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## TAMING CAPITAL ACCOUNT SHOCKS: MANAGING BOOMS AND BUSTS

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### I. Introduction

A paradox and weakness of the triumph of the market economy in recent decades was the fact that liberalization was the strongest in the area -finance- where market imperfections are in fact the largest. Indeed, as a result of rapid and widespread liberalization of both domestic and international financial systems, as well as capital accounts, currency and financial sector crises became increasingly frequent, and developmentally as well as fiscally, costly. This has culminated in the global financial crisis, that started in 2007 in the developed countries and which was, to a large degree, also a result of extreme financial liberalization, accompanied by insufficient and inappropriate regulation.

Latin America, especially in the Southern Cone, had followed this pattern of liberalization and crises since the late 1970s. Diaz Alejandro (1985) had then very perceptively synthesized this as “Good-bye financial repression, hello financial crisis”. Domestic financial crises interacted with the 1980s major Latin American debt crisis, to lead to a lost decade for growth and equity (see, for example, Griffith-Jones and Sunkel, 1989).

In particular, the liberalization of the capital accounts of Latin American economies led to sharp surges and then reversals of capital flows, which posed both severe difficulties for macro-economic management (Ffrench-Davis and Griffith-Jones, 2003), and led to very costly crises.

As the Latin American debt crisis of the 1980s was followed by the Mexican peso crisis and the East Asian crisis, a major discussion arose internationally about the urgent need to reform the international financial architecture. Griffith-Jones and Ocampo (2003 and 2009) have long emphasized the need for strengthening counter-cyclical elements in this international architecture, to allow greater space for counter cyclical macro-economic policies at the national level. This approach has gained further relevance and support with the 2007-09 global financial crisis, and the ensuing discussion and reforms on counter-cyclical as well as comprehensive regulation and international liquidity provision. Particularly, if the attempts at international financial reform fail or are insufficient to curb excessive boom-bust patterns of capital flows, as well as their severe costs, the issue of slowing down capital account liberalization is again of great policy relevance; where this liberalization has already largely taken place like in Latin America, re-introducing capital account regulations is again becoming relevant.

International capital markets have grown dramatically since the mid-1960s. Although international capital movements partly reflect expanding economies, increasing world trade and the globalization of production, they also involve purely financial factors that rose notably faster. The revolutionary innovations that have taken place in telecommunications technology, and the emergence of increasingly “sophisticated” financial techniques contributed to a boom in

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international financial flows. Increasingly, these capital movements used opaque instruments, that were totally non-transparent and unregulated, such as the Over the Counter (OTC) derivatives. Booming domestic and international financial flows occurred in a framework of lax or incomplete regulations and supervision, and in which existing regulations, such as the Basle II banking regulation were in fact pro-cyclical, which reinforced the inherent pro-cyclicality of financial and banking markets.<sup>1</sup> More recently, after the 2007-2008 global financial crisis, there is growing agreement over the significant shortage of macroeconomic and financial governance in the present stage of unbalanced globalization (Griffith-Jones and Ocampo, 2009).

This critical problem has had crucial relevance for Latin American countries (LACs) in the last decades. In the 1980s, the links with international capital markets were largely severed as a result of the debt crisis. However, the region enjoyed a booming expansion of capital flows during 1991-94, from mid-1995 to 1997, in the mid-2000s, and again since mid-2009. At the beginning, these surges, especially in the early 1990s, were most welcome because they overcame a binding external constraint that was contributing to low investment levels and to a severe economic recession in the region; but they later became excessive and contributed to the vulnerability that was revealed when the Asian crisis hit LACs. On the four occasions, these increasing inflows generated an unwelcome and distorting effect on real macroeconomic balances.

We have observed that emerging economies, frequently led by capital surges, penetrate into *vulnerability zones*, which is contrary to conventional economic views that capital flows provide discipline for governments to follow better macroeconomic policies. The vulnerabilities generated include: (i) high external liabilities, with a large short-term share; (ii) significant current account deficits; (iii) appreciated exchange rates and currency mismatches; (iv) high prices of domestic financial assets and real estate; and (v) sizable increases in money supply as counterpart of the accumulation of international reserves. The longer and deeper the economy's penetration into those vulnerability zones, the more severe the *financieristic trap* in which authorities could get caught, and the lower the probability of leaving it without undergoing a crisis and long-lasting economic and social costs. The absence or weakness of policies moderating the boom –leaning against the wind through macroeconomic and regulatory policies during overheating and/or curbing excessive capital inflows– endangers the feasibility of adopting a strong reactivating policy under the frequently recessive environment following the bust (see Ffrench-Davis, 2006).

## II. Liberalization of the capital account

Most general equilibrium frameworks take no account of important real-world conditions in capital flows, such as informational gaps and asymmetries, that contribute to problems such as herding, the incompleteness of the market within which investors operate, and the allocation implications of the volatility of financing. These factors frequently do not allow, spontaneously, countries to tap the benefits of foreign savings. Indeed, systemic market failure does occur. Frequent reminders of this feature are the major financial crises, mostly accompanied by macroeconomic collapse, that have taken place in recent economic history, including the debt crisis in Latin America in the 1980s and the Mexican, Asian, Argentinean and Brazilian crises, as well as the recent global crisis that started in the US.

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<sup>1</sup> For early discussion of these issues, see Griffith-Jones (2001); Ocampo (2002); United Nations (1999).

### A. *The case for regulation: sequencing, selectivity and volatility*

Reforms were inclined toward rapid liberalization of the capital account. Particularly, in the mid-1970s three Southern Cone countries –Argentina, Chile and Uruguay– underwent radical economic liberalization processes, inspired partly by the financial repression hypothesis. As known, the Southern Cone experiment collapsed in the early 1980s after speculative bubbles on asset prices, low domestic savings and investment, with a huge external debt. The history was repeated to a significant extent during the 1990s, when the reforms á la Washington Consensus were implemented in several LACs, *pari passu* with the two capital surges present in that decade.

As far as sequencing is concerned, there is now consensus that the capital account opening was premature and should have been postponed until other major reforms had been consolidated and equilibrium prices established. The lesson is that during adjustment, open capital accounts (especially in periods of elastic supply of international finance) can induce capital surges, with destabilizing macroeconomic and sectoral effects.

First, if productive investment capacity reacts slowly and/or with a lag and domestic financial markets remain incomplete and poorly supervised, additional external resources cannot be absorbed efficiently in the domestic economy, thereby threatening the future stability of flows themselves. Second, fiscal parameters need to be consolidated, tax evasion must be placed under control, and policy must be flexible, for without a sound tax base and flexible fiscal instruments, authorities must rely excessively on monetary policy to regulate aggregate demand. Third, under capital surges, financial markets adjust faster than economic structures; this usually leads to the emergence of bubbles in financial assets and real estate markets, together with exchange rate appreciation (and/or inflation).

The policy response to avoid all those sources of vulnerability is to impose a gradual adjustment in financial flows, accommodating its speed to that at which productive structures can adjust. In brief, if it is decided to liberalize the capital account, the speed at which it should be done must be tailored to the economy's capacity to absorb and allocate efficiently external resources, as it may take many years before conditions emerge (such as a deep and institutionally diversified domestic financial market; a broad, consolidated tax base; a diversified, internationally competitive export sector; and a wide range of available macroeconomic policy instruments) that will allow their economies to absorb unregulated capital flows in ways that are consistent with sustained growth and social equity.

The gradual approach also stems from the belief that macroeconomic stability also requires a certain sequence in capital account opening itself. A clear distinction can be drawn between inflows and outflows, and it is suggested that countries should liberalize the former before the latter, partly because the benefits that can be derived from outflows are more evident after accumulating substantial net assets (Williamson, 1993; Rodrik, 1998). There could also be sequencing within the components of inflows and outflows: for instance, long-term inflows could be liberalized before short-term transactions while, in the case of outflows, priority might be given to direct export-oriented investments and trade credit.

The proponents of sequencing usually question only the order and timing of liberalization, not the ultimate objective of an open capital account. Yet the overriding importance of real macroeconomic stability, coupled with the overwhelming size of international capital markets compared with the much smaller Latin American economies and the severe imperfections existing in such markets that lead to very high volatility of such flows may make an inflexible commitment in all circumstances to an across-the-board open capital account highly

undesirable. Indeed, the increasing volatility of international capital flows, and their huge size,— as well as the high cost of crises— have for some time given rise to renewed discussion in industrialized countries on the potentially destabilizing behavior of capital markets and the possible need for capital account regulations (Financial Stability Forum, 2000; Stiglitz, Ocampo, Ffrench-Davis, Spiegel and Nayyar, 2006).

A somewhat different issue to sequencing and selectivity refers to the cyclicity of flows. It is not identical to have a given form of opening under stable or under volatile flows. Given the acknowledged volatility of financial flows, counter-cyclical devices should complement gradual reforms. In periods when resources are scarce, there would be justification for seeking ways of attracting capital inflows, especially trade credit and long term flows, and erecting certain barriers to discourage capital outflows. The reverse would apply when there was an abundance of capital in the markets, as in 1990-94, in 1996-97, and in 2004-2007 or even since mid 2009 for many LACs. For the sake of macroeconomic stability, in these circumstances short-term and liquid inflows should be transitorily restricted or discouraged and some channels for outflows promoted.

#### ***B. The objectives, nature and experience with capital account regulations***

Obviously, sequencing and counter-cyclicity imply the presence of either price-based or quantitative regulations. The more pressing the need for management, and the more underdeveloped fiscal and monetary policies are, the more likely it is that the use of direct regulations, such as quantitative controls, on certain types of capital flows will be warranted, even if only temporarily (Ocampo, 2003). Often, controls of any type are considered inefficient and capable of being circumvented by ever more sophisticated capital market operations. But, as Williamson (2000) has pointed out, “assertions about the ineffectiveness of capital controls are vastly exaggerated”.

In developing countries, these regulations should have three policy aims: (i) reduce currency mismatches; (ii) improve maturity structure of external debt; and (iii) increase the room for maneuver of macro-economic policies. In any case, capital account regulations are a complement for sound real macroeconomic policies, not a substitute for them.

Specific regulations should be put in place to control currency mismatches, including those associated with derivative operations. The strict prohibition of currency mismatches in the portfolios of financial intermediaries is probably the best rule. Authorities should also closely monitor the currency risk of non-financial firms operating in non-tradable sectors, which may eventually become credit risks for banks. Regulations can be used to establish more stringent provisions and/or risk weighting (and therefore higher capital requirements) for these operations (Ocampo, 2003).

Capital account regulations should also aim at improving debt profiles, and in this way reduce the risks associated with liability structures that are biased towards short-term capital flows. This is a severe cause of vulnerability as recorded in several currency crises in emerging economies (Rodrik and Velasco, 2000; see Ocampo, 2003). They can also be used as a complementary tool of macroeconomic policy. If effective, they provide room for action during periods of financial euphoria, through the adoption of a contractionary monetary policy and reduced appreciation pressures; they will also reduce or eliminate the usual quasi-fiscal costs of sterilized foreign exchange accumulation. In the other phase of the cycle, of binding external

constraints, they may provide space for expansionary monetary and fiscal policies.<sup>2</sup>

Overall innovative experiences in the 1990s indicate that price-based regulations, particularly unremunerated reserve requirements (URR) on capital inflows, can provide useful instruments, both in terms of improving debt profiles, facilitating the adoption of counter-cyclical macroeconomic policies during the boom, and minimizing the costly adjustment during downturns following overheated disequilibria. URRs are thus aimed at deterring over-expansionary macro policies and ratios from penetrating into vulnerability zones. Following the positive experience of Chile in the first half of the 1990s (see Agosin and Ffrench-Davis, 2001; Ffrench-Davis, 2010, ch. VIII), these regulations were also usefully applied in Colombia (Ocampo and Tovar, 2003). These regulations also (i) provide a more market-friendly environment for irreversible investment decisions; (ii) help avoid significant output gaps between actual and potential GDP; (iii) avoid outlier macro prices (exchange and interest rates); and (iv) discourage outlier macro ratios (deficit on current account/GDP, price/earnings ratios of equity stocks, and net short-term and liquid external liabilities/international reserves).

On the other hand, the experience with quantitative type regulations includes the well-known action of Malaysia in 1998 of imposing tough non-price regulations on outflows. Data supports the view that they were effective in contributing to the sharp GDP recovery in 1999, by making feasible the active fiscal and monetary policies implemented by Malaysia to face the crisis (Kaplan and Rodrik, 2001). They also include the traditional controls of, such as quantitative restrictions on short-term financial borrowing and regulations on outflows by domestic agents. Experience indicates that these regulations have worked quite efficiently for the objective of macroeconomic policy to significantly reduce the domestic macroeconomic sensitivity to international financial volatility, as in China and India.

Despite their advantages and the improved understanding of the causes of “modern” financial crisis in emerging economies, capital account regulations were not widely used during the boom of the mid-2000s. Even more, the moves to introduce URRs by Argentina, Colombia and Thailand led to serious rejection by financial markets, and their lead was not followed by others. Some countries did introduce other regulations, particularly on the purchase of domestic currency government bonds by international institutional investors.

In 2009, there is again a perception of increased need to discourage excessive inflows, as the carry trade linked to loose monetary policy in the developed countries creates very large short term inflows to countries, leading to excessive appreciation of their currencies. This has resulted in Brazil taxing portfolio inflows in October 2009, a form of capital regulation similar in its economic effects to URRs. Asian countries, like Taiwan, have followed similar policies.

### III. Origins and composition of private capital surges in the 1990s and 2000s

There is well-documented evidence that the initial surge of private flows, in the early 1990s, was originated, to a large extent, in the supply side of capital flows rather than in the demand side.<sup>3</sup> It was associated with technological innovation in financial markets, as well as, institutional and monetary policy changes in developed economies, and was encouraged by some

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<sup>2</sup> The market rewards *prudently balanced* external debt structures, because, during times of uncertainty, the market usually responds to *gross* financing requirements, which means that the rollover of short-term liabilities is not financially neutral (see Ocampo, 2003).

<sup>3</sup> The classical paper is Calvo, Leiderman and Reinhart (1993). Diverse approaches and emphasis are found in Eichengreen, 2003; Griffith-Jones (1998); Krugman, 2000; Rodrik, 1998; Stiglitz (2000).

economic authorities and powerful lobbying forces (see Bhagwati, 2004, for a strong criticism of that lobbyist activity). The financial surge toward the EEs originated mainly in the US. Liberalization of financial outflows in the US, its domestic recession in the early 1990s -with a limited local demand for funds, and very low real interest rates, due to loose monetary policy- led investors to search for yields in other markets. *Pari passu*, there was a fast opening in the capital accounts of EEs, first in Latin America; consequently, this opening was implemented under abundant supply. Latin America was a receptive market, with the binding external constraint still prevailing in 1990, and offered the expectation of high rates of return.

#### **A. *Surges and falls of inflows and diversification toward volatility***

There was a massive scale-up of private capital flows to Latin America in the early 1990s. Net capital inflows climbed in 1992-94, to 3.6% of GDP and an average of US\$52 billion. Furthermore, after the drop in 1995, they jumped to US\$79 billion (4.5%) in 1996-97 (See Table 1 below).

The sharp increase of international financial flows since the early 1990s was notably more diversified than in the 1970s. The trend was a shift from medium-term bank credit, which was the predominant source of financing in the 1970s, to more portfolio flows (equity and bonds), short-term time deposits, and acquisitions of domestic firms by foreign investors. Overall, these changes in the composition of finance were seen by many observers as positive, since they involved a greater diversification of capital flows; flows with variable interest rates (particularly dangerous for funding long-term development, as shown by the 1980s debt crisis) represented a small share of total inflows.

However, there were crucial dangerous features, stressed by some observers (for our own work, see Ffrench-Davis and Griffith-Jones, 1995). One perceived source of vulnerability was that current account deficits grew too sharply, as occurred in previous booms. Second, associated to that fact, real exchange rates had generally been strongly associated to the net capital flows: they appreciated significantly during the surge and depreciated sharply during the bust (see figure 4 below). Indeed, the evolution of real exchange rates has responded, to a large degree, to financial flows (rather than to the real forces behind the current account). Third, the domestic investment ratio did not grow *pari passu* with capital inflows; actually, capital formation has been notably low in the region during all the period of reforms a la Washington Consensus (see Ffrench-Davis, 2006, chapter III).

Paradoxically, this diversification seemed to have potentially brought more instability, in as much as, since the 1990s, there has tended to be a *diversification toward highly reversible sources of funding*. If each component tended to respond to different causes of fluctuations, diversification would likely imply that the fluctuations of the diverse flows compensate each other, leading to more stable total flows. However, the new components not only were more unstable but, additionally, they were prone to be subject to common contagions; frequently, they have shared similar bouts of over-optimism and over-pessimism. The potential reversibility of flows is not observed during the expansive-boom stage of the cycles, but explodes abruptly with the contagion of negative changes of mood common to diverse financial markets.<sup>4</sup> For instance, figure 1 shows the sharp cyclical fluctuations of stock prices, just taking an average of the indexes of Latin America; its fluctuations are strongly correlated with the country risk grading of

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<sup>4</sup> The accelerated growth of derivatives markets contributed to soften 'micro-instability' but has tended to increase 'macro-instability' and to reduce transparency. See Dodd and Griffith-Jones (2006).

LACs. It is a fact, that risk rating has been quite pro-cyclical, as discussed below.

Include Figure 1

One of the most dynamic and comparatively stable flows to LAC is FDI, which rose sharply since the Tequila crisis, from about 1% of GDP in the early 1990s to almost 3% between 1996 and 2003, though falling to 1.9% in the 2004-2008 period. FDI includes, however, two components: traditional greenfield investment, and more novel M&A, which have been more pro-cyclical (see table 1).

Include Table 1

The traditional FDI experienced a sharp rise since the mid-1990s. It expanded fast in the world, and in particular to LACs, as an important agent of globalization. Greenfield FDI inflows are, by their own nature, reflected directly in capital formation, and continue to be more stable (it is a persistent variable, with a unitary root).<sup>5</sup> On the contrary, M&A is an inflow not linked with the direct generation of productive capacity. Private domestic sales of firms to FDI frequently are followed by financial outflows, especially under recessive gaps; it depicts a clearly pro-cyclical behavior. For example about one-half of FDI inflows into Latin America in 1996-2003 corresponded to M&A (UNCTAD, 2005).

On the whole, only greenfield FDI flows seem to be a fairly stable and rather irreversible capital inflow, and flows of FDI that are already well in the investment process tend to continue until projects are completed. However, it should be stressed that the same multinationals that carry out FDI often hedge their exposure pro-cyclically or even speculate; these latter transactions are often destabilizing.

The foundations of a broad liquid market for portfolio investment, that were laid down with the Brady bonds in the late 1980s, developed vigorously in the 1990s and 2000s, with Latin America as a major destination for both bond and stock financing.

The advantage of bonds is that they are often at fixed interest rates until maturity. However, spreads are highly volatile through the cycle, as indicated in Figure 1. The average maturity for bonds is also highly sensitive to the cycle.

Equity investment was a new form of external private funding for LACs. This has the advantage of a cyclical sensitivity of dividends. However, equity flows carry very important volatility risks for recipient countries. Foreign financiers can, suddenly, stop not only investing in equities, but try to sell their stocks quickly, if they fear a worsening prospect. This leads to pressure on the exchange rate and/or to price drops in the domestic stock exchange. This latter could have a negative impact on aggregate demand -via wealth and panic effects. As long as markets are led by players who specialize in short-term yields, the risks of great volatility are inherent to external financing (Eatwell, 1997).

## **B. Global factors effecting Latin America**

Amongst important institutional changes affecting capital flows to developing countries that occurred in the 2000s we underline two. The first is the introduction of collective action clauses into bond issues of many EEs, which facilitates future debt restructuring. It is important to highlight that these changes have not increased the cost of borrowing for countries that introduced these clauses. The second is the approval of Basel II, without participation of

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<sup>5</sup> Prasad, Rogoff, *et al.* (2003, table 1 and figure 3) report data on volatility of total inward FDI, bank loans and portfolio investment. The authors confirm the conclusion from other abundant research that FDI is less volatile, even though they did not control for M&A.

developing countries, and thus without taking account of their interests. Basel II tends to restrict the supply of bank flows to developing countries, and to increase their cost. Perhaps most worrying, as has been increasingly recognized in the wake of the global financial crisis, is that it will increase pro-cyclicality of international and domestic bank lending. (Griffith-Jones and Persaud, 2008).

The great regulatory debate that followed the recent global financial crisis will also have important implications for developing countries, but as this process is ongoing, at the time of writing, we cannot yet extract definitive lessons. It does, however, seem clear that there will be a more general trend to greater counter cyclicity and comprehensiveness in regulation, which hopefully should be beneficial for ensuring greater stability in flows towards Latin America (Griffith-Jones and Ocampo with Ortiz, 2009a).

One outstanding feature behind the supply of funds to EEs, is that institutional investors, especially pension funds and insurance companies, saw their total assets increase dramatically in the last decades. At the same time, there has been a clear trend towards an increase of the share of foreign assets in total assets. This led to the development of specialized markets, such as the bonds and shares issued by EEs. A result of the development of these markets is that the role of credit rating agencies has broadened considerably, as they provide information to investors. However, there has been widespread criticism of the markedly pro-cyclical behavior of ratings during the gestation and explosion of the Asian crisis (see Reisen, 2003) and in the build-up of the global financial crisis (Goodhart, 2010).

As pointed out, the large expansion of liquidity by developed countries' Central banks in the wake of the global financial crisis has led to a major surge in short term flows to Latin America and much of emerging economies, in 2009, in search of higher yields, contributing to significant appreciation of exchange rates and sharply rising stock markets. Evidently, stock prices became inconsistent with the slow recovery of economic activity, and exchange rates also inconsistent with the need to progress toward sustainable macroeconomic balances suited for development. These trends are suggesting that new bubbles are being created.

### ***C. The financial risks of the newer capital flows***

The benefits of interaction with private capital flows for the development of LAC economies depend, to a great extent, on stable and predictable access to financial markets, especially valuable for long term investment. The risk of abrupt stops in supply and/or sharp increases in cost and shortening of the maturity terms of external liabilities, are partly determined by perceptions of risk and hence host country policies. But, as pointed out, access also can be heavily conditioned by exogenously determined supply-side dynamics, related to industrialized country policies in the areas of macroeconomics and prudential regulation, as well as developments in financial markets themselves.

One new source of a growing potential for market instability are derivatives, which have become increasingly important in financial activity. These transactions are unregulated often with no margin or capital standards. Furthermore, information on derivative transactions continues to be extremely incomplete, especially when they are on the over-the-counter market (Dodd and Griffith-Jones, 2006). The role of derivatives in the carry trade was very negative both during the surge of inflows to Latin America in 2004-2007, which contributed to appreciating exchange rates and in the reversal of flows in the wake of the global crisis; it implied a major reversal of



the carry trade for a brief period in 2008, leading to sharp depreciations and significant losses by companies in countries like Mexico.

Given the increase in global systemic risk, central banks and governments in LACs should seek to participate actively in global discussions of regulation, especially those that affect their countries. The fact that three Latin American countries, Brazil, Mexico and Argentina, since 2009 participate in the global regulatory forums, like the Financial Stability Board and the Basle Banking Committee, should facilitate such a task somewhat.

#### **D. *New Policy Strength and Challenges***

It should however be emphasized that LAC governments have made efforts to reduce their vulnerability to financial crises, and have recently in the good times, e.g. the mid 2000s accumulated large levels of foreign exchange reserves, as well as reduced both the level of external public debt, and improved its structure (longer maturities, higher proportion in local currency). Indeed, as can be seen in Table I, Latin American countries accumulated annually on average \$49 billion of foreign exchange reserves during the 2004–2008 period, that is around 1.5% of GDP every year. Net foreign exchange reserves for the seven largest LAC countries reached in late 2007 12.3% of GDP, which is almost double their level in 2001; even more important, as percentage of foreign debt, net reserves for those seven major countries reached 58% in 2007, compared with 20% in 2001 (Ocampo, 2009). This has implied that LACs were somewhat less vulnerable through the financial channel to the global financial crisis, though they were badly hit via the trade and remittances channel, and initially suffered a major, even if brief, reversal of capital flows. Indeed, governments were more able than in the past to pursue somewhat countercyclical fiscal policies; also where necessary governments could use part of their reserves to provide trade credit to their exporters, and working capital to other private companies, whose external sources had dried up.

The reversal of flows during the worst of the global crisis affected all credit flows, including trade credit; it also implied major selling of Latin American shares and other paper, to provide liquidity to US mutual and hedge funds; as pointed out, it also implied major reversals of the carry trade. These trends led to a brief, but costly, period of sharply falling stock markets. Large currency depreciations and losses by companies involved in derivatives markets also occurred, followed by a significant recession. In 2009, average GDP of Latin America, decreased nearly 2%.

#### **IV. *The links between economic growth and capital flows***

One outstanding feature of the economies of the region is the high instability exhibited by GDP, as shown by figure 2. The volatility of capital flows has generated serious negative effects on the real economies of recipient countries. Economic downturns and particularly financial crises, which often result from, or are aggravated by, volatile financial flows, have a negative impact on economic growth and employment; they often result in reduced investment in both physical and human capital. Figure 3 shows the systematic association between swings in external shocks and their impact on aggregate demand. In other words, in recent decades, generally, real volatility has had an external origin: external shocks have been notably stronger than domestically originated shocks.

Include Figures 2 and 3

Under a situation with unemployment of productive factors, the positive shock has

positive Keynesian-type effects: it eliminates the binding external constraint, making possible an economic recovery, with higher use of productive capacity, and thus leading to rising output, income, employment, and investment ratio. However, it is most relevant how some macro variables behave during economic recovery. It happens that most crises since the 1980s have been the result of badly managed booms (Ocampo, 2003). During the boom is when degrees of freedom to choose policies are broader and when future imbalances may be generated. To move toward a macroeconomics-for-growth, we need a systematic differentiation between what is economic recovery and what is generation of additional capacity. Disregarding this crucial feature leads not only to neglect the relevance of investment from the point of view of public policies, but also stimulates the private sector to run a *destabilizing inter-temporal adjustment*. Thus, sharply distinguishing between creating capacity and using existing capacity should be guiding domestic macroeconomic policy.

Figure 4 shows that changes of actual GDP have been sharply associated to fluctuations in aggregate demand. In the last four decades, aggregate demand changes have led GDP changes in both booms and recessions that have affected the region.

Include Figure 4

Inflows, under a binding external constraint tend to be extremely efficient initially, since idle labor and capital are utilized; but it never must be forgotten that if there is such a constraint, this implies that there is a macroeconomic disequilibria in the real economy: actual GDP is lower than potential GDP with relevant implications for growth and equity, for employment and capital formation (see Ffrench-Davis, 2006, ch. II). In fact, when the external constraint disappears as a result of inflows this implies aggregate demand increases. Given that there is an output gap, actual GDP can also rise. For the region as a whole, 2004 is an outstanding case. For six years Latin America had averaged a meager 1.4% GDP growth, less than the rise of population. In 2004 GDP jumped over 6%, thanks to a change in the macroeconomic environment, brought by the acute improvement in external conditions.

In the case of all the general cycles experienced by the region since the late 1980s, trends initially reflected the recovery toward 'normal' levels of aggregate demand, imports and the real exchange rate, all of which were determined by the external constraint during the previous period. However, after a while, the continuing abundance of capital generated an over-shooting leading in those macro-variables, in several cases, to unsustainable macroeconomic imbalances, and inviting a recession.

In fact, if capital inflows or improved terms of trade stimulate processes of recovery in economies with unemployment of productive factors, actual productivity rises because of an increase in the rate of utilization of potential GDP. Then agents, authorities and many researchers may confuse the jump in actual productivity that is based on the utilization of previously idle labor and capital, with a structural increase in the sustainable speed of productivity improvements and in permanent income. Consequently, the market response would tend to be an inter-temporal upward adjustment in consumption, with the external gap covered with capital inflows, as long as the supply of foreign savings is available. That implies a crowding-out of domestic savings. The inter-temporal adjustment ends up being destabilizing.

The increased availability of funds tends to generate a process of exchange rate appreciation; in fact, the RER has been influenced to a large degree by capital flows, as shown in figure 5. Then the expectations of continued, persistent appreciation encourage additional inflows from dealers operating with maturity horizons located within the expected appreciation of the domestic currency. For allocation efficiency and for export-oriented development strategies, a

macro-price—as significant as the exchange rate—led by capital inflows conducted by short-termist agents reveals a severe policy inconsistency. The increase in aggregate demand, pushed up by inflows and appreciation, and rising share of the domestic demand for tradables, augments artificially the absorptive capacity and the demand for foreign savings. Thus, exogenous changes (like fluctuations in the supply of funds) are converted into an endogenous process, leading to domestic vulnerability, given the potential reversibility of flows.

Include Figure 5

When actual output is reaching the production frontier, with the recessive gap elapsing, more active policies are needed to regulate the expansion of aggregate demand. It is essential to keep the rate of expansion of demand in line with the growth of productive capacity (and also with sustainable external financing). Otherwise, if passive macroeconomic policies are adopted in situations of positive external shocks (such as lower international interest rates or increased supply of capital inflows), then the economy will be subject to inflationary pressures and/or a growing gap between expenditure and output. In all events, a future adjustment in the opposite direction will usually be built up.

In brief, an effective pro-growth counter-cyclical policy mix is needed. As documented by Kaminsky *et al.* (2004) for a sample of 104 countries, the opposite has tended to occur in the past. Both monetary and fiscal policies (as well as the exchange rate) have behaved pro-cyclically and have multiplied the effects of financial shocks. Consequently, there is need for counter-cyclical intervention.

Intervention is based on two assumptions: (i) the monetary and fiscal authority has a better idea of future macroeconomic trends in the balance of payments and their long-term effects on the economy; and (ii) more fundamentally, its objectives are longer term than those of agents operating in short-term markets whose training and rewards are associated to earnings in the short term (Zahler, 1998). An outstanding feature of most recent macroeconomic crises in East Asia and Latin America is that currency and financial crises have been suffered by EEs that usually were considered to be highly ‘successful’ by IFIs and financial agents. EEs were “rewarded” with large private capital flows, and falling spreads, in parallel with accumulating rising stocks of external liabilities, over appreciation of exchange rates, unsustainable prices of stocks and of expensive real estate. As explained in Ffrench-Davis (2006, ch. VI), given all these signals of macroeconomic disequilibria, why did neither agent act in due time to curb flows well before a crisis? It has been agents specialized in microeconomic aspects of finance, placed in the short-term or liquid segments of capital markets, acquire a dominant voice in the generation of macroeconomic expectations.

During all the expansive processes there has been an evident contagion of over-optimism among creditors. Rather than appetite for risk, in those episodes agents supplying funding underestimate or ignore risk. Borrowers are also victims of the syndrome of financial euphoria during the boom periods. The agents predominant in the financial markets are specialized in short-term liquid investment, operate within short-term horizons, are highly mobile geographically, and seek returns in the short run. This explains, from the supply-side, why the surges of flows to LACs—in 1977–81, 1991–94 and mid-1995–98—have been *processes* that went on for several years rather than one-shot changes in supply. In this sense, it must be stressed the relevance for policy design of making a distinction between two different types of volatility of capital flows, short term, and medium-term instability. Medium-term instability leads several variables—like the stock market, real estate prices, and the exchange rate—to move persistently in a given direction, providing “wrong certainties” to the market, encouraging capital flows and

*seeking economic rents* rather than differences in real productivity.

In brief, the interaction between the two sets of factors—*the nature of agents* and *a process of adjustment*—explains the dynamics of capital flows over time and why suppliers keep pouring-in funds while real macroeconomic fundamentals gradually worsen. The accumulation of stocks of assets abroad by financial suppliers until the boom stage of the cycle is well advanced, and a subsequent sudden reversal of flows, can *both* be considered to be *rational* responses on the part of individual agents with short-term horizons. This is because it is of little concern to these investors whether (long-term) fundamentals are being improved or worsened while they continue to raise profits from additional inflows. Thus, they will continue to supply net inflows until expectations of an imminent reversal build up. Indeed, for many influential financial operators, the more relevant variables are not related to the long-term fundamentals but to short-term profitability. In conclusion, economic agents specialized in the allocation of financial funding, who operate with short-horizons “by training and by reward,” have played the leading role in determining macroeconomic conditions and policy design in LACs. It implies that a financieristic approach becomes predominant rather than a productivistic approach.

As Ffrench-Davis and Griffith-Jones (1995) argued, several pre-conditions need to be met for capital flows to produce sustained growth –i.e., to create a virtuous “debt cycle”. These include: a) a high proportion of the inflows should go into investment; b) the additional investment should be efficient; c) a large proportion of the increased investment should go into tradeables, so as to help generate the foreign currency required for servicing the debt, and d) creditors and investors must be willing to provide stable and predictable capital flows on reasonable terms.

Unfortunately, it is both difficult and rare, at least in recent Latin American economic history, for large surges of capital flows to lead to sustained growth. A serious source of concern is that in 2009, capital flows to LAC increased sharply, leading again to increased prices of stock markets and strengthened exchange rates, whilst investment as percentage of GDP was falling. This may relate to the fact that the above listed pre-conditions are not being met.

Large surges of capital flows tend to contribute to overvalued exchange rates. Overvaluation, and the instability that brings, discourages investment in tradables, and especially in exports, which are meant to be one of the most dynamic sectors in a market economy. More broadly, volatility in key macroeconomic variables – not only exchange rates but also domestic credit levels, asset values, interest rates and the rate of growth itself – have a negative effect on investment levels via business expectations, as they increase uncertainty about future profitability of investment. As investors have the option of delaying investment until more information arrives, there exists an opportunity cost of investing now rather than waiting. Therefore, increased volatility in macroeconomic variables, which augments uncertainty, reduces the level of private investment, as various empirical studies have shown.<sup>6</sup>

For obvious reasons, overvalued exchange rates encourage growth of current account deficits. As this trend continues, and as foreign exchange liabilities (especially short-term) increase, the likelihood increases of a reversal of capital flows and a currency crisis. Such a currency crisis can increase the risk of a banking crisis.

Another negative interaction between capital flows and sustainable growth operates via the impact on the fiscal balance and public investment. With a surge of short term capital

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<sup>6</sup> In a complementary line, Ffrench-Davis (2006, chap. III) has shown that the gap between actual and potential GDP has been a determinant variable explaining the low investment ratio since the 1980s.

inflows, there is a change in market perceptions about what they will accept as a sustainable level of public expenditure. As this increases, the “permitted” fiscal deficit can rise quite sharply for a transition period, given the space opened by the higher expected GDP growth. Once foreign creditors and lenders see the cumulative effect of their individual decisions, however, sentiment can change suddenly, possibly even to a lower public debt ratio than before the initial favorable change of perception. The financial market then requires a sharp adjustment in the fiscal balance. As taxes are difficult to increase rapidly and current spending is difficult to cut, public investment tends to be the main adjustment mechanism. Sharp fluctuations in public investment are very negative, as efficiency is lost both when projects are started too rapidly and ongoing ones are frozen or delayed once started. Also the volatility and resulting inefficiency of public investment negatively affects private investment because there often are strong complementarities between them.

A final, external reason that makes it difficult for surges of short-term capital to contribute to sustained growth is related to the volatile nature of capital flows themselves. Rather than faithful companions, capital flows are fair weather friends. Their “friendliness for a country or of emerging countries as an “asset class” may quickly change, due to a deterioration in key national variables (such as current account deficits, fiscal deficits or the ratio of short-term foreign liabilities to reserves) that they themselves partly contributed to create or because of external factors, such as variations in developed countries’ interest rates (Mexico, late 1994) or contagion from currency crises in other emerging markets (Brazil, early 1999) or even in developed markets (late 2008 to early 2009).

## **V. Policy challenges for Latin America**

### **A. Capital account liberalization and foreign exchange policy**

In a number of LAC countries, trade liberalization was accompanied by a broad opening of the capital account. For example, the capital surges prevailing from the early nineties up to 1998, the liberalization of the capital account prompted considerable exchange rate appreciation just when trade reforms urgently required the opposite: a compensatory real depreciation.

The mix of import liberalization and RER appreciation, that became feasible only due to net inflows of funding, implied a sharp destruction of import substituting sectors, including not only inefficient firms that had been over-protected, but also producers that would be efficient under “normal” (not-outlier) relative prices and a more gradual movement to a new equilibrium. The exchange rate has a strong impact on the allocation of resources between tradables and non-tradables. This role was strengthened by the sharp reduction of protectionism in LACs (Bouzas and Keifman, 2003).

Exchange rate instability tends to reduce the capacity to identify comparative advantages, a trend that undermines capital formation. In the export side, it often has a negative and stronger impact on new exports, on those undertaken by companies with less diversified markets, and on those with more limited access to capital markets; in the import side, it tends to crowd-out the production of import substitutes, particularly by SMEs. Consequently, exchange rate instability, caused often by capital flow volatility is biased against non-traditional producers.

Instability usually reduces the average rate of use of resources and biases the market toward the short-term and financial *rent-seeking*. A policy that avoids extreme ups-and-downs of the real exchange rate allows for a sustainable higher average level of effective demand and

economic activity. Therefore, it tends to encourage a greater utilization of capacity and to encourage productive investment.

Exchange rate stability and competitiveness is especially important in a developing economy undergoing structural transformation, exhibiting sharp heterogeneity, and with crucial incomplete factors markets; even more than in homogeneous and diversified developed economies, redeployment of resources across sectors is hard and costly. Hence, it is essential for the exchange rate to be guided by the trend shown by the current account of the balance of payments projections (at full employment), seeking to attenuate the transmission of short-term fluctuations of the capital flows into the domestic economy. Capital controls are crucial to moderate destabilizing capital flows and their negative effects on the domestic financial sector and macroeconomic balances. Thus capital controls can be seen both as a prudential tool, to avoid systemic risk in the financial sector, distortions in the production of tradables, and as a tool to avoid macroeconomic imbalances. Capital controls should, we stress it again, always been seen as a complement, and not as a substitute, for good macroeconomic policies.

#### ***B. Financial and capital account reforms***

During the 1990s an extended liberalization was carried out in LACs relating both to domestic capital markets and the capital account. The predominant pattern followed the more naive orthodoxy, repeating to a large degree the 1970s inefficient reform experience of the Southern Cone. There was widespread disregard for the high risk of generating speculative bubbles. It is interesting to note that a "financieristic" bias assigned a strategic role to the sector's sharp liberalization, without considering in the reform design the characteristics of the market failures in question (see Díaz-Alejandro, 1985; Stiglitz, 2000).<sup>7</sup>

A distinctive feature of macroeconomic management, in the transition toward development of the most successful newly industrialized countries, has been the predominance of productive over financial dimensions; with financial aspects serving the "real" side. On the contrary, in many LACs there prevailed the phenomenon of "financierism"—that is, the dominance (or strong influence and powerful lobbying) of short-termist financial agents on macroeconomic decisions. The growing link with the international financial system facilitated the dissociation with the needs of domestic productive systems, encouraged capital outflows during periods of domestic crises, and the predominance of a short-termist bias at the expense of concerns for productivity and additions to productive capacity. In short, total openness to the international financial markets, in developing economies, tends to imply integration into more speculative segments of developed world markets.

From the mid-1990s, campaigning and elected Latin American presidents became usual visitors to Wall Street. International mass media, in turn, began to talk about the "market's candidate," actually just referring to financial markets. The strengthening of this dimension has provoked a growing duality, worrisome for democracy, in the constituencies taken into account by authorities in EEs. Thus, an outcome of the specific road taken by globalization has been that experts in financial intermediation—a microeconomic training—have become determinant, in too many cases, for the evolution of the domestic macroeconomic balances and their volatility

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<sup>7</sup> In a brilliant analysis of financial reforms implemented, in the Southern Cone in the 1970s, Carlos Díaz-Alejandro (1985) concludes that "financial reforms...yielded by 1983 domestic financial sectors characterized by widespread bankruptcies, massive government interventions to rescue private institutions, and low domestic savings. The clearest example of this is Chile".

(see Ffrench-Davis, 2006, ch. VIII).

**C. *A positive agenda for managing the capital account for development***

As we discussed, international finance has played a leading role in defining business cycles in Latin America. The high costs generated by business cycles are thus, evidently, related to the strong and growing connections between domestic and international capital markets. This implies that an essential objective of public policies must be to reap the benefits from external savings, but reducing the intensity of capital account cycles and their negative effects on domestic economic and social variables.

The common assertion in the mainstream economic literature that efficiency requires an open capital account is based on assumptions that are often unrealistic regarding the functioning of international capital markets and their interaction with EEs. These conventional arguments are far more strongly challenged after numerous and costly crises, both in emerging-and more recently-in developed countries. Therefore, it is increasingly evident that across-the-board capital account liberalization, resulting in large flows intensive in financial capital (loosely linked to GKF) rather than in long-term capital and greenfield FDI (directly linked to gross capital formation, GKF), can be a destabilizing source of shocks, rather than providing additional resources for long-term development.

From an analytical point of view, recent crises have shed light over a number of wrong hypotheses that had become part of the “conventional wisdom”. They are based on three wrong assumptions: (i) recovery from crises is rapid; (ii) open capital accounts discourage macroeconomic disequilibria; (iii) short-term inflows complement domestic savings. These beliefs have misleadingly prescribed a passive approach in the management of macroeconomic policies.

As an alternative approach, we propose a set of active macro-policies for open economies. In all of them, the underlying principle is that usually crises are the consequence of badly managed booms; consequently, the main aim of macroeconomic policies should be of prudential nature, by controlling booms before they become unsustainable. In particular, since international capital markets give rise to frequent cycles of abundance and scarcity of funding and systemic crises, policy makers should exercise active capital account management (including capital controls, both for financial prudential and macroeconomic reasons) and exchange rate management, in order to ensure that capital inflows are persistently consistent with real macroeconomic stability, investment, and growth based on systemic competitiveness. Indeed, in the last decades we have learnt that, in spite of the new challenges imposed by globalization of financial volatility, still there is significant room for successful domestic policies. The accumulation of reserves in LAC countries during the 2000s is an example of such policies.

Evidence shows that capital surges, and their intrinsic volatility, are costly both for growth and for equity. It is true that several crises, especially in the past, were caused by irresponsible or populist policies. But, in the normal or boom stages of the business cycle, it has been quite common in successful emerging economies, that a capital surge flowing into foreign exchange and stock markets and credit increases, has been the leading variable behind an excessive increase in aggregate demand, associated with exchange rate appreciation and bubbles in the stock market. The consequence has been a growing trade deficit, led by the capital surge, with a deficit generated in the private sector. These ‘wrong’ policies have been supported by suppliers of international financing and encouraged by financial analysts, risk rating agencies and

IFIs: recall the enthusiastic praise to Argentina in the 1990s, or to Mexico in the first half of the 1990s, or the assertion in fashion that Latin America learnt how to do macroeconomics (see Ffrench-Davis, 2008, for the counter argument).

Understanding better the working of domestic and international financial markets is at the core of integrating successfully with the world economy. More systematic efforts should be at work in order to bring pragmatism into the highly ideological approach to capital account liberalization that has often prevailed.

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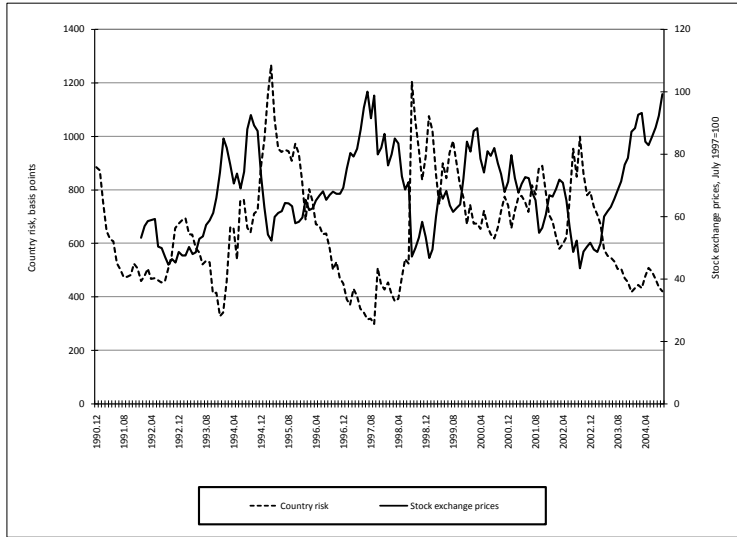
**Table 7.1. Latin America (19): Composition of capital flows, 1977-2008 (in US billions and percentage of trend GDP)**

	1977-81	1982-90	1991	1992-94	1995	1996-97	1998-2003	2004-06	2007	2008	2004-08
1 <u>Current account</u>	-24.3	-10.3	-17.0	-43.5	-37.8	-51.5	-40.9	35.6	16.1	-27.5	19.1
2 <u>Trade balance</u>	-9.4	20.3	4.5	-22.0	-12.3	-21.4	-12.3	63.2	47.0	14.3	50.2
3 <u>Rents</u>	-16.1	-35.3	-31.4	-33.5	-40.7	-45.1	-53.1	-79.7	-95.1	-105.7	-88.0
4 <u>Unrequited transfers</u>	1.2	4.8	10.0	12.0	15.3	15.1	24.5	52.1	64.2	64.0	56.9
5 <u>Net capital inflows</u>	27.8	-12.9	23.2	52.4	28.5	79.4	31.8	4.4	98.8	56.9	33.8
6 <u>Net FDI</u>	5.1	5.5	11.0	15.7	25.8	48.9	60.4	42.3	83.6	88.9	59.9
7 <u>M&amp;A inflows</u>	0.0	1.3	2.9	5.7	7.4	26.3	32.8	23.8	23.8	24.8	24.0
8 <u>Greenfield FDI inflows</u>	5.4	4.6	9.5	12.7	22.4	28.0	34.1	44.6	83.2	98.5	63.1
9 <u>Outflows</u>	0.3	-0.4	-1.3	-2.7	-4.0	-5.4	-6.6	-26.1	-23.5	-34.4	-27.2
10 <u>Portfolio</u>	1.3	0.6	16.4	57.6	2.6	37.0	2.1	-2.1	59.5	-10.1	8.6
11 <u>Other capital</u>	21.4	-16.0	-4.8	-17.7	6.0	-2.2	-23.5	-31.7	-34.1	-21.8	-30.2
12 <u>Special flows</u>	0.5	23.6	11.8	3.9	31.7	-7.9	10.7	-8.5	1.9	3.9	-3.9
13 <u>Reserves accumulation</u>	4.1	0.4	18.1	12.9	22.4	20.0	1.6	31.5	116.9	33.3	49.0
14 <u>Net transfer of funds</u>	13.5	-19.9	13.6	34.8	34.7	41.4	13.9	-31.7	69.9	19.1	-1.2
15 <u>Trend GDP</u>	598	862	1252	1454	1644	1767	2113	2835	3333	3599	3088
16 <u>GDP</u>	622	795	1244	1507	1794	2032	1971	2648	3614	4086	3128

	<u>Percentage of trend GDP</u>	<u>1977- 81</u>	<u>1982- 90</u>	<u>1991</u>	<u>1992- 94</u>	<u>1995</u>	<u>1996- 97</u>	<u>1998- 2003</u>	<u>2004- 06</u>	<u>2007</u>	<u>2008</u>	<u>2004- 08</u>
1	<u>Current account</u>	<u>-3.9</u>	<u>-1.3</u>	<u>-1.4</u>	<u>-3.0</u>	<u>-2.3</u>	<u>-2.9</u>	<u>-2.1</u>	<u>1.2</u>	<u>0.5</u>	<u>-0.8</u>	<u>0.7</u>
2	<u>Trade balance</u>	<u>-1.5</u>	<u>2.4</u>	<u>0.4</u>	<u>-1.5</u>	<u>-0.7</u>	<u>-1.2</u>	<u>-0.7</u>	<u>2.2</u>	<u>1.4</u>	<u>0.4</u>	<u>1.7</u>
3	<u>Rents</u>	<u>-2.6</u>	<u>-4.3</u>	<u>-2.5</u>	<u>-2.3</u>	<u>-2.5</u>	<u>-2.6</u>	<u>-2.5</u>	<u>-2.8</u>	<u>-2.9</u>	<u>-2.9</u>	<u>-2.8</u>
4	<u>Unrequited transfers</u>	<u>0.2</u>	<u>0.5</u>	<u>0.8</u>	<u>0.8</u>	<u>0.9</u>	<u>0.9</u>	<u>1.1</u>	<u>1.8</u>	<u>1.9</u>	<u>1.8</u>	<u>1.8</u>
5	<u>Net capital inflows</u>	<u>4.6</u>	<u>-1.5</u>	<u>1.9</u>	<u>3.6</u>	<u>1.7</u>	<u>4.5</u>	<u>1.6</u>	<u>0.1</u>	<u>3.0</u>	<u>1.6</u>	<u>1.0</u>
6	<u>Net FDI</u>	<u>0.8</u>	<u>0.6</u>	<u>0.9</u>	<u>1.1</u>	<u>1.6</u>	<u>2.8</u>	<u>2.9</u>	<u>1.5</u>	<u>2.5</u>	<u>2.5</u>	<u>1.9</u>
7	<u>M&amp;A inflows</u>	<u>0.0</u>	<u>0.1</u>	<u>0.2</u>	<u>0.4</u>	<u>0.4</u>	<u>1.5</u>	<u>1.6</u>	<u>0.8</u>	<u>0.7</u>	<u>0.7</u>	<u>0.8</u>
8	<u>Greenfield FDI inflows</u>	<u>0.9</u>	<u>0.6</u>	<u>0.8</u>	<u>0.9</u>	<u>1.4</u>	<u>1.6</u>	<u>1.6</u>	<u>1.6</u>	<u>2.5</u>	<u>2.7</u>	<u>2.0</u>
9	<u>Outflows</u>	<u>0.0</u>	<u>0.0</u>	<u>-0.1</u>	<u>-0.2</u>	<u>-0.2</u>	<u>-0.3</u>	<u>-0.3</u>	<u>-0.9</u>	<u>-0.7</u>	<u>-1.0</u>	<u>-0.9</u>
10	<u>Portfolio</u>	<u>0.2</u>	<u>0.0</u>	<u>1.3</u>	<u>3.9</u>	<u>0.2</u>	<u>2.1</u>	<u>0.1</u>	<u>-0.1</u>	<u>1.8</u>	<u>-0.3</u>	<u>0.3</u>
11	<u>Other capital</u>	<u>3.5</u>	<u>-1.8</u>	<u>-0.4</u>	<u>-1.2</u>	<u>0.4</u>	<u>-0.1</u>	<u>-1.1</u>	<u>-1.1</u>	<u>-1.0</u>	<u>-0.6</u>	<u>-1.0</u>
12	<u>Special flows</u>	<u>0.1</u>	<u>2.8</u>	<u>0.9</u>	<u>0.3</u>	<u>1.9</u>	<u>-0.4</u>	<u>0.5</u>	<u>-0.3</u>	<u>0.1</u>	<u>0.1</u>	<u>-0.1</u>
13	<u>Reserves accumulation</u>	<u>0.7</u>	<u>0.0</u>	<u>1.4</u>	<u>0.9</u>	<u>1.4</u>	<u>1.1</u>	<u>0.0</u>	<u>1.1</u>	<u>3.5</u>	<u>0.9</u>	<u>1.5</u>
14	<u>Net transfer of funds</u>	<u>2.3</u>	<u>-2.4</u>	<u>1.1</u>	<u>2.4</u>	<u>2.1</u>	<u>2.3</u>	<u>0.7</u>	<u>-1.1</u>	<u>2.1</u>	<u>0.5</u>	<u>-0.1</u>

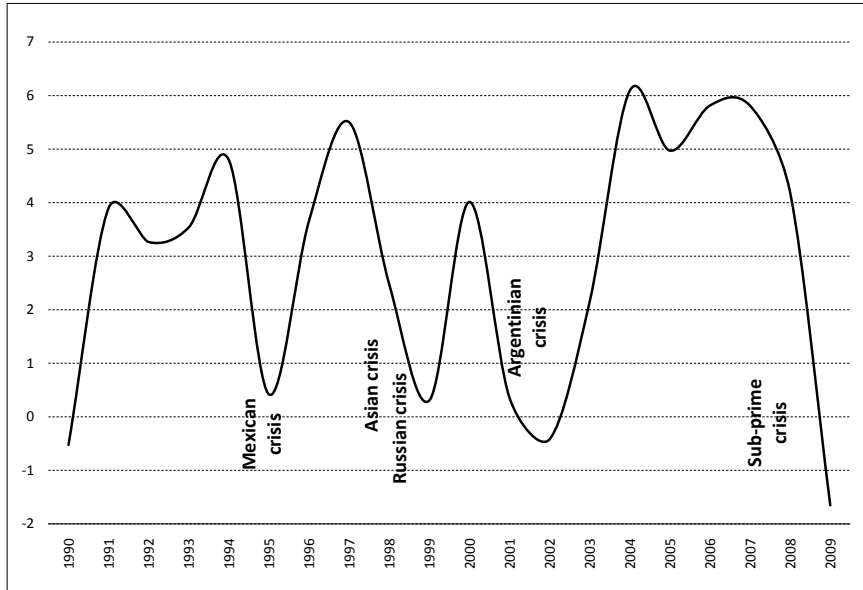
Source: Based on official data from ECLAC and UNCTAD for M&A. Trend GDP was calculated by filtering nominal GDP in US dollars (Hodrick-Prescott filter, lambda=100).

**Figure 7.1. Latin America: country risk and stock exchange prices, 1990-2004 (basis points, indices)**



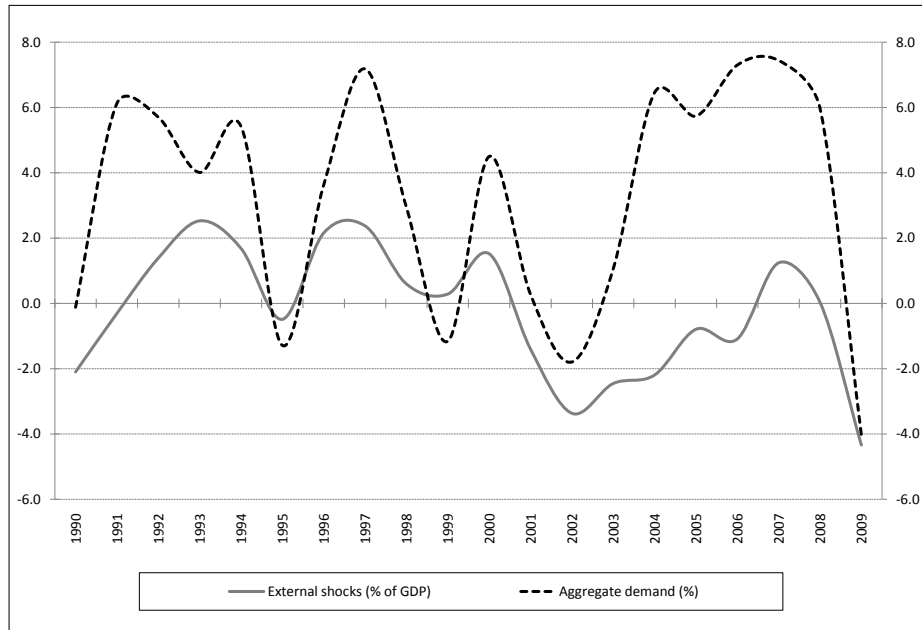
Source: Country risk (measured by the sovereign spread over the U.S. zero coupon curve): JP Morgan, Emerging Market Bond Index (EMBI). Stock exchange prices: IFC, Standard and Poor's, Dollar denominated.

**Figure 7.2. Latin America (19): GDP growth instability, 1990-2009 (annual percentage change)**



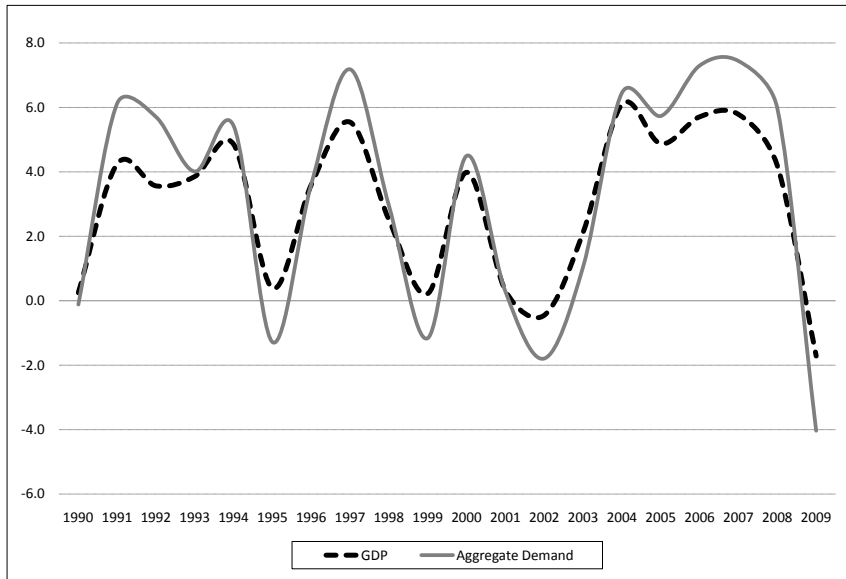
Source: Based on ECLAC figures.

**Figure 7.3. Latin America (19): External Shocks and Growth of Aggregate Demand, 1990-2009 (percent of GDP; annual average growth rate)**



Source: French-Davis (2008), and updated figures, based on data from ECLAC. External shocks include net transfers of resources from abroad plus the terms-of-trade effect, both measured as percentages of GDP.

**Figure 7.4. Latin America (19): GDP and Aggregate Demand, 1990-2009 (annual average growth rates)**



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*Source: Ffrench-Davis (2006) and updated figures from ECLAC, [Time for equality: closing gaps, opening trails](#), Santiago, Chile, May 2010, figure II.5.*

**Figure 7.5. Latin America (19): Net capital inflows and real exchange rate, 1980-2009 (RER in 2000=100, Flows in percent of GDP)**



Source: Based on figures of ECLAC.

Con formato: Izquierda, Sangría:  
Izquierda: 0 cm, Primera línea: 0 cm,  
Borde: Inferior: (Sin borde), Punto de  
tabulación: 0,86 cm, Izquierda