

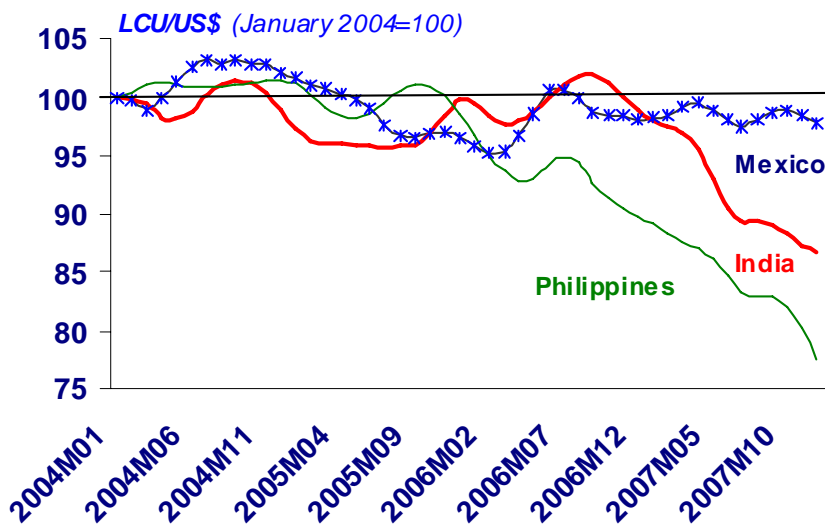
Sanket Mohapatra To DECPG Migration Team Distribution List  
03/14/2008 10:21 PM  
37721 DECPG Subject **Remittances Dispatch: US dollar depreciation and remittance flows to developing countries**

Dear Colleagues,

Many currencies have appreciated against the U.S dollar in recent years. We have been receiving requests for information on the impact of the U.S dollar depreciation on remittance flows to developing countries, specially for the Philippines, Mexico and India, which are among the largest remittance-recipients. We have provided a brief (and necessarily partial) analysis of this issue below.

Remittance flows to the Philippines increased by nearly 50 percent between 2004 and 2007. However, a large part of this increase has been simply to preserve the purchasing power of recipients, since the Philippine peso appreciated by 33 percent against the U.S dollar. Similarly, while remittances to India and Mexico increased by 44 percent and 38 percent respectively, the Indian rupee appreciated by 15 percent and the Mexican peso held firm against the dollar during this period (see chart 1 below).

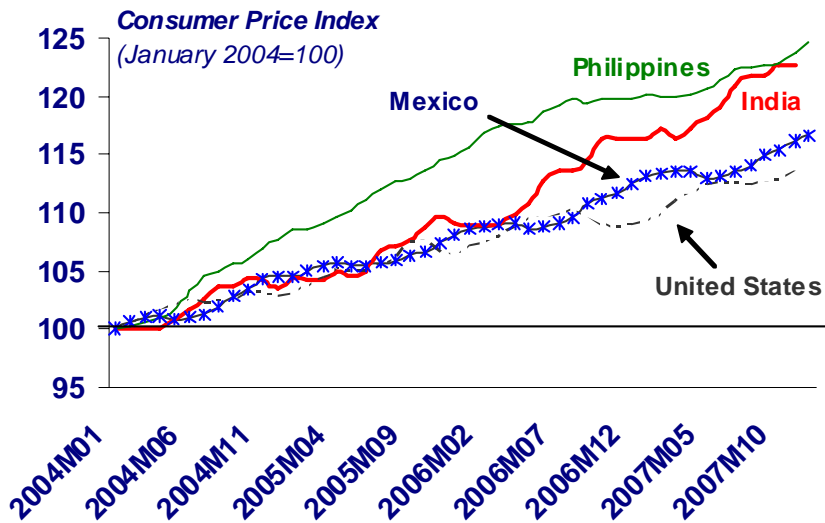
Chart 1: Currency appreciation in the major remittance-receiving countries



Source: The market exchange rates (local currency units per U.S dollar) are from the IMF's International Financial Statistics.

Rising costs of living are further eroding the purchasing power of remittances received by these countries. Chart 2 below shows the cumulative consumer price index (CPI) inflation in these countries during this period. Furthermore, the international prices of oil and food grains, measured in current U.S dollars have been rising at alarming rates—the price of crude oil nearly tripled from \$31 per barrel in January 2004 to \$90 per barrel by the end of 2007 (and has since crossed the \$100 mark in 2008), while the international price of maize and rice increased by 56 and 70 percent respectively during this period. These increases are largely due to global economic factors that are largely outside the control of policymakers in the remittance-recipient developing countries.

Chart 2: Increasing costs of living



Source: IMF's International Financial Statistics

Using the average annual exchange rates of local currencies against the US dollar and the consumer price index (CPI) for the three countries, we estimate how much remittances have increased relative to 2004 after accounting for the appreciation of domestic currencies and inflation (see table 1 below).

Table 1: Remittances in current U.S dollars and in domestic purchasing power terms

	Philippines	India	Mexico
Remittances in 2004 (\$ bil.)	11.5	18.6	18.1
Remittances in 2007 (\$ bil.)	17.0	27.0	25.0
Remittances in 2007 at constant 2004 purchasing power, assuming no domestic inflation (\$ bil.)	14.0	24.6	24.2
Remittances in 2007 in constant 2004 purchasing power, with domestic inflation (\$ bil.)	11.8	21.2	21.6
Percent increase in nominal U.S \$ terms	48%	44%	38%
Percent increase in constant 2004 purchasing power, assuming no domestic inflation	22%	31%	33%
Percent increase in constant 2004 purchasing power, with domestic inflation	3%	13%	19%

Remittances are defined as the sum of workers' remittances, compensation of employees, and migrant transfers. The appreciation of a currency relative to the US dollar is calculated as the percentage change in the US dollar value per local currency unit, or as  $(X_t - X_{t-1})/X_{t-1}$ , where  $X_t$  = U.S dollars per local currency unit. The calculation in table 1 are based on the consumer price index (CPI) and market exchange rates from the IMF's International Financial Statistics and remittance data from the World Bank's [Migration and Remittances Factbook 2008](#).

The results of table 1 can be summarized as follows:

- In the Philippines, while remittances increased by nearly 50 percent in nominal dollar terms between 2004 and 2007, they increased by 22 percent after accounting for the appreciation of the Philippine Peso. After adjusting for domestic inflation, they increased by only 3 percent in this period.

- In India, which had a similar increase in prices during this three-year period but a relatively smaller appreciation against the US dollar compared to the Philippines, remittances increased by 44 percent in nominal dollars, by 32 percent after accounting for the appreciation of the Rupee, and by 13 percent after accounting also for inflation.
- In Mexico, which had the smallest appreciation against the US dollar and also the lowest cumulative inflation during this three-year period, the increase in remittances was 38 percent in nominal dollars, 34 percent after accounting for the effect of appreciation, and 19 percent after accounting for domestic inflation.

If instead of using CPI, purchasing power is measured in terms of the prices of crude oil, it would require almost twice the increase in actual remittances between 2004 and 2007 to maintain the purchasing power of remittances in these three countries. When measured in international food grain prices, the increase in remittances needed to simply maintain purchasing power is at least as large as the actual increase for all three countries. However, not all of the increase in international prices of oil and food grains is typically passed on to consumers, since countries often resort to price controls and subsidies for the poor.

We are seeing pressures for renegotiations of wage contracts in some migrant-receiving countries where the currency is dollar-denominated or linked to the U.S dollar. Thousands of migrant workers (mainly from South Asia) went on strike in the United Arab Emirates in late 2007 demanding higher wages to compensate for rising living costs in the host country and falling domestic purchasing power of remittances in their home countries. Labor market unrest erupted again in March as the dirham continued to weaken further together with the U.S dollar during the first quarter of 2008.

The currency appreciation may also cause potential migrants to more favorably consider domestic employment or seek destinations other than the United States. There is anecdotal evidence of an increase in migration to Europe in recent years. Surveys by the Inter-American Development Bank suggest that in Central American countries, the share of remittances from the U.S has declined from over 90 percent to around 80 percent in the last four years. Bilateral estimates of remittances for the OECD suggest that Latin America countries received nearly \$5 billion only from Spain in 2006. The depreciation of the U.S dollar may make Europe a more attractive destination especially for skilled migrants, who European countries are already attempting to attract through schemes such as a proposed "Blue Card" which will allow unrestricted entry to EU labor markets after an initial period in the host EU country.

Governments in the migrant-sending countries are also feeling pressure to act to protect the incomes of migrants and remittance-recipients. In the Philippines, where remittances are around 13 percent of gross domestic product, the government is promoting hedging and other financial products for overseas Filipino workers (OFWs). The Philippines recently announced the launch of Certificates of Deposit in March and is considering issuing retail treasury bonds--with some cover against exchange rate risk--to help the OFWs deal with the Peso appreciation by providing additional investment avenues for OFWs and to promote a savings culture.

To conclude, while the macroeconomic trends outlined above are suggestive of adverse impacts on the standard of living of remittance recipients, it would require a rigorous evaluation of impacts at the household level to draw conclusions about their effect on poverty and other relevant measures of welfare. The broader trends, however, point to the need for policy measures to diversify income sources, improve productivity and external competitiveness and create better domestic employment opportunities (along with measures to better tap into the resources of the diaspora) to more effectively respond to a possible medium-term decline of the U.S dollar.

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This quick note was prepared by Sanket Mohapatra and Dilip Ratha. These informal, occasional e-mail “dispatches” are intended for World Bank staff and others interested in the topic of migration, remittances, and development. The views expressed are those of the authors and may not be attributed to the World Bank Group. The latest data on remittances and other useful resources are available at [www.worldbank.org/prospects/migrationandremittances](http://www.worldbank.org/prospects/migrationandremittances). Feedback, and requests to be added to or dropped from the distribution list, may be sent to Dilip Ratha at [dratha@worldbank.org](mailto:dratha@worldbank.org).