Brazil, developing economies and private international capital flows: the (new) challenges in the post-crisis scenario

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Abstract: this paper focuses on international capital inflows to developing countries with a historical perspective, searching for elements to better comprehend the new features and challenges associated to this aspect of international relations. The core idea of the paper is that, thanks to broad range of causes (pull and push factors), the situation of a selected group of developing countries in this matter is structurally diverse from previous situations of cyclical abundance of external financing. Brazilian situation, in this context, is subject to a special attention. The article is divided in five sections. Section I intends to briefly review some approaches to theme, and draft some theoretical inputs to understand the current situation. Section II is dedicated to describe the gyrations in international capital flows to developing economies in recent data, using some available (but incomplete) data. Section III highlights the new features of these flows and its determinants in the post-crisis context and discusses the perspectives. Section IV uses the Brazilian situation as an example of the new conditions (and challenges) in the current context. Section V concludes.

Introduction

To developing or peripheral countries, especially the Latin American ones, financial problems emanating from the external sector could hardly be seen as a novelty. Since the difficulties pointed by the classic Gold Standard (and its “rules of the game”), to the liberalization crashes in Southern Cone at the end of 1970s, the pattern of abundant external financing followed by a period of scarcity (with tragic consequences) is a well-known stylized fact in economic history. In recent decades, various aspects of international financial relations were subject to structural changes, but this pattern still holds. In actual fact, during the “financial globalization”, with all its defining features – securitization, derivatives, emergence of institutional investors and greater capital mobility –, the rotation between good and bad phases in external financing to developing countries was even intensified (and shortened).

In the last months of 2008, when the great international financial crisis reached its peak, the widespread expectation regarding the external financing of developing world was of a reproduction of this historical pattern. An abundance period was apparently finishing, and the well known movements of “flight to quality”, sharp exchange rate devaluations and difficulties in macroeconomic management were obvious. However, this moment of reversion was short-lived, at least for the most important “emerging markets”. Surprisingly, given the violence and deepening of the crisis, the massive of capital inflows to these economies was quickly reestablished. Three years after the collapse of Lehman Brothers, the world seems to be again on the brink of a new round of financial stress, and the recurrent fears of a permanent reversal of capital flows is back to the center of the stage.

Concluded in this exact context of extreme uncertainty, the paper focuses on international capital inflows to developing countries with a historical perspective, but searching for elements to better comprehend some new features of and challenges associated to this aspect of international relations, especially for Brazil case. The core idea of the paper is that, thanks to broad range of

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causes (pull and push factors), the situation of a selected group of developing countries in this matter is structurally diverse from previous situations of cyclical abundance of external financing.

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I. Theoretical issues

In theoretical ground, the reality of phases, or cycles, in international capital flows to developing countries is, first of all, a clear challenge (or “puzzle”) to the idealized view of international financial relations that arises from classical orthodox formulations, summarized by Obstfeld and Taylor (2004, ch. 1). If one would follow strictly the theoretical benefits of financial opening (international risk-sharing; inter-temporal trade; macroeconomic discipline), that would be a non-question: the capital should flow, in a continuous mode, to where it is scarce, to where the interest rate is higher and investment opportunities are better and, of course, to where the macroeconomic policy is "correct".

Driven by the recurrent crises and also by the historical evidence that “the capital does not flow from rich to poor countries” (Lucas, 1990), an important trend in the literature dedicated to this topic is a broad recognition of the oscillations in private capital flows to developing countries. Some of the examples, emanating from economists and institutions of the so-called “mainstream economics”, are noteworthy.

Under the impact of 1990’s crises, Calvo and Reinhart (2000) identified the occurrence of “sudden stops” in capital flows to developing countries, mainly after a period of persistent current account deficits, leading to bankruptcies, human capital and financial domestic channels destruction, and so on. Kaminsky, Reinhart and Vegh (2004) proposed that the absorption of capital inflows by developing countries is "pro-cyclical", as well as are, in general, the monetary and fiscal policies adopted by host countries in times of abundance. More recently, amid the deepening of US-originated financial crisis, and thinking about its possible impacts on developing economies' external financing, Reinhart and Reinhart (2008) used the term "capital flow bonanzas" to designate phases of large capital inflows, identified in a large sample of developed and developing countries from 1980 to 2006.

As discussed in sections below, the decline in capital flows during the 2008 crisis was short-lived, and a new wave of them reached developing countries since mid-2009. In the wake of this return, new concepts and empirical findings: the periods of large inflows to developing countries could be described in terms of “surges”, “episodes” or “waves” (IMF, 2011; Cardarelli et al., 2010; Furceri et al., 2011).

Along this theoretical evolution, however, few integrated explanations were proposed to link these systematic quantitative analyses. Furthermore, rarely the empirical findings were followed by policy recommendations to protect the economies from the gyrations in capital flows. In this matter, the recent publications of IMF supporting (and trying to discipline) the use capital controls (Ostry et al., 2010 and 2011; IMF, 2011) are also a sign of change. Even in the heterodox field, the

\[1\] The contrast with other publications about the same topic (like IMF, 2007 and World Bank, 2008) is revealing.
analyses (e. g. Akyuz, 2011; UNCTAD, 1999 and 2006) tend to prioritize the description and policy implications of capital flows – here with a clear sense of prudence and self-protection.

Filling this lack of a consolidated background to deal with the question is not the goal of the present article. Nevertheless, some inputs from a heterodox literature, mixed with recent concepts emphasized even inside the mainstream, can here be gathered, in order to better comprehend the external financial conditions faced by developing economies and the new settings of this issue.

In such approach, the cyclical nature of capital flows can be seen as a result of at least two structural features of contemporary international financial relations: its instability and its asymmetries. Both affect adversely the developing world.

First of all, contemporary international capital flows are considered to be intrinsically volatile and moved by the search for short-term yield. The financial globalization era is understood here not just as a period of increased financial flows and external assets/liabilities stocks. More than that, it is characterized by some important qualitative shifts in financial relations: the emergence of institutional investors as major sources of funding; the growing importance of “market finance” (i.e., the predominance of financial relations through the issuing of stocks, bonds and other securities, a trend also called “securitization”) vis-à-vis “bank finance”; the dissemination of derivatives instruments in these relations; and the broad liberalizing reforms that result in a greater capital mobility around the world.²

Mainly in response to securitization and institutionalization of savings, the speculative pattern of behavior – in a Keynesian sense: the attempt to anticipate the market tendency – was disseminated throughout the spectrum of economic agents (banks, firms, families). Regarding international financial relations, the wider possibilities of portfolio diversification, ensured by abolition of capital controls, gave rise to large speculative cross border capital movements – in the form of bank flows, equity flows (directly or through an investment, pension or hedge fund) and even FDI flows to a lesser extent. The logic is always the same: the search for short-term capital gains, at different economies. If the contemporary international monetary system is taken into account, the volatile nature of typical capital flows in the globalization era is reinforced: both the absence of clear rules and the fiduciary basis of US dollar dominance magnify the risks and possibilities of sudden expectation reversion. The greater the uncertainty, the more speculative and volatile are financial relations, in an amplified space.

Hence, to this view, the recurrent financial crises are not consequences of ad hoc market failures: the instability is intrinsic to contemporary international financial and monetary system. Furthermore, the assumption is that the situation of the developing countries in that unstable environment is even worse, aggravated by three reinforcing handicaps or asymmetries (Prates, 2005; Ocampo, 2001).

The first asymmetry is a financial one. Developing economies, each one and as a group, represent a small share in global portfolios; to the leading international investors, those destinations are always seen as exotics and just a fraction of the total is allocated there. As a result, the fragility of their structural position is revealed: being minor parts of total wealth, the assets allocated in developing countries are the first sell alternative in moments of risk aversion and/or huge losses in other markets. At the same time, a macroeconomic asymmetry exists, i.e., there are fewer degrees of freedom in macroeconomic management in the developing world as compared to the developed one.

² All these elements are highlighted by the large and varied literature grouped under the general denomination of “financialization” or “finance-led capitalism”. For a recent “primer” of this approaches, see Guttmann (2008).
But the third handicap, the monetary asymmetry, is the most important one. The idea is that the huge qualitative differences among national currencies represent the main factor causing the financial and macroeconomic asymmetries. Because they are not able to perform any of the three basic functions of money (unit of account; medium of exchange and, specially, store of value) in international transactions, almost all developing countries’ currencies are considered to be “provisory” or “unconvertible”. In Keynesian terms, those are not monies which “lulls the disquietude” of global investors.

To sum up, in a global financial environment which is intrinsically unstable, the inferior position of some economies is worsened by these three disadvantages – the financial, the macroeconomic and (above all) the monetary asymmetries. As a result of these structural characteristics, the movement of private capital flows to developing countries, issuers of currencies that are not internationally liquid, is always a consequence of a reduction in liquidity preference in the international level (or a decrease in risk aversion).

As in a stylized Minskyan financial cycle, a confidence phase – i.e., an optimistic period, when the expectation on future yields support financial transactions involving more and more risky agents – also can be identified here, based on some common beliefs about those host economies, their risks and future opportunities. In the original formulation, the increasing financial fragility turns into financial crisis in the aftermath of an expectation shock, a drastic reversion of optimism about future and a sudden increase in liquidity preference (Minsky, 1982). Regarding international flows, any event that induces a reevaluation of the risk/return combination of assets denominated in inferior currencies is able to trigger a “flight to quality” – an increasing in risk aversion or in liquidity preference in this international sense.

At this point, some important issues arise. What kind of event can play this role of expectation reversal? Or, in more general terms, what drives the rotation from an optimistic to a pessimistic period in international capital flows to developing economies? Besides the psychological aspects, are there economic processes that lead these changes in expectation, liquidity preference and risk aversion? Searching for answers to these questions, the relative importance of external and domestic factors – also known as “push and pull factors” – has been the subject of a long debate, both in theoretical or empirical grounds.

The heterodox view tends to put emphasis more on the first set of influences than on the “fundamentals” of receiving economies (like “sound” macroeconomic indicators and policies, perspectives, rules etc.). In normal times, variables like global and central economies’ growth rates and the interest rates of central currencies (firstly of the US dollar), are more important.

However, an additional aspect of this general picture needs to be clarified. Both in the optimistic and in the pessimistic moments, the convention shifts can give rise to a more long term movement – the “high” and “low tide” phases in external financial environment – or can be just a brief “up” or “down” moment, unable to offset the broad and longer trend. These ephemeral occurrences can be associated with the “sudden stops” identified by Calvo and Reinhart (2000), but the point to emphasize here is that an abrupt reversion of optimism not necessarily turns into a long phase of external finance shortage.

In fact, the length of a period of scarcity (and the same is valid for one of abundance) seems to depend on a complex interaction between domestic and external factors governing capital flows.

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3 The monetary hierarchy is also a topic studied by a large range of approaches, even among orthodox authors. Besides the classic works of Cohen (1977 and 1998), see also Carneiro (2008) and McKinnon (2002).
4 Examples vary from the discussion about the return of flows to Latin America during the first half of 1990s (Calvo et al., 1993; El-Erian, 1992) to very recent assessments of the trends after the 2008 financial crisis (Fratzcher, 2011).
Particularly, the probability of a “flight to quality” initiates a more lasting phase of difficulties is commonly associated with the level of fragility caused by the inflows in the profusion period. The main sources of this fragility are well described in the literature.

Akyuz (2011), for example, identifies some channels of external vulnerability of developing economies to a reversal of capital flows cycle: the creation of credit and asset bubbles in booming periods; the cycles of primary commodities prices usually associated with the financial cycle (which points to a risk of deterioration also in the current account when the “bust” time comes); the uncontrolled expansion of domestic credit with external funding (especially when directed to consumption and production of non-tradable goods); and, above all, the accumulation of large external liabilities denominated in foreign currencies in response to exchange rate appreciation and current account deficits.

These last two phenomena have also been emphasized in recent years by some important mainstream authors, since the identification of “twin crisis” in emerging economies during the 1990s – i.e., an exchange rate crisis that, thanks to the foreign-currency denominated liabilities accumulated in public sectors, families, companies and banks balances, turns into a financial and economic crisis (if not a fiscal one, too). In fact, the so-called “balance-sheet approach” to deal with developing economies external vulnerabilities – of which the best developments are the concepts of “currency mismatches” (Goldstein and Turner, 2004) and “original sin” (Eingengreen and Haussman, orgs., 2005) – is nowadays clearly considered “conventional wisdom” in these matters.

In summary, the theoretical considerations above led to the conclusion that the assessment of capital inflows to developing countries, especially the comprehension of its cycles, has to take into account two groups of determinants. On one hand, these oscillations are impossible to be understood without the consideration of the structural characteristics of contemporary international financial relations – mainly its instability and asymmetries. The availability of external financing, in short, is far beyond the control of developing countries. On the other hand, some domestic factors – mainly the accumulation of stocks of external liabilities and its currency denomination during an abundance period – also play an important role in this picture. If these pull factors are not able to avoid a “sudden stop”, they can influence the length of the subsequent scarcity period.

II. The “long” evidence: two big cycles

Having painted the broad picture in theoretical terms, the next task is describing the cycles. In chronological terms, the starting point chosen here is the beginning of 1990’s, because of data availability and also for an analytical reason. All the process described above as being the defining features of financial globalization era – securitization, emergence of institutional investors etc. – are typical of 1980’s, but just in central economies: to developing economies, that decade was marked by the complete absence of private external finance, which returns just after 1990. In other words, before this point, there is no financial globalization to developing world, neither in quantitative nor in qualitative terms. This choice, of course, doesn’t mean that the previous cycle

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5 The original paper of Kaminsky and Reinhart (1999) started a sequence that, passing through the identification of the “fear of floating” (Calvo and Reinhart, 2002) and reached an apex with the monumental historical investigation of Reinhart and Rogoff (2009).
The second methodological option is related to data sources. Theoretically, there are at least two possibilities of measuring capital flows: getting the numbers from balance of payments of receiving countries; or from the creditors’ side (banks, institutional investors, transnational companies etc.). This second option is only available in partial dimensions – like the UNCTAD’s annual accounting of FDI announcements in its *World Investment Report*, or the EPFR weekly assessment of the movements in portfolio funds dedicated to emerging markets –, making difficult to paint an overall picture. Turning to the receiving economy side, a case-by-case data compiling would turn the research impracticable – so, the alternative is to resort to multilateral institutions dedicated to this task. The first candidate is the International Monetary Fund and, specifically, the *International Financial Statistics* database. The problem here is that, even in annual basis, the information regarding developing countries available to the general public is always full of missing data and not updated. For this reason, as a complement to this traditional source, the option was to use the numbers of the Institute of International Finance (IIF), which also does the accounting for inflows to "emerging markets" and presents the update data plus forecasts for subsequent years.

Thirdly, it is necessary to clarify which countries are examined. Given the structural differences inside the large group of “non-industrialized” nations and the fact that, to the poorest ones the capital inflows are mainly official, the focus is on a selected group of developing economies that can be considered a large sample of “emerging markets”: 30 countries from the four developing regions. Finally, in terms of the indicators used, the choice is to evaluate the size of inflows (i.e., acquisition/sells of assets by non-residents, equivalent to variations in domestic economy external liabilities) always as a share of GDP. The absolute numbers are important, but since the idea is to compare the evolution through a relatively long period, and for simplicity reasons, the relative measure fits better.

Subject to all this qualifications, the evidence of capital inflows to developing economies since 1990 shows long waves, as depicted in Fig. 1 (that used the IMF-IFS based measure complemented by the IIF-based). The curves described by both measure are quite similar (despite the diverse periods covered), and the slight differences can be attributed to rounding, small changes in coverage along the time (in IIF sample) and some missing numbers in IFS database. For 2010 on, just the IIF provides forecasts.

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6 In fact, that cycle was dominated largely by bank loans, a type of flow that shares importance with FDI, equity and other securities during the subsequent decades. To more long term assessments, including the 1970’s, see the already quoted Akyuz (2011) and UNCTAD (2006, ch. IV).

7 EPFR (Emerging Portfolio Fund Research) is a private company that tracks the global flow of equity and bond funds by country, sector and cross border allocations culled from a universe of 15,000 international and U.S. funds. Its high frequency information is more suited to guide private investors’ decisions, but has been increasingly used also for analytical purposes, like in IMF (2011) and Fratzcher (2011). The data, subject to an expensive subscription, can be found in [http://www.epfr.com](http://www.epfr.com).

8 The IIF (an association of more than 400 financial institutions), publishes three times per year a report called *Capital Flows to Emerging Market Economies*, accompanied by an aggregated database. See [http://www.iif.com/](http://www.iif.com/).

9 The list, almost the same used by IIF in its calculations, is made up of economies from Emerging Europe (Bulgaria, Czech Republic, Hungary, Poland, Romania, Russia, Turkey and Ukraine); Latin America (Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru and Venezuela); Emerging Asia (China, India, Indonesia, Malaysia, Philippines, South Korea and Thailand); Africa/Middle East (Egypt, Lebanon, Morocco, Nigeria, South Africa, Saudi Arabia and UAE).

10 The *World Economic Outlook*, one of the flagship reports of IMF, also provides a database with forecasts to capital flows. But these predictions are not comparable with those of IMF, thanks to a different concept (there, the net flows – including residents – are calculated) and a much larger sample of developing countries covered.
In terms of the general trend, if a cycle is taken as an ascendant phase followed by a descendent one, two cycles are evident: one starting in the first years of 1990s and other in the beginning of 2000’s. Moreover, it’s easy to identify the reversion, the moment when the "high tide" of the first half of 1990s turned into a lasting "low tide" that, despite some brief recovery in 1999 and 2000, reaches its lowest level in 2002. Other noteworthy facts are the approximate same duration of the two ascendant phases (five to six years) and the much higher values reached in 2007 when compared to the previous peak (1996).

Observing the figure, the historical record and the predictions available in mid-2011 suggest that the developing world entered in 2008 in a more lasting phase of low levels of capital inflows, similar to the 1997-2002 interval. Following this reasoning, if the length of the new low tide repeats the previous one, those economies should be prepared for a continuous decrease in external financing until 2013.

**Fig. 1. Capital inflows to emerging market economies, total, GDP share, 1990-2012.**

![Chart of capital inflows to emerging market economies](chart.png)

**Source:** Own calculations based on data from IMF and IIF.

**e:** preliminary estimation (IIF, June 2011)

**f:** forecast (IIF, June 2011)

Assessing the evidence by components, both charts of Figure 2 describe a higher importance (and stability) of FDI flows, while bank debt and the two modalities of portfolio flows (debt and equity) present a more cyclical behavior, with bank flows leading the broad cycle in the critical moments (1998; 2002; 2008) as well as in the peak of the long trajectory (1997). Having contributed decisively to the beginning of the first high tide, the portfolio flows – by definition the most volatile ones – show a fast contraction in 2008, but also a rapid return in 2009. The numbers for 2010 and 2011, according to IIF, are based much more on the behavior of these investments, since the prediction for FDI was of a constant decline.

However, such measures do not seem to be a good way to capture the more recent contours of this aspect of international financial relations. There are different signs indicating that the scenario of a new low tide phase suggested by these figures did not materialize.
Both the preliminary account for 2010 and predictions to 2011, from IIF, are underestimating the very fast recovery of inflows already captured in other indicators. As an example, in a recent publication by IMF (2011, Fig. 2, p. 9), quarterly and more updated data, related to a smaller sample of emerging economies, show a level of inflows in the first half of 2010 already reaching 6% of GDP (much closer to the previous peak of more than 9% in mid-2007). Since then, the movement has been of continuous increasing. Partial dimensions of the movement — such as the numbers and forecasts of FDI flows to developing countries (UNCTAD, 2011) and the weekly movement of investors through emerging market-dedicated portfolio investment funds (tracked by EPFR) — also confirms that the recovery this time was much faster and intense than expected by the IIF and the usual pattern after serious episodes like the ones experienced in 2008.

Furthermore, the last numbers in Figures 1 and 2, thanks to the criteria used — inflows as shares of GDP — are also influenced by exchange rate appreciations verified in important emerging economies since 2009, that overestimate the domestic product in US dollars. To this kind of short-term assessment, the absolute numbers are more enlightening: according to IIF, the total amount of inflows estimated for 2010 (almost US$ 990 billions) and forecasted to 2011 (slightly above US$ 1 trillion), are still below the record of US$ 1.3 trillion reached in 2007, but represent a recovery much stronger than suggested by the relative indicator.

One last point about the post-crisis scenario is the impression that the general picture, more than before, is hiding a lot of specific and very different situations, suggesting a higher differentiation among the destinations of capital inflows, as discussed below. Addressing these new features of capital inflows oscillations and, especially, think about future perspectives in this field, are the tasks of the next section.

III. Is this time different? New features and perspectives

Despite some difficulty to clearly demonstrate, with accurate and update data, the reality of capital inflows to developing countries in 2009 and 2010, there is no doubt about the distinctiveness of this moment when compared with previous post-crisis episodes. The intense “flight to quality”, or “sudden stop” of the last quarter of 2008 did not initiate a cumulative sequence of difficulties and reductions in external financing that — as discussed in section I and verified in the numbers of 1998-2002 period — usually frame a lasting low tide phase. From the receiving economies viewpoint, the problems associated with excessive capital inflows during the
high tide were not replaced by the ones caused by the scarcity. On the contrary, the exchange rate appreciation pressures, the adverse effects on exports and current accounts and the risks of assets and credit bubbles are, to some important countries, higher than before 2008. So, the departing point to discuss the current and projected situation is the recognition that, at least in this sense, this time was different.

But, as implicitly suggested by Akyuz (2011) and others, it could be just an exacerbation of the previous situation, and the developing world would be on the brink of stronger reversion of the financial cycle, similar to those verified in the beginning of 1980s or in the aftermath of Asian crisis in 1997. The increasing fiscal and financial problems in Europe and the perspectives of a Greek default (and even a collapse of the Euro) during the third quarter of 2011 append arguments and evidences for this point of view. A new systemic financial crisis would represent, according to this reasoning, the effective turning of the tide, the end of the party or some similar metaphor.

Coherent with the theoretical considerations drafted in section I, an evaluation of this picture, illuminated by the comparison with past cycles, has to take into account the structural determinants – typical of a finance-led capitalism, with asymmetric and unstable monetary/financial order –, but also the interaction between external and domestic factors.

Inside the former group, three defining characteristics of international economy in each time deserve closer attention: the risk aversion of global investors, the growth pace and short term perspectives of central economies, and the interest rates in the currencies situated on the top of international monetary hierarchy. The current behavior of these parameters (Figure 3), shows a complex a unusual situation. On one hand, risk aversion has been signaling a long and difficult “low tide” since 2008: the Volatility Index (used as a proxy for the propensity to take risks, and negatively correlated with capital flows to developing countries) reached unprecedented levels in 2008 and is subject to huge increases since then. On the other hand, GDP growth and yields in central economies have been playing a decisive role in pushing the capital flows to other destinations. In the first case, G-7 performance and its distance to developing world was already a clear peculiarity of the 2003-2008 interval, was maintained during the crisis and is projected to last on years ahead. But certainly the most powerful push factor is the very low, close to zero interest rate in central currencies, a result of the monetary policy reactions to financial crisis, never verified (in such a coordinated way) in previous cycles and that most probably will keep in action in during the medium term horizon.

In addition to these variables, some less objective forces seems to be in action still on the “push” side, and need to be considered. Firstly, an obvious difference to recent crises affecting capital flows: this time the turmoil (the stronger since the 1930s) had its epicenter in the central economy, and the damage caused in the U.S. and Europe were higher than in the periphery as a whole. Three years after the collapse, this novelty is more evident than ever, and explains the poor growth perspectives already mentioned. Furthermore, thanks to fiscal and political problems (also more evident than ever), the ambitious monetary project of the Euro is in serious danger, while the U. S. faces renewed challenges to keep its privileges as issuer of the reserve currency. Predicting a radical change in the central pillar of the international financial relations – the monetary asymmetry with the U.S. dollar as the top currency – certainly would be an overstatement. But there is a growing consensus about a more balance international monetary system in the future, on which the Chinese renminbi will certainly play a decisive role and the regional influence of some currencies tends to be greater than today.
Interacting with this peculiar combination of external factors, the domestic reality of receiving country is obviously diverse, as well as the record of capital inflows after the crisis. According to preliminary evidence provided by IMF (2011) and IIF (2011), the return of inflows in 2009 and 2010 was much more prominent to Latin America and Emerging Asia than to Emerging Europe. To this last region, indeed, it is possible to observe (and forecast) a lasting low tide. The reasons behind this different pattern are illustrative of the main argument regarding “pull factors”.

During the high tide phase up to 2008, emerging European countries – the most notorious cases were Hungary and Ukraine, but many other economies from Central and Eastern Europe and CIS follow the same route – in a certain sense repeating the errors of Latin America and Asia during the first half of 1990s. The high growth rates in the wake of massive inflows (mainly of short term bank debt) were accompanied by exchange rate real overvaluations, large and increasing current account deficits, growing stocks of external debt denominated in foreign currency. A large part of this debt was transformed in domestic credit (in domestic currency) by local banks. Even with different records in terms of other strategic variables (real state prices, inflation, fiscal accounts), the currency mismatches in the balances of banks (and other agents) were the main ingredients to the serious damages suffered by the region as whole when the “sudden stop” of capital inflows came. Following a classic exchange rate crisis (that required the assistance of IMF in some cases), a financial one happened, increasing the losses. It is not difficult to comprehend why the capital inflows, even with those powerful push factors in action, did not return to this region.

11 Some numbers, extracted from IMF-WEO database, are impressive. The current account deficit of the aggregate “Central and Eastern Europe” was lower than -8% of GDP in 2007 and 2008. In some cases, the figures are astonishing: Bulgaria posted a deficit of -30% of GDP in 2007 and in Latvia it was around -20% in 2006 and 2007. In terms of GDP...
But to Asia and Latin America the regress was intense, and despite the huge differences in various aspects of the economies in both regions, some common features seem to have played a role, before and after the crisis. First and foremost, the external accounts performed much better this time when compared to the previous high tide (the years before 1997). Both regions presented current account surpluses or very small deficits, for completely different reasons (dynamic exports of manufactures and the Chinese impulse in Asia; primary commodity prices in Latin America). This environment have enabled the accumulation of foreign exchange reserves, a process that varies a lot among countries, but that means in general a powerful shield against sharp movements in exchange rates and an increase in foreign assets. Consequently, the situation in terms of net external liabilities (or the “International Investment Position”) of these countries improved and, most important, the currency mismatches of the economies were reduced. Another aspect of this picture is the higher relevance, during this cycle, of the absorption of inflows through of the entrance of foreign investors in local markets of bonds and equities, and a lower share of bank and portfolio debt negotiated abroad (in foreign currency).

Other elements should be mentioned, like the better “fundamentals” in terms of inflation and fiscal situation, a “correct” macroeconomic management, the higher rates of growth and the good perspectives (even in a stagnating world economy), in some cases the interest rate differentials in a context of almost zero yield in central economies. All of these are also powerful pull factors, which help to explain not only the relatively mild impact of the international crisis in these regions, but mainly the fast return of capital inflows. However, its importance seems to be subordinated to the fundamental changes related to the size and composition of external assets and liabilities.

In short, the behavior of capital inflows to developing economies after the 2008 crisis is different not only because the predictions of a lasting low tide were frustrated; the return was not homogeneous among emerging regions. The reasons behind these “novelties” are certainly related to the exceptional combination of macro prices and, growth perspectives in central economies, but the domestic situation of receiving countries also matters, and is essential to understand the higher differentiation.

The same reasoning, considering this dynamic interaction between pull and push factors to think about the recent developments in this field, can be used to think about future perspectives.

The third quarter of 2011 witnessed a growing tension in international financial markets, and various analysts foresee the repetition of a 2008-style systemic crisis, with bank failures, collapse of interbank transactions and, to make things worse, and a lower capacity of reaction from national states, thanks to political resistance and the heritage of the previous rescue operations. The core of the problems, this time, is located in Europe, and threatens the very survival of the single currency. Among the sources of stress, the most important are a likely default on Greek debt and the potential of contagion to other peripheral European economies, the situation of banks and other financial agents exposed to the those public debts, and the absence of effective mechanisms of coordination inside the monetary union (especially in fiscal front).

In such a situation, the current state of excessive capital inflows to developing economies hardly will persist. The most likely scenario – in a certain sense already observed during September – is composed by a much higher instability and, in the event of a new systemic crisis, a more serious “flight to quality”. But a lasting “low tide” phase is difficult to forecast, because of this very different combination of pull and push factors described here.
In fact, apart from a “nuclear” scenario of complete meltdown of international financial system – on which the world certainly would retreat in terms of financial globalization – it is difficult to imagine a permanent run of investors to zero-yield currencies, or to regions actually much more fragile (in financial and fiscal terms) than the healthiest emerging markets. Since the great problem now is the Euro, and not a peripheral currency, the list of “target” in the radar of international investors is quite different than in previous episodes.

As a result of all these new features, the situation of developing economies, in general, improved significantly when compared to the past. Despite (or because of) the turbulent times ahead, the more permanent challenges related to capital inflows, at least for some selected countries, seem to be the management of the abundance, not the scarcity. One of these national cases deserves special attention.

**IV. Brazil, the new features and perspectives**

The Brazilian economy, in recent decades, has been one of the most important destinations of capital inflows and, having implemented a continuous process of financial opening since the beginning of 1990s, suffered all the oscillations described in section II. In fact, all the relevant economic processes in Brazil were somehow related to the context of greater or lesser availability of external financing: from the “lost decade” of 1980s to the resumption of growth in mid-2000s, passing through the successful stabilization plan implemented in mid-1990s and the exchange rate crises of 1999 and 2002.

As depicted in Figure 4, the contours of the broad cycles of capital inflows to developing economies fit almost perfectly to the national data. Even with a higher level than the average in the first years of 2000s (largely explained by the depreciation of local currency) and much lower numbers between 2002 and 2005, the general and specific trends are quite similar. From 2006 to 2008, in effect, the exact records are in practice the same, suggesting that Brazil was driving the general oscillation. The Figure 5, which depicts the total by types of flows, also is similar to the general trends showed in Figure 2.

**Fig. 4. Capital inflows to emerging market economies and to Brazil, GDP share, 1990-2012.**

Source: Own calculations based on data from Central Bank of Brazil, IMF and IIF.
e: preliminary estimation (IIF, june 2011)
f: forecast (IIF, june 2011). Data for Brazil in 2011 refers to the total accumulated in 12 months up to the end of first semester.
The more recent evidence, however, shows an economy to some extent “decoupled” from the general trend verified, or forecasted, to emerging economies as a group. Even using the relative measure, the level reached in 2010 and in the first half of 2011 is close to 2007 mark; the absolute numbers for these last registers are significantly higher than the previous peak. Without doubt, instead of an eventually low tide phase, in Brazil a renewed and strong high tide was observed in the aftermath of the worst international financial crisis in decades.

The components and motivations of this fast return deserve some special attention. Probably the most notorious aspect of Brazilian economy, in financial terms, is the unusually high levels of domestic interest rates. Undoubtedly, the major motivation of the massive inflows to Brazil, even before 2008 crisis, has been the enormous interest rate differential, that pursues the so-called carry trade operations between central and peripheral monies. This “pull factor”, indeed, was reinforced after the crisis, since Brazilian authorities started to augment the policy rate in the first half of 2010 to control inflation, while a very lax monetary policy was adopted in central economies (see Figure 3). Even after some reduction in the beginning of September 2011, the Brazilian real rate still is the highest among the relevant economies, exceeding the 4.5% per year, while the zero or negative numbers are the rule worldwide.\textsuperscript{12}

This peculiarity is the main driver of the recovery of inflows to Brazil in 2009, led firstly by portfolio (equity and debt) and bank flows, the same motion that explained the record levels of 2007. Since 2010, however, important shifts are noteworthy: while the total inflows keep growing, the composition is improving, with a decrease in equity and portfolio debt flows, and a strong recovery in FDI flows (Figure 5).

\textbf{Fig. 5. Capital inflows to Brazil, by major components, GDP share, 1990-2012.}

\begin{figure}[h!]
\centering
\includegraphics[width=\textwidth]{capital_inflows_brazil.png}
\caption{Capital inflows to Brazil, by major components, GDP share, 1990-2012.}
\end{figure}

\textit{Source: Own calculations based on data from Central Bank of Brazil.}
\textit{* Data for 1992 and 1994 are adjusted to “neutralize” large amortizations of Bank debt that were refinanced through issues of portfolio debt, in the context of external debt renegotiation (Brady Plan). Because of those operations, the original numbers super estimate the amount of portfolio debt inflows and underestimate the values for bank debt, without influence on the total inflows.}
\textit{** Data for 2011 refers to the total accumulated in 12 months up to the end of first semester.}

\textsuperscript{12} Measuring the differential by the difference between the domestic policy rate and the sum of the country risk (CDS premium) and the US policy rate, the Brazilian record increased to 11% in mid-2011, while in other emerging markets like South Africa and Turkey this indicator was below 5%, and in South Korea did not reach 2%. 


These recent trends are not easily explained by the external context or just by the interest rate differential. Since October 2009, different efforts to moderate the excessive inflow of short term capital are pursued by Brazilian authorities, mainly through tax-based capital controls. Despite the capacity of financial agents to circumvent these barriers (what requires a constant monitoring and revision of the measures), to some extent the goals are reached. On the other side, the huge increase in direct investment observed in the last two years, despite some suspicions about a “camouflage” of short term investment inside FDI flows, is related to other set of good factors.

In other words, there are additional pull factors beyond high interest rates in Brazilian economy, nowadays and in the projected future. The resumption of economic growth in the last decade, initially driven by the external sector, is clearly led by domestic market since mid-2000s, an advantage in an international environment of low growth and diminishing impulses from external trade. The processes sustaining the domestic market dynamism – income redistribution, expansion of domestic credit, a still insufficient increase in public and private investment – have a long way ahead, and the economic policy is nowadays oriented to preserve these sources of growth. Furthermore, Brazil will host the two biggest sports events – the World Cup in 2014 and the Olympic Games in 2016 – that are also great opportunities to receive productive investments, especially in infrastructure sector.

But the major “asset” of Brazilian economy for the medium term future is the recently discovered large oil reserves, located in very deep layers of the Atlantic Ocean. The “pre-salt” offshore reserves have the potential to put Brazil among the leading oil exporters, but to explore this opportunity an enormous amount of investment and technology will be required. A large part of it will came (in fact, already is coming) from abroad. In a lesser extent, other sectors of the economy related to primary commodities production (mainly minerals and agriculture) also are important sources of foreign currency receipts, as well as promising fields for external investment.

Objectively, the current relations of Brazilian economy with the rest of the world are also different from previous periods. Since the end of 2007, the current account of the balance of payments is in deficit, a historically repeated process in developing countries, which often leads to exchange rate crisis. The size of the deficits (stabilized around -2.2% of GDP during the first half of 2011), however, are less worrying than the numbers registered in 1990s (-4% in the worst moments). As already mentioned, the financing of these deficits is far from being a problem to Brazil: the total amount of capital inflows has been superior to 7% of GDP, and just the FDI inflows are enough to cover these needs (Figure 5). The major problem, this time, is related to vulnerability of this relatively mild result to a possible decrease in commodity prices, leading to a sharp reduction in the value of exports.

With regard to stocks, the situation show signs of structural change, and here are the major improves. The total amount of external liabilities at the end of first half of 2011 was US$ 1.4 trillion – much higher than the US 400 billions registered, for example, in 2001, but that in relative terms is a sign of a better position (around 60% of GDP today, against 70% that time). The other side of the balance-sheet is also improved. The stock of external assets was slight inferior to US$ 700 billions (or 30% of GDP) according to the last numbers available, of which US$ 350 billions were official foreign exchange reserves (15% of GDP). The contrast with other moments is revealing: the Central Bank of Brazil had, on the brink of 1997 Asian crisis, approximately US$ 60 billions of

13 The growing importance of “intercompany loans” in total FDI flows, and some complicated accounting and legal operations in this field have been calling the attention of analysts. But the general trend of higher absorption of direct investments is undeniable.

14 This and the following quantitative information were extracted from regular data release of Central Bank of Brazil.
international reserves (8% of GDP), and this amount decreased to US$ 35 billions (6% of GDP) in average, between 2000 and 2002.

However, the most important shift is not related to the size of the liabilities stock (or the comparison with assets), but to its composition. Thanks to a massive entry of foreign investors in local bonds and equity markets, the share of portfolio liabilities denominated in reais is today of 60%, coming from less than 10% at the beginning of 2000s. Taken into account the other forms of liabilities (FDI and bank debt), the portion “de-dollarized” of external liabilities is today around 2/3, against less than 1/3 in 2002, another moment of stress in international financial markets.

The consequences of these last numbers need to be highlighted. Having a larger part of its commitments with external investors denominated in its own currency, a country is in a much better position to face a sudden devaluation of exchange rate. Not only the value of this part of the stock automatically decreases with the exchange rate move, but also the capital flight (i.e., the conversion of the investment in foreign currency and the return to the original country) is discouraged. In those situations, the “balance-sheet effect” acts in favor of the debtor country or, in simpler terms, the exchange rate risk is transferred to the creditor. If the large stock of external assets, especially international reserves, is considered, the result is a much lower level of currency mismatch.

Finally, another advantage of Brazilian economy nowadays refers to the fiscal position, and its vulnerability to changes in external sector. During the second half of the 1990s, and even more in the turbulent times of 2001/02, the stock of public debt was continuously increasing, regardless of current fiscal result. The flows of revenues and expenditures, even when subject to a “responsible” macroeconomic management, were not able to counteract the autonomous variations of the stock, driven by its indexation structure. That time, more than 40% of the debt was sensitive to changes in the exchange rate, while today this share is around 4%. In fact, thanks to the large holdings of external assets (international reserves) by the public sector, today the fiscal position improves with exchange rate devaluations. As an example, the net public debt fell from 43% to 38% of GDP between August and November of 2008.

All of these changes, even when considered together with the good perspectives from the “real side” previously commented, do not turn Brazil immune to a reversal in the international financial cycle. Such positive transformations could be more intense, the currency “re-match” is lower than in other economies (like China) and, after all, Brazil has current account deficits, a notorious ingredient of future problems. Moreover, a recent sharp increase in the absorption of traditional external debt by private sector is making some specific companies more vulnerable to exchange rate fluctuations, in the traditional way.

But the point to stress is that the Brazilian situation as a whole is far from being similar to those observed in the reversal moments of the 1990s and 1970/80s. Nowadays, a brief interruption in capital inflows, even when followed by sharp exchange rate moves, has a lower potential to cause damages that extend the problems, initiating a long period of difficulties. It is true that each crisis reveals new sources of vulnerability – as was the case in 2008, when the exposition of banks and companies to exchange rate derivatives provoked some fears of systemic crisis. But from the point of view of traditional balance-sheet effects, the situation is clearly improved, even better than three years ago.

In such circumstances, the general perspectives to financial inflows to developing economies summarized at the end of previous section fit perfectly to Brazilian case. With important specific elements that reinforce the trend, especially the large interest rate differentials that attract
massive carry trade operations. The task of manage the abundance, in Brazilian case, is even more
difficult than elsewhere, as showed in the recent attempts to moderate short term inflows.

V. Conclusions

Along the different sections of this paper, the broad goal of understanding and describing a
common feature of developing countries economic history was mixed with the emphasis on the
recent developments that changed the picture in a more permanent way. The main idea of the
work is that the vulnerability of these economies to the periodical swings in international capital
inflows is a structural factor, due to the defining characteristics of contemporary finance and to
the relative positions in its asymmetric organization. But, at the same time, the argument is that
some domestic aspects, especially the “financial fragility” positions built during phases of
excessive capital inflows, are key to evaluate the size of the damages caused by a sudden reversal
and the length of a low tide in terms of external financing.

With these elements in mind, the developments in this field after the 2008 international financial
crisis can be better explained. The return of capital inflows in a much faster way than predicted,
largely motivated by the unusual configuration of external factors (mainly the very low yields in
central economies), was more intense to the regions where the currency mismatches and other
balance-sheet effects were minor during the excess phase. Except for Emerging Europe (that is, in
fact, experiencing a lasting low tide), there were neither twin nor fiscal crisis in big emerging
markets in the aftermath of exchange rate devaluations. Especially for Asian an Latin American
economies (despite the huge differences and determinants), the errors of the 1990s were not
repeated. Permanent attention to these sources of vulnerability has to be, undoubtedly, a top
priority of economic policy in developing countries.

More importantly, the perspectives for the future are also different from previous experiences.
The financial landscape is prone to volatility and new rounds of financial crises in core economies
and this certainly will imply a higher degree of instability in capital flows to emerging market
economies. But while the interaction between domestic and external factors remain similar to the
current configuration, a lasting low tide is difficult to forecast for developing economies as a
whole, and for some cases in particular.

Brazil is one of these cases. Not only because of its improved conditions in terms of balance-sheet
effects and good perspectives of growth, but mainly thanks the most powerful pull factor
attracting short term capital inflows: the extraordinary level of interest rate differentials. Despite
the recently demonstrated political will, this characteristic is not so easy to modify in the short
run, especially given the almost zero-interest rate policy in central economies.

Hence, apart from the revelation of a hidden source of external vulnerability, the projected
situation of capital inflows to Brazil keeps positive for the medium term, subject to short term
volatility. Nevertheless, this is not a comfortable situation. In addition to the worries regarding the
current account deficit and the vulnerability to the evolution of primary commodity prices, the
major problems are related to the lasting effects of this benign scenario. A permanent surplus of
foreign currency puts a permanent pressure on the exchange rate. The appreciation trend,
especially when combined with other structural weaknesses of Brazilian economy, has been
eroding the competitiveness of domestic industry for a long time. Even with lower risks of a
traditional exchange rate crisis following this situation, the consequences are deleterious to the
productive structure of the economy. The fears of a “de-industrialization” process, or of a re-
primarization of exports structure, are well justified, and tend to increase with the expected large
revenues from the oil sector in a near future.
As a result, for Brazil the policy challenges posed by this very specific international conjuncture are two-fold. On one hand, the tasks of structural policies – on the industrial, educational, scientific and infrastructure fronts – are higher than ever. The exchange rate, this time, hardly will contribute decisively for the competitiveness of Brazilian economy. On the other hand, trying to moderate short term inflows, selecting the kind of capital more suitable to its enormous needs in terms of development financing, is the major challenging arising from external sector.

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