The Global Financial Crisis: financial flows to developing countries set to fall by one quarter

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1 Introduction

The global financial crisis that has spread around the world has caused a considerable slowdown in most developed countries and has already affected financial markets and growth prospects in developing countries. Governments around the world are trying to contain the crisis, but some suggest the worst is yet to come. House prices in the USA have collapsed with losses of up to $2.4 trillion in the eight months to July 2008 (Lin, 2008), hitting the balance sheets of banks exposed to the housing sector, which affected the entire US financial sector, and then, in turn, other developed and developing countries. Leading indicators of global economic activities, such as shipping rates, have declined at alarming rates. Asian markets are also slowing down, while orders for Chinese exports are falling.

Global financial contagion is already upon us. Stock markets in both developed and developing countries are down 50-75% from their recent peaks. The USA has lost equities worth $16.2 trillion this year. Investment banks have collapsed and high street banks have been rescued, with government sponsored packages worth more than one trillion US dollars. The International Monetary Fund (IMF) has begun to support countries such as Hungary, Iceland and Ukraine. On 8 October, interest rates were cut around the world in what looks like a coordinated response, and have fallen further in a number of countries.

The financial crisis will also have major negative implications for the real economy. The IMF has revised its growth forecasts downward twice in recent months. The world economy is expected to grow by 3.7% in 2008 and 2.2% in 2009 - nearly 2% less than its July forecast for 2009 - after growth of 5% in 2007. While China is expected to maintain growth rates of more than 8% this year, developing countries (and also Sub-Saharan Africa as a group) are expected to grow at 5.1% in 2009 (both groups had a two percentage point downward revision in growth rates), whilst advanced economies are expected to contract by 0.3%. The IMF expects world trade growth to slow down from 9.3% in 2006 to 2.1% in 2009, broadly consistent with the World Bank's forecast of stagnant trade. The impact of the crisis on developing countries will vary depending on their direct and indirect trade links to crisis affected countries, the structure of trade, the share of remittances and private financial flows from crisis affected countries, and the extent to which their fiscal and trade balance allow governments to respond.

This background note discusses a number of critical questions for those interested in development. What does the global turmoil mean for financial resources to developing countries? What are the channels through which the crisis spreads to developing countries and how are they feeling the effects? What evidence is already available? And what does this mean for the upcoming Doha conference on Finance for Development and G20 crisis meeting?

The remainder of the note is structured as follows. The second section examines how the current financial crisis affects development finance resource flows to developing countries. The third section describes the evidence so far on the effects of the financial turmoil on flows and indicators of development finance resources, and includes a summary table on the potential effects of the financial crisis on developing country financial resources. Finally, the fourth section presents policy implications.

2 How is the crisis affecting development finance resource flows?

This section focuses on the capital and financial account of the Balance of Payments (which records transactions between residents and non-residents), acknowledging that the fallout of the crisis may also be explained through effects on the current account such as export revenues, aid flows, and remittances. In conceptual terms we distinguish between different types of resource flows:

- **Private capital flows**: Foreign Direct Investment (FDI), portfolio flows and international bank and non-bank lending;
- **Official flows**: finance by development finance institutions (DFIs);
- **Capital/current transfers**: aid (ODA or official development assistance) and remittances;
- Other relevant finance flows for development include **domestic resources** such as domestic public and private spending (which enters the national accounts, not balance of payments statistics).

2.1 Foreign direct investment, portfolio flows and international bank and non-bank lending

The developing world has become more closely integrated with the global financial system especially over the past two decades. This integration is due to both pull and push factors; 'pull' factors include continuous liberalisation of capital accounts and domestic stock markets as well as large scale privatisation programmes, while 'push' factors include the increasing importance of institutional investors (mutual funds, hedge funds, etc.), and the spread of depositary receipts (negotiable receipts that represent a company's publicly traded debt or equity), and cross-listings. Thanks to all of these factors, as well as an improvement in emerging market economies' fundamentals, foreign investors have gained confidence in the potential of the developing world leading to a remarkable surge in cross-border capital flows between developed and developing countries.

Increased financial integration of developing countries can increase economic growth rates, but may also potentially increase the speed and the number of channels through which financial crises in general, and the current financial turmoil in the specific case, may propagate across the developing world. Indeed, cross-border capital flows between developed and developing countries are sensitive to macroeconomic and financial conditions not only in developing economies but also in mature markets, and the transmission of shocks through these financial channels is much quicker than through real channels. For example, a shock in income growth in a developed country may have a gradual impact on a developing country through trade channels, but could have a much quicker effect on economic activity of that country through correlations in stock market fluctuations.

There are two main financial channels through which the recent turmoil, triggered by the subprime crisis in the USA since mid-2007, has spread to developing countries:

- *Net private equity flows*: this includes foreign direct investment (FDI) aimed at acquiring a long lasting stake in developing country entities and portfolio equity inflows.
- *Net private debt flows*: this includes short, medium, and long-term debt flows.

The developed country financial crisis affects private capital flows to developing countries in a number of ways:

- *Solvency Effect.* During the current financial crisis, several financial institutions in developed countries experienced a strong deterioration in their balance sheets due to huge losses in subprime mortgages. This deterioration caused a substantial fall in the amount of bank capital and, because of risk based-capital requirements, banks have restricted asset growth by cutting back on lending. As a consequence, cross-border syndicated loans to developing countries and intra-bank lending have been curtailed.

- *Liquidity Effects.* The financial crisis increased the pressure of liquidity constraints on bank and non-bank intermediaries (i.e. institutional investors like mutual funds and hedge fund) in developed economies with adverse consequences for developing countries. Indeed, the increased uncertainty about counterparty risk in the banking sector caused a surge in demand for short-term financing thus putting banks' liquidity under pressure and making fewer resources available for cross-border bank lending. Moreover, hedge fund investors in mature economies, who had faced margin calls and redemption orders at home, have been forced to liquidate some of their foreign equity positions thus intensifying the sell-off of risky assets in the developing world.

- *Investor perceptions.* The uncertainties on the global economic outlook created by the current financial turmoil have reduced investors' appetite for risk, thus causing a flight to quality. International investors have become more risk averse and have preferred to flee to high quality assets (e.g. government bonds) from large economies like Europe and, ironically the USA, rather than continuing to invest in risky emerging markets' assets. This phenomenon has been exacerbated by investors' concerns about the existence of some overvaluation in emerging markets and about the risk of a sudden slowdown in their economic growth. Consequently, bond issuance and net private equity flows in developing countries have declined. In particular, the lack of investors' confidence has led to a reduction in the number of initial public offerings (IPOs), as foreign investors have become less willing to invest in equities issued by companies going public in developing countries.

- *Asymmetric information and herding.* Because of the opacity of the structured products market, the subprime mortgages crisis has led to a high degree of asymmetric information among banks about the distribution of losses and counterparty risk. Banks have, therefore, become reluctant to lend even to developing countries and have increased the cost of borrowing. The presence of information asymmetries among investors have also led to the herding phenomena, where uninformed investors decide to sell-off risky assets in developing countries just following the behaviour of perceived informed investors.

- *Real economy effects.* Given the strong links between global growth and net private capital flows to developing economies, the projected reduction in global growth mainly driven by developed countries may lead to a further reduction in net private capital flows to developing countries.

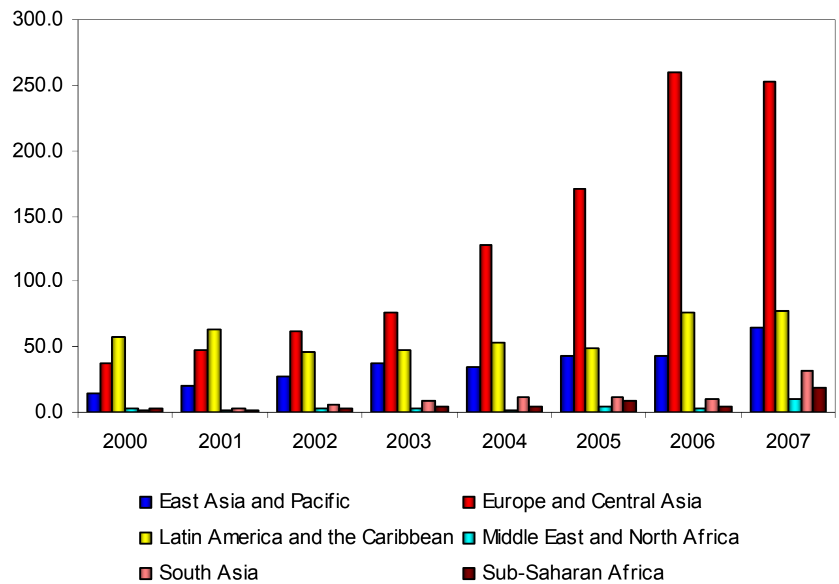
- *Liability Management Effect.* The absence of a prudent liability management by financial institutions may have additional negative effects on capital flows to developing countries, because of increasing uncertainty of whether developing countries will be able to roll over short-term debt as well as medium and long-term debt. According to the Institute of International Finance (IIF, 2008), which has looked at 30 developing countries, short-term debt flows have increased in the last two years from an average value of $25 billion in 1997-2006 to $253 billion in 2007 and $141 billion in 2008. On the other hand, the overall amortisation payments of debt due by private sector borrowers are expected to amount to $90 billion in the last quarter of 2008, and to $130 billion in the first half of 2009. Brazil and Russia are among the countries with the largest debt close to be due in the next months.

The magnitude of these effects on net private capital flows to developing countries will differ country-by-country depending on a number of factors:

- *The composition of international financial flows.* Bank lending and, to a lesser extent, portfolio flows are substantially more volatile than foreign direct investment, especially in times of turbulence (World Bank, 2003 and World Bank, 2004). This implies that developing countries that have, in the past, relied heavily on borrowing from foreign banks to finance the growth of their domestic market are expected to suffer more from the current financial crisis. Chart 1 suggests that the financial turmoil will have a strong impact on

European and Central Asian developing countries where gross cross-border bank lending has increased from about $37 billion in 2000 to a value of $252 billion in 2007.

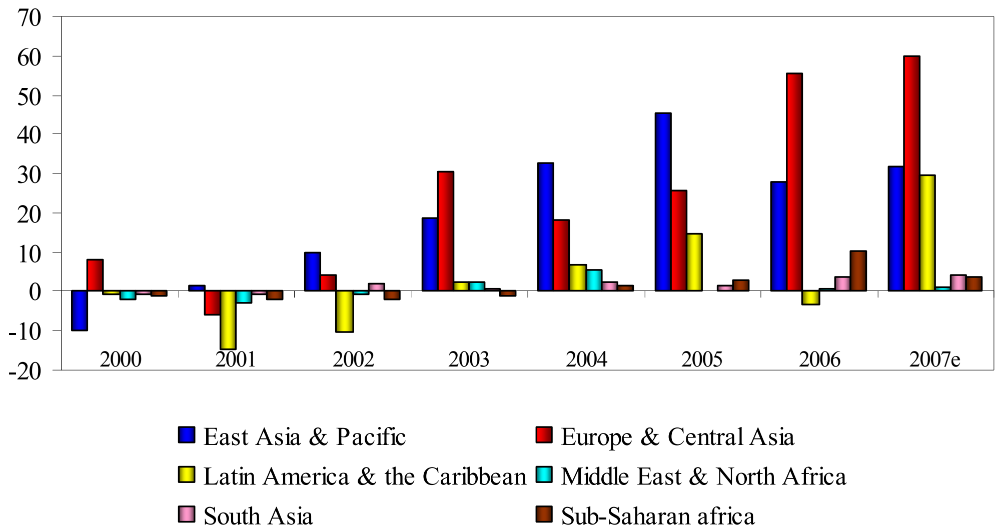
Chart 1 Gross Cross-Border Bank Lending to Developing Countries, by region
(2000-2007)



Source: World Bank's Global Development Finance Report, 2008; Note: Amounts in billions of US $.

- *The maturity structure of external debt* may affect the incidence and the severity of the financial crisis. In particular, evidence exists suggesting that countries where external debt has a short maturity are more exposed to risk of being hit by financial crises. Chart 2 highlights that the financial turmoil is more likely to spread to developing countries in Europe and Central Asia.

Chart 2 Net Short-Term Debt Flows to Developing Countries, by region
(2000-2007)



Source: World Bank's Global Development Finance Report, 2008; Note: Amounts in billions of US $.

- *The current account balance and the reserve holdings of each developing country*. Indeed, large current account surpluses and reserve holdings may provide insurance against a sudden shift in private capital flows reducing the adverse shocks of the financial turmoil. For this reason, Emerging Asia and the Gulf Cooperation Council (GCC) countries that have huge current account surpluses are expected to suffer less from a sudden reversal in foreign financing than Latin American countries, where the current account surplus is contracting, or even worse Emerging Europe countries, where the current account deficit is high and increasing (see Table 1).

Table 1 Current Account Balance in Emerging Market Economies, by region
(2006-2008)

Region	2006	2007	2008e
Emerging Europe	21.50	-23.60	-34.60
Emerging Asia	289.30	421.80	365.90
Latin America	54.00	26.60	14.00
Africa/Middle East	14.90	11.00	33.00
GCC Countries	210.60	206.10	377.40

Source: Institute of International Finance (IIF), October 12, 2008; Note: Amounts in billions of US $; e = estimate.

2.2 Trade and development finance

Trade and development finance are important sources of external finance for developing countries. Export credit is short term finance that enables trade to take place. Recently, developing country firms have funded themselves in developed countries by issuing bonds and arranging loans which means that the financial crisis affects such firms. These effects are also felt through the lack of export credits as these are important for countries heavily dependent on exports.

The family of multilateral and bilateral DFIs have substantial resources backed by guarantees and capital endowments from governments in developed countries. In 2005, total commitments to loans, equity, guarantees and debt securities of the main regional, multi-lateral and bi-lateral DFIs totaled $45 billion (Table 2).

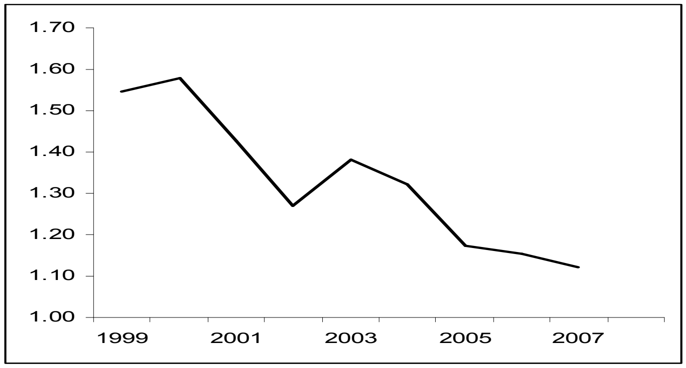
The mandates of DFIs require them to leverage such liquidity to invest in emerging markets, and for some, low-income and frontier markets. When emerging markets are doing well, DFIs will be able to obtain high returns on equity investments and developing country firms will be able to repay loans. Until recently, there have been very high levels of income across the main DFIs. At the IFC, in 2006/7 total capital (capital stock plus designated and undesignated retained earnings) was close to total commitments of loans, equity and debt securities (see Chart 3), and the institution's capital adequacy ratio has risen from 45% in 2002/3 to 57% for 2006/7. The FMO's (Dutch DFI) capital adequacy has increased from 38.4% in 2000 to 50.5% in 2005. CDC's (UK DFID) rate of return outpaced emerging markets stock market indices.

Table 2 Annual commitments by DFIs, US$ million

	2005	2004	2003
IFC	6,703.00	5,370.00	4,750.00
EBRD	5,328.07	5,138.56	4,207.82
EIB (FEMIP,ALA,IF)	6,842.41	6,063.57	5,543.33
IADB	7,147.50	6,019.90	6,810.00
ADB	7,432.40	5,712.90	6,295.70
AFDB	3,279.89	4,319.39	2,631.80
FMO	870.78	752.20	621.96
DEG	837.14	699.98	572.20
OPIC	2612.00	3217.00	2000.00
NIB	1,308.04	840.47	837.95
PROPARCO	461.05	269.17	
CDC	283.92	366.00	425.43
MIGA	1300.00	1200.00	1100.00
TOTAL	44,406.20	39,969.14	35,796.18

Source: Dellacha and te Velde (2007)

Chart 3 Ratio of Portfolio Commitments to Total Capital, IFC

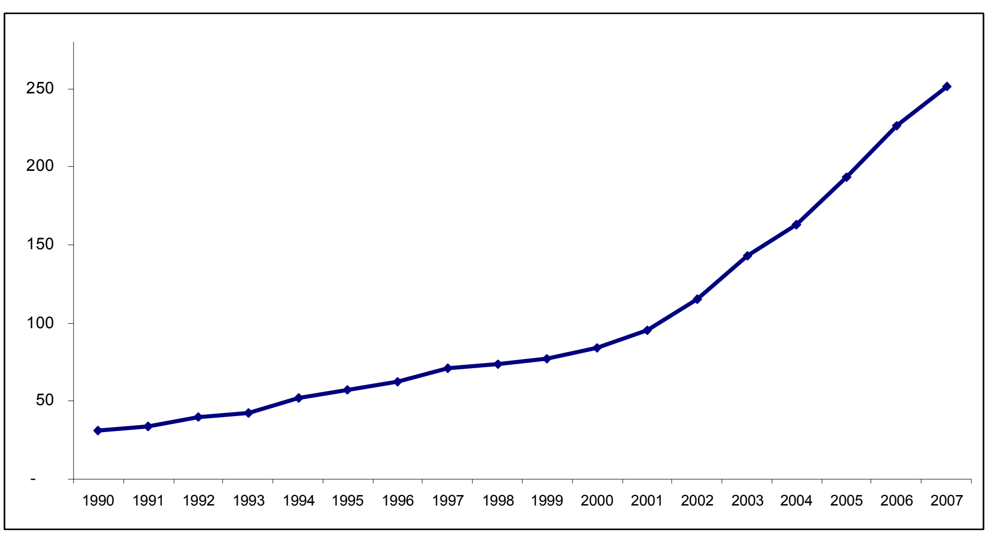


Source: IFC; Note: Commitments include loans, equity investments and debt securities. Capital includes stock plus designated and undesignated retained earnings.

2.3 Remittances

Remittances sent home by migrants represent the largest source of external capital in many developing countries. This source is now being affected by the current financial crisis. Remittances were estimated at $251 billion worldwide in 2007 (World Bank, 2008), which represents more than twice the level of international aid. Adding remittances through informal channels, the number is higher by 50% (World Bank, 2006). The level of remittances has been increasing for many years (Chart 4), but if the predictions are confirmed, 2008 risks being the first year of decreasing levels of remittances in several decades. This would set back developing countries as remittances have a poverty reducing impact on both the sending households and the country of origin. Remittances are much less concentrated in certain countries than foreign direct investment, which tends to flow to certain countries.

Chart 4 Remittances to developing countries, 1990-2007 (US$ billion)

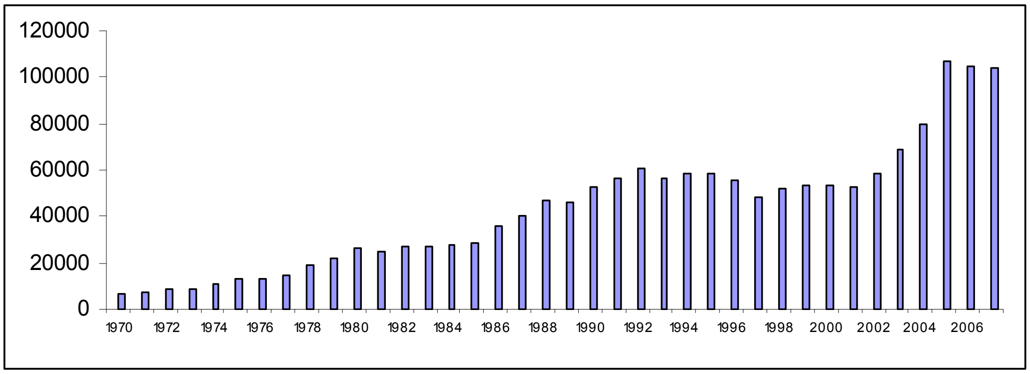


Source: World Bank (2008)

2.4 Aid

The 22 member countries of the OECD Development Assistance Committee, the world's major donors, provided $ 103.7 billion in aid in 2007, see Chart 5. It is not clear how the crisis might affect aid flows (apart from exchange rate effects).

Chart 5 OECD DAC Aid, US$ millions



Source: DAC

2.5 Domestic finance

While the focus of this note is on international capital flows, domestic resources will also be affected. Exports to crisis affected states will be affected, and this will be particularly the case of sectors affected by the crisis such as tourism and mining. The private sector will struggle more to raise finance in the current climate with falling stock markets. Lower growth will also put government spending under pressure.

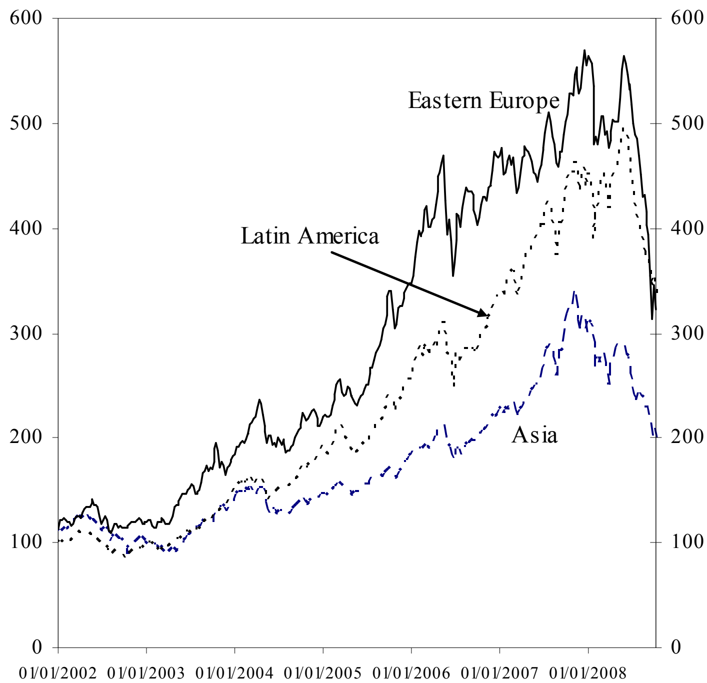
3 The evidence so far

This section discusses the potential effects of the current financial crisis on developing countries, organised by type of flow. Inevitably this is based on a number of assumptions and therefore any forecast or forward thinking will need to be treated with caution.

3.1 Foreign direct investment, portfolio flows and international bank lending

There is already significant evidence of financial contagion across the developing world. For example, Chart 6 shows how emerging equity markets, after an initial period of admirable resilience against the financial turbulence, in October 2008 have started to fall. Notably, on 6 October, 2008, these markets have suffered the worst fall since the Black Monday crash in October 1987, with the MSCI Emerging Markets Index dropping 11%.

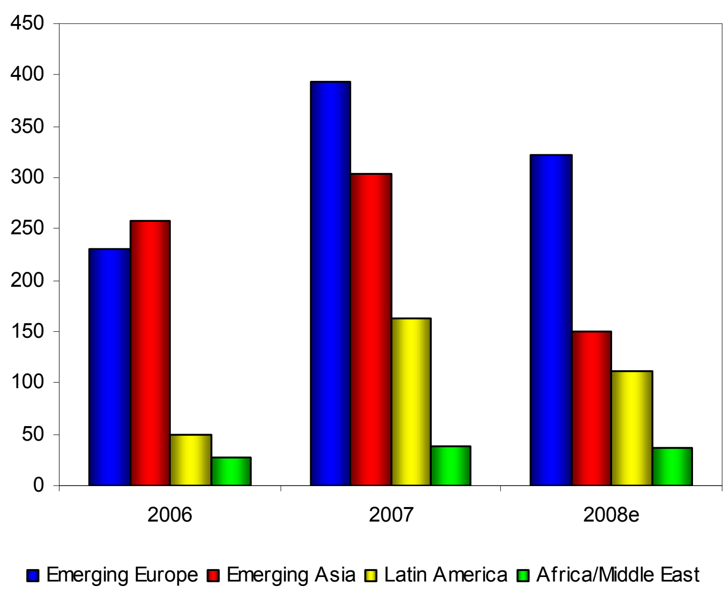
Chart 6 Emerging Equity Markets (2001=100, national currency)
(January 1, 2002 - October 3, 2008)



Source: IMF's World Economic Outlook, October 2008

Chart 7 shows how net private capital flows have fallen in Emerging Europe, Emerging Asia, Latin America as well as in the Middle East and Africa alike.

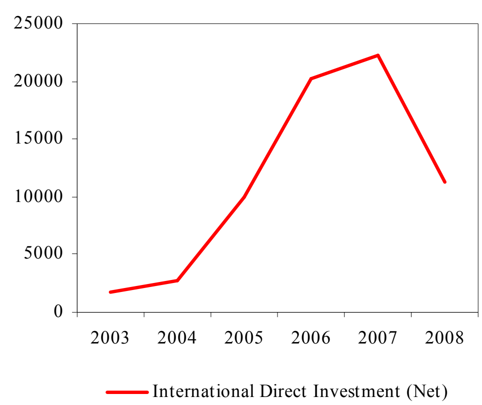
Chart 7 Net Private Flows
(2006-2008)



Source: Institute of International Finance (IIF), October 12, 2008; Note: Amounts in billions of US$. e = estimate.

According to the Institute of International Finance (IIF, 2008), in a sample of 30 developing countries, net bank lending has declined from a value of $401 billion in 2007 to a much lower value of $245 billion in 2008. Similarly, net portfolio equity flows that in 2007 have turned negative to $-5.8 billion due to increased investment abroad by local investors have fallen to $-68.9 billion in 2008. On the other hand, foreign direct investment flows (FDI) have been more resilient and have faced a relatively small decline from $302 billion in 2007 to $288 billion in 2008. Nevertheless, some countries have been hit harder than others. For example, Turkey has experienced a reduction of 40% in FDI which has a significant effect on prospects for economic growth (see Chart 8). FDI in India dropped by 40% from 2008 Q1 to Q2, FDI to China was $6 billion in September 2008, 20% down from the monthly average in 2008, and mining investments in South Africa have been put on hold. Previous downturns in world growth in the range of 2% led to falls in FDI to developing countries of around 25%. A similar drop would imply a fall in FDI of $150 billion to 2009.

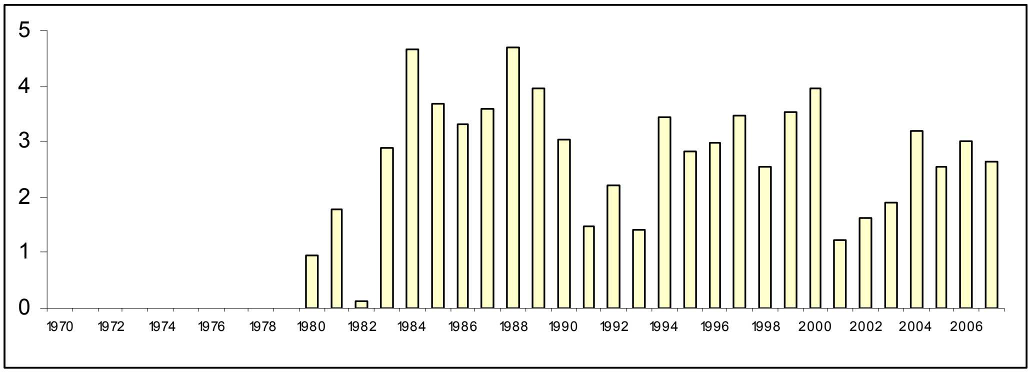
Chart 8 Net Foreign Direct Investment, Turkey
(2003-2008)



Source: Central Bank of the Republic of Turkey; Note: Provisional data. Chart in 2008 was recorded until August. Amounts in millions of US$.

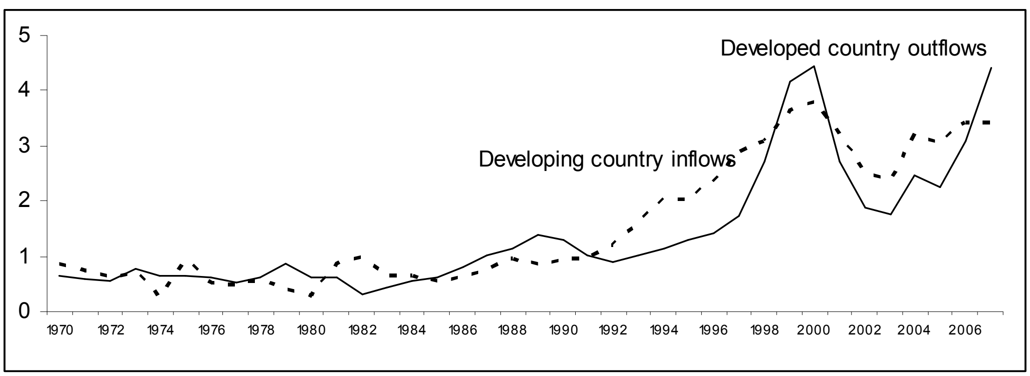
A complementary way to understand the possible future impact of the current financial crisis on FDI is to examine what happened in past downturns. The current downturn has slowed developed country growth by around 2 percentage points (see Introduction). Such a slowdown has already occurred twice in the past three decades, i.e. from 1989-1992, and from 2000-2002, see Chart 9. These slowdowns coincided with substantial declines in absolute FDI flows. FDI has tended to decline by more than GDP in times of adverse economic consequences, as Chart 10 shows. FDI outflows from developed countries fell by 15% over 1989-1992, and by 55% from 2000-2002, while developing country inflows fell by a third during 2000-2002. If we see the same fall happening now (around a 2 percentage point fall in OECD GDP growth), we could see a drop of inward FDI to developing countries from nearly $500 billion to around $350 billion.

Chart 9 GDP growth rate in advanced countries
(1980-2007)



Source: IMF

Chart 10 Foreign Direct Investment flows, US$ million as percent of GDP
(1970-2008)



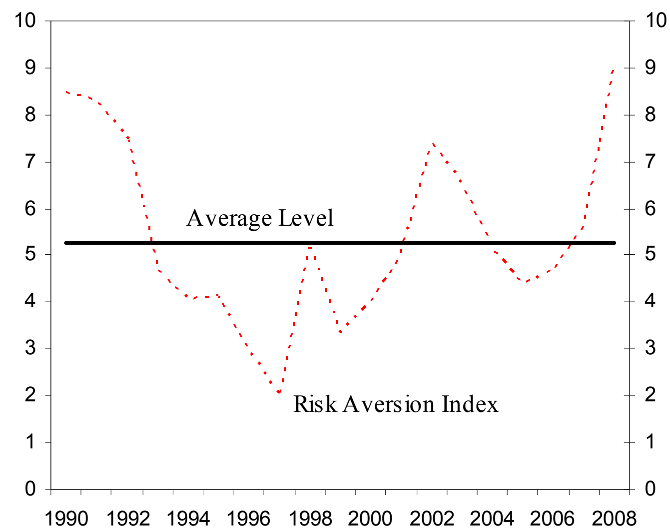
Source: UNCTAD

Emerging Europe, and in particular Hungary, is a recent example of the *solvency effect*. As many other developing countries, Hungary sold its banks to foreigners, aiming to stabilise and reinvigorate its financial system. This choice worked during the past years. Investors and banks were confident regarding the future of the economy and lent fearlessly without demanding enough securities (Austria's loan books amounted to 43% of GDP). Now that the financial system has become so volatile, foreign banks are beginning to scale back lending to their Hungarian subsidiaries, resulting in problems in rolling over their loans. When local banks or subsidiaries start running out of money due to bad loans (Hungarian firms and households took out hard currency loans, accounting for 90% of all new mortgages and 20% of GDP), parent banks in the Euro Area may refuse to send them more cash, increasing the chances for bankruptcy and financial collapse. The European Central Bank granted Hungary a short-term credit line of $8.1 billion, while the International Monetary Fund provided a $15.7 billion loan, and the World Bank made available

$1.3 billion, hoping to isolate Hungary and prevent the further spread of the crisis to other emerging countries.

Investors' risk aversion has increased sharply as shown in Chart 11 and is above levels seen for two decades.

Chart 11 Goldman Sachs Risk Aversion Index
(1990-2008)

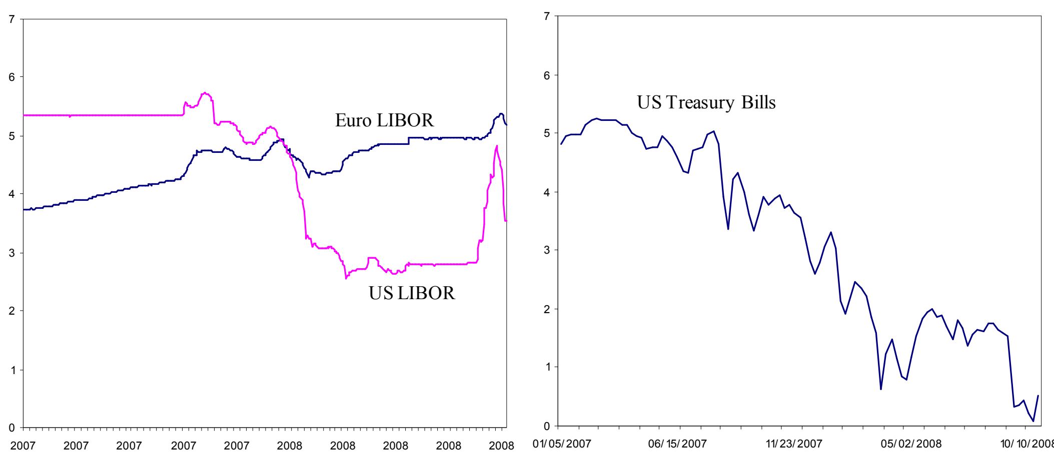


Source: IMF's Global Financial Stability Report, October 2008; and authors' calculations; Note: Index Annual Averages. The average for 2008 ends in May.

The drop in bond and equity issuances and the sell-off of risky assets in developing countries embodies an additional piece of evidence helping to understand the severity of the current financial situation. According to the World Bank (2008), the average volume of bond issuance by developing countries between July 2007 and March 2008 has been only $6 billion, compared to an average of $15 billion over the same period in 2006. Moreover, between January and March 2008, equity issuance by developing countries has reached its lowest level in the last five years reaching only $5 billion. This directly resulted in a considerable decrease in IPOs. The World Bank (2008) reported that 91 IPOs have been withdrawn or postponed in the first term of 2008. In the UAE, for example, Abu-Dhabi-based Al Quadra Holding in March has delayed what would have been the UAE's second largest IPO. Moreover, the equity sell-off by foreign investors has been pronounced in Emerging Asia, and in particular in Korea where investors have withdrawn $45 billion. South Africa has experienced a smaller but still significant equity sell-off as foreign investors have sold $6.1 billion of local stocks during the year. India had already seen capital outflows of $16 billion in 2008, and a large trade deficit has weakened the rupee.

The increase in the cost of borrowing provides evidence of the *liquidity effect* and the spread of information asymmetries in the banking sector. Given that banks do not trust each other, they must protect themselves by reducing lending to other banks otherwise known as raising the cost of credit. This is precisely what has happened. There has been a dramatic surge in the spreads between interbank borrowing rates and yields on government securities. Chart 12 shows the spread between the US Treasury bills and the Euro and US LIBOR, a proxy for interbank lending. Liquidity constraints have also put pressure on international mutual funds, which, according to AMG Data Services, have suffered $31 billion of redemptions in the third quarter of 2008.

Chart 12 US Treasury Bill, and Euro and US LIBOR, in percent
(2007-2008)

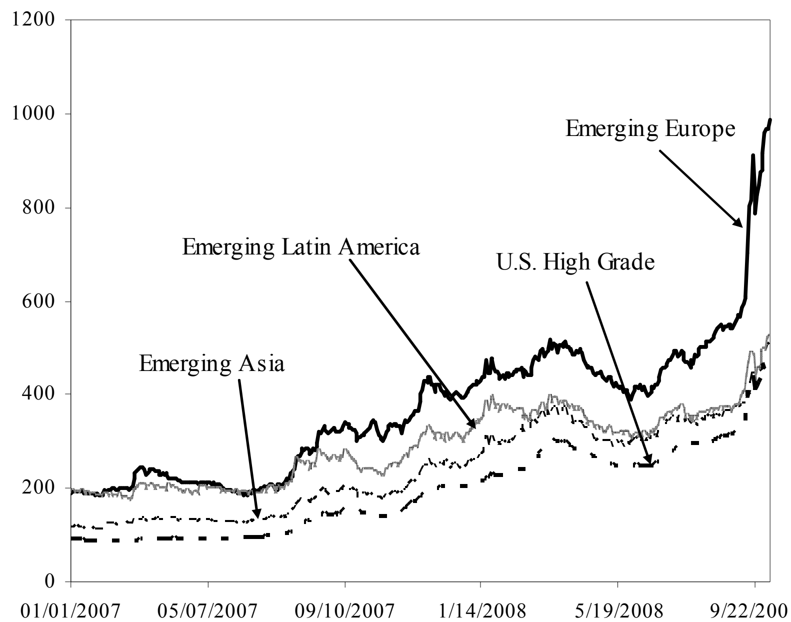


Source: US Board of Governor of the Federal Reserve System.

The strong impact of the financial turmoil on the cost of credit is also visible from the emerging-markets sovereign bond spread and more significantly corporate bond spread. The bond spread has widened to over 300 basis points, after a low of 150 basis points in June 2007. The emerging-markets corporate bond spread has risen dramatically in all developing countries even compared to the US corporate bond spread, stressing that the financial turmoil has made the cost of borrowing particularly high for less-creditworthy corporations (see Chart 13).

Chart 13 Emerging Markets External and US High Grade Corporate Spreads, in basis points

(January 2007 – October 2008)



Sources: J.P. Morgan & Co., and Merrill Lynch.

A recent report by the Institute of International Finance (IIF, 2008) suggested that a projected 0.7 percentage point change reduction in global growth would lead to a $60 billion decline in net private flows to developing countries by the end of 2009.

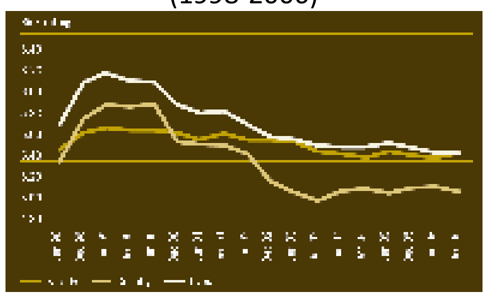
3.2 Aid, development finance and domestic resources

At the Gleneagles G8 summit in 2005, donors committed to increase their aid to $130 billion in 2010 (at constant 2004 prices). While a few countries have slightly reduced their targets since 2005, the majority of these commitments remain in force. According to the OECD, most donors were not on track to meet their stated commitments to scale up aid by April 2008; they will need to make unprecedented increases to meet their 2010 targets. Financial resources will be under pressure because developed countries will face a deep and long recession.

However, there is no simple relationship between downturns and changes in aid. For example, there was no decline in aid in the period 2000-2002 in absolute terms (of course this came after long decline in aid/GDP ratios).

Development finance operations will be affected by the crisis. Whether DFIs are operating at an optimum level of risk taking (i.e. exposure to risky projects) might be indicated by past experience, for example by looking at the Asian financial crisis of the late 1990s, see example from EBRD below. During this period DFI portfolios were riskier, loan losses for some higher and returns lower than they are at present. And yet this poorer financial performance did not seem to adversely affect institutional credit ratings or their credibility as investment institutions. The EBRD argued in 2007 that it was able to withstand the impact of a major shock with an impact equivalent to about 3.5 times the magnitude of the financial crisis of 1998, without a need to call capital, although a large share of its accumulated reserves are projected to be consumed. Thus we assume that many DFIs have sufficient capital: indeed until recently they had lost the battle of liquidity, having difficulty finding suitable projects (see also the high capital adequacy ratios in Section 2.2).

Chart 14 EBRD Credit Risk Ratings for Portfolio
(1998-2006)



Source: EBRD, Annual Financial Report 2007.

DFIs are reacting to the financial crisis by establishing new mechanisms. IFC, the private sector arm of the World Bank Group, approved a $500 million increase to the IFC Global Trade Finance Programme, bringing the programme's ceiling to $1.5 billion. The expansion enhances IFC's counter-cyclical role and its ability to respond to the global credit crisis by supporting trade with emerging markets. The IFC argues that during a liquidity crisis, banks typically reduce their exposure as a defensive measure, often resulting in a decrease in short-term trade lines. Through the Global Trade Finance Program, IFC can guarantee the payment risk of issuing banks up to the full value of a transaction. This enables the continued flow of trade credit into the market at a time when imports may be critical and the country's exports can generate much-needed foreign exchange.

The IMF has established a new facility for short-term finance. This would create a new short-term lending facility to channel funds quickly to emerging markets that have a strong track record but need rapid help during the current financial crisis to recover from temporary liquidity problems. The IMF has also made $200 billion available for immediate lending to emerging markets and can draw on an additional $50 billion in additional resources if necessary. So far only a few countries have drawn on it: Ukraine ($16.5 billion), Hungary ($12.5 billion) and possibly Pakistan.

3.3 Remittances

The current crisis is likely to reduce the growth (and possibly the size) of total remittances substantially as it would (negatively) affect both the size of the migrants' population and the amount remitted per capita. Economic theory suggests that migration is driven by the difference between the expected wage obtained in the destination country and the actual wage earned in the source country. The current crisis would reduce wages in developed countries, squeezing the difference in wages, and reducing the level of migrant flows. But the migration stock may also be affected as some migrants may lose their jobs, thus increasing the rate of return migration or the level of unemployed migrants. Moreover, the downturn may force even those who maintain their job to reduce the amounts remitted, due for instance to a reduction in real wages (if these are linked to firms' profitability) and to a depreciation in the exchange rate of the country of destination. For instance a currency depreciation (vis-à-vis that of many developing countries) is currently occurring in the UK.

A large enough reduction in growth in remittances could turn into a reduction in the *absolute* level of remittances. Recent evidence suggests that the decrease in remittances can be substantial for certain countries. For example, in the first eight months of 2008 remittances to Mexico (which rely almost exclusively on the US market) have decreased by 4.2% (at annual level). And the drop has been strongest in the last two months of data: remittances fell by 12.2% in August and by 9.6% in the July-August period. Remittances to Kenya (which depend on the US economy) have been hit even harder, with the Central Bank estimating a 38% year-to-year drop in August.

Not all countries and sectors are likely to be affected in the same way. First, certain sectors may be less affected than others. The health sector for instance is likely to be among those less affected. As a primary need, the demand for health services has a low elasticity with respect to income. Therefore health expenditures may remain fairly stable even in a period of deep crisis. According to the Philippines' Central Bank, this seems to be the case of Philippines, whose inflow of remittances is expected to experience a less drastic drop than other countries in the aftermath of the current crisis. Second, to the extent that the crisis is localised to certain regions, the more concentrated a country's migrant population is in those regions, the more adverse the potential consequences of the crisis on remittances. Third, the more reliant a country is on remittances to fund its imports or its public budget, the more exposed it is to the potential reduction in remittances. Table 3 presents a list of remittance-dependent developing countries with a ratio of remittances inflows to the size of their economy (measured in 2006) larger than 10%.

Table 3 Remittance-dependent countries, Remittances (in US$ million)

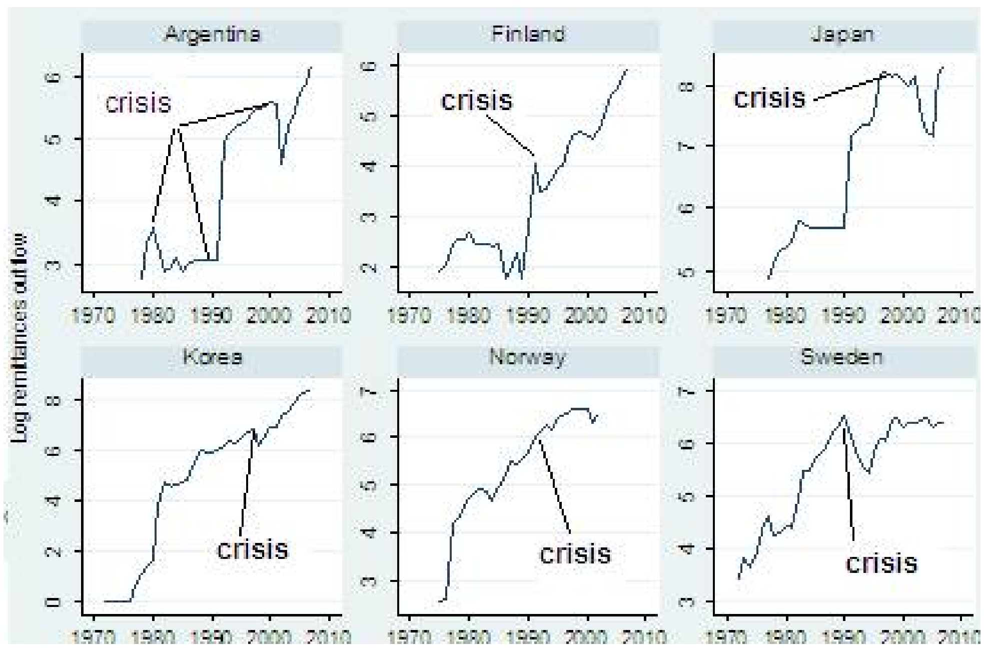
	Region	2003	2004	2005	2006	2007	Share in GDP
Tajikistan	ECA	146	252	467	1,019	1,250	*36.2%*
Moldova	ECA	487	705	920	1,182	1,498	*35.2%*
Tonga	EAP	56	68	66	72	77	*32.2%*
Honduras	LAC	867	1,151	1,796	2,367	2,675	*25.6%*
Guyana	LAC	99	153	201	218	218	*24.3%*
Lesotho	SSA	287	355	327	361	371	*24.2%*
Lebanon	MNA	4,743	5,591	4,924	5,202	5,769	*22.9%*
Haiti	LAC	811	932	985	1,070	1,184	*21.5%*
Jordan	MNA	2,201	2,330	2,500	2,883	2,934	*20.4%*
Jamaica	LAC	1,399	1,623	1,784	1,946	2,021	*19.4%*
El Salvador	LAC	2,122	2,564	2,843	3,471	3,695	*18.6%*
Armenia	ECA	686	813	940	1,175	1,273	*18.4%*
Bosnia & Herz.	ECA	1,749	2,072	2,052	2,157	2,514	*17.6%*
Kyrgyz Republic	ECA	78	189	322	481	715	*17.1%*
Nepal	SAS	771	823	1,212	1,453	1,734	*16.3%*
Albania	ECA	889	1,161	1,290	1,359	1,359	*14.9%*
West Bank & Gaza	MNA	472	455	598	598	598	*14.7%*
Serbia & Mont.	ECA	2,661	4,129	4,650	4,703	4,910	*13.6%*
Philippines	EAP	10,243	11,471	13,566	15,251	17,217	*13.0%*
Gambia, The	SSA	65	62	57	64	64	*12.5%*
Nicaragua	LAC	439	519	600	656	990	*12.4%*
Cape Verde	SSA	109	113	137	137	143	*11.9%*
Guatemala	LAC	2,147	2,591	3,032	3,626	4,130	*10.3%*

Source: World Bank (2008) based on IMF Balance of Payment Statistics.

In the absence of recent experiences of global financial crises, lack of data limits the ability to formally test for the impact of such past crises (especially in developed countries) on remittances to developing countries. However, there have been relatively recent episodes of localised crises, which may be useful for that purpose. Based on an IMF paper by Laeven and Valencia (2008), it is possible to identify a few examples of countries hit by large systemic banking crises (along with the relative starting year). Chart 15 plots the evolution in remittance outflows in the sample countries which have experienced systemic banking crises. As is evident from the chart, most episodes seem to have a substantially negative effect on the subsequent level of remittances. While in the majority of the cases this effect is short-lived and remittances quickly return to their pre-crisis level, in the case of Sweden and Japan this has not yet been the case.

Rough estimates based on chart 15 suggest a 20% drop in the value of remittances in the aftermath of the crisis. On the basis of this chart it is possible to speculate about the costs of the crisis in terms of the level of remittances towards developing countries. In order to do that, let us assume that only remittances from high income countries are affected by the crisis (as full decoupling takes place); and let us also assume that 80% of total remittances towards developing countries come from high income countries (based on estimations by Ratha and Shaw, 2007). This implies that remittances to developing countries would drop by around $40 billion following the current crisis. Although significant (the average estimate is around one third of total yearly external development assistance) this drop is likely to be short-term, with remittances likely to return on their long-term growth path once the crisis is over. While these estimates may provide some idea of the scale of the direct losses for one of the largest sources of external capital for developing countries, they are based on a number of specific assumptions.

Chart 15 Remittance outflows in selected countries
(1972-2006)



Source: Author's elaboration on World Bank (2008) and Laeven and Valencia (2008).

3.4 Summary table

Table 4 provides a summary overview of the type of flows we discussed in this section, the baseline flows in 2007 and the expected drop during the current financial crisis. We suggest it is possible that international financial resources to developing countries fall by some $300 billion, or experienced a drop by a quarter.

Table 4 Gross financial resources to developing countries, latest year available, US$ billion

	Baseline financial flows in 2007	Possible new estimate for 2008/9 (assuming a 2 % drop in GDP over 2008-2009 due to the crisis)	Expected fall	Examples
Foreign Direct Investment (gross)	US $499 billion (UNCTAD)	US $350 billion (own estimate)	a third	Xstrata pulled out of a US $5 billion deal in South Africa; drop of net FDI by 40% in Turkey.
International bank lending (net)	US $400 billion (IIF)	US $250 billion (estimate for 2008 by IIF)	a third to two-fifths	International bank cross-border claims (world wide) fell by US $862 billion in the second quarter of 2008.
Portfolio equity flows (net)	US $-6 billion	Zero or negative net flows		Investors in Korea have withdrawn US $45 billion, US $6.1 billion during the year in South Africa, and US $16 billion in India in 2008.
Remittances (gross)	US $251 billion	US $210 billion	a fifth	Annual decreases of 12% in Mexico, and 38% in Kenya.
Aid (gross)	US $100 billion	US $100 billion	No change (assumption, but acknowledge pressures on aid and other budgets)	Governments in France, Italy, and Spain could be planning to freeze or cut aid budgets. Joe Biden said that foreign aid may have to be re-examined as the US looks for places to cut spending.
Development Finance Institutions (gross)	US $50 billion (2005/6), not including IMF	US $75 billion (in 2008, assuming trend growth)	Increase (assumption)	New facilities (IFC, IMF US $200-250 billion); IMF deals with Ukraine (US $16.5 billion), Hungary (US $12.5 billion) and possibly Pakistan.
Sum of above	Around US $1.3 trillion	Around US $1000 billion	Decrease of US $300 billion (fall by 25%)	

4. Policy Implications

Efforts are needed to restore international financial flows and developing and developed countries need to respond to the financial crisis depending on how they are affected. Looking ahead, developed and developing countries will need a number of appropriate arrangements to promote finance for development (for supplementary views by eminent economists see Annex A) in addition to dealing with the consequences of the crisis:

- Developed countries must act to contain the global financial crisis by slashing interest rates further, coordinating their capital market responses (some is already policy) and designing fiscal packages to stimulate the economy. Some fiscal stimulus may well come in form of aid to other countries.
- Developed countries need to help to prevent emerging markets from sliding further into global turmoil through the use of loans and other support.
- Suggestions that aid "will decline" may risk becoming a self-fulfilling prophecy. Now is the time for increased aid to poor countries (e.g. economic growth in Africa will barely be enough to keep pace with population growth next year). Smarter aid towards managing economic shocks and to those that suffer from shocks through safety nets will become more important. Maintaining aid

budgets in the face of the impact of the crisis in donor countries will be a real challenge. Increased aid would lead to increased exports (around a $6 : $1 ratio) and hence home country economic growth while a fiscal stimulus at home would anyway involve significant leakages abroad (around half).

- More emphasis on pro-cyclical development finance (e.g. by IFC and bilateral DFIs) should promote short-term trade finance as well as long-term capital towards economically viable projects that currently face credit constraints. A current review of the UK DFID (CDC) suggests CDC could do more in crisis affected countries. IFC has already announced it would do so.
- Encourage an enhanced, reformed and independent role for the IMF to monitor and prevent financial crises and intervene in credit constrained countries.
- Broaden G8 discussions to promote good governance of public goods and foster co-ordination amongst developed and key emerging countries (e.g. cross-border monitoring, rules and incentives, establish and independent regulator rating agencies).
- Reinforce the need for quantity and quality resources. Business needs to continue to improve its development impact; remittances and diaspora investment must be facilitated; the domestic tax and resource base need to be enhanced; aid quality needs to be improved; and domestic institutions need to ensure maximum benefits from decreasing financial resources.

References

Dellacha, G. and D.W. te Velde (2007), *Analysis of Development Finance Institutions Financial Accounts*.

Institute of International Finance (2008), *Capital Flows to Emerging Market Economies*, October 12, Washington D.C.

International Monetary Fund (2008), *Global Financial Stability Report*, October, Washington D.C.

International Monetary Fund (2008), *World Economic Outlook*, October, Washington D.C.

Laeven, L. and F. Valencia (2008). *Systemic Banking Crises: A New Database*, IMF WP/08/224, Washington D.C.

Lin, J. (2008), *The Impact of the Financial Crisis on Developing Countries*, World Bank Draft, Washington D.C.

Ratha, D. and W. Shaw (2007). *South-South Migration and Remittances*, World Bank Working Paper No. 102, Washington D.C.

World Bank (2008), Remittances data, online database available at: http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1110315015165/RemittancesData_Jul08(Release).xls

World Bank (2003), *Global Development Finance 2003*, Washington D.C.

World Bank (2004), *Global Development Finance 2004*, Washington D.C.

World Bank (2006), *Global Economic Prospects 2006—Economic Implications Remittances and Migration*, Washington D.C.

World Bank (2007), *World Development Report 2007*, Washington D.C.

World Bank (2008), *Global Development Finance 2008*, Washington D.C.

Annex A
What G20 leaders must do to stabilise our economy and fix the financial system

Edited by Barry Eichengreen and Richard Baldwin
A VoxEU.org Publication, 200

Author	Key Policy Recommendations	Other Suggestions
Alberto Alesina, Guido Tabellini	Cut interest rates are as low as possible without disrupting financial markets. In the US, a combination of tax relief for the lower middle class and spending on public infrastructure.	Southern Europe should make unemployment insurance more available. Also tax changes that reduce wedge between gross and net wages would sustain employment and aggregate demand.
Refet Gurkaynak	IMF should be able to 'name and shame' countries; call attention to countries that increase stimulus-linked government expenditures in a manner that leaves them deeper in debt but no better off in terms of their deep problems.	Avoid wasting time on a unified global framework to deal with crisis. Establish common levels of government guarantees for deposits.
Michael Spence	Well targeted fiscal stimulus programs needed; should combine with credible plans to restore fiscal balance and healthy public-sector balance sheets over a period of time.	Mortgages need to be removed from damaged balance sheets, terms reset and foreclosures limited. Collaterised and structured assets, not trading and with uncertain values, similarly need to be evaluated, purchased, and dismantled.
Dani Rodrik	Expand funding of the new Short-Term Liquidity Facility (SLF) at the IMF, and support the Federal Reserve's new swap facilities. Access to SLF available to all developing countries adversely affected by the financial turbulence emanating from the subprime fallout. Ministers of finance to establish a high-level working group that will convene as soon as practically feasible to seek wider input.	Countries with large account surpluses will adopt policies that boost domestic demand. Chinese government to make available part of its foreign currency reserve assets towards expanded swap facility in support of global financial stability. Ensure protectionist barriers are not raised by asking the secretariat of the World Trade Organization to monitor and report unilateral changes in trade policy, 'naming and shaming' of G20 members.
Willem H. Buiter	Institutional reform: Increase financial resources of the IMF - additional $750 billion minimum, $1.75 trillion required to act in systemic emerging markets crisis. Reform the G7/8 to include the US, the EU, Japan, China, India, Brazil, Saudi Arabia, and possibly Russia or South Africa. Change IMF quotas and voting rights in line with shares of world GDP at PPP exchange rates. Turn IMF into permanent secretariat for the new G7/8. Agree to adhere rigorously to mark-to-market accounting. Steps toward a single global regulator for large highly leveraged institutions that have significant border-crossing activities. Permit capital controls and barriers to entry for foreign entities. Create a uniform global regulatory framework for rating agencies. Do not bother with multilateral surveillance.	Fire-fighting measures: Treasury guarantees for cross-border interbank lending. Mandatory recapitalisation of banks to a uniform international standard. Coordinated global fiscal expansion, modulated by 'ability to borrow.' Fiscal bail-outs of advanced industrial countries whose systematically important banks have a solvency gap that exceeds the government's fiscal capacity. Avoid moral hazard race to the bottom through binding international agreements on the kind of guarantees extended by governments to financial institutions and creditors in their jurisdictions. Agree common access rules and common methods for valuing illiquid assets in different national TARP-like structures.
Raghuram Rajan	G20 leaders should focus on global governance; boost the IMF's financial firepower. Facilitate better international economic dialogue by creating a group of all major countries (G-20+) with a single seat for the EU, and a reformed IMF as secretariat. IMF lending capacity should be increased.	IMF must broaden mandate beyond exchange rate surveillance; become self-financing; eliminate any country's official veto power; choice of management transparent and nationality-neutral. Expand IMF's arrangements to borrow from countries with large reserves or from financial markets.
Barry Eichengreen	Create a new entity, the 'World Financial Organization' (analogous to WTO) that would blend national sovereignty with globally agreed rules on obligations for supervision and regulation. Boost IMF lending capacity in exchange for revamping old G7/8 group into a new group.	Increase funding to IMF. New G7 composed of the US, the EU, Japan, China, Saudi Arabia, South Africa, and Brazil.
Stijn Claessens	Creation of an 'International Bank Charter' for the world's largest, most international banks with accompanying regulation and supervision, liquidity support, remedial actions, and post-insolvency recapitalisation fund in case things go wrong.	
Daniel Gros	G20 members should boost IMF independence so it may act as a 'whistleblower' to warn of the next crisis.	Bring reach of banking supervisors more in line with the reach of banks. Creation of the unified Euro Area IMF representation.
Paul De Grauwe	Restrict banks to traditional, narrow banking with traditional oversight and guarantees while requiring	Only commercial banks may attract deposits from the public and from other commercial banks;

	firms operating in financial markets to more closely match the average maturities of their assets and liabilities. Financial institutions forced to choose between status as commercial bank or investment bank	commercial banks benefit from the lender of last resort facility and deposit insurance; other financial institutions not allowed to finance illiquid assets by short term credit lines from commercial banks. New international agreement needed to remodel banking system and separate commercial banks from investment banking activities.
Takatoshi Ito	Improved surveillance mechanisms to avoid future crises; reinforced liquidity support for small nations hit by shocks originating from other nations; better coordination of national financial supervisory and regulatory frameworks; international agreement on bankruptcy procedures for large banks with extensive transnational involvement.	Changes: IMF management and staff should be 'independent' of large shareholders; new lending facility calibrated to the size of the capital flows necessary to fill the gap; financial sector assessment programme should be strengthened; establishment of an international bankruptcy court.
Wendy Dobson		Leaders should agree on a coherent international framework for regulating financial institutions and markets that encourages strong and appropriate oversight within countries. Speed up IMF restructuring. High priority on real economy. Replace G-7 with G-20 as leaders' forum.
Yung Chul Park	Regional funding arrangements could complement IMF in enhancing efficiency and stability. G-20 nations should collaborate to make the SRPA a credible regional lender by enlarging the SRPA's reserve pool, ensuring policy conditions are no more stringent than the IMF's SLF.	
Guillermo Calvo		New Bretton Woods institutions should focus first on global macroeconomic and financial stability issues to generate conditions for sustainable growth. Create institutions at country level to help offset credit market distortions. Multilateral development banks should be prepared to increase lending. Public-Private Partnerships supported by G7 could sustain growth in the South. Credit lines should be accompanied by foreign exchange and banking regulations that limit the extent of capital flight.
Vijay Joshi, David Vines	New system with three objectives; control of inflation, preservation of financial stability and avoidance of excessive international imbalances through policy instruments; monetary policy, regulatory supervision, and fiscal policy. With IMF enforcement. IMF to determine appropriate exchange rate values – 'fundamental equilibrium exchange rates' and new system of IMF issuance of SDRs.	
Erik Berglof, Jeromin Zettelmeyer	IMF budget should be increased with funding from large emerging economies.	To prevent discriminatory practices, the IMF or Basel Committee should be given broader jurisdiction. Redraft the articles of the IMF to bring closer in line with more constraining spirit of the text signed at Bretton Woods, or more realistically emulate the EU's enhanced cooperation solution at the global level, with the IMF ensuring that the rules are respected.
Ernesto Zedillo		Countries should not fall into the protectionist temptation. G20 countries should commit substantial resources toward promised 'aid for trade fund' to support poor countries with adjustment costs of implementing Doha round. Rich countries should pledge to reinforce respective social compacts to make enhanced trade integration more palatable to their people.