International liquidity cycles to developing countries in the financial globalization era

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Abstract: This paper aims at discussing and documenting the oscillation of capital flows to developing countries (best described as international liquidity cycles), considered to be a structural element of the financial globalization era. The shift of developing world’s external situation following the current financial crisis is a dramatic (but not uncommon) example of this behavior. Based on these assumptions, the article tries to: i. provide a brief (and heterodox) theoretical background to the theme; ii. document the two big cycles of financial globalization (1990-2002; 2003-?) using different quantitative indicators; and iii. summarize the arguments and think about future perspectives on this subject.

Key-words: Financial globalization; capital flows; cycles; developing countries

JEL Classification: F32; G15
Topic area: 7. Finance
Kind of work: Paper

Los ciclos de la liquidez internacional hacia países en desarrollo en la era de la globalización financiera

Resúmen: El propósito de esta comunicación es debatir y documentar la oscilación de los flujos de capitales hacia los países en desarrollo (mejor calificados como ciclos de la liquidez internacional), considerados elementos estructurales de la era de la globalización financiera. El cambio de condiciones financieras externas del mundo en desarrollo en la presente crisis financiera es un ejemplo dramático (aunque no inédito) de este carácter. Con dichos presupuestos, el artículo intenta: i. proveer breves (y heterodoxos) fundamentos teóricos para el tema; ii. documentar los dos grandes ciclos de la globalización (1990-2002; 2003-?) con distintos indicadores cuantitativos; y iii. resumir los argumentos y especular sobre las perspectivas futuras.

Palabras clave: Globalización financiera; flujos de capitales; ciclos; países en desarrollo

Clasificación JEL: F32; G15
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Tipo de trabajo: Comunicación
Introduction
During the year of 2008, mainly in its second half, the vast majority of developing countries faced a lot of challenges that, in recent years, had been far from their economic routine. Severe and continued losses in formerly buoyant capital markets; large withdrawals from funds dedicated to this kind of economies; exchange rates reverting the appreciation trend and, in some cases, plummeting. Expressions such as "flight to quality", "risk aversion" and even "external financial crisis" came back to the news, in a sharp contrast with the optimism and euphoria of some months before.

Curiously, those bad events affected not just the countries previously identified as more vulnerable (located mainly in Western Europe, which are in fact going through serious crises), but also some of the "superstars" of the good times. The falls in stock exchanges were notably severe in São Paulo, Shanghai, Mumbai and Moscow; the ruble, the rupee and the real suffered big losses against the dollar and the euro, leading to difficulties in some domestic banks and enterprises. Even the so-chanted shields of these economies – current account surpluses and the resulting increasing stocks of international reserves, which had revived the debates about the "capital flows paradox" or "capital flowing uphill" – were not apparently good enough to preserve them from the effects of a drastic expectation reversion.

The background of the change, obviously, is the worst financial crisis since the Great Depression, made explicit by the problems in the sub prime segment of the US mortgage market, and that turned radically into a real meltdown in financial systems of central economies.\(^1\) Regarding its consequences to the periphery, after a brief reputation of the "de-coupling theory", the trends outlined above are strong enough to allow us to say that the tide went out, or the party is over. Hence, one question follows: if, unlike the 1990's episodes, this time the crisis has its origins at the center, and had more drastic effects on central financial systems, what explains such dramatic consequences on developing countries? Maybe a more long-term approach, oriented by some critical considerations about modern international financial relations, could help understand the present, past and maybe future events in this field.

\(^1\) The deep roots of the crisis, related to the so-called "finance-led capitalism" and the growth pattern of recent times – both at United States and the world economy – are far beyond the problem of the housing sector. And, of course, its discussion is also far beyond the limits of this article.
Moved by this doubts, this paper aims at discussing and documenting the oscillation of capital flows to developing countries (best described as international liquidity cycles), considered to be a structural element of the financial globalization era. Besides this introduction, the article tries to: i. provide a brief (and heterodox) theoretical background to the theme; ii. document the two big cycles of financial globalization (1990-2002; 2003-?) using different quantitative indicators; and iii. summarize the arguments and think about future perspectives on this subject.

I. Theoretical considerations

I.i. Why "international liquidity cycles to developing countries "?  
"International liquidity" is not a clear concept in economics. Traditionally, as a legacy of gold standard exchange rates, international liquidity means all the resources a country could use to finance its balance of payments deficits (i.e., the sum of international reserves held by central banks, denominated in reserve currencies and gold, plus some other reserve assets like the Special Drawing Rights of IMF\(^2\)). But this definition is old-fashioned and useless today, after several decades of inconvertibility and floating exchanging rates. As stated by Clark and Polak (2004),

"The concept of a given stock of global international liquidity, which provided a constraint on the operation of the system of pegged rates, is no longer relevant. International reserves can now expand in response to demand, and the role of the SDR in relieving the constraint on the supply side has correspondingly diminished." (p. 51)

In fact, not just the floating exchange rates, but especially the international capital mobility – which, according to conventional models, can afford all the external financing a country needs, all the time – seem to make these worries almost an intellectual query without practical implications. Unfortunately, in the real world things are not that simple, and the international liquidity is indeed a real problem to a wide range of countries, especially the developing ones. Like firms and families, national economies can suffer from "liquidity constraints": being able or not to produce the necessary flows to face the long run commitments, they can find themselves, more or less suddenly, with serious short-term problems before the international economy.

The key concept here is the difference between countries and its currencies in the global space – an aspect that doesn't fit so well in conventional reasoning of international financial relations. In this sense the international liquidity to developing

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\(^2\) See IMF's International Financial Statistic explanation: [http://www.imfstatistics.org/imf/IFSInter.htm](http://www.imfstatistics.org/imf/IFSInter.htm)
countries would have more to do with the availability of international currency – led by, and accounted on, the US dollar. But this variable should neither be taken as a synonym of simple measures of *excess liquidity* in one or two major developed economies, nor derived from broader and more sophisticated attempts to define the *global liquidity* with the same geographical boundaries – like the one present in IMF (2007, Box 1.4).³ What is being pursued here is not the whole liquidity in the world, but just the part of it which affects the developing world.

From this perspective, some other practical definitions would be more helpful. For instance, the notion of *international illiquidity* applied by Chang & Velasco (2001) in the explanation of emerging markets financial crises of the 1990's – "a situation in which a country's consolidated financial system has potential short term obligations in foreign currency that exceed the amount of foreign currency it can have access to on short notice"⁴ – or the simpler *international liquidity index* used by Barbosa Filho (2001) – the ratio of foreign reserves to foreign debt – to assess the effects of swings in external finance on the Brazilian economic performance. Both concepts share the interaction between a peripheral country and an external, foreign currency-denominated financing supply, but both are equally more focused on the relations between stocks and flows (i.e., they are dealing with the effects of capital flows on the host economy).

This paper will also examine, in section III, this kind of interaction as a tool to evaluate the external vulnerability to shifts in external situation. But, in order to characterize the background phenomenon, a more direct proxy is needed. So the definition for "international liquidity to developing countries" that is used henceforth is the availability of private international capital flows to this kind of host country, always in an aggregate basis (to all developing economies or to the segment of "emerging market economies"). In order to measure it, as explained in the next section, there are different direct and indirect indicators, but the general observable fact is simple: how the external financing conditions evolve over time.

³ "Excess liquidity" measures are, in general, based in deviations of the "Taylor-rate" which should orient domestic monetary policy. Besides this, in the IMF document quoted above several indicators based also on quantities and financial markets prices are calculated.

⁴ p. 1. Note that this concept share the same ideas that would, later, open a wide field of research about developing countries' external financial vulnerabilities, commonly known as "balance sheet approach". The best examples of this literature are Eichengreen & Hausmann (eds., 2005) and Goldstein & Turner (2004).
The question that follows is obvious: why not use the term "capital flows" to define these movement? There are, at least, two answers.

First, this expression could convey the wrong idea of a current account, private and official capital flows assessment – which, as stated in UNCTAD (2008, ch. III), leads to the concept of "net capital inflow" or "outflow" as synonyms of deficit or surpluses in current account, and, consequently, to the notion of "foreign savings" import or export. Despite its relevance, this is not exactly the point here – mainly because private financial capital seems to move without any close relation with the current account result.

In that sense, and following the Keynesian advice, it's better to take "saving" as an ex-post phenomenon; the ex-ante and determinant one is the cross borders search for yield movement by huge amounts of private capital. The accounting of it, and the governments' response to an eventual excess of inflows (by means of reserve accumulation in financial centers) should not puzzle anybody. Furthermore, being – temporarily or not – a net capital export doesn't mean that a developing country becomes isolated from swings in international financial landscape (or that it can play a protagonist role on this movements).

Second, the idea of "liquidity" seems to be full of significance to this discussion. An asset is considered to be more liquid insofar as it can be exchanged by money (the liquid asset par excellence) faster and with fewer capital losses. To have the wealth in a less liquid asset (which, in general, is traded in a less liquidity market) means to have a higher degree of risk propensity – probably compensated by a major yield. Regarding international financial relations, this logic can be put as follows: the most liquid assets are those denominated in US dollars, traded at US financial markets. Any movement towards different markets and, most important, different currencies, represent a decrease in liquidity preference, or a decrease in risk aversion. From the point of view of these "different" and illiquid markets/currencies – exactly the focus here – this dislocation denotes an increase in international liquidity. Finally, the notion is that such appetite for risk – or such liquidity preference – from global financial investors (the main actors in this stage) varies throughout short-term history. A deeper analysis of these changes is the task of next sub-section.
I.ii. What drives these cycles?

Even when not defined as "cycles of international liquidity", the oscillation of external financing availability to developing countries is an undeniable, stylized fact. Nevertheless, on theoretical grounds, there are few integrated explanations to this evidence – at least inside the so-called mainstream economics. In fact, if one would follow strictly the classical benefits of financial opening (international risk-sharing; inter-temporal trade; macroeconomic discipline⁵), this would be a non-question: the capital should flow, in a continuous fashion, 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".

Such an abstract prediction has been changed in recent years, mainly in response to the sequence of crises that affected the major emerging markets since the last half of 1990's. The historical evidence that the "capital doesn't flow from rich to poor countries"⁶ is also a catalyst to theoretical revisions. New generations of exchange and financial crises models succeeded, and some unusual elements in conventional literature (self-fulfilling prophecies, herd behavior etc.) were introduced.⁷ But these were, in general, discussions more closely related to episodes of crises, and not to the succession of bad and good times of financing to developing countries.

At the beginning of the 1990's, when private capital flows "suddenly" started to flow back to Latin American countries, after a long decade of almost complete absence, a brief debate occurred inside the mainstream, regarding the causes of the radical change. There were basically two positions. On one hand those (such as El-Erian, 1992 and Schadler et al., 1993) who explained that trend by internal factors – namely, monetary and fiscal policies leading to macroeconomic stabilization, the liberalizing reforms according to the Washington Consensus codification, and external debt renegotiations following the Brady Plan guidelines. On the other hand those (the best reference is Calvo, Leiderman & Reinhart, 1993) who emphasized the dominance of external factors, specially the low levels of growth and interest rates in developed economies, without which the appetite for those countries wouldn't

⁵ The intertemporal trade has two complementary meanings: to smooth out the effects of income fluctuations and to exploit the investment potential without the need of a drastic raise in domestic savings. See, inter alia, Obstfeld & Taylor (2004, ch. 1.1) and Fischer (1998).
⁶ As already mentioned, this is an old (but sometimes forgotten) puzzle of international finance, known as "Lucas paradox", in reference to his article on the subject (Lucas, 1990). See also Obstfeld & Taylor (2004, ch. 7) and, to a critical assessment, UNCTAD (2008, ch. III).
⁷ For a brief survey of this literature, see Burnside et al. (2008).
have been revived. This is an important division – also named “pull versus push factors debate” – that will remain important in good or bad phases: who are the villains (or the heroes) and who are the victims (or the blessed) in each time?

Afterwards, several very interesting concepts were introduced by some of these economists. Also under the impact of 1990’s crises, Calvo (1998) and Calvo & 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 & 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 & 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.  

However, except in this last case – in which some factors explaining the cycle are clearly discussed (commodity prices, international interest rates, and growth in largest economies) – the conventional literature neither focuses on the forces behind the oscillation, nor tries to draw conclusions from the evidence, thinking about the future. The same could be said of some recent and richly detailed reports by IMF (2007), World Bank (2008) and BIS (2009) – which deal with the same phenomena and also identified, more or less explicitly, the sequence of good and bad phases. Important exceptions, among multilateral agencies' assessments of this topic, are UNCTAD's analyses (1999; 2006) – where the emphasis on the cyclical nature of external finance leads to a more cautious attitude (regarding financial opening) recommendation.

In a critical or heterodox approach to the question, such cyclical nature can be seen as a result of at least two structural features of international financial relations

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8 The general idea (a country or a group being in fashion for a time in the eyes of international investors, followed by an episode of sudden stop or a less dramatic reversion) is very similar to the approach of the present paper. But the criteria used to identify the periods of “bonanzas” - large current account deficits in a general definition - suffers from the same problems already discussed above. Just to illustrate, countries like Brazil or Mexico, which undeniably enjoyed the good international financial conditions of recent years, and certainly will suffer the effects of the present reversion aren’t on the list of "bonanzas" in the last cycle (because the current accounts surpluses or small deficits).
during the globalization era: 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.

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 broader 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. 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. This is the second level of analysis, specific to developing world.⁹

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⁹ The concept of asymmetries is proposed by Prates (2005), based mainly on ideas of 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, not just one of the biggest inconsistencies of conventional wisdom (the capital doesn’t flow as expected), but also a fragile position: 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. Specifically, economies are subject to a draconian rule regarding interest rate setting: even with floating exchange rates, the monetary policy is not totally freed from external influence (the “impossible trinity” theory does not apply perfectly in this case). A floor is determined by the cost of money in the major financial centers, plus the global investors’ risk evaluation, plus the expected exchange rate depreciation.

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 – that marks the contemporary world and typify a developing country: 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).

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10 About unconvertibility of peripheral currencies, its roots and consequences, see Carneiro (2008).
As in a stylized Minskyan financial cycle (an optimistic period, when the expectation on future yields shore up financial transactions involving more and more risky agents), a confidence phase also occurs in international liquidity directed to developing countries, 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 liquidity, any event that induces a reevaluation of the risk/return combination of assets denominated in unconvertible currencies (vis-à-vis the central economies) is able to trigger a “flight to quality” – an increasing in risk aversion or in liquidity preference in this international sense.

Both in the optimistic and in the pessimistic moments, these 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 (the “mini-cycles”), which are unable to offset the broad trend.\textsuperscript{11} Because international capital flows are, as discussed, intrinsically unstable nowadays (more than before), not just the two big phases in recent time seem to be shorter, but also the mini-cycles are more frequent.

An additional dimension of this discussion is related to the economic processes that, further than psychological factors, lead these changes in expectation, liquidity preference and risk aversion – the same dispute between pull and push factors already commented. The assumption here is that the economic situation in central economies (issuers of convertible/permanent currencies) is the major determinant of the big movements, despite the interaction with internal conditions. In normal times, variables like global and central economies’ growth rates and the monetary conditions of those countries (firstly in the US) are the most important in determining the general trend of capital flows to developing countries. But these “real” bases to the attitude toward riskier assets can always be surpassed by exceptional events.

The main implication of this relation between internal and external factors driving the cycle needs to be emphasized: the level and conditions by which the private capital is available to developing countries are set by process beyond their

\textsuperscript{11} \textit{Boom and burst, feast and famine}, or the already mentioned \textit{sudden stops} are other terms used in the literature to title the cycles’ phases.
control, or even their influence. Hence, the power of domestic “fundamentals” – which can, of course, reinforce a trend already in progress or compensate its effects – are clearly subordinated to more important forces. In a nutshell, the developing countries are much more victims than protagonists in international liquidity cycles’ dynamics.

II. Two international liquidity cycles to developing countries since 1990

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, 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, this 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 (the external indebtedness process in 1960’s and 1970’s, which will result in 1980’s debt crisis) is less important.  

So, after 1990, the general picture of international liquidity directed to developing countries can be seen in Charts 1 and 2, both about net private capital flows: the first based on IMF data covering 145 "developing and emerging economies"13, and the second on IIF data covering 28 "emerging market economies".14

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12 In fact, that liquidity cycle was dominated almost exclusively by bank loans, a type of flow that shares importance with equity and bond flows during the financial globalization era. To a more long term assessment, which includes the 1970’s, see UNCTAD (2006, ch. IV)

13 Out of the 174 economies covered WEO Database, 29 are considered advanced: Australia, Austria, Belgium, Canada, Cyprus, Denmark, Finland, France, Germany, Greece, Hong Kong SAR, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Malta, Netherlands, New Zealand, Norway, Portugal, Singapore, Slovenia, Spain, Sweden, Switzerland, Taiwan Province of China, United Kingdom, United States. All the remaining 145 are "emerging" or "developing". Specifically to this series, the group also comprises the Asean-4 (Hong Kong SAR, Korea, Singapore and Taiwan Province of China) and Israel.

14 Divided by region, they are: China, India, Indonesia, Malaysia, Philippines, Korea, and Thailand; Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru and Venezuela; Bulgaria, Czech Republic, Hungary, Poland, Romania, Russia, Turkey and Ukraine; Algeria, Egypt, Morocco, South Africa and Tunisia.
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 reversions, the moments when the international liquidity directed to developing countries moves from a "high tide" to a "low tide". Based on this indicators, the starting points of the two cycles would be 1990/91 and 2002/03; and the instants when "the tide goes out" are 1997/98 and 2007/08.

Despite the differences between the two charts – attributed to the different samples and the indicators (in current US dollars and as GDP shares) – the movement is similar. Interestingly, the smaller list of economies included in IIF measure give rise to higher levels of net private flows, maybe indicating an important role as capital exporters of some developing countries not considered to be “emerging” (probably Arab oil-exporters). The index relative to GDP, especially in Chart 1, approximates the peaks of two cycles, but is clear that the maximum reached in 2007 is much higher than the previous one, in 1996. Hence, it's in fact a “super cycle”, but a more intense climbing can suggest a much deeper dive.

*: IMF forecasts (October 2008)
If the more recent numbers are correct – just preliminary estimations and forecasts to 2008 and 2009, which probably will be revised downwards – a dramatic reversion is happening now. By IIF figure (and by IMF GDP share also), the total net capital flows would return to 2002 levels – one of the most difficult moments, regarding external financial conditions to developing countries, in recent history.

Beyond this general picture based on net totals, some qualification can be done. Firstly, by examining the behavior of the different types of capital flows. Using the balance of payments financial account division, Chart 3 shows a rather stable trend regarding FDI flows - that account for the biggest share of net capital flows to the broad sample of economies used by IMF, and are mounting until 2008. As expected, the two additional kinds (portfolio flows and other investments) are much more volatile.

It’s possible to notice some additional trends. On the high tide of first cycle, the ascendant movement was driven firstly by portfolio flows, later followed (and overtaken) by FDI. But in the low tide, the drop is divided in two moments: the first led by other flows (1997-99) and, then, by portfolio flows (2001-02). Afterwards, a recovery in these two types of capital is the explanation of the beginning of the high tide of the second cycle, with FDI recovers just in 2004 onwards. In general, peak
moments are a combination of huge increases in all modalities (maybe signaling a "contagion" between them), but the first reversion was more flow-specific, as already observed. In that sense, what turns the present reversion so dramatic is the projected simultaneous (and deep) falls in the three kinds of flows, including FDI.

Chart 3. Private capital flows to emerging and developing economies, by type of flow, US$ billions, 1990-2009

The numbers from the restricted sample of IIF, organized in four categories ("other capital flows are here divided in "commercial banks" and "other private creditors", show the same trends (Chart 4). The highlight is, certainly, the leading role played by commercial banks flows in the recent high tide phase, and its drastic reversion in 2008 and 2009. This kind of flow was, indeed, the most important in 2006 and 2007 - even more than FDI (whose net numbers are diminished by the big outflows recently observed from emerging economies).
Another way of depicting the cycles can be done by means of using (Chart 5). This label doesn't designate just "entries" of capital, but exactly the kind of movement more important here. The actor involved in the operation is the defining factor: "inflows" (in contrast to “outflows”, not showed by the pictures) correspond to the swings of the capital from abroad - i.e., foreigners buying or selling assets in local markets or issued by locals in external markets. Hence, it can be positive or negative, according to the balance between sales and purchases. The numbers, always as GDP shares, are divided by big emerging region, and cover the period between 1990 and 2007 (IMF’s forecasts in October that year) – hence, the reversion in 2008 and 2009 is not represented here.

The broad picture for all emerging markets (last figure) shows the same general trend already seen by net numbers: two cycles, with a recent peak (in 2007) in higher levels than the previous one (1996/97), but with a smaller difference between the two climbs. The low tide period (1998-2002) appears by this angle as a succession of very bad moments, 1997/98 (Asian and Russian crisis) and, later, 2001/02 (not just the geopolitical turbulences in a global level leading to a higher risk aversion, but also crisis in Argentina and Brazil). Amid them, a brief recovery is
noticed between 1999 and 2000: this is the best example of what was called mini-cycles (another one, in a lesser dimension, is the retraction of inflows observed in 1995 in Latin America, resulting from Mexican crisis).

Chart 5. Gross private capital inflows to emerging market economies, percent of GDP, 1990-2007

*: IMF forecasts (October 2007)

When specific regional numbers are analyzed, it’s possible to see the violence of Asian crisis in 1997/98 and that this region is the most relevant in the definition of
general trend to all emerging economies. Surprisingly, the impact of Latin American crises on gross private inflows appears relatively mild by this picture, especially in 1998/99.

The trends for Emerging Europe are more impressive: not just the peaks of inflows reached in the two cycles are extremely high (more than 8% of GDP in 1997 and even in 1999, almost 12% in 2006 and 2007) but also the reversion during the low tide of first cycle is very soft. As discussed below, those facts seem to be important in the comprehension of recent events in emerging European economies, the most affected by the current reversion.

With this detailed picture in mind, it's time to return to a background discussion: the drivers of these cycles. According to the theoretical underpinnings briefly discussed above, a high tide phase is driven by a reduction in risk aversion of global investors - who, in a self-reinforcing trend, expands their activities towards "exotic" and riskier markets until a certain point where the "adventure" is drastically reversed and the capital flights back to safety.

One question follows directly this reasoning: what is the behavior of risk aversion during the period of liquidity cycles? To measure this psychological variable, it's frequent in the literature the use of VIX - an option traded in Chicago Board Options Exchange that varies according to the implicit volatility attributed to the S&P 500 – as a proxy of global market sentiment.\textsuperscript{15} As depicted in Chart 6, the long-term trajectory of this index is rather well suited to the figure of the international liquidity cycles just discussed.

The transition from high to low tides (measured by capital flows data to developing countries) is always preceded by shifts in market risk appetite/aversion. A long phase of low and declining risk aversion covering all the first half of 1990s seems to stop in some point of 1996/97. Afterwards, a climbing tendency (punctuated by sudden jumps) is the rule until the beginning of 2003. For the next four years, the indicator reached its historical lows – in line with the records in capital flows to developing countries.

\textsuperscript{15} A discussion about the VIX as a risk aversion proxy is made on IMF (2004).

But, again, the party came to an end. Even before problems in the sub prime mortgage segment in US were explicit, the VIX started a mounting trend that - specially after September 2008 - led the risk aversion to a level that nobody could wonder before: the historical peak is 80.9 in October 20, 2008 (less than two years before, it had reached one of the historical lows: 9.9 in January 24, 2007). The preliminary conclusions are awful: if this link between VIX and liquidity cycle persist from now on, and if this indicator can be taken as good predictor of the private capital flows behavior, even the drastic reversions projected by IMF and IIF seems to be optimistic. But such forecasts are just preliminary. It’s necessary to take into account some additional factors.

Another indirect way of document the oscillation in external financial conditions of developing countries is observing a traditional thermometer of markets' evaluation of these economies. The spreads of Emerging Markets Bonds Index (EMBI) calculated by J.P. Morgan in two versions (EMBI until 2002 and EMBI+ since 1998) are defined as the premium required by international investors to compensate the risk of holding emerging markets sovereign bonds instead of US equivalent securities. Chart 7 shows the course of these indicators during the period in question,

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16 The previous records, from the first liquidity cycle, were: 9.3 in December 22, 1993 and 45.8 in October 8, 1998.
on a daily basis from the end of 1995 to the end of 2008. The compatibility with international liquidity cycles discussed here is total.


Following a decreasing phase since mid-decade, there is a long period of high risks between 1997 and 2002 that corresponds, perfectly, to the swings in capital flows to developing countries. Here it's even easier to see the sequence of crises in emerging economies: Asian from July 1997 onwards, Russian approximately one year later, and then the deterioration of Brazilian situation until mid-1999. The brief recovery started at that point is reversed because the Argentinean convertibility long agony during 2001, and a new apex is reached in the aftermath of terrorist attacks of September 11, 2001. And the turbulence is persistent during the following year (when, again, Brazilian situation and the doubts about its electoral process, are the main driver of the trend).

The index plummeted since the end of 2002, reaching less than 200 basis-points just before the problems in US sub prime mortgage market were made explicit in July/August 2007. Then, the high tide of the second cycle, measured by this risk perception, came to an end, and a soft soaring trend is observed until September 2008, when the indicator jumps. But, observing the maximum values reached (a little more than 800 basis-points), it's possible to say that this climb is not a sky rocking
movement as previous times (more than 1700 basis-points in August 1998 or even 1100 in September 2001).

What could this "strength" mean? A number of factors have to be considered here. Firstly, it is obvious that this time the core of the problems is located on central economies, not in developing world (contrary to the 1990s pattern). But this should not be hailed as good news to developing world: if the international financial relations are marked by all the asymmetries already discussed, the movement during risk aversion jumps is always from periphery to centre, from inconvertible ("provisory") to convertible ("permanent") currencies, regardless the economic origins of that sentiment shift. That is the root of the current paradox: the short-term capital flowing back to the core of the problems, the US financial system. At least until the first months of 2009, this is the pattern, much more than a supposed “decoupling” of emerging markets, an idea already abandoned by its advocates of some months ago.

A different fact is the actual improved conditions in emerging markets in general, compared to the previous reversion and low tide. The most important of these conditions are related to current account results (or the dependence on external financial flows) and international reserve accumulation (the “shield” against a sudden lack of international financing and pressures against the exchange rate). Showing the numbers of these two variables from 1990 to 2007 for the developing world as a whole and for its three biggest regions, Chart 8 can shed light on this question.

Again, Asian numbers shape the trend to the entire group: current account deficits and slow reserve accumulation in the "high tide" of first cycle, current account reversal and acceleration of reserve accumulation after (or throughout) the "low tide", and better position during the recent "high tide". In short, the passage from a vulnerable to a stronger position between the two cycles; it’s the (hard) learning process from the crises’ experience: growing based on external savings is no longer a secure option! Even the Western Hemisphere (Latin America and Caribbean) have followed this "Asian receipt" after 2003 – despite some signs of reversion in 2007.
The big exception is Central and Eastern Europe (Emerging Europe), with huge and increasing current account deficits throughout the different phases, and a slower pace of reserve accumulation, even after 2004. This elevated external savings absorption is a kind of "1990's behavior" – apparently the emerging Europeans didn't learned anything from the previous decade experience. One of the reasons can be seen on Chart 5: the "low tide" of the first cycle had not been so severe to these countries, in terms of capital inflows. As a result, this is obviously the most vulnerable region, as proven by the exchange crises happening in Hungary, Ukraine and so on in 2008-09.

But it’s necessary to stress again: the so-called “better fundamentals" are an important shield against the effects of a reversion in international liquidity, but certainly are insufficient to avoid the “low tide" itself. This is driven, all in all, by very different phenomena, away from developing countries’ command or even influence. The internal factors, as discussed, are just a minor part of the explanation, subject to external ones.
III. Concluding remarks

This paper has investigated the international financial conditions of developing countries on two complementary dimensions. At the theoretical level, some heterodox ideas and concepts were used to build a comprehensive explanation of the oscillation of private capital flows to these economies – or, as preferred here, the international liquidity cycles. In a descriptive effort, those cycles are documented by means of complementary direct and indirect quantitative indicators.

In short, those cycles are seen as structural elements of the contemporary international financial order, resulting from the asymmetries that let the developing world in an inferior position regarding external financing. Specifically, the availability of private capital flows (coming from foreign sources but also from the residents) is subject to a risk/return calculation – always a matter of risk aversion or liquidity preference in the international level – that changes over time, leading to the “high” and “low tide” phases. More important, the drivers of these periodical shifts are factors beyond the control of developing economies, which are more victims than leading characters in that whole process.

The numbers presented in the second section seem to corroborate this reasoning: since 1990 (considered to be an adequate starting point) the world has witnessed two big cycles, the high tide phases of which with roughly the same duration: 1990/91-1997/98; and 2002-2008. Between them, a low tide period full of crises and brief recovery attempts. That chronology has an almost perfect counterpart in the risk premium of the developing countries and in global investors risk aversion.

Based on these numbers and interpretation, how to think about future perspectives on this subject? At least two possibilities arose from the evidence presented here.

On one hand, the historic record of prolonged difficult times following an euphoria period points to a pessimistic forecast. More than that, the sudden increase in risk aversion since September 2008, reaching inconceivable levels, can be seen as a prediction of a long and dark winter – or, better saying, a severe drought. In fact, if one compares the current VIX levels with those of previous low tide, the situation can prove worse than that projected in the IMF and IIF numbers.
However, the main arguments supporting this bad scenario are not derived from quantitative evidence. Despite a distinctive aspect that could help the developing world – the crises now are originated in the center, not in the periphery like in the previous reversion – the qualitative features of the moment make things even worse.

The nature, depth and extension of the financial crisis turn this juncture one of the most uncertain periods in all economic history. The consequences of several unimaginable events in sequence – leading to the virtual meltdown of US and European financial systems as a whole, with those strong economies now on the verge of mass bank nationalizations – are simply unpredictable, in a Keynesian sense. As “uncertainty” is a synonym of risk aversion and liquidity preference, it’s difficult to wonder how the low tide trend in international liquidity could be reverted in a short period. Even with serious problems in the private financial system, and some signs of monetary hegemony contestation, the US dollar and public treasuries will probably continue to be seen as the safe heaven of the system. During difficult times, the main movement is toward there, not from there to exotic destinations.\footnote{Even in a most complicated scenario, where the US dollar is challenged as the key currency, the situation would not be better to developing economies and its external finance. Currency competition moments in history were marked by strong turbulence and uncertainty, also.}

On the other hand, the general better situation of developing countries, with a decreasing need for short-term financial flows and larger international reserves, is undeniable. Contrary to the previous low tide, exchange crises are not visible in the short-term scenario to the majority of prudent developing economies – mainly those that have taken advantage of the good times to prepare for the bad ones. In that sense, the much stronger position of Asia (and even Latin America) vis-à-vis Emerging Europe highlights the fact that the lessons from 1990’s should have been learned by all.

But these small pieces of good evidence should not be taken as adequate grounds for a lot of optimism – and the reasons, again, didn’t come directly from the numbers. Firstly, because the liquidity cycle itself is not driven by domestic factors: the better fundamentals can act (and are in fact acting) as tools to reduce the adverse effects of the reversion, but they are not able to avoid the low tide. And secondly because the improved external situation must be seen dynamically: the exceptional global situation, which has enabled the large current account surpluses
and fast reserve accumulation by developing countries, apparently doesn't exist anymore. Like the liquidity cycle, the high tide of global trade also is turning into a low tide in the aftermath of the global economic (and not just financial) crisis.

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