant households that received social security or unemployment insurance were more likely to remit than were other immigrant households. Also, documented migrants are likely to send more remittances to their families to compensate for a fall in remittances by undocumented migrants.

Source: Ratha, Mohapatra, and Silwal 2010.

where M_t = new migrant stock, M_{t-1} = existing stock of migrants, R_t = return migration, N_t = new migration, and δ is the death rate of migrants in the host countries. Equivalently,

$$\Delta M_{t} = N_{t} - R_{t} - \delta M_{t-1}, \qquad (Eq. 2)$$

where ΔM_t is the change in migrant stock. In other words, the change in migrant stock equals new migration net of return migration and deaths (and assimilation) of existing migrants.

There is little evidence of return migration (R_t) as a result of the financial crisis in Europe and the United States. On the contrary, there are widespread reports that migrants are unwilling to return to their countries of origin, fearing that they may not be able to reenter once they leave because of tighter immigration controls (Awad 2009; Fix and others 2009; Green and Winters forthcoming). Data from the Mexican Migration Project show that the duration of migration for Mexican migrants in the United States has increased from 8 months in the early 1990s to 15 months more recently (figure 17.1). In part, the reluctance to return also reflects the significantly higher incomes that migrants are earning in the rich countries despite the crisis.

Financial incentives to encourage return migration have also not worked as expected in the Czech Republic, Japan, and Spain. In part because of the weak response to financial incentives, Spain and other European countries have implemented stronger immigration restrictions, even for highly skilled migrants. Anecdotally, employers in the Gulf Cooperation Council (GCC) countries are also offering unpaid leave to migrant workers to encourage them to return home until the economy recovers, but there appear to be few takers.

On average, new migration flows in a given year tend to be small relative to the existing stock of migrants. During 2000–05, for example, new

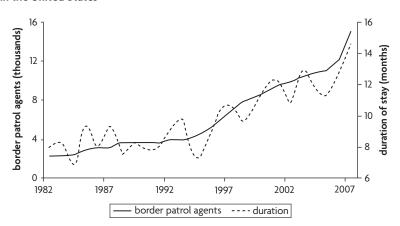


Figure 17.1 U.S.-Mexico Border Controls and Duration of Stay of Mexican Migrants in the United States

Sources: U.S. Department of Homeland Security; Mexican Migration Project.

migration flows amounted to about 2 percent of migrant stocks in the United States, 4 percent in European Union (EU) countries, and 5 percent in GCC countries. New migration flows (N_t) from many countries appear to have been affected by the financial crisis and weak job markets in the destination countries, although flows are still positive.² There has been a large fall in new deployments in many migrant-sending countries; in Bangladesh, for example, migration fell by nearly half in 2009 compared with the number of migrants in 2008. New migration from Poland and other accession countries to the United Kingdom has fallen, and the number of workers from those countries employed in the United Kingdom has plateaued since the start of the crisis.

Developing countries with migrants in the GCC countries, such as Bangladesh, India, Nepal, Pakistan, and the Philippines, have experienced smaller declines in remittance flows. Dubai, which has been severely affected by the crisis, is only one of the seven emirates of the United Arab Emirates and the only one that does not have oil. The substantial financial resources and long-term infrastructure development plans of the GCC countries imply that they will continue to demand migrant workers.

The More Diverse the Migration Destinations, the More Resilient Are Remittances. Remittance flows to Latin America and the Caribbean are highly correlated with the business cycle of the United States. Since economic cycles in the Gulf region are different from those of the United States, remittance flows to countries that send migrants to both the United States and the Gulf (for example, India and the Philippines) tend to be more resilient. The migration destinations of India are diversified, which is one of the reasons why flows to India fell only modestly in 2009. Recent estimates of migrant stocks show that about two-fifth of Indian migrants are in the Gulf and a fifth are in North America, with the remainder in Europe, Australia, Bangladesh, Nepal, and other regions. Filipino migrants are also well-diversified in terms of destinations, with land-based workers in the United States, the Gulf, Europe, and other continents, and a significant number of seabased workers.

The composition of migration has shifted during the crisis, with migrants switching across sectors and countries. For example, in the Gulf, after the massive construction projects such as Burj Dubai have been completed and with the debt crisis in Dubai, there is a slowdown in new construction projects and, therefore, in demand for new migrants. Many migrants have moved on to Abu Dhabi and other oil-rich emirates of the United Arab Emirates and to neighboring countries where there are huge infrastructure projects. Since the second half of 2009, the share of remittances from the United Arab Emirates in overall remittance flows from the GCC countries to Bangladesh has fallen, but that of Saudi Arabia has risen. Saudi Arabia has also become an increasingly important destination of migrants from the Philippines; between 2005 and 2008, the percentage of Filipino migrants going to Saudi Arabia increased from 20 percent to 30 percent of all Filipino migrants. Together with the higher level of earnings and sectoral diversification in health, domestic work, and other sectors, this diversification has cushioned overall remittances to the Philippines.

Some developing countries are also important destinations for migrants—for example, India, Malaysia, the Russian Federation, and South Africa. Resource-rich developing countries, such as the Islamic Republic of Iran, Libya, Nigeria, and Sudan, are also becoming attractive destinations for migrants. It is hard to predict how outward remittances from these destination countries in the South will be affected by the crisis, but some interesting cases involving currency effects are discussed below.

Exchange Rate Movements Produce Valuation Effects, but They Also Influence the Consumption-Investment Motive for Remittances. Exchange rate movement can be an important factor affecting the U.S. dollar valuation of remittances. For example, in U.S. dollar terms, remittance flows to the Kyrgyz Republic, Armenia, and Tajikistan declined by 15 percent, 33 percent, and 34 percent, respectively, in the first half of 2009 compared with the same period in 2008. However, the Russian ruble lost 25 percent of its value against the U.S. dollar in the first half of 2009 compared with its average value in the same period the previous year. If measured in ruble terms, remittances to the Kyrgyz Republic actually increased 17 percent in the first half of 2009 on a year-on-year basis. In Armenia, the year-on-year fall in ruble terms was only 8 percent, and in Tajikistan, it was 10 percent. Similarly, a significant part of the decline in remittance

flows to Poland can be explained by the weakening of the British pound against the U.S. dollar.

Exchange rate movements also affect remittances through their impacts on consumption and investment motives. The depreciation of the Indian rupee and the Philippine peso produced a "sale effect" on housing, bank deposits, stocks, and other assets back home. Indeed, as the Indian rupee has depreciated more than 25 percent against the U.S. dollar, there has been a surge in remittance flows to India. There are signs that a similar surge in investment-related remittance flows is happening in Bangladesh, Ethiopia, Moldova, Nepal, Pakistan, the Philippines, and Tajikistan.

The Lower the Barriers to Labor Mobility, the Stronger Is the Link between Remittances and Economic Cycles in That Corridor. The impact of the crisis has been more severe in corridors with fewer restrictions on labor mobility. Russia's relatively porous border with neighboring countries allows migrants to move in and out of the country in response to changing economic prospects, with the result that remittances are more correlated with the business cycle in the source country. Remittance outflows from Russia to Commonwealth of Independent States countries fell sharply—by 33 percent—during the first three quarters of 2009. With increasing oil prices, however, outward remittance flows from Russia are starting to recover (figure 17.2). On the other hand, remittances outflows from Saudi Arabia have been less correlated with oil prices. This is in part because of Saudi Arabia's ambitious development plans and countercyclical fiscal policy, but also because of its quotas on immigration that it has strictly enforced.

Because the labor markets are relatively integrated within the EU, migration is more responsive to economic cycles of the destination and source countries. Remittance flows to Poland and Romania fell between 2008 and 2009. This sharp decline is partly due to weak labor markets in Spain and Italy, but also because of the ability of workers within the EU to easily move in and out of countries in response to changes in labor demand.

In countries where it is more difficult to reenter after leaving, migrants have chosen to remain. Many migrants who have lost jobs in Dubai have not left; rather, they are taking lower-paying jobs with other employers and often staying on illegally. Interviews with migrants in

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Figure 17.2 Sharp Decline of Remittance Outflows from Russia during the Crisis, but Beginning of Increase with Recovery in Oil Prices and Growth

Sources: International Monetary Fund Balance of Payments database; World Bank Development Prospects Group. Note: Q = quarter.

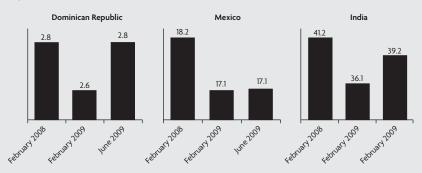
Dubai suggest that many migrant workers have reduced their daily expenditures in response to wage cuts by employers. Some sent their families back home, so the funds spent in Dubai are now remitted home. Migrants are also sharing accommodations to enable them to send remittances. Migrant workers, from Bangladesh in particular, appear to be stranded in Dubai because they cannot afford to return. Interviews with migrants suggest that it costs about 12,000 dirhams (about US\$3,300) to pay recruitment agencies and travel costs. With a monthly income below 900 dirhams (about US\$245), and little overtime, a construction worker can easily take three years to save enough to repay the recruitment costs. Even with the crisis, migrants often cannot risk returning home. So many entered into creative arrangements (for example, taking unpaid leave) with employers to simply wait it out in Dubai. Rising living costs in Dubai have also reduced remittances. The price of rice, a staple for many migrants, more than doubled in the past two years. Earlier, a construction worker spent roughly 150 dirhams (about US\$40) a month on food; now, he or she is spending between 350 and 400 dirhams (US\$95 to US\$110). Also, this has increased the time it takes a migrant to pay back the recruitment fees. There are anecdotal reports of family members sending "reverse remittances" to help migrants (see box 17.2).

Box 17.2 Reverse Remittances

There have been several anecdotal media reports about reverse remittances from Mexico and the Dominican Republic to the United States. According to these reports, the economic crisis in the United States is forcing many migrants to dip into their savings and assets back home and to rely on their families for financial help. Also, some migrants have sold their homes in Mexico to make mortgage payments in the United States. There are also anecdotes that some, deciding that returning home was not an option, have brought their family members to join them in the United States. This would imply, again, that they would liquidate assets in the home country and remit the proceeds overseas.

Decline of Nonresident Deposits* in 2008 but Subsequent Rise

US\$ billions



Sources: Central banks of the Dominican Republic, Mexico, and India.

*The Dominican Republic: foreign currency deposits; India: foreign currency and repatriable rupee deposits; and Mexico: foreign currency demand deposits and time deposits from the public. Note that these charts use different scales.

There is no way of judging the extent of such reverse remittances. Data on outward remittance flows are of questionable quality in most of the countries. Also, many large migrant destination countries do not report monthly data on inward remittance flows. A modest, and rather indirect, inference about reverse remittances can be drawn from a decline in foreign currency deposits—which are likely held by migrants or their relatives—in the Dominican Republic and other countries. In 2008, these deposits declined by 7 percent in the Dominican Republic, 12 percent in India, and 6 percent in Mexico (see figure above). However, these deposits have risen since then, indicating perhaps that reverse remittances are slowing because of a bottoming of the U.S. economic downturn. Reverse remittances are most likely miniscule—and they seem to be declining—compared to the size of remittance flows received by developing countries.

Source: Authors.

Leveraging of Remittances for External Financing

The global financial crisis has highlighted the importance of remittances for meeting external financing gaps. Remittances have helped to build up international reserves and have contributed to reducing current account deficits in many developing countries. This has provided a cushion against external shocks during the global economic crisis. In low-income countries, the current account deficit as a percentage of gross domestic product (GDP) would have more than doubled in the absence of remittances in recent years. For some large remittance recipients such as the Philippines, Bangladesh, and Nepal, remittance flows have offset large trade deficits and enabled these countries to maintain a current account surplus (figure 17.3).

Remittances are now factored into sovereign ratings in middle-income countries and debt sustainability analysis in low-income countries (figure 17.4). In large remittance-recipient countries, country creditworthiness analysis by the major rating agencies such as Standard & Poor's, Moody's, and Fitch Ratings often cite remittances as a factor in their rating decisions. The stability of remittances to the Philippines was an important factor in its ability to issue a US\$750 million bond despite the global financial crisis. Bangladesh was rated for the first time in April 2010, receiving a BB–rating from Standard & Poor's Investor Service and Ba3 from Moody's Investor Service, similar to many emerging markets. Again, the high share of remittance flows in GDP and their high growth rate was cited by the rating agency as one of the important factors for its rating decision.

As countries have become aware of remittances as a stable source of foreign currency earnings, many countries have started looking at the

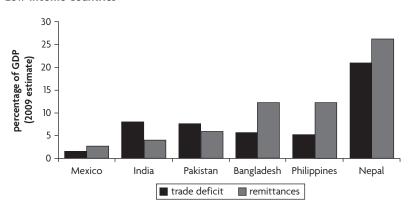


Figure 17.3 Offset of Trade Deficits by Remittances in Many Middle- and Low-Income Countries

Sources: World Bank, Migration and Remittances Team and Global Economic Prospects 2010 database.

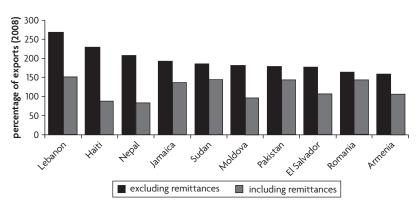


Figure 17.4 Contribution of Remittances to Sovereign Creditworthiness and External Debt

Sources: World Bank Migration and Remittances Team and Global Economic Prospects 2010 database.

Note: External debt is a percentage of exports and remittances. The figure includes countries that received more than US\$1 billion in remittances and whose remittances were more than 4 percent of GDP in 2008.

diaspora abroad as potential sources of capital that could be tapped with diaspora bonds. Many countries—for example, El Salvador, Ethiopia, Nepal, the Philippines, Rwanda, and Sri Lanka—have issued or are considering issuing diaspora bonds (see box 17.3).

Structural and Policy Changes in the Remittance Markets

The global financial crisis has intensified efforts to reduce remittance costs and leverage remittances for improving financial access. Many banks and operators are cutting remittance fees. This is partly because of the global financial crisis, which has caused the market to shrink in several corridors (especially from the United States to Latin America), and more intense competition. For example, remittance fees from the United Arab Emirates to South Asia, a high-volume corridor, are often under US\$1 per transaction.

Africa is now at the forefront of mobile money transfer technologies. Kenya's M-Pesa now has more than 9 million subscribers. While M-Pesa is mostly focused on domestic money transfers in Kenya with a small pilot scheme for U.K.-Kenya remittances, Kuwaiti mobile operator Zain has expanded to 15 African countries and has 42 million subscribers. It offers

Box 17.3 Diaspora Bonds as a Source of Financing during Difficult Times

In the current environment of a severe crisis of confidence in debt markets, some developing (and even developed) countries are encountering a great deal of difficulty in obtaining private financing using traditional financial instruments. This scarcity of capital threatens to jeopardize long-term growth and employment generation in developing countries, many of which have limited access to capital even in the best of times. Official aid alone will not be adequate to bridge nearor long-term financing gaps. Ultimately, it will be necessary to adopt innovative financing approaches to target previously untapped investors. Diaspora bonds are one such mechanism whereby developing countries turn to borrowing from their expatriate (diaspora) communities. A diaspora bond is a debt instrument issued by a country—or potentially, by a subsovereign public or private entity—to raise financing from its overseas diaspora. In the past, diaspora bonds have been used by Israel and India to raise over US\$35 billion of development financing. The proceeds from these bonds were used to support balance-of-payments needs and finance infrastructure, housing, health, and education projects. Several countries—for example, El Salvador, Ethiopia, Nepal, the Philippines, Rwanda, and Sri Lanka—are considering (or have issued) diaspora bonds to bridge financing gaps.

If 200,000 Haitians in the United States, Canada, and France were to invest US\$1,000 each in diaspora bonds, it would add up to US\$200 million. If these bonds were opened to friends of Haiti, including private charitable organizations, much larger sums could be raised. If the bond ratings were enhanced to investment grade via guarantees from the multilateral and bilateral donors, then such bonds would even attract institutional investors.

For the countries, diaspora bonds represent a stable and cheap source of external finance, especially in times of financial stress. For the diaspora investors, these bonds offer the opportunity to help their country of origin while at the same time offering an investment opportunity. Besides patriotism, diaspora members are usually more interested than foreign investors in investing in the home country. However, in countries that have weak governance and high sovereign risk, diaspora bonds may require support for institutional capacity building, credit enhancement, or both from multilateral or bilateral agencies. Compliance with securities and exchange regulations overseas can also be cumbersome in some migrant-destination countries.

Sources: Ketkar and Ratha 2010; Ratha 2010.

Zain Zap, a mobile remittance service, which, in addition to money transfers, also offers other services such as payment for bills and groceries.

New remittance technologies are also being adopted in South Asia. In Bangladesh, Banglalink, the second-largest mobile operator in Bangladesh after GrameenPhone with 13 million subscribers, is launching mobile remittance services in partnership with several Bangladesh banks. These banks will offer "mobile wallet" accounts through Banglalink, and Banglalink distribution outlets will be used as remittance disbursement cash points. The services will reduce transfer time from four to five days to one day. A remittance card introduced in Bangladesh for existing and prospective migrants allows nominees of the migrant worker to withdraw

the remittance through the point-of-sale terminals of bank branches and automatic teller machines. In Pakistan, Telenor, one of the largest mobile operators, has extended its domestic EasyPaisa service from money transfers and bill payments to savings accounts for people who do not have bank accounts.

The Philippines central bank is introducing a lower-cost real time gross settlement system. The Philippine Payments and Settlement (PhilPaSS) system, planned for implementation in the second quarter of 2010, would ensure same-day settlements of transactions and reduce fees to a maximum of 100 Philippines Pesos (about US\$2.25) per transaction.

The State Bank of Pakistan, the Ministry of Overseas Pakistanis, and the Ministry of Finance launched a joint initiative called the Pakistan Remittances Initiative to facilitate and support a faster, cheaper, and more convenient and efficient flow of remittances. The initiative reimburses a part of marketing expenses to banks and other entities that work with Pakistani banks in order to reduce costs for the remittance senders and to facilitate flows through formal banking channels. Market competition can often pressure businesses to provide customized remittances and other financial services for the poor at market prices, although businesses usually vie to serve wealthier customers. Competition has pushed many remittance service providers to send remittance agents to the migrant camps to provide remittance services to poor migrant workers from Bangladesh, the Philippines, and other countries. But in addition to providing a standard remittance service, they also provide deposit and loan services customized to the needs of migrants. When small numbers add up to create large profit opportunities, such services are likely to be more sustainable over time than those relying on public or private subsidies. The remittance market in Abu Dhabi and Dubai is large. As information about the size of the market has become more credible, competition among remittance service providers has become intense.

Remittances and Microfinance: A Tenuous Link?

Several pilot programs use remittances to improve the access of house-holds to formal financial services, but the scale of such programs to date remains limited. With the recent increased popularity of microfinance, a

number of microfinance institutions are looking into provision of remittance services. Some microfinance institutions are beginning to use the history of remittances as a way to evaluate creditworthiness of their poor customers who often cannot provide proof of income. Also, several microfinance agencies are trying to earn remittance fee income. Early evidence (from 2004 and 2005) from the World Council of Credit Unions showed that when people enter a credit union branch to send or receive remittances, both remittance senders and receivers open an account and leave some money behind for use later.

The Universal Postal Union is also working with a remittance software platform to provide remittance services through member post offices, earn remittance fees, and at the same time cross-sell postal saving products. The World Savings Bank Institute is trying to promote a link with remittances and savings with member savings banks. Cemex, a Mexican cement company, had an early scheme to link remittances to microsaving to try to encourage saving by migrants to build houses. Later a Bancomer affiliate piloted a scheme in New York suburbs to provide housing financing to migrants who send remittances through its branches. There are pilot products linked to (a) remittances to provide car loans to migrants in the United States for purchasing cars in Mexico and in the Gulf for purchasing cars in the Philippines and (b) life insurance to remitters to guarantee the continuation of remittance flows for 12 months or more in the event of remitter's death.

While the goal of expanding remittance services to underserved poor customers is laudable, the idea of using remittance fees to cross-subsidize microfinance products is less appealing because this involves one set of poor people subsidizing another set of poor people. Microfinance customers are also not always remittance recipients, and vice versa, except in communities that have a large concentration of migrants or remittance recipients.

Outlook for Migration and Remittances in 2010-11

Based on our methodology of forecasting remittances using a bilateral migration matrix and the World Bank's forecasts of nominal GDP growth, remittance flows to developing countries are projected to grow by 6.2 percent in 2010 and 7.1 percent in 2011 (table 17.1; see box 17.4)

Box 17.4 Revised Forecast Methodology Using New Bilateral Migration and Remittance Matrixes

The forecasts for remittance flows for 2010 and beyond are based on stocks of migrants in different destination countries and estimates of how changes in income of migrants influence remittances sent by these migrants. Remittance flows are broadly affected by three factors: (a) the migrant stocks in different destination countries, (b) incomes of migrants in the different destination countries, and (c) to some extent, incomes in the source country (see Ratha and Shaw [2007] for a discussion of these and other factors). Remittances received by country *i* from country *j* can be expressed as

$$R_{ij} = f(M_{ij}, y_i, y_j),$$

where M_{ij} is the stock of migrants from country i in country j, y_j is the nominal per capita income of the migrant-destination country, and y_i is the per capita income of the remittance-receiving country. The bilateral remittance matrix of Ratha and Shaw (2007) is re-estimated using the bilateral migrant stocks data above to arrive at estimates of remittance intensities I_{ij} (the share of remittance outflows in nominal GDP Y_i of each source country j going to receiving country i).

$$I_{ii} = r_{ii}I_i,$$

where r_{ij} is the share of country j's remittances going to country i, and I_{ij} is the share of remittance outflows in nominal GDP of source country j.

During the precrisis period, remittances grew faster than the GDP of remittance-source countries because of a number of factors, including improvements in remittance technologies, falling costs, and the steady increase in migrant stocks. For the postcrisis period (2010 and beyond), the elasticity of remittances (R_j) with respect to migrant incomes (MY_j) is assumed to be half of the precrisis period, with an upper bound of 3 and lower bound of 1, with the view that remittances would grow at a lower, more "sustainable" rate in the postcrisis period. These remittance elasticities are used to forecast remittance outflows from each remittance-source country in 2010 and beyond based on the latest available forecasts of GDP from the World Bank, using the following formula:

$$\hat{R}_{j}^{t} = R_{j}^{t-1} \left(1 + \eta_{j} \left(I_{j} \right) log \left(M Y_{j}^{t} / M Y_{j}^{t-1} \right) \right).$$

The forecasts of outflows and estimated remittance intensities are used to arrive at the estimates of inflows for each remittance-receiving country i.

$$\hat{R}_i^t = \sum_i r_{ij} R_j^t.$$

For this purpose, the bilateral migration matrix developed by Ratha and Shaw (2007) was updated with immigrant stock data from various sources to provide the most comprehensive estimates of bilateral immigrant stocks worldwide in 2010 (*Migration and Remittances Fact-book 2010* forthcoming).

Source: Ratha, Mohapatra, and Silwal 2010.

for a description of the forecast methodology). Remittance flows to developing countries are expected to reach US\$335 billion in 2010, almost the same level reached in 2008.

The decline in remittance flows to Latin America and the Caribbean appears to have bottomed out. Partly because of the large decline in 2009, flows to Europe and Central Asia by 2011 are unlikely to recover to the precrisis levels of 2008. Flows to other developing regions are expected to remain weak in 2010–11. Although the outcome for remittances in 2009 turned out better than expected, the recovery in the coming years is expected to be more shallow.

One source of risk to this outlook is that the crisis could last longer than expected. The emerging recovery in construction and other sectors in the United States may not be sustained after the effects of the stimulus package wear off. The recovery in construction employment in the United States has been driven in part by a credit to new home buyers that has stabilized migrant employment in that sector. If this subsidy proves unsustainable, it could have a dampening impact on the housing market. The recovery in migrant employment in construction during the summer may also be seasonal. A slowdown in construction activities in the United States tends to affect remittance flows to Mexico with a lag of four to six months (figure 17.5).

Other migrant-sending countries may also experience a lagged slow-down in remittance flows in response to slowing activities in other destination countries. A deceleration in construction activities in the GCC countries may affect migrant-sending countries in East Asia and South Asia. Although a recovery in oil prices and a fiscal stimulus implemented by GCC governments are likely to help maintain employment levels for existing migrants, new migration flows are unlikely to grow over the next two years. Therefore, remittances from the GCC countries may remain stable, but they are unlikely to grow rapidly for a year or two.

A second source of risk to the outlook presented here is that weak job markets and persistently high rates of unemployment in the destination countries may lead to further tightening of immigration controls, especially for low-skilled migrants. Even with projections of economic recovery in the advanced economies, unemployment rates are projected to remain high during 2010 and 2011, with a "jobless" global recovery. The labor market in the United States, the largest migrant-destination country, is expected to remain weak in the medium term, and unemployment rates

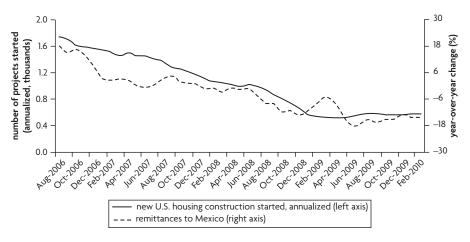


Figure 17.5 Correlation between U.S. Construction Sector Activity and Remittances to Mexico

Sources: U.S. Census Bureau 2010; Banco de México 2010. Note: Three-month moving averages are shown in chart.

100

50

0

2005

2006

300 264 number of days to reach H1-B visa quota in United States 250 183 200 131 150

Figure 17.6 Reflection of Fall in Demand for (and Supply of) High-Skilled Foreign Workers in Fewer Applications for U.S. Temporary Worker Visas



2007

55

6

2009

2010

2

2008

are expected to remain high. The applications from high-skilled foreign workers for temporary worker visas has fallen in the United States, with the number of days to fill the quota rising from two days for the 2008 fiscal year to 264 days for applications for the 2010 fiscal year (figure 17.6). If employment recovers only with a substantial lag to the recovery in economic output, then it is likely to have an impact on the employment levels and incomes of migrants—and, in turn, on their ability to send remittances.

A third source of risk is that currency movements are highly unpredictable. If the currencies of receiving countries start appreciating with respect to the U.S. dollar, then the "sale effect" (remittances for investment in cheaper assets) may reverse. This especially applies to India, which experienced a surge in such flows during 2008. The abnormal surge in remittances to Bangladesh and Tajikistan during 2007–08 may also prove unsustainable for the same reasons.

Policy Responses

With lower levels of foreign aid and investment likely over the short term, remittances will have to shoulder an increasing percentage of local development needs. Unfortunately, the greatest risk to remittance flows does not come from the economic downturn itself; instead, it comes from protectionist measures taken by many destination countries, including those in the developing world. There are risks that more immigration controls to protect native workers might imply a tradeoff between protecting native workers from job competition and protecting businesses facing falling revenues. In the short term, allowing employers flexibility in hiring and firing decisions may help them cut costs and survive the crisis. In the medium term, that might result in a more sustainable recovery.

Many migrant-sending countries are worried about large return migration prompted by weak job markets in destination countries. Return migration in the current crisis appears to be negligible so far, but if it happens, the workers coming back home will return with skills, entrepreneurial energy, and capital (see box 17.3). These workers should be provided with help in setting up small businesses and reintegrating into their communities, not be made the object of envy or fear of job competition.

To compensate for any reduction in new migration flows, some migrant-sending countries are trying to establish guest worker programs with destination countries. India is negotiating mobility partnerships with some European countries. Bangladesh and Nepal are trying to negotiate the continuation of immigration quotas with Malaysia and the Republic of Korea, respectively. The Philippines is actively searching for new migrant destinations.

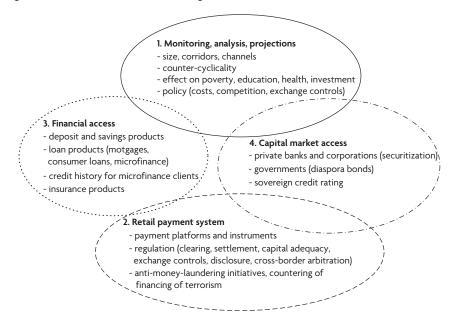
Several countries are beginning to look at facilitating remittances in the face of external financing constraints, including introducing incentives to send more remittances through formal channels. For example, Pakistan has introduced a program that subsidizes remittance service providers for a certain part of their marketing expenses, depending on the volumes transferred. Countries are also trying to facilitate cheaper and faster remittances. One of the potentially cheapest and quickest options is money transfer using mobile phone networks. However, significant regulatory challenges related to anti-money-laundering initiatives and efforts to counter the financing of terrorism remain for cross-border transfers using mobile phone networks.

A standard remittance is a simple financial transaction that—if lightly regulated and processed using modern technology—can have minimal cost. Many remittance providers currently charge fees of more than 10 percent. Reducing remittance costs would require improving competition and transparency in the remittance market, applying a simpler and identical set of regulations across state and national boundaries, and increasing the use of postal networks and mobile phone companies. Exclusive partnership arrangements between money-transfer companies and the postal and banking networks of most countries are a hindrance to competition among firms offering remittance services. Sharing of payment platforms with multiple partners should be encouraged.

If funds were transferred through banks and other financial intermediaries, migrants and their beneficiaries would be encouraged to save and invest. Intermediary banks could also use remittance inflows as collateral to borrow larger sums in international credit markets for local investments. The development community can leverage remittance flows for development by making them cheaper, safer, and more productive for both the sending and the receiving countries. An "International Remittances Agenda," as summarized in figure 17.7, would involve

- · Performing monitoring, analysis, and projections
- Improving retail payment systems through use of better technologies and appropriate regulatory changes
- · Linking remittances to financial access at the household level
- Leveraging remittances for capital market access at the institutional or macroeconomic level.

Figure 17.7 International Remittances Agenda



Source: Authors.

Conclusion

Officially recorded remittance flows to developing countries reached US\$316 billion in 2009, down 6 percent from US\$336 billion in 2008. With improved prospects for the global economy, remittance flows to developing countries are expected to increase by 6.2 percent in 2010 and 7.1 percent in 2011. The decline in remittance flows to Latin America that began with the onset of the financial crisis in the United States appears to have bottomed out since the last quarter of 2009. Remittance flows to South Asia (and to a smaller extent East Asia) continued to grow in 2009, although at a markedly slower pace than in the precrisis years. Flows to Europe and Central Asia and the Middle East and North Africa fell more than expected in 2009.

These regional trends reveal three features:

 The more diverse the migration destinations, the more resilient are remittances.

- The lower the barriers to labor mobility, the stronger is the link between remittances and economic cycles in that corridor.
- Exchange rate movements produce valuation effects. However, they also influence the consumption-investment motive for remittances.

The resilience of remittances during the financial crisis has highlighted their importance in countries facing external financing gaps. Remittances are now being factored into sovereign ratings in middle-income countries and debt sustainability analysis in low-income countries. Countries are also becoming increasingly aware of the income and wealth of the overseas diaspora as potential sources of capital. Some countries are showing interest in financial instruments such as diaspora bonds and securitization of future remittances to raise international capital.

Notes

- 1. Remittance flows to Haiti are also likely to surge in 2010, in response to the devastating earthquake in January (see Ratha 2010).
- 2. Green and Winters (forthcoming) have examined migration trends during several past crises (during 1831–1913 and the Great Depression in the 1930s) and conclude that host-country economic factors usually were a much stronger determinant of migration than were origin-country factors. Passel and Suro (2005) report a similar finding for Mexican migration to the United States during 1992–2004. (See also Hatton and Williamson 2009.)

References

- Awad, I. 2009. The Global Economic Crisis and Migrant Workers: Impact and Response. Geneva: International Migration Programme, International Labour Organization.
- Fix, M., D. G. Papademetriou, J. Batalova, A. Terrazas, S. Yi-Ying Lin, and M. Mittelstadt. 2009. "Migration and the Global Recession: A Report Commissioned by the BBC World Service." Migration Policy Institute, Washington, DC. http://www.migrationpolicy.org/pubs/MPI-BBCreport-Sept09.pdf.
- Green, T., and L. A. Winters. Forthcoming. "Economic Crises and Migration: Learning from the Past and the Present." U.K. Department for International Development, London.
- Hatton, T., and J. G. Williamson. 2009. "Global Economic Slumps and Migration." Vox EU. http://www.voxeu.org/index.php?q=node/3512.

- Ketkar, S. L., and D. Ratha. 2010. "Diaspora Bonds: Tapping the Diaspora during Difficult Times." World Bank, Washington, DC.
- Passel, J. S., and R. Suro. 2005. "Rise, Peak, and Decline: Trends in U.S. Immigration 1992–2004." Pew Hispanic Center, Washington, DC. http://pewhispanic.org/ files/reports/53.pdf.
- Ratha, D. 2003. "Workers' Remittances: An Important and Stable Source of External Development Finance." In *Global Development Finance 2003: Striving for Stability in Development Finance*, 157–76. Washington, DC: World Bank.
- ——. 2009. "Dollars Without Borders." *Foreign Affairs*, October 16. http://www.foreignaffairs.com/articles/65448/dilip-ratha/dollars-without-borders.
- ——. 2010. "Mobilize the Diaspora for the Reconstruction of Haiti." *Haiti: Now and Next*, SSRC Features, February 11. http://www.ssrc.org/features/pages/haiti-now-and-next/1338/1438/.
- Ratha, D., S. Mohapatra, and A. Silwal. 2010. "Outlook for Remittance Flows 2010–11: Remittance Flows to Developing Countries Remained Resilient in 2009, Expected to Recover during 2010–11." *Migration and Development Brief* 12. World Bank, Washington, DC.
- Ratha, D., and W. Shaw. 2007. "South-South Migration and Remittances." Working Paper 102, World Bank, Washington, DC.
- Taylor, J. E. 2000. "Do Government Programs 'Crowd In' Remittances?" Inter-American Dialogue and the Tomas Rivera Policy Institute, Washington, DC.
- World Bank. Forthcoming. Migration and Remittances Factbook 2010. Washington, DC: World Bank.