

## Capital flows to emerging economies during and after the global financial crisis in 2008

Vesna Georgieva Svrтинov, Riste Temjanovski

### Abstract

*This paper analyses dynamics of various types of capital flows to emerging economies during and after the global financial crisis. The first part discusses dynamics of various types of international capital flows during the global financial crisis. The second part focuses on the regional distribution of capital inflows to emerging markets economies. The third part raises the issue of the changed pattern of foreign direct investment, observed during and after the global crisis. The fourth part discusses possible policy responses for dealing with volatile capital flows to emerging market economies.*

**Keywords:** *capital flows, emerging economies, global financial crisis, foreign direct investment, portfolio inflows*

### Introduction

The liberalization of capital flows often represents an important factor for increasing the level of economic development in emerging market economies. Nevertheless, while some countries have gained great benefits from the free capital flows, others have encountered with sudden stoppage and overturns of the capital accounts, which resulted with financial crises in some of these economies.

It is well known that capital flows represent a significant factor for rapid development of emerging markets, but also that they can feed the boom and bust cycles, when money enter and exit countries with high speed. Indeed, on one hand capital inflows increase economic growth in emerging markets, yet, on the other hand they cause growth of asset prices, credit expansion and growth of inflation rate.

With the beginning of crisis, especially with the collapse of Lehman Brothers, the financial institutions from developed countries stricken by the crisis, started to massively withdraw the capital from their affiliates located in emerging market economies, which caused a negative influence over the foreign exchange reserves and national currencies and even over the liquidity crisis in these economies.

The experience from different episodes of financial and economic crises, at least until the beginning of the global crisis from 2007 to 2009, confirm that FDI in relation to portfolio investments, represents far more stable form of international capital movement. However, the last crisis confirmed that FDI can manifest a significant volatility and instability-an awareness which seems to coincide with the sharpness of the crisis. It is evident that it's a question of a relatively new phenomenon which should not be undervalued, that is to say, it is a question of a phenomenon which should always be taken into account by the creators of economic policies.

#### **Capital flows to emerging economies during and after the global financial crisis in 2008**

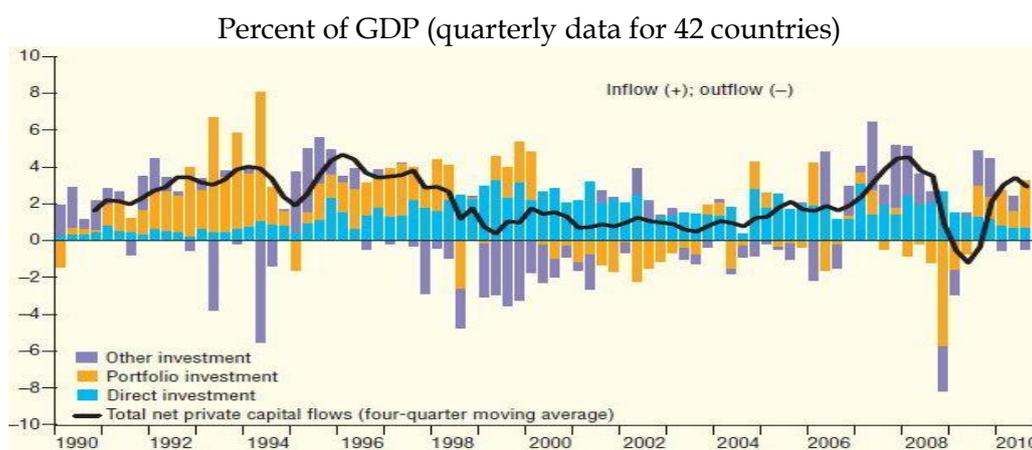
During the years before the global crisis, the investors from developed countries, in order to make diversification of their portfolios, massively invested in emerging market economies. The amount of international funds was constantly increasing, mainly because of the expansion of financial globalization. Apart from that, the main drivers of capital flows to emerging economies were technological changes, high emerging-market growth prospects, the process of privatization, and macroeconomic and trade reforms, which made these economies far more attractive destinations for foreign investors (IMF 2011).

The probable reason for large capital inflows to emerging economies was also the loose monetary policy in developed countries in the pre-crisis period, The U.S. Federal reserve led expansive monetary policy, which resulted in high liquidity and low interest rates. Therefore, financial institutions from advanced economies started investing in primary markets abroad, especially in emerging market economies with higher interest rates. This was not something unusual: historically, low US real interest rates have played some role in encouraging each capital market boom (Chandrasekhar and Ghosh, 2011).

Consequently, the portfolio investments in emerging market economies in the period from 1997 to 2009 increased three times (from 132 million USD to 421 million USD).

It is necessary to notice that big capital inflow before the global financial crisis, were not unprecedented. Private capital inflows were of same size, if not even bigger in the last century 90s (Cociuba, 2011, see chart No.1).

Chart 1:  
Private Capital Flows in Emerging Market Economies Are Not Unprecedented



Source: Cociuba, 2011

Note: The emerging market economies consist of Argentina, Belarus, Brazil, Bulgaria, Chile, Colombia, Costa Rica, Croatia, Cyprus, Czech Republic, Ecuador, El Salvador, Estonia, Guatemala, Hong Kong, Hungary, India, Indonesia, Israel, Jordan, Kazakhstan, South Korea, Latvia, Lithuania, Malta, Mexico, Morocco, Peru, Philippines, Poland, Romania, Russia, Saudi Arabia, Singapore, Slovak Republic, Slovenia, South Africa, Thailand, Turkey, Ukraine and Uruguay

### 1. Dynamics of capital flows to emerging economies during the last global financial crisis

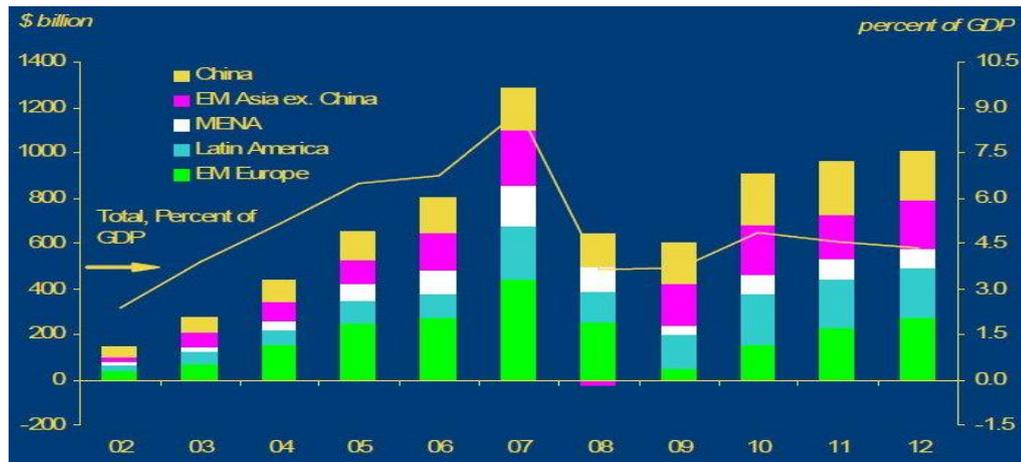
The beginning of the global financial crisis in 2008, despite the solid economic fundamentals in emerging market economies, for the lack of liquidity, made the international banks and investors to withdraw portfolio investments from these economies. According to the research conveyed by the German Development Institute (German Development Institute, 2009), the net-capital flows in emerging market economies decreased even up to 52%.

The most significant feature of the last global financial crisis is the dynamics of international private capital flows, especially in emerging market economies. As mentioned previously, during the years before the crisis, that is, after 2003, emerging market economies have encountered with big waves of capital flow. Nevertheless, with the beginning of crisis, especially with the collapse of Lehman Brothers, the financial institutions from developed countries stricken

by the crisis, started to massively withdraw the capital from their affiliates located in emerging market economies, which caused a negative influence over the foreign exchange reserves and national currencies and even over the liquidity crisis in these economies. Nevertheless, because of the decreased interest rates in developed economies, for a very short period of time, the capital began to inflow to emerging markets where the interest rates were relatively higher (Chandrasekhar and Ghosh, 2011).

It is interesting to notice that the relation of capital inflows and GDP before the crisis is similar to the one before the Asian crisis from 1997. Nevertheless, compared to the Asian crisis, when portfolio investments decreased rapidly, reaching even negative values in the period from 2008 to 2009, the situation was different. Portfolio investments were not characterized by big volatility – they started to decrease only in the second half of 2008, and in 2009 they began to increase mildly. Such trend continued in the following years (see chart No.2)

Chart 2:  
Emerging Market Private Capital Inflows, Net



Source: Lawson, 2012

Within this context, it is significant to state that capital flows in emerging market economies were less volatile than the ones in developed countries. In average, capital flows in developed economies were for 20% more volatile than the ones in emerging market economies. The major cause for these capital flow variables arises from the fact that even up to 60% from total capital inflows to emerging market economies during the last decade were in a form of equity investment, which represents a more stable form of investment. Unlike them, in developed economies only one third of total capital investments were in a form

of equity investment, and the major part were in a form of cross-border loan, which is considered to be more volatile than the capital flows in a form of equity investment and of FDI (Roxburg, Lund and Piotrowski, 2011).

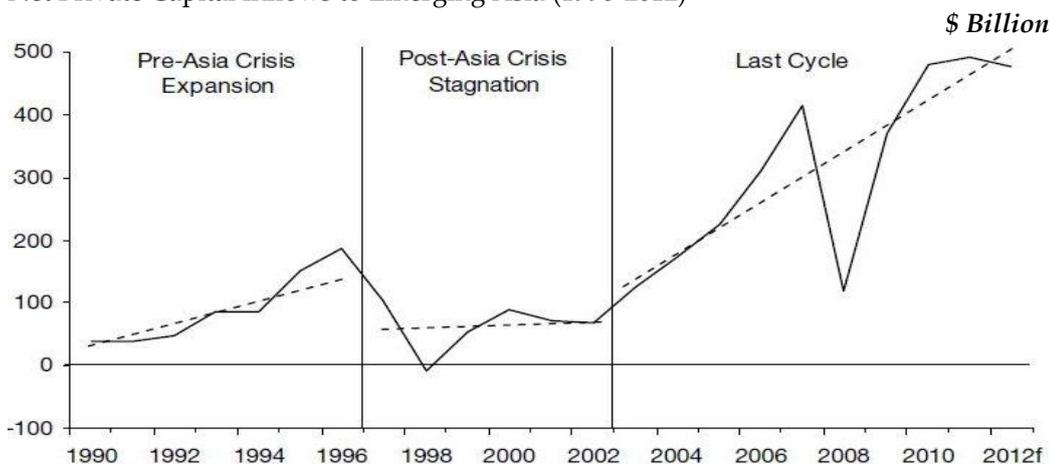
## 2. Regional distribution of capital flows to emerging market economies

### Emerging Asia

Speaking of the capital flow movement in Asian emerging markets, it is interesting to analyze the period before the Asian financial crisis and up till now. To that end, further down a chart is presented, where it can be noticed that in the period before the Asian crisis they experienced vast expansion, while five years after the crisis they noticed stagnation. During the global financial crisis in 2008, the capital inflows in these regions were less than 120 billion dollars and they increased significantly in the following years (IIF, 2011a).

Chart 3:

Net Private Capital Inflows to Emerging Asia (1990-2012)



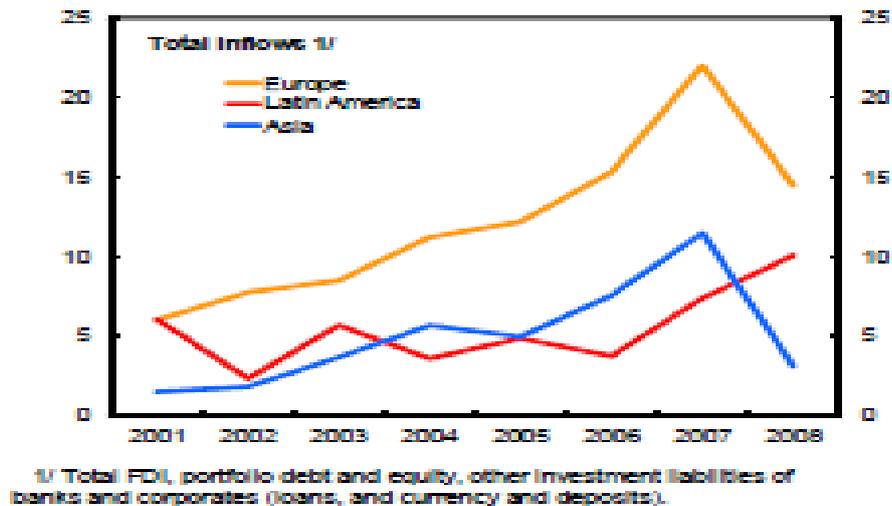
Source: IIF, 2011a

We can notice a big decrease of capital flows in 1997, that is, during the Asian financial crisis and during the global financial crisis. Also, it is noticeable that capital flows after the global crisis can renew quickly. This is primarily due to the low interest rates in developed economies and to the increase of interest rates in emerging markets, a measure which is undertaken to decrease inflationary pressures.

### EM Europe

Capital inflows to European emerging markets were higher before the crisis; in comparison with capital inflows to the rest of emerging market economies (see chart No. 4)

Chart 4:  
Capital inflows in EM countries



Source: Rummel, 2011

This is primarily due the fact that European emerging markets, because of their tendency to join the Union, starting from the last century 90s, have to a great extent removed the capital controls. The big inflows of foreign investments to the emerging markets in Eastern Europe are also due to the fact that these countries chose market-driven 'development model', which relies on political, commercial and financial integration with Western Europe (Rummel, 2011).

Nevertheless, because of the increased uncertainty in global economy, the capital flows (primarily the portfolio flows and the short-term capital flows) have experienced a significant turnover in the economies of this region. The capital inflows in a form of portfolio investments were almost stopped, while the FDI referred foremost to reinvestment of the previous earnings rather than to new investments (IIF, 2012b).

### Latin America

The net private capital inflows to Latin America have also increased after the global crisis. In addition, the capital outflows in a form of FDI are primarily due

to the real growth of GDP, the solid macroeconomic policies, the decreased political risk as well as to the favorable business climate in the major economies of the region. The capital inflows in a form of portfolio investments result from the relatively high domestic interest rates and the increased liquidity at the local capital markets. It should be taken into account that the increase of capital flows creates pressure over the national currencies from these economies and will represent a great challenge for the bearers of economic policy (Gallagher, 2011).

### **3. Foreign direct investment and its new role after the last global financial crisis**

The experience from different episodes of financial and economic crises, at least until the beginning of the global crisis from 2007 to 2009, confirm that FDI in relation to portfolio investments, represents far more stable form of international capital movement. However, the last crisis confirmed that FDI can manifest a significant volatility and instability-an awareness which seems to coincide with the sharpness of the crisis. It is evident that it's a question of a relatively new phenomenon which should not be undervalued, that is to say, it is a question of a phenomenon which should always be taken into account by the creators of economic policies.

After the continuous four-year growth of global foreign direct investment, in 2007 it reached a historical height, from 2 trillion USD, which represented 16% more than the real growth of world GDP. Nevertheless, for the worldwide collapse of real estate values, the collapse of stock market, the decreased consumer confidence, and the scale of production, the difficult access to credit and the decreased scope of world trade, the global FDI flows fell down for 16% in 2008, and even declined for 40% in 2009 (in 2008 they amounted to 1 700 billion USD, while in 2009 1 114 billion USD) (Poulsen and Hufbauer, 2011).

According to Poulsen and Hufbauer (2011), the reason for the drastic fall of FDI during the crisis is due to several factors. Firstly, the global financial crisis has led to liquidity constraints for transnational corporations worldwide, since during this period crediting conditions were tightened, while corporate balance sheets have deteriorated. Thus, the capacity of transnational corporations to invest was weakened considerably. Alongside, the crisis caused a more cautious attitude of the managers and they moved away from high-risk projects (such as the infrastructure ones) to assets with less risk (for instance government bonds) (Poulsen and Hufbauer, 2011).

To conclude from the above stated, the global crisis caused collapse of FDI global flows. To compare with last episodes of financial crises, it is noticeable that the last global crisis left more serious consequences over FDI. Foreign direct investment declined seriously and reacted more rapidly to the crisis in

comparison with the other forms of capital flows. This confirms that they are not so stable and can show volatility, as all other types of capital flows when global economy encounters with financial instability (Vintila, 2011).

During the recent decades, including the years of the global crisis, countries have undertaken various policies for inciting a larger scope of foreign direct investment. The crisis will probably change such attitude, since what happened recently indicated that not all direct investment promote economic growth, and the big scope of FDI should not be considered as an indicator of successful economic policy. Therefore, in order to increase the positive influence of foreign direct investment over the economic growth and to decrease the negative consequences over the financial stability, the authorities should consider a sustainable FDI strategy, which would increase not only the quantity, but also the quality of these investments. Nevertheless, the sustainable FDI regime at national and international level might not contribute a lot to reduce the recession of these investments, but will surely have important economic and social welfare implications over the longer term (Poulsen and Hufbauer, 2011).

#### **4. How to cope with large capital inflow to emerging market economies?**

The increase of capital inflows to emerging markets is a sign the world economy re-coverage. The improved economic fundamentals lowered the risk of investment in EMEs. It should be taken into account that the increased significance of EMEs in world economy does not represent a new trend – the crisis only heightened their place in global economy. Furthermore, the increased capital flows to these countries show their heightened reciprocal economic integration. This is primarily due to financial liberalization and to development of domestic bond market (Caruana, 2011).

High level of capital inflows to emerging market economies indicates the increased role and importance of these countries in global economy, and their stronger performances in the recent years, in comparison to developed economies. Hereupon, these inflows have a very positive influence over the global development and it is important to emphasize that about 40% from total inflows are in a form of foreign direct investment (IIF, 2011).

However, as the actual crisis indicated, capital inflows have side effects as well. It is well known that capital flows represent a significant factor for rapid development of emerging markets, but also that they can feed the boom and bust cycles, when money enter and exit countries with high speed. Indeed, on one hand capital inflows increase economic growth in emerging markets, yet, on the other hand they cause growth of asset prices, credit expansion and growth of inflation rate.

Capital inflows that are cyclical in nature mostly depend on global liquidity and investors' appetite for risk taking. Gabrielle Roanne in her study "Coping with Surges in Capital Flows: The Philippine Case", 2011 states the following conditions that should be undertaken by countries in order to cope with large capital inflows:

- Improved monitoring of capital inflows and understanding of their nature: whether they are permanent or cyclic;
- Foreign exchange reserves accumulation to protect from external shocks;
- Macro- prudential tools: requirements on banks' capital adequacy, regulations on financial derivative activities, implementation of Basel III standards. Solid macroeconomic fundamentals refer to: price stability, sound financial sector and fiscal discipline;
- Enhanced monitoring of external borrowings from both public and private sectors;
- Liquidity management, in order to prevent from potential inflationary pressure in a period of large capital inflows;
- Capital market deepening, to help attract long-term investments and not just short-term portfolio;
- Capital market deepening, to channel foreign capital inflows in the most productive sectors of economy;
- Balance between monetary and fiscal policy, which is also important for managing capital flows. Inflexible fiscal policy cannot be an effective tool for managing fluctuations in capital movements, and
- Temporary usage of capital controls. Nevertheless, controls should not be a substitute for solid macroeconomic policies (Roanne, 2011).

It can be noticed in the afore mentioned points that big waves of capital inflows to emerging markets cause appreciation of national currencies and decrease export competitiveness of these economies. Indeed, appreciation raises in value the export and depreciates the import, which has negative effects over domestic rate of unemployment, but also causes deficit of current account. Thus, national currencies in Asian emerging markets, from the middle of 2009 and up to now, appreciated for about 5-6%<sup>1</sup>. Alongside, in India and Indonesia, national currencies, during the same period, appreciated for even 12% (Caruana, 2011). Therefore, certain countries, for instance Brazil, whose currency is considered to be the most overvalued currency, but also Chile and Columbia, introduced capital controls, in order to decrease the inflow of 'hot money' to their economies. Furthermore, large capital inflows represent a

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<sup>1</sup> Starting from June 2005, China's national currency increased for 14, 5% in comparison with the currencies of its trade partners

problem for the bearers of economic policies, who fear the possibility of sudden stoppage and turnover of capital flows.

Because of the large waves of capital inflows, IMF anticipates that emerging markets shall grow more rapidly than developed economies in the following years, but also that they will face stronger inflationary pressures. Therefore, these economies shall face with dilemma. Namely, they tend to control the increased inflation without stimulating further currency appreciation. But, if they decide to increase the interest rates in order to strengthen the monetary policy, they will cause additional entry of 'hot money'. Otherwise, if they do not strengthen the monetary policy, the inflation can easily get out of control, and incite economic instability, or even social riots. Nevertheless, the most of the analyses, imply that central banks in emerging markets shall probably increase the interest rates gradually, for the following few years.

IMF recommends for the emerging markets to adopt policies directed towards protection of their domestic economies and pertaining the financial stability. Also, the Fund recommends these economies, instead of accumulating foreign exchange reserves, to strengthen the monetary policy (by increasing interest rates), but also to introduce appropriate macro-prudential measures, and under certain conditions, to set capital controls.

Nevertheless, the measures should comply with specific characteristics of the economies, that is, of macroeconomic, institutional and market conditions of each country. Therefore, IMF actively analyses the influence and efficiency of wide variety of macro-prudential measures, which should be used by the countries in order to maintain their financial stability (IMF, 2011).

Furthermore, IIF is of an opinion that emerging markets should strengthen the monetary and fiscal policy, allow greater appreciation of national currencies and introduce appropriate macro-prudential measures. Nevertheless, macro-prudential measures should only be used as a supplement and not a substitute for solid macroeconomic policies. Macroeconomic policies, including the monetary, fiscal and foreign exchange policy, should provide domestic monetary stability, while macro-prudential measures should be used at second line of defense, and capital controls as last instance. Ultimately, structural financial policies, such as capital market deepening and improving of regulatory and supervising framework, should represent part of the instruments, used by these economies to protect from instable capital flows (Caruana, 2011).

According to Lawson (2011), the following five steps should be undertaken, as a response to the large wave of capital inflows to emerging market economies:

1. Maintaining lower interest rates
2. Introducing capital controls
3. Introducing macro-prudential measures

4. Heightening the fiscal policy
5. Allowing appreciation of the foreign exchange rate (Lawson,2011)

In terms of foreign exchange rate regime, it is characteristic to state that emerging market economies with pegged regime, have lower interest rates and consequently highest credit growth, thus they accepted the biggest percent of total capital flows. It should be taken into account that pegged foreign exchange rates do not necessarily cause credit boom, nevertheless it is more difficult for the countries who introduced this regime to protect themselves from financial instability in a situation of large capital inflow, and therefore they have limited set of tools for the domestic monetary policy. On the other hand, countries with flexible exchange rate can allow its appreciation and lead more solid monetary policy, under conditions of large capital inflows (Rummel, 2011).

According to [Aizenman](#) and [Pinto](#) (2011) emerging market economies should take the following steps in order to better manage large capital inflows:

1. Substantial management of public finances
2. Increased supervision over the macro-prudential regulation
3. Enhanced monitoring over crediting the sector of household, in order to avoid “bubbles” of prices, but also bad loans
4. Building a satisfactory level of foreign exchange reserves

The economist Nouriel Roubini (2010) in his article “How Should Emerging Markets Manage Capital Inflows and Currency Appreciation”, stated several possible measures which can be used by emerging market economies, in order to manage instable capital inflows:

- Unsterilized interventions, in order to prevent a nominal appreciation;
- Sterilized intervention to prevent nominal and real appreciation;
- Capital controls;
- Fiscal tightening;
- Macro-prudential regulation/supervision of banks and financial institutions;
- Long-term sterilized intervention (Roubini, 2010)

Despite the fact that the biggest worry from large wave of capital inflows are the increased prices of food and oil, there is an argument within the economic circles for the possibility of rapid change of the financial assets flow, from one market into another. Volatile capital flows are considered as a potential factor for the following financial shock (Wood, 2011).

### Bibliography

1. [Aizenman](#) J. and [Pinto](#) B. (2011): "Managing financial integration and capital mobility", Working Paper, October, available at <http://www.voxeu.org>.
2. Caruana J. (2011): "Capital flows to the emerging market economies: a perspective on policy challenges", Bank for International Settlements, February.
3. Chandrasekhar C.P. and Ghosh J. (2011): "Revisiting Capital Flows", column published in Business Line, May.
4. Cociuba, S.E. (2011): "Upstream capital flows: why emerging markets send savings to advanced economies," Economic letter, Federal Reserve Bank of Dallas, January.
5. Gallagher P.K. (2011): "Capital Controls and Developing Countries", IMF paper, Vol. XLVI Nb.19 May.
6. Gallagher K. and Ocampo A. J. (2011): "The IMF's welcome rethink on capital controls" IMF Working Paper, Article history, April.
7. German Development Institute (2011): "Capital flows to emerging economies - prelude to the next crisis?" by [Dr. Ulrich Volz](#), May.
8. Institute of International Finance IIF, (2011): "Capital Flows to Emerging Markets Economies", September 25.
9. International Monetary Fund (2011): "International Mutual Funds, Capital Flow Volatility and Contagion-A Survey", by Gaston Gelos, Working Paper 11/92, April.
10. International Monetary Fund (2011a): "Capital Flows To Emerging Markets May Slow When Fed Raises Interest Rates", Business-the internet newspaper, October, 28 2011 available at [www.huffingtonpost.com](http://www.huffingtonpost.com).
11. Lawson J. (2012): "Capital Flows to Emerging Economies" published at IIF.
12. Poulsen L. S. and Hufbauer G. C. (2011): "Foreign Direct Investment in Times of Crisis", Working Paper 11-3, January.
13. Roanne L. G. (2011): "Coping with Surges in Capital Flows: The Philippine Case" Banko Sentral NG Philippines, Economic Newsletter Nb. 11-02, March-April.
14. Roxburg C., Lund S. and Piotrowski J. (2011): "Mapping Global Capital Markets", Mc Kinsey Global Institute, August.
15. Roubini N. (2010): "How Should Emerging Markets Manage Capital Inflows and Currency Appreciation?" November 4. Available at <http://www.roubini.com/analysis>.
16. Rummel O. (2011): "Recent dynamics of capital flows to emerging markets and lessons from emerging Europe", Bank of England, May.
17. Third World Network-TWN (2011): "Global FDI flows remained stagnant last year" published in SUNS Nb.7069, Geneva, Kanaga Raja TWN Info Service on Finance and Development, January
18. Vintila D. M. (2011): "Foreign Direct Investments During Financial Crises", The Academy of Economic Studies, Bucharest, Faculty of International Business.
19. Wood B, (2011): "Next worry: Capital flows to emerging economies. Market Watch", Washington, April, available at <http://www.moisesnaim.com>.
20. Yuthamanop P. (2011): "Hot money to rock Asian capital markets", published at <http://www.bangkokpost.com>, August.