

Who we are:

Pedro Conceição (Director)
Namsuk Kim
Heloisa Marone
Thierry Soret
Nina Thelen
Yanchun Zhang

About:

Issues and Facts on Development

is a brief issued by the Office of Development Studies (ODS), United Nations Development Programme. The publication takes on up-to-date topics in the area of development and shows them in a new light. It consists of a main feature titled "the current issue" and a number of mini features headed "facts at a glance".

For inquiries on how to receive this brief regularly or to contact the authors, please send an email to ods@undp.org.

This brief should not be reported as representing the views of UNDP. The views expressed in this brief are those of the author(s) and do not necessarily represent those of the UNDP policy. Briefs describe research in progress by the author(s) and are published to elicit comments and to further debate.

Inside this issue:

The Current Issue I	2
Facts at a Glance I	4
Facts at a Glance 2	5

Issues and Facts on Development

Office of Development Studies, United Nations Development Programme

Issues and Facts on Development, Issue 7 **November / December 2008**

The Current Issue

The Current Issue I

Remittances and the Business Cycle

– Where do we Stand?

By Heloisa Marone

It is still early to determine what will be the exact impact of the ongoing economic and financial crisis on the world financial and trade flows but the general consensus is that the strong increase in flows observed in particular during the last 5 years is unlikely to continue in 2009 given the weak economic outlook.



Facts at a Glance

Facts at a Glance I

Mapping Remittances in 2007

By Heloisa Marone

Where are remittances flowing to? And where are remittances coming from? This article provides some data on the current status.

Facts at a Glance 2

Four-Step Summary of the Current Financial Crisis

By Heloisa Marone and Nina Thelen

This note describes the unfolding of the current financial crisis.

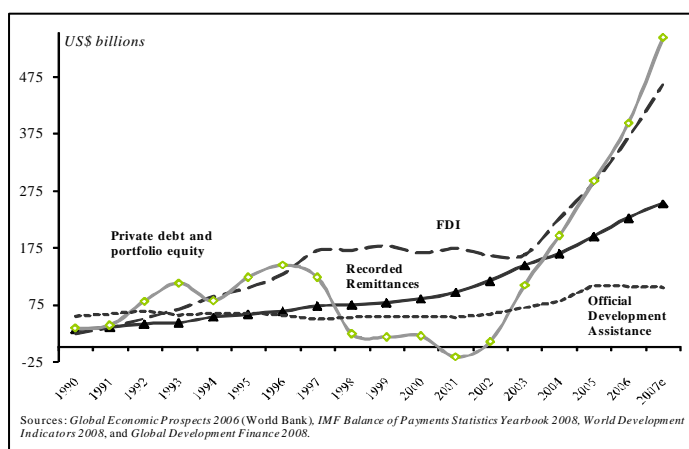
The Current Issue I:

Remittances and the Business Cycle – Where do we Stand?

By Heloisa Marone

It is still early to determine what will be the exact impact of the ongoing financial crisis on the world financial and trade flows but the general consensus is that the strong increase in flows observed in particular during the last 5 years (Chart 1) is unlikely to continue in 2009 given the weak economic outlook. Late in 2008, the IMF revised its October forecast of the world's output growth for 2009 down from 3.0% to 2.2% y-o-y. It also expects the world trade volume growth to drop to 2.2% y-o-y in 2009, which is more than half the growth rate in 2007. The World Bank also projects a decline in world trade.

Chart 1. Remittances and Capital Flows to Developing Countries



Source: Ratha, Mohapatra, Vijayalakshmi, and Xu 2007, p. 2, figure 1.

The grim economic outlook and its potential consequent effect on trade, remittances, FDI, portfolio investment and official flows has raised concerns that financing for development will weaken. Indeed, the World Bank estimates that remittances could fall by 0.9 percent (or in the worst case, 6 percent) in 2009 but it cautions that given the level of uncertainty, its forecast ought to be taken as an attempt to understand the risks rather than being a precise estimate.

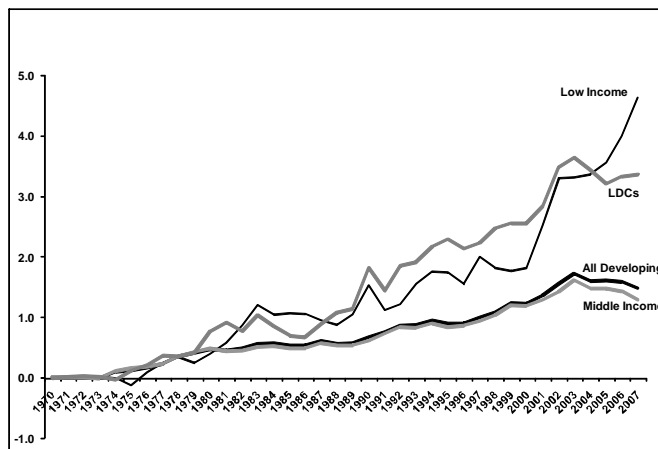
This note presents some key results from a simple cyclicity analysis that aims to measure the correlation between economic downturn and remittances flows. One of the main findings is that while remittances to the developing world are much more volatile than the world's output, remittances volatility dropped significantly in the period between 2000 and 2007. This is particularly important considering that volatility increases uncertainty and thus, affects planning and decision making. Looking ahead and towards a dimmer economic outlook, while it is likely that remittances to all developing countries will drop in response to a fall in world's output, it appears that the upper middle income economies are likely to be the ones who will be hit first and the hardest.

A Historical Context

In the last almost 40 years, remittances as a source of external financing have grown in importance for all developing countries in

general, and, in particular, for low-income countries and the least developed countries (LDCs) (Chart 2).

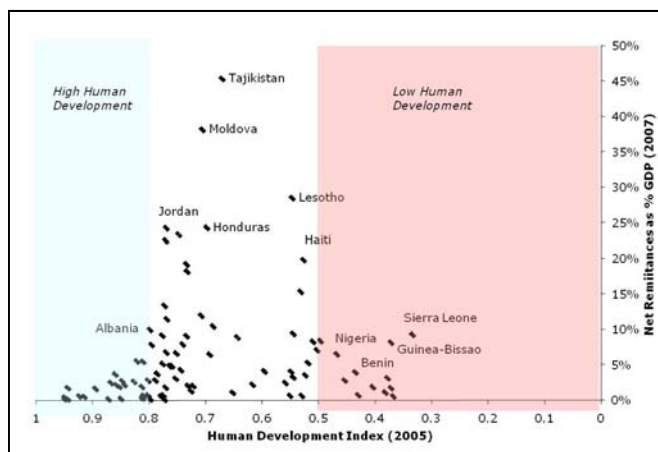
Chart 2. Net Remittances to Developing Countries (as % of GDP)



Source: Own computation based on data from World Bank.

Overall, in 2007 remittances as a percentage of GDP were particularly important for countries of middle human development, as measured by the HDI. Among the countries with low human development those for which remittances as a percentage of GDP are more important are Sierra Leone, Guinea-Bissau, Nigeria, and Benin (Chart 3).

Chart 3. Net Remittances and Human Development Index, 2007



Source: Own aggregation based on World Bank remittances database (November 2008) and United Nations Human Development Index (2005).

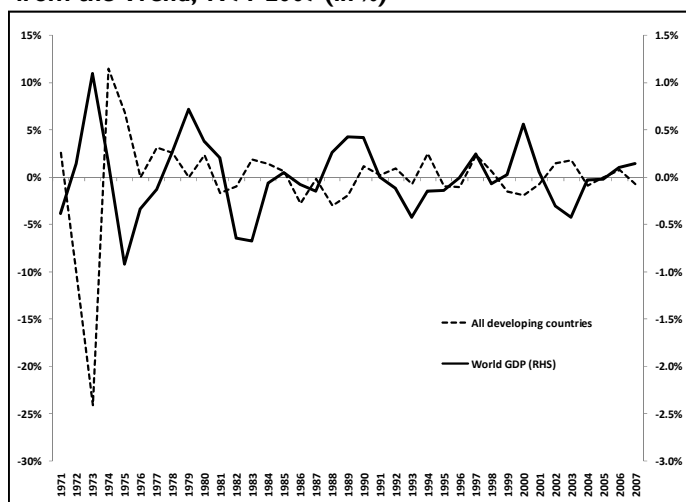
According to the World Bank, net remittances (inflows minus outflows) to low-income countries reached as much as 4.6% of their GDP in 2007, more than two and a half times the 2000 levels (Chart 2). This is in contrast to net exports of low-income countries that accounted for about -6% of GDP in 2007. Net remittances to LDCs accounted for 3.4% of their GDP while their net exports reached -8% of GDP in 2007. In other words, remittances in 2007 financed about 42% of the trade deficit in LDCs and around 77% of the trade deficit of low-income countries.

The drop in the commodity prices and the slowdown in the world's economic growth is likely to decrease trade gaps in commodity importing countries while potentially widening gaps in commodity exporting countries. Thereby, at least under the trade perspective, some countries' dependency on external sources of financing, including remittances, could in fact increase as the world's demand slows.

Remittances and the Business Cycle

A simple exercise suggests that remittances to the developing world are much more volatile than the world's output (Chart 4). When comparing deviations from trend between real GDP and remittances inflows, we find that standard deviation of remittances to all developing countries between 1971 and 2007 reached 5.1% which corresponds to more than 12 times the standard deviation of GDP (Table 1). It is worth noting, however, that in the period between 2000 and 2007, the volatility of remittances to the developing world dropped significantly to 1.3%, which represents almost 1/5 the volatility in the period between 1971 and 1999. The difference is even more striking for the upper middle income group where volatility dropped from 22.4% to 1.6% between the two periods.

Chart 4. Real GDP and Remittances Inflows: Deviations from the Trend, 1971-2007 (in %)



Note: Deviations from trend are the log difference between the variable (in real terms) and the trend which was constructed using an HP filter. Source: Own computation based on World Bank remittances database (November 2008) and IMF WEO.

Table 1. Volatility of Deviations from the Trend: Remittances Inflows and GDP, 1971-2007 (in %)

Standard Deviation (%)	Deviations From the Trend					GDP
	Remittances Inflows					
	All developing countries	Low-income countries	Middle-income	Lower MICs	Upper MICs	
1971-2007	5.1%	7.1%	5.3%	4.3%	19.8%	0.4%
1971-1999	5.8%	7.8%	6.0%	4.8%	22.4%	0.4%
2000-2007	1.3%	3.6%	1.2%	1.6%	1.6%	0.3%
F-TEST of Differences between periods	***	**	***	***	***	

Note: *** 1% significance, ** 5% significance. Source: Own computation based on World Bank remittances database (November 2008) and IMF WEO.

Table 2. Cross-correlation of Deviations from Trend: Remittances Inflows and GDP, 1971-2007 (in %)

		Cross-correlation (deviations from trend)				
		All developing countries	Low-income countries	Middle-income	Lower MICs	Upper MICs
GDP	spot	-50.0%	-39.0%	-47.2%	-33.3%	-40.3%
	lag 1	14.2%	-40.8%	20.0%	-48.8%	33.2%
	lag 2	23.9%	-14.9%	27.5%	-9.0%	36.3%
	lag 3	1.8%	20.0%	-0.3%	12.2%	4.9%
	lag 4	4.7%	39.7%	-4.6%	21.0%	-15.4%

Source: Own computation based on World Bank remittances database (November 2008) and IMF WEO.

Furthermore, the correlation between the cyclical part of world's GDP and the cyclical part of remittances to developing countries is negative 50% on the spot, but becomes positive as the GDP series is lagged (Table 2). After a two year lag the correlation is as high as 24%. Among the income categories, the upper middle income countries show the highest correlation between remittances and the world's business cycle. The correlation between the cyclical part of world's GDP and the cyclical part of remittances to upper middle income countries is 33% after only one year lag, compared to -41% for low-income countries and -49% to lower middle income countries. This may suggest that remittances flows to upper middle income countries may be hit first and hardest by a downturn in the world's output.

Conclusion

Remittances as a source of external financing have grown in importance for all developing countries, in particular, for low income countries and the LDCs. Using a simple cyclicity analysis, this study suggests that while it is likely that remittances to all developing countries will drop in response to a fall in world's output in the next two years, middle income economies, and especially the upper middle income economies are likely to be the ones who will be hit first and the hardest. Remittances to lower middle income and low-income countries appear to be more resilient.

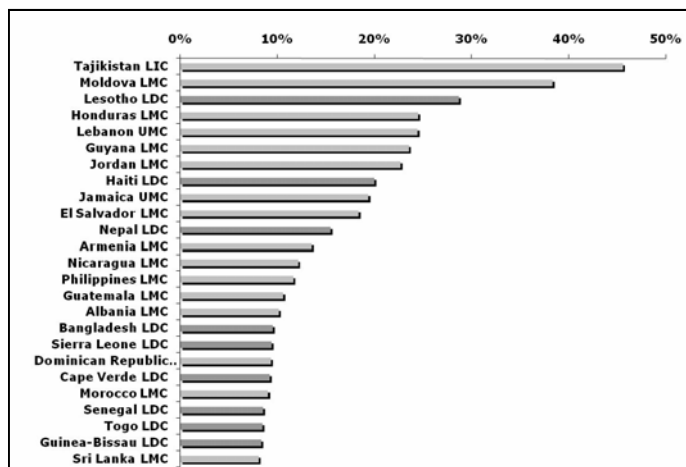
Facts at a Glance I: Mapping Remittances in 2007

By Heloisa Marone

Where are Remittances Flowing to?

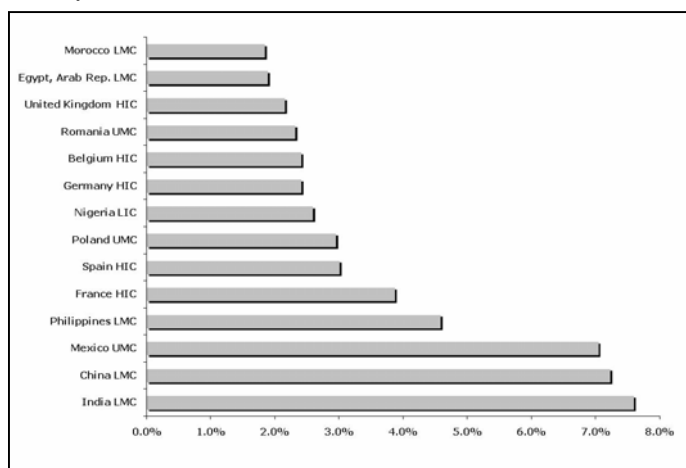
Total remittances inflows amounted to about USD355.4bn in 2007, of which USD 264.8bn went to low and middle income countries. The top recipients of remittances as a percentage of GDP in 2007 were Tajikistan (45%), Moldova (close to 40%), and Lesotho (close to 30%) (Chart 1). In absolute terms, however, India, China, and Mexico received in aggregate about 22% of the world's total remittances in 2007. Indeed, each of these countries alone received more than the LDCs as a whole (USD 17.9bn) (Chart 2).

Chart 1. Remittances Inflows: Top 25 countries, 2007 (% of GDP)



Source: Own aggregation based on World Bank income classification and remittances database (November 2008).

Chart 2. Remittances Inflows: top 51%, 2007 (as % of World Total)

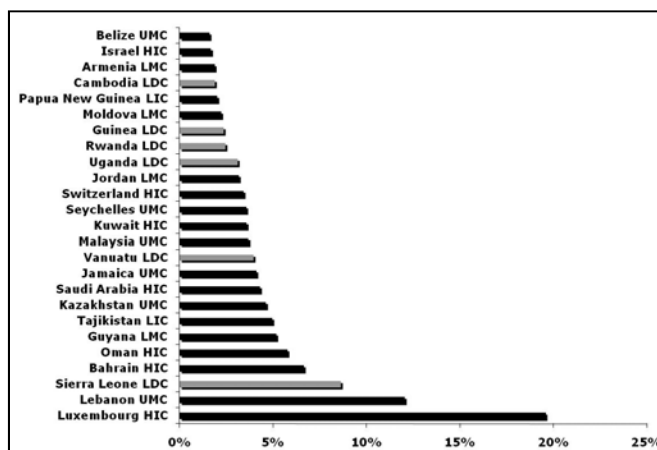


Source: Own aggregation based on World Bank income classification and remittances database (November 2008).

Where are Remittances Coming from?

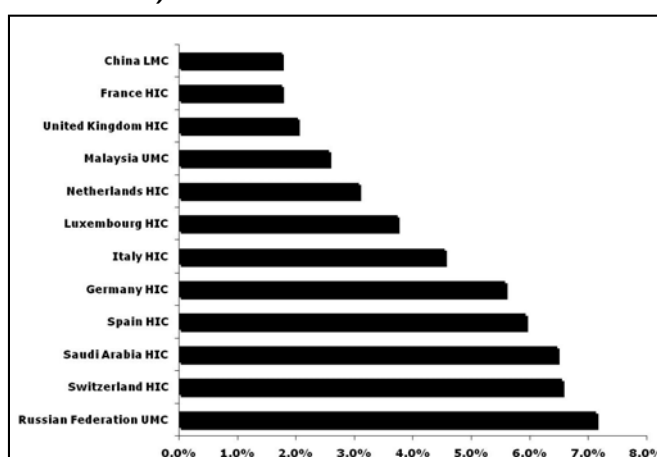
The World Bank recorded total remittances outflows of approximately USD248.2bn in 2007, of which about 66% flew out of high-income countries. As a percentage of GDP, Luxembourg (20%), Bahrain (6.6%), Oman (5.8%), and Saudi Arabia (4.3%) were, among high income countries, the top remitters in 2007 (Chart 3). In absolute terms, Russia, Switzerland and Saudi Arabia accounted for about 20% of the total world's remittances outflows in 2007. Russia's remittances outflows were as large as total remittances inflows into LDCs in 2007 (Chart 4).

Chart 3. Remittances Outflows: Top 25 countries, 2007 (% of GDP)



Source: Own aggregation based on World Bank income classification and remittances database (November 2008).

Chart 4. Remittances Outflows: top 51%, 2007 (as % of World Total)



Source: Own aggregation based on World Bank income classification and remittances database (November 2008).

Facts at a Glance 2: Four-Step Summary of the Current Financial Crisis

By Heloisa Marone and Nina Thelen

Step One: The Build-up of the Housing Price Bubble

The exceptionally strong performance of the world economy in the years preceding the crisis along with low global interest rates and ample global liquidity permitted a rapid expansion in credit and increases in asset prices, especially housing prices.

More credit meant an increase in demand for houses, leading to an increase in the prices of houses, more investment in housing construction, with the new supply of housing quickly absorbed given the expansion of credit, further price increases, with all these elements self-reinforcing each other as a credit boom built up.

Even people with low credit scores and little or no documented income (sub-prime) were managing to get loans (mortgages) to buy houses. Financial institutions were lending to sub-prime borrowers with a view that their ability to pay for their mortgages would be good as long as house prices would continue to rise. Prices, in turn, would continue to rise as long as financial institutions were willing to lend money.

Moreover, these sub-prime loans were re-packaged into new and complex securities. This repackaging included mixing the sub-prime loans with higher credit loans so that some of the new and complex securities could have better credit ratings and could thus be sold at a higher price by financial institutions. Institutions were also re-packaging the already re-packaged securities making the true value of these securities hard to grasp. At the time, given the ample liquidity, the demand for any type of securities was high, especially the demand for securities that paid a good rate of return.

Step Two: The Mortgage Meltdown

As excess housing inventory built-up and the inability of demand to absorb that inventory started, house prices started to decline. The ability of sub-prime borrowers to pay for their mortgages decreased. The risk of lending to this group increased and so did the interest rates charged in many of these mortgages.

As the price of mortgages went up, sub-prime borrowers saw themselves unable to pay for their loans and were then forced to leave or try to sell their houses. At the same time, as the cost of mortgages were going up, less people were able to afford mortgages to buy new houses. The result of more people having to sell their houses in contrast to less people being able to buy houses accelerated the drop in house prices (Chart 1).

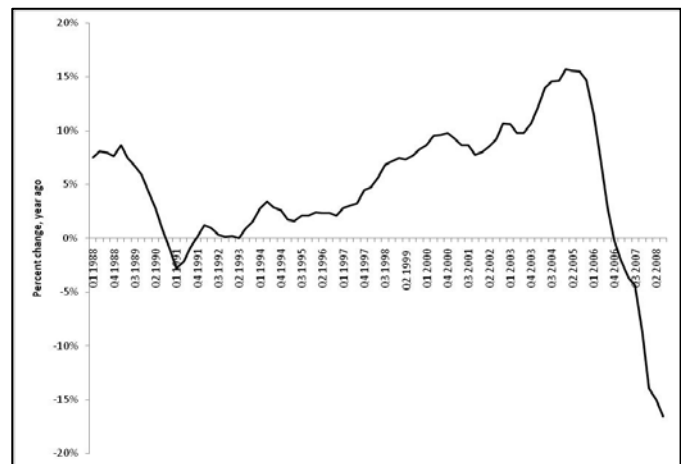
As house prices declined, the risk of sub-prime mortgages increased even further and so did interest rates, which precipitated an even larger number of people being forced to sell their houses. The consequence was a continued decline in house prices.

On the economic front, the construction sector and all other services related to the housing sector were also being hit as demand for new houses slowdown. This, in turn, would contribute

for the weakening of the economy.

This generated the “credit crunch.” Recall that sub-prime lending was being re-packaged into complex securities. These new securities were so complex that it was incredibly difficult to know where the risk actually resided or how to price it. This gave rise to major concerns about counterpart risk triggering the “credit crunch.” Faced with a drop in house prices and the problem in the sub-prime market, financial institutions could not value their own balance sheets any longer. It was not possible to see which financial institutional was in trouble and as a consequence loans between financial institutions virtually ceased.

Chart 1: S&P/Case-Shiller U.S. National Home Price Index (percent change, year ago), Q1 1988 to Q3 2008



Source: Standard & Poors, latest available data.

Step Three: De-leveraging Effects on Asset Prices

Prior to the crisis, many financial institutions, especially investment banks and hedge funds, were very highly leveraged, i.e. they were lending amounts that were many times the value of their capital. Slim equity cushions increased these institutions’ exposure to insolvency in the face of credit losses or asset write-downs related with the mortgage market. Moreover, many of these institutions relied on short-term debt – often overnight loans – to fund their operations. The credit crunch thus made them even more vulnerable.

As loans ceased and financial institutions started to sell assets to de-leverage their balance sheets, asset prices suffered a sharp decline, producing additional losses and thereby creating selling pressures for other institutions holding similar positions.

Step Four: The Economic Consequence of the Financial Crisis

The crisis soon spread to other developed countries and is now affecting the developing world very hard.

Facts at a Glance 2: Four-Step Summary of the Current Financial Crisis (continued)

By Heloisa Marone and Nina Thelen

The slowdown in global demand has been affecting negatively the trade balance of many countries such as Brazil and South Africa, in part because commodity prices are collapsing. Oil prices for instance stood closed to 147 dollars a barrel on July 11 2008 and close to 45 dollars a barrel on December 10; a 70% drop.

Shifts in risk appetite and the continuation of the process of de-leveraging in the developed world triggered a sell-off of assets in the developing world.

Outflow of capital from the developing world due to both the sell-off in financial markets and trade balance weakening have been negative to emerging market currencies. In some cases currencies in the developed world lost more than 50% of their value vis-à-vis the USD in three-month period beginning in early August.

Depreciation of currencies in developing countries has increased the value of their foreign denominated debt (especially short-term private debt) and the credit crunch decreased the possibility for roll-overs. Countries more vulnerable are those with large short-term debt, current account deficit, and low level of foreign reserves.

The cost of borrowing of emerging markets has gone up dramatically. In early October, rate spreads (i.e. the difference between sovereign interest rates in emerging market countries and the US treasury-bill) reached levels more than three times larger than one year ago. Spreads are now at levels as large as in late December 2002 after a brief dip in early November.

A severe credit crunch is leaving households and firms all over the world with fewer resources to finance spending and investment, and as a result, the global economy has weakened further with unemployment going up (e.g. November's employment report in the U.S. was one of the worst ever: non-farm payrolls dropped by 533,000, the worst decline since 1974 and one of the worst in history even relative to the size of the growing labor force). Naturally, a weak economy and higher unemployment undermine households and firms, which worsens the credit crunch, which hurts spending, and the adverse feedback loop goes on.

In late 2008, the IMF revised its growth forecast down. It now projects world output to expand by 2.2% in 2009, down by some $\frac{3}{4}$ percentage point of GDP relative to the projections in the October WEO. In advanced economies, output is forecast to contract on a full-year basis in 2009, the first such fall in the post-war period. In emerging economies, growth is projected to slow appreciably but still reach 5% in 2009.

References

Ratha, Dilip, Sanket Mohapatra, K. M. Vijayalakshmi, Zhimei Xu. 2007. "Remittance Trends 2007." Migration and Development Brief 3. Development Prospects Group, Migration and Remittances Team, World Bank, Washington. D.C. [<http://siteresources.worldbank.org/EXTDECPROSPECTS/Resources/476882-1157133580628/BriefingNote3.pdf>].

**OFFICE OF
DEVELOPMENT
STUDIES**

336 East 45th St. Uganda House,
4th Floor
New York, 10017
New York

Phone: 212-906-3683
Fax: 212-906-3676 or 5657
E-mail: ods@undp.org



About the Office of Development Studies (ODS)

The Office of Development Studies (ODS) is a research unit within the United Nations Development Programme (UNDP). Policy research and analysis at ODS is oriented primarily to support the Executive Office of UNDP on substantive economic and development issues. The mandate of ODS involves scanning the development horizon for new economic thinking on development and global challenges. ODS collects up-to-date information on key areas, and keeps abreast of all the relevant literature and policy developments. Among other functions, ODS plays an advisory role as regards development policy analysis and research, as requested by the Administrator.

Past Issues

Issue 6, Sept.-Oct. 2008:

The Current Issues:
Is Driving More Affordable in the
U.S. Than in China?
By Yanchun Zhang

Exploring Innovative Strategies for
Insuring Against Weather-Related
Disasters—The Case of the CCRIF
By Nina Thelen

Facts at a Glance:
Thinking of Opening a Business in
the BRICS?
By Heloisa Marone

Readings on the Distributional Im-
pact of Increasing Oil Prices
By Namsuk Kim

Issue 3, May 2008:

The Current Issue:
Lucas, Tolstoy, and Development
By Pedro Conceição

Facts at a Glance:
Microscoping China's CPI Inflation
By Yanchun Zhang

Issue 5, July 2008:

The Current Issue:
The HDI at 20
By Romina Bandura

Facts at a Glance:
Mushrooming Composite Indices
By Romina Bandura

Issue 2, April 2008:

The Current Issue:
Migration, Remittances, and Devel-
opment
By Ronald U. Mendoza

Facts at a Glance:
Post-Conflict Recovery Takes Time
*By Pedro Conceição and Ronald U.
Mendoza*

Mega-Sporting Events and Economic
Development
By Namsuk Kim

Issue 4, June 2008:

The Current Issue:
Public Support for Economic Glob-
alization: Assessing Convergence
and Divergence
By Thierry Soret with Nergis Gulasan

Facts at a Glance:
Looking behind the Projected
Trend of Selected Death Causes
By Nina Thelen

Issue 1, March 2008:

The Current Issue:
Slipping up the Income Ladder
By Heloisa Marone

Facts at a Glance:
In Search for Renewable Energy
By Heloisa Marone and Nina Thelen

Rising Food Prices and the Inflation
Scare
By Heloisa Marone