



Economic Premise

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Impact of the Global Financial Crisis on Migration and Remittances

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Remittances to developing countries are estimated to have declined by 6.1 percent in 2009 as a result of weak job markets in major destination countries. Although new migration has fallen, it is still positive. The stock of international migrants, therefore, has continued to grow and remittances have remained resilient. Going forward, remittance flows to Latin America are expected to recover, whereas those to East Asia and South Asia are likely to slow. Policy responses should involve efforts to facilitate migration and remittances to make these flows cheaper, safer, and more productive for both the sending and the receiving countries.

Remittances sent by international migrants worldwide are an important source of external finance for many developing countries. The global financial crisis has raised fears of a slow-down or even a reversal of migration flows and a consequent decline in remittance flows, especially to low-income countries. In this note, 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 its 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, resulting in a global crisis. Migrant destinations in both the North and 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 6.1 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 \$338 billion (see table 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.

Table 1. Remittance Flows to Developing Countries, 2006–11

Remittance flows	2006	2007	2008	2009 ^a	2010 ^b	2011 ^b
<i>(\$ billions)</i>						
Developing countries	235	289	338	317	322	334
East Asia and Pacific	58	71	86	85	85	89
Europe and Central Asia	37	51	58	49	51	53
Latin America and Caribbean	59	63	65	58	59	61
Middle East and North Africa	26	31	35	32	33	34
South Asia	43	54	73	72	73	76
Sub-Saharan Africa	13	19	21	21	21	22
Low-income countries	20	25	32	32	33	34
Middle-income countries	215	265	306	285	289	300
World	317	385	444	420	425	441
<i>Growth rate (%)</i>						
Developing countries	18.3	22.9	16.7	-6.1	1.4	3.9
East Asia and Pacific	14.1	23.8	20.8	-1.5	0.8	3.7
Europe and Central Asia	24.1	36.0	13.8	-14.7	2.7	5.0
Latin America and Caribbean	18.1	6.8	2.3	-9.6	0.5	3.5
Middle East and North Africa	4.6	20.1	10.6	-7.2	1.5	3.3
South Asia	25.3	27.1	35.6	-1.8	1.7	4.1
Sub-Saharan Africa	34.7	47.6	13.4	-2.9	1.8	3.9
Low-income countries	23.9	23.4	28.3	0.7	2.6	4.6
Middle-income countries	17.8	22.9	15.6	-6.8	1.2	3.8
World	15.3	21.3	15.3	-5.3	1.2	3.7

Source: Ratha, Mohapatra, and Silwal (2009).

Note: Remittances are defined as the sum of workers' remittances, compensation of employees, and migrant transfers. For data definitions and the entire data set, see <http://www.worldbank.org/prospects/migrationandremittances>.

a. Estimated.

b. Forecast.

Based on high-frequency data for the first three quarters of 2009, we estimate that remittance flows to developing countries reached \$317 billion in 2009, marking a 6.1 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 down 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.

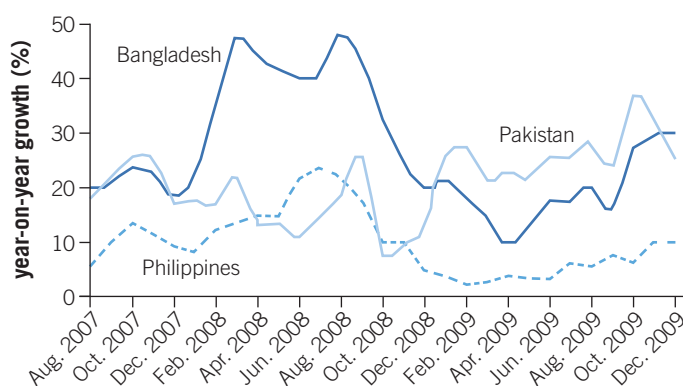
Remittance flows to South Asia and East Asia have proved to be stronger than our earlier expectations. Flows to Pakistan increased by 23.9 percent in 2009, and flows to Bangladesh and Nepal increased by 19.4 percent and 13.2 percent, respectively (figure 1). Remittance flows to the East Asia and Pacific region were also stronger than expected. In the Philip-

pinas, a surge in the last quarter of 2009 increased remittances by 5.6 percent (figure 1) 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 were expected earlier. In Mexico, they fell by 15.7 percent in 2009; and flows to El Salvador decreased by 8.5 percent (figure 2). However, the decline in flows appears to be bottoming 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.

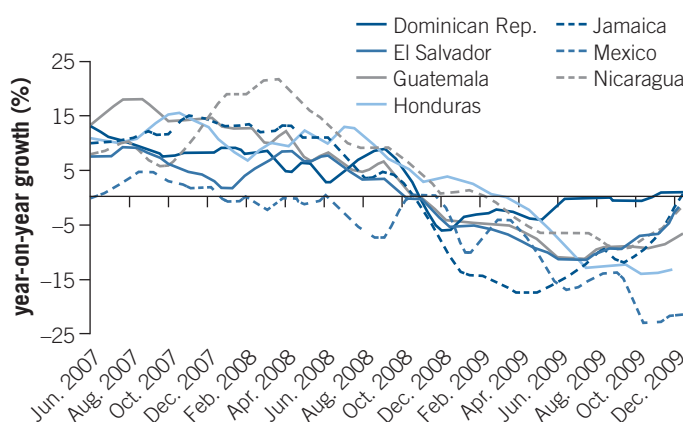
Figure 1. Remittance Flows to Bangladesh, Pakistan, and the Philippines



Sources: Central banks of the countries represented.

Note: Growth of three-month moving average.

Figure 2. Remittance Flows to Latin America and the Caribbean



Sources: Central banks of the countries represented.

Note: Growth of three-month moving average.

Remittances to the Middle East and North Africa region were also weaker than anticipated. Flows to Egypt (the largest recipient in the region) declined by 15 percent; and to Morocco, they fell by 9 percent in 2009. Sub-Saharan Africa did relatively better, with flows to Nigeria, Kenya, and Uganda showing 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: (1) effects of the economic crisis on migrant stocks, (2) efforts by migrants to cut consumption, and (3) currency effects. These factors are discussed below.

Effect of current 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). In understanding factors that influence the impact of the current 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:

$$M_t = (1-\delta)M_{t-1} - R_t + N_t, \quad (\text{Eq. 1})$$

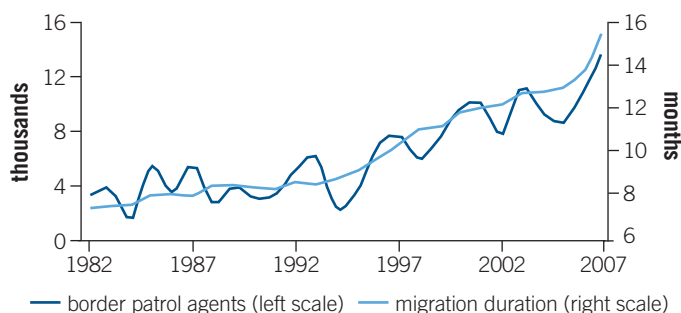
where M_t = new migrant stock, M_{t-1} = existing stock of migrants, R_t = return migration, N_t = new migration, and δ is the death rate (plus assimilation rate, as applicable) of migrants in the host countries. Equivalently,

$$\Delta M_t = N_t - R_t - \delta M_{t-1}, \quad (\text{Eq. 2})$$

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 (See Awad [2009], Fix et al. [2009], and 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

Figure 3. U.S.-Mexico Border Controls and Mexican Migrants' Duration of Stay in the United States



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

more recently (figure 3). 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 are also not working as expected in the Czech Republic, Japan, and Spain. In part because of the weak response to financial incentives, Spain and other European countries are now considering stronger immigration restrictions. 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.

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 the previous year. 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 worst 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.

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.

Efforts by migrants to cut consumption

Remittances are a small share of migrants' incomes, and they typically continue to send remittances even when hit by income shocks. Interviews with migrants in Dubai suggest that many migrant workers have sent their families back home and have reduced their daily expenditures in response to wage cuts by employers. Migrants are also sharing accommodations to enable them to send remittances. Many migrants who have lost jobs are not leaving; rather, they are taking lower-paying jobs with other employers, and often staying on illegally. There are anecdotal reports of family members sending "reverse remittances" to help migrants.

Currency effects

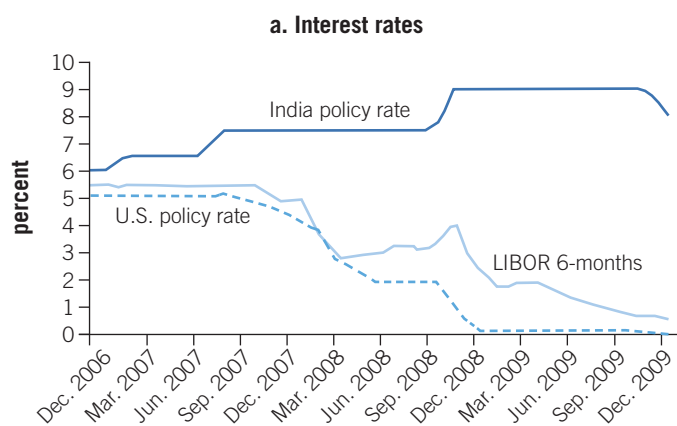
Exchange rate movement can be an important factor affecting the U.S. dollar valuation of remittances. For example, in U.S. dollar terms, remittance flows to the Kyrgyz Republic, Armenia, and Tajikistan declined by 15 percent, 33 percent, and 34 percent, respectively, in the first half of 2009, compared 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/investment motives. As highlighted in Ratha, Mohapatra, and Silwal (2009), 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 (figure 4). There are signs that a similar surge in investment-related remittance flows is happening in Bangladesh, Ethiopia, Moldova, Nepal, Pakistan, the Philippines, and Tajikistan.

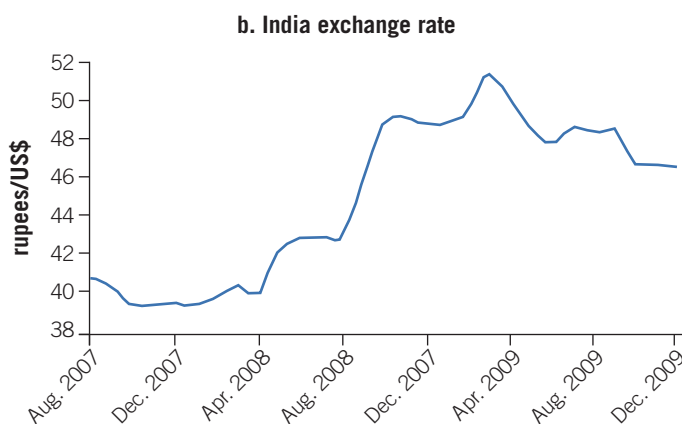
Outlook for Migration and Remittances in 2010–11

World Bank and International Monetary Fund estimates show that economic growth is beginning to recover after the

Figure 4. Widening Interest Rate Differentials and Exchange Rate Depreciation in India



Note: LIBOR = London interbank offered rate.



Source: Development Prospects Group, World Bank.

global slump that began in 2008. Although recovery will gather pace, according to the forecasts, growth will remain weak in 2010 and 2011, and is unlikely to reach the brisk pace seen before the crisis. In line with this outlook, and based on our methodology of forecasting remittances using a bilateral migration matrix and the World Bank's forecasts of nominal GDP growth, we have revised our forecasts for remittances. Flows to developing countries are expected to remain almost flat in 2010 (with a modest increase of 1.4 percent) and grow by 3.9 percent in 2011 (table 1). With this sluggish pace of recovery, remittance flows are unlikely to reach the 2008 level even by 2011.

The decline in remittance flows to Latin America and the Caribbean appears to be bottoming out. However, partly because of the large declines in 2009, flows to Europe and Central Asia and to Latin America and the Caribbean by 2011 are unlikely to recover to the pre-crisis 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 (figure 5). 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 6).

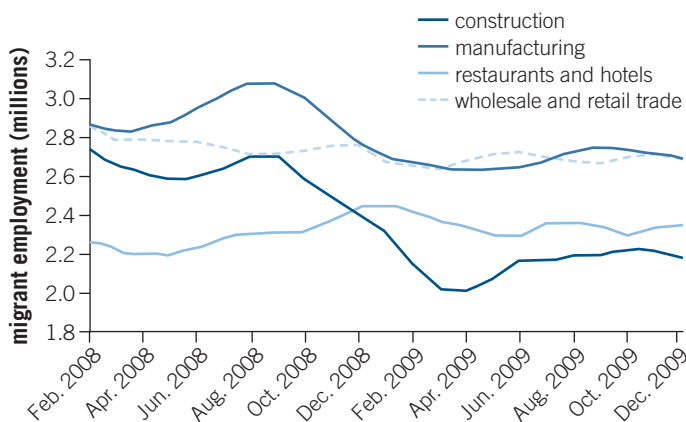
Other migrant-sending countries may also experience a lagged slowdown in remittance flows in response to slowing activities in other destination countries. A deceleration in construction activities in the GCC countries may affect migrant-

sending countries in East Asia and South Asia. Although a recovery in oil prices and fiscal stimulus implemented by GCC governments is 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. Many economists are predicting a “jobless” global recovery. The labor market in the United States is expected to remain weak in the medium term, and unemployment rates are expected to remain high. 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.

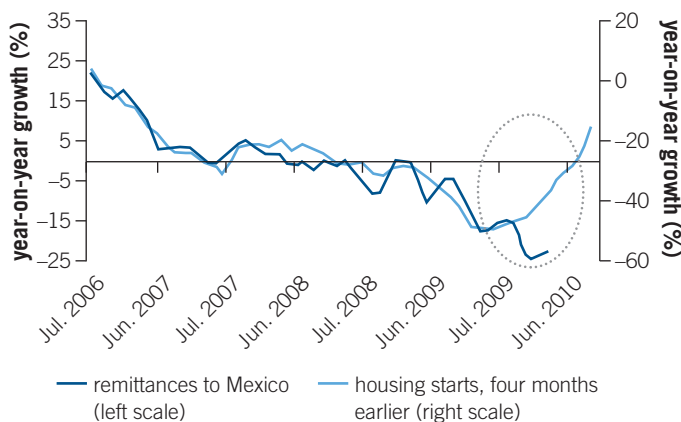
A third source of risk is that currency movements are highly unpredictable. If the currencies of receiving countries start appreciating with respect to the U.S. dollar, then the “sale effect” (remittances for investment in cheaper assets) may reverse. This especially applies to India, which experienced 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.

Figure 5. U.S. Migrant Employment in Construction and Manufacturing



Source: U.S. Census Bureau.

Figure 6. Correlation between U.S. Construction Sector Activity and Remittances to Mexico



Sources: U.S. Census Bureau; Banco de Mexico.

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 trade-off 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 1). These workers should be provided

Box 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 earlier, these flows have remained more resilient than many other types of resource flows (such as private debt and equity flows and foreign direct investment that 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 last 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 things 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.

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.

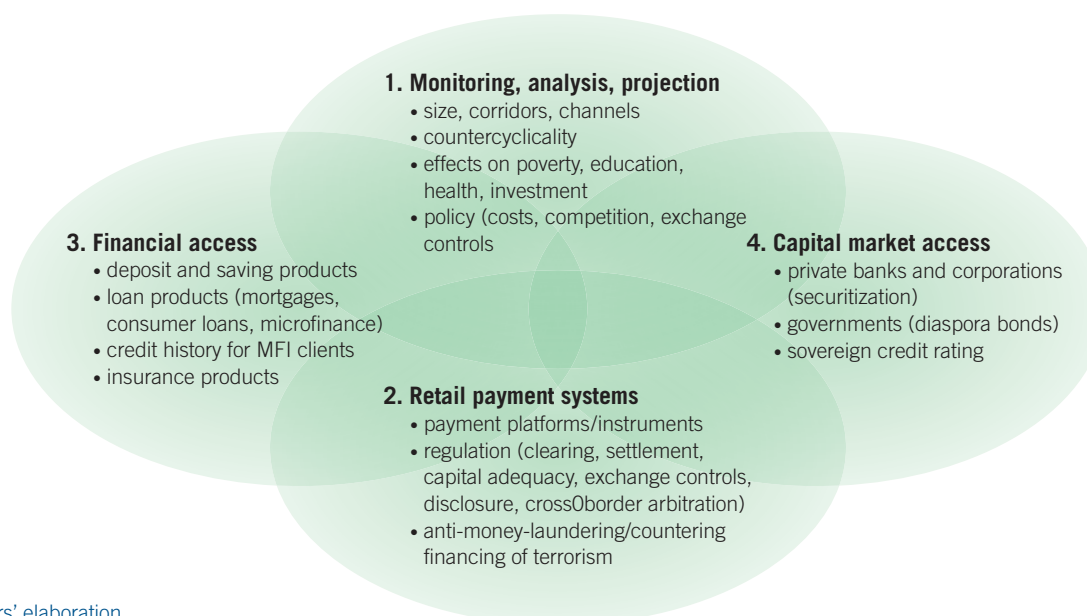
Several countries are beginning to look at facilitating remittances in the face of external financing constraints, including introducing incentives to send more remittances through formal channels. For example, Pakistan has introduced a program that subsidizes remittance service providers for a certain 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 cost as little as 1 percent of the amount transferred. 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

Figure 7. International Remittances Agenda



Source: Authors' elaboration.
 Note: MFI = microfinance institution.

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 7, would involve (1) monitoring, analysis and projections, (2) improving retail payment systems through use of better technologies and appropriate regulatory changes, (3) linking remittances to financial access at the household level, and (4) leveraging remittances for capital market access at the institutional or macroeconomic level.

Notes

1. Remittance flows to Haiti are also likely to surge in 2010, in response to the devastating earthquake in January; see <http://www.ssrc.org/features/pages/haiti-now-and-next/1338/1438/>.

2. Green and Winters (forthcoming) have examined migration trends during several past crises (in the 1831–1913

period 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 in the 1992–2004 period. (See also Hatton and Williamson 2009.)

About the Authors

Sanket Mohapatra is an economist and Dilip Ratha is a lead economist in the Development Prospects Group of the World Bank. This note draws on Migration and Development Briefs 8 through 11, published between November 2008 and November 2009 (coauthored with Ani Sihval), <http://go.worldbank.org/SSW3DDNLQ0>; and on “Dollars Without Borders” by Dilip Ratha, published in Foreign Affairs, October 16, 2009, <http://www.foreignaffairs.com/articles/65448/dilip-ratha/dollars-without-borders>. For more information, see the PeopleMove blog at <http://peoplemove.worldbank.org>.

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