

The current financial crisis: Old wine in new goatskins or is this time different for Latin America?

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Abstract

This paper addresses a fundamental question regarding the current crisis and its effects on Latin America, namely, will the effects of the crisis be different or of the same type that the region has witnessed in past?

The answer provided in the paper, on the basis of past crises episodes and currently available information, is that this crisis is a 'repeat.' That is, it is "Old wine in New Goatskins." This conclusion is underpinned by two fundamental ideas. First, the evidence shows that the impact of financial crises on the region is closely related to the degree to which external finance becomes scarce and costly, and to the magnitude of the disruption in international trade channels. Second, financial crises have had deep and protracted effects on the economies of the region, independently of idiosyncratic features and initial conditions. The available evidence and the unprecedented magnitude of the current shock do not warrant the belief that the effects of this crisis will be any different from those that have whiplashed the region in the past.

Introduction

The current international financial crisis is the most severe since the Great Depression. It is having unprecedented negative effects in terms of its magnitude and scope in the developed world and is rapidly spreading to the developing world, becoming a global crisis.

Since the current financial crisis began to spread across the developed world, questions about its potential consequences on Latin American economies began to surface. Initially, the discussion focused on the existence of a possible decoupling of business cycles. Currently the debate centers rather on the intensity of the impact, that is, whether the outcome will turn out to be a significant slowdown of growth or a recession, and on the possibilities of the region's governments to effectively undertake counter-cyclical fiscal policies.

The analysis presented in this paper, based on lessons from past crises episodes and updated available information on the current episode, sustains that the current crisis will have a strong and negative effect on the economies of the region. The analysis is underpinned by two fundamental ideas.

First, the evidence shows that the impact of financial crises on the region is closely related to the degree to which external finance becomes scarce and costly, and to the magnitude of disruption of international trade. Second, financial crises have had deep and protracted effects on the economies of the region, independently of idiosyncratic features and initial conditions.

This paper is divided into three sections. The first section presents some of the main lessons that can be drawn from the analysis of the economic performance of Latin American countries during past episodes of international financial crises. The crises events under consideration are the Debt crisis (1980-83), the Loan and Savings crisis episode (1987-91), the Mexican crisis (1994-95), the Asian-Russian crisis (1997-99), and the Argentinean crisis (2001-2002).

The analysis in this section indicates that, since the eighties, crises hit the region in a rather generalized, deep and protracted manner and independently of countries specific features. Furthermore, and as suggested by a large body of literature, the impacts on the region are closely related to the degree to which external finance becomes scarce and costly, and external aggregate demand experienced significant contractions.

The second section displays preliminary evidence about the manifestations of the effects of the current crisis into the region. The evidence available so far underscores that, once again the external conditions are hardening for the region. In fact, private financial flows to Latin America have witnessed a decline in 2008 (US\$ 184 billion in 2007 and US\$ 89 billion in 2008), and a further contraction is expected in 2009 (US\$ 43 billion). For its part, global international trade is also expected to decline in 2009 by more than 2%, respect its value in 2008, affecting the region ability to maintain exports from falling. The evidence also shows that, as on previous occasions, the worsening of external conditions is accompanied by the contraction of economic activity in several of the countries of the region, for the same period. Thus, the early interpretation of a possible decoupling between the business cycles of the developed economies and those of Latin American economies was a rather optimistic view of the crisis.

The final reflections are found in the third section. In particular, the section, hammers in the point that given the unprecedented magnitude of the current episode, and the most recent macroeconomic performance of the region, the current crisis will, as in past episodes, result in a generalized, deep and protracted negative effects on the economies of the region, regardless their connection to international financial markets, the degree of openness to international trade and its initial conditions.

The approach followed in this paper is closely related to that of studies such as Calvo, Izquierdo and Talvi (2006), Edwards (2007) and Reinhart and Rogoff (2008) in the sense that it extracts the salient features of the aftermath of systemic international financial crises for the countries of the region.

However, unlike that literature this paper does not distinguish between countries because they were the “core” or the “periphery” of the financial crises episodes or because they are more or less integrated to international financial markets. Instead, the paper analyzes the economic performance for 17 countries in the region, LAC(17)², regardless of the origin of the crisis (outside or inside of the region), and countries specific characteristics (openness, financial development, integration to international markets or initial conditions).

² LAC(17) includes Argentina, Brazil, Bolivia, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Dominican Republic, Uruguay and Venezuela.

1. Lessons of past financial crises that have affected Latin America

The analysis of the effects of past financial crises on Latin American economies can improve our understanding of the potential consequences of the current crisis episode. To this end, we analyze the evolution of some key macroeconomic variables encapsulating the possibilities of access to international financial markets (capital flows, international reserves and real exchange rate) and also the external aggregate demand conditions (international trade) for 17 economies in the region, LAC(17)³, during crises episodes that occurred between 1980 and 2007. The events under consideration include the Debt crisis (1980-83), the Loan and Savings crisis episode (L&S) (1987-91)⁴, the Mexican crisis (1994-95), the Asian-Russian (1997-99) crisis and the Argentinean (2001-2002) crises.⁵

The examination of these episodes underscores two main lessons. First, their negative impact on economic performance was deep, protracted and generalized sparing only a few economies of the region. Second, during all those episodes the region's external conditions significantly deteriorated, i.e., access to external financing and external aggregate demand dropped significantly. The rest of this section discusses each of these in turn.

³ LAC(17) includes Argentina, Brazil, Bolivia, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Dominican Republic, Uruguay and Venezuela.

⁴ In addition to Loan and Savings crisis, this episode also encompasses the Scandinavian countries crisis and the Japanese crisis.

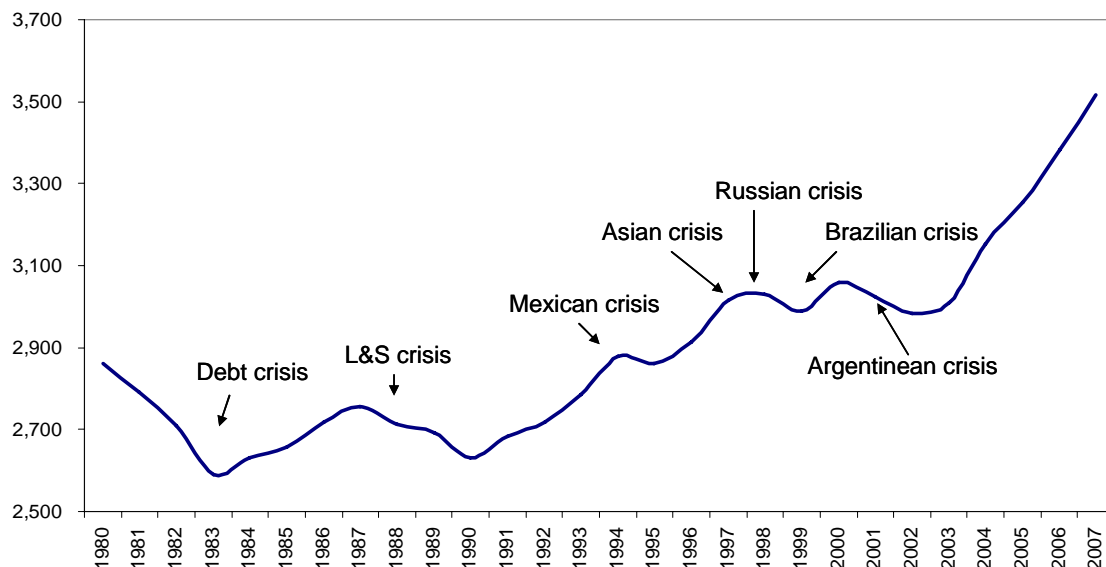
⁵ These episodes were chosen because they have been identified by the literature on the subject of crisis as periods in which financial international financial markets changed their regular behavior in a dramatic fashion. For instance, Eichengreen, Rose and Wyplosz (1996), De Gregorio and Valdes (1999), Calvo and Mendoza (2000), Forbes and Rigobon (2000), Rigobon (2001), Edwards (2007) and Kaminsky, Reinhart and Vegh (2002) have identified several critical moments in the international financial markets that could be considered as systemic crisis. These episodes are: the debt crisis in early 1980's, the Mexican crisis of 1994, the Asian crisis of 1997, the Russian Crisis of 1998, the Brazilian crisis of 1999, the Long Term Capital Management crisis of 2000, the Argentinean crisis of 2001 and the Turkey crisis of 2002. Other literature that focus on the occurrence of financial crisis, such as Laeven and Valencia (2008) and Reinhart and Rogoff (2008a), have identified episodes such as the Loan and Savings crisis on the middle 1980s, the Scandinavian crisis of early 1990s, the Japanese crisis as the "big five" given the financial cost of those crises. The Asian-Russian crisis episode includes the Long Term Capital Management and Brazilian crisis. The Argentinean Crisis encompasses the Dot.Com and Turkey crisis episodes.

1.1 Effects of past crises on the region's economic performance

The financial crises episodes here studied had deep and protracted effects on economic activity. In all cases considered financial crises produced a recession in the countries affected (See Figure 1.1, below). The average contraction of per capita GDP for all countries affected taking into account the entire sample of crises episodes equaled 6.2%.

Figure 1.1
Latin American
Per capita GDP and selected major international financial crises
(1980 – 2007)

US\$ of 1990



Source: UN statistic division.

At a closer inspection, the analysis on a case-by-case basis shows that the Debt crisis was the most costly in terms of per capita GDP contractions and also in terms of the extent of its contagion effects. Indeed, the Debt crisis affected without any exception all the countries in the sample. During this crisis episode the median decline of per capita GDP reached 12.6%. In the other episodes the data also shows a contraction in GDP

across the region, with a median decline ranging from 1.2% in the Argentinean case and 5.4% in the Asian-Russian case. (See, Table 1.1 below).⁶

Table 1.1
GDP dynamic during past international financial crises episodes
(Per capita percentage change)

Crisis Episodes	Countries that experienced contraction (# of Countries)	Median Duration of the Declining Phase (# of years)	Median Decline (Peak to-trough) (%)	Years to recover the pre-crisis level (Median) (# of years)
1980 - 83: Debt	17	2	12.6	13
1987 - 91: L&S	14	1	2.3	5
1994 - 95: Mexican	10	1	2.0	2
1997 - 99: Asian-Russian	12	2	5.4	5
2001 - 02: Argentinean	13	1	1.2	3

Source: Own Computations based United Nations Stats (National Accounts database, 2009).

The negative effects of these crises have not only been significant but also persistent. The duration of the crisis (defined as a the number of years required to recover the pre-crisis GDP level) was 13 years for the Debt, 5 years in the L&S, 2 years in the Mexican, 5 years in the Asian-Russian, and 3 years in the Argentinean crises episodes.⁷

⁶ The maximum and minimum declines were 22.2% (Bolivia) and 0.5% (Dominican Republic) during the Debt crisis, 28.1% (Peru) and 0.24% (Costa Rica) during the L&S crisis, 7.8% (Mexico) and 0.13% (Ecuador) during the Mexican crisis, 21.7% (Argentina) and 1.6% (Costa Rica) during the Asian-Russian episode, and 18.9% (Venezuela) and 0.12% (Guatemala) during the Argentinean crisis. The contraction of per capita GDP in Argentina during the Argentinean crisis episode was 16.5%. Authors like Cerra and Chaman-Saxena (2007) argue that the large and permanent output costs, induced by political and financial crises, could explain why the Latin American region has failed to reduce the income gap between them and developed economies. Other authors like Calvo and Mendoza (2000), Calvo, Izquierdo and Talvi (2006), Edwards (2007) and Reinhart and Rogoff (2008b), have presented evidence of how sudden stops of capital inflows have induced the collapse of output in emerging markets, and in particular, in Latin American economies.

⁷ The maximum duration of the declining phase of per capita GDP that started during the Debt crisis was 6 years (Bolivia and Guatemala) and the minimum one year (Dominican Republic), during the L&S crisis those values were 3 years (Argentina and Peru) and one year (Bolivia, Brazil, Costa Rica, Ecuador, El Salvador, Honduras, Mexico, Uruguay and Venezuela). In the Asian-Russian episode the maximum duration of the declining phase was 5 years (Paraguay) and the minimum one year (Bolivia, Chile, Ecuador and Honduras), during the Argentinean crisis the maximum duration was two years (Argentina, Mexico, Paraguay, Dominican Republic, Uruguay and Venezuela).

Consistently with the evolution of output, unemployment tended to increase during these episodes. With one exception, that of the Asian-Russian case, all countries included in the sample showed an increase in the unemployment rate ranging from 1.5 percentage points in the Mexican crisis to 4.0 percentage points in the Asian –Russian crisis. The average increase of unemployment rate for the whole sample was 3.9 percentage points (See, Table 1.2 below).

Similarly as in the case of GDP, unemployment shocks were very persistent with a median duration (measured in the number of years necessary to restore the recorded pre-crisis values) of 6 years for the Debt crisis, 18 years for the L&S and Asian crisis, 11 years for the Mexican crisis, 8 years during the Asian-Russian crisis and 5 years for the Argentinean crisis.

Table 1.2
Unemployment dynamic during past international financial crises episodes
(Percentage points change)

Crisis Episodes	Countries that experienced increase (# of Countries)	Median Duration of the increase (# of years)	Median Abs. increase (Trough-to-peak) (% points)	Years to recover the pre-crisis level (Median) (# of years)
1980 - 83: Debt	11	1	3.1	6
1987 - 91: L&S	16	2	2.4	18
1994 - 95: Mexican	17	2	1.5	11
1997 - 99: Asian-Russian	15	2	4.0	8
2001 - 02: Argentinean	17	2	1.9	5

/1 11 countries in the sample.

/2 16 countries in the sample.

/3 17 countries in the sample.

Source: Own Computations based World Development Indicators, World Bank 2009.

For its part, investment also presented drastic and persistent reductions across the region. Moreover, it is important to take into account that the drop in per capita investment tended to be significantly larger and more persistent than that of output. In the most severe of all crises considered, that of the Debt crisis, the contraction of investment was nearly 4 times that of output. In terms of persistence, for the same crisis

episode, it took 15 years for investment per capita to recover its pre-crisis level, that is, two more years than in the case of output (see Table 1.3 below).

Table 1.3
Investment dynamic during past international financial crises episodes
(Per capita percentage change)

Crisis Episodes	Countries with contraction	Median Duration of the Contraction	Median Decline (Peak to-trough)	Years to recover the pre-crisis level (Median)
	(# of Countries)	(# of years)	(%)	(# of years)
1980 - 83: Debt	17	2	46.6	15
1987 - 91: L&S	17	2	16.7	5
1994 - 95: Mexican	15	1	13.7	4
1997 - 99: Asian-Russian	16	2	24.4	6
2001 - 02: Argentinean	16	1	13.7	4

Source: Own Computations based on United Nations Statistics (National Accounts Database, 2009).

1.2. Access to international financial markets and external aggregate demand during past crises episodes

A common denominator present in the different international financial crises here considered, is the region's restricted access to both financial markets and international trade channels. This can be seen by analyzing the evolution of changes in both capital inflows and outflows and exports. The former reflect the prevailing conditions in financial markets and the latter in international trade.

In the past three decades, Latin America has faced both financial and trade shocks, although their relative importance has tended to vary across countries and time periods. Nonetheless, in spite of the difficulties in isolating one from the other, the evidence shows that the region's GDP performance has had a stronger statistical association with the changes in external financial conditions than with the behavior of external aggregate demand. For instance, the coefficient of correlation between the cycle of GDP and financial flows is positive and statically significant at 5% level for the 1980s

and 1990s, reaching 0.52 and 0.54 respectively. For its part, the correlation of coefficient between the GDP cycle and that of the terms of trade was also positive and statistically significant, albeit at the 10% for the 1990s.⁸

The behavior of external aggregate demand in past crises

In past international financial crises the region faced a contraction in external aggregate demand visible in the decline of exports during those episodes.⁹ On average, for the entire sample (all countries and all crises episodes), the contraction of exports equaled 19.1%. The largest reductions in exports took place during the debt crisis and the Asian-Russian episode. The median decline of exports reached 38.2% in the former and 13.9% in the latter episodes.¹⁰ (See, Table 1.4 below).

Table 1.4
Exports dynamic during past international financial crises episodes
(Per capita percentage change)

Crisis Episodes	Countries with contraction	Median Duration of the Contraction	Median Decline (Peak to-trough)	Years to recover the pre-crisis level (Median)
	(# of Countries)	(# of years)	(%)	(# of years)
1980 - 83: Debt	17	3	38.2	10
1987 - 91: L&S	17	1	10.7	7
1994 - 95: Mexican	10	1	4.1	3
1997 - 99: Asian-Russian	14	1	13.9	4
2001 - 02: Argentinean	14	1	10.7	3

Source: Own computations based on ECLAC (2009).

The shocks to exports also tended to be very persistent in all crises episodes. The median duration required for exports to recover their pre-crisis level was of 10 years for the Debt crisis, 7 years for the L&S crisis, 3 years after the Mexican crisis, 4 years after the Asian-Russian episode and 3 years for the Argentinean episode.

⁸ See Titelman, Perez-Caldentey and Minzer (2008).

⁹ The importance of international trade as a crisis propagation channel was stressed by Eichengreen, Rose and Wyplosz (1996).

¹⁰ During the Debt crisis the maximum reduction of exports, peak-to-trough, was 72% (Bolivia) and the minimum was 14% (Mexico). In the L&S crisis the maximum was 39% (Brazil) and the minimum 0.6% (Guatemala). During the Mexican crisis the maximum reduction was 29% (Paraguay) and the minimum 3.13% Guatemala. During the Asian-Russian episode the maximum cumulative reduction of exports was 42% (Venezuela) and the minimum was 2.9% (Chile). The Argentinean case had a maximum decline of exports 29.9% (Ecuador) and the minimum 1% (Argentina).

Access to international financing

In all financial crises episodes here considered access to international financial markets was severely curtailed. More to the point, the majority of the financial crises that affected the region were characterized by “sudden stops” in capital inflows, and important increases in capital outflows.¹¹ The median decline in capital inflows, from peak-to-through, was 8.4% of GDP during the Debt crisis, 2.7% during the L&S, 2.9% during the Mexican, 4.4% during the Asian-Russian crisis and 4.5% during the Argentinean.¹² (See, Table 1.5 below).

Table 1.5
**Capital inflows dynamic during past international financial crises episodes
(As percentage of GDP)**

Crisis Episodes	Countries that experienced contraction (# of Countries)	Median Duration of the Contraction (# of years)	Median Abs. Decline (Peak-to-trough) (% of GDP)
1980 - 83: Debt	17	2	8.4
1987 - 91: L&S	17	1	2.7
1994 - 95: Mexican	14	2	2.9
1997 - 99: Asian-Russian	17	2	4.4
2001 - 02: Argentinean	16	2	4.5

Source: Own computations based on ECLAC (2009).

¹¹ Several explanations have been proposed to explain the dynamics of capital flows. Kaminsky, Reinhart and Vegh (2002), Calvo and Talvi (2005) have suggested the role of a common financial intermediaries explaining the sudden and generalized stop of financial flows, Calvo and Reinhart (1996) pointed out the spillover effects that large neighbors could have in others smaller economies, and Calvo and Mendoza (1996) and Chari and Kehoe (2002) have argued that herd behavior by financial investor also explain why financial resources stop flowing to emerging market economies. See Appendix 1 to see further information on data and other methodological issues.

¹² There are also differences in the duration of the decline in inflows. The maximum duration of the declining phase during the Debt crisis was 6 years (El Salvador) and the minimum one year (Guatemala and Venezuela), during the L&S crisis the maximum value was 3 years (Argentina and Honduras) and the minimum one year (Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Mexico, Peru y Dominican Republic). During the Mexican crisis the maximum duration was 2 years (Argentina, Guatemala, Honduras, Mexico, Panama, Paraguay and Venezuela) and the minimum one year (Chile, Colombia, Costa Rica, Ecuador, El Salvador Peru, and Dominican Republic). In the Asian-Russian case the maximum duration was 5 years (Argentina, overlapping with other crises episodes) and the minimum duration one year (Brazil, Chile, Costa Rica, Guatemala, Honduras, Mexico, Panama, Dominican Republic). During the Argentinean crisis episode the declining phase of inflows had a maximum duration of 4 years (Bolivia) and one year in Chile, Colombia, Costa Rica, Ecuador, Panama, Peru, Uruguay and Venezuela).

The reduction in capital inflows was accompanied by large capital outflows in the majority of countries. The median increase of capital outflows ranged from 1.2% to 2.9% of GDP in the different crises episodes. (See, Table 1.6 below).¹³ In summary, the average regional reduction of net financial flows for the entire sample represented approximately 5.8% of GDP.

Table 1.6
Capital outflows dynamic during past international financial crises episodes
(As percentage of GDP)

Crisis Episodes	Countries that experienced increase (# of Countries)	Median Duration of the increase (# of years)	Median Abs. increase (Trough- to-peak) (% of GDP)
1980 - 83: Debt	15	1	1.2
1987 - 91: L&S, Scandinavian, Japanese	17	2	1.8
1994 - 95: Mexican	17	1	2.1
1997 - 99: Asian, Russian, LTCM	17	1	1.4
2001 - 02: Argentinean, Dot Com	17	1	2.9

Source: Own computations based on ECLAC (2009).

The drastic reductions in net financial flows and in exports affected all countries of the region independently of where the crisis originated and countries' level of financial development (or initial conditions), as well as the degree of integration with international financial markets. The declines in net capital flows and exports worsened the balance of payment position inducing adjustments in international reserves and in the real exchange rate.

¹³ Some studies, Cuddington (1986), Dooley (1986) and Pineda (1998), have suggested that capital outflows, and in particular, capital outflows by private non-financial institutions, are the reaction of individuals in response to change in domestic risk, that could be induced by an increase expropriation risk, in the devaluation risk, inflation risk or any other changes in the expected return of domestic assets, in addition to changes in other fundamentals.

In terms of international reserves, as can be expected, a large group of countries exhibited considerable reductions ranging from 19% in the Mexican and the Asian-Russian crises, to 43% in the Debt crisis ¹⁴ (See Table 1.7 below).

Table 1.7
International reserves dynamics during past international financial crises episodes
(In US\$)

Crisis Episodes	Countries with contraction	Median Duration of the Contraction	Median Decline (Peak-to-trough)
	(# of Countries)	(# of years)	(%)
1980 - 83: Debt	17	1	42.7
1987 - 91: L&S, Scandinavian, Japanese	15	1	40.5
1994 - 95: Mexican	9	1	19.1
1997 - 99: Asian, Russian, LTCM	15	1	18.7
2001 - 02: Argentinean, Dot Com	11	2	37.3

Source: Own computations based on World Economic Outlook, IMF (2009).

Adjustments in international reserves were accompanied by important depreciation of the real exchange rate, with the exception of the Mexican crisis. The range of depreciation of the real exchange rate is as wide as the range of reduction in international reserve 14% in the Asian-Russian and 45% in the debt crisis. (See, Table 1.8 below).

Table 1.8
Real depreciations during past international financial crises episodes
(2000=1)

Crisis Episodes	Countries with depreciation of RER	Duration of the depreciation of RER phase	Median cumulative depreciation of RER
	(# of Countries)	(# of years)	(%)
1980 - 83: Debt	16	3	45.2
1987 - 91: L&S, Scandinavian, Japanese	16	3	16.9
1994 - 95: Mexican	6	2	1.2
1997 - 99: Asian, Russian, LTCM	13	2	14.0
2001 - 02: Argentinean, Dot Com	16	3	21.2

Source: Own computations based on ECLAC (2009).

¹⁴ Notice that some countries have reduced voluntarily their holding of international reserves by adopting more flexible exchange rate regimes.

2. The Current Financial Crisis

The analysis of past crises episodes discussed in the first section of this paper showed that the region has not been immune to their effects. Rather Latin American countries have been affected in a generalized, deep and protracted manner without exception. As documented, these effects seem to be strongly associated with restricted access to external finance and contractions in external aggregate demand.

Following a brief discussion of the origins and propagation mechanisms of the current crisis, this section focuses on the dynamics of access to external finance and the aggregate demand conditions in order to provide an initial assessment of the effects of this new crisis episode on the Latin American economies. The main message of this section is that given the unprecedented magnitude and systemic character of the current crisis, and as a result, the adverse external conditions visible mostly since the second semester of 2008, it is reasonable to expect that GDP per capita and investment will follow a trajectory reminiscent of those of previous crises, characterized by deep and protracted contractions, given a highlighted sense of déjà vu.

2.1 Crisis in the major financial markets and consequences in world aggregate demand

The current crisis which originated in the Subprime real estate sector of the United States and erupted in the middle of 2007 is unprecedented in terms of its magnitude and scope. It is estimated that the cumulative declines of United States real estate wealth and the stock market capitalization values that followed the subprime crisis reached, by the middle of 2008, roughly US\$ 1 and 7 trillion dollars respectively. Moreover, far from remaining focalized within the subprime sector of the United States, which represent 20% of the total estate sector of the United States, the crisis has widely spread to affect some of the most important financial institutions in the United States and in the developed world.

The contagion mechanism throughout the developed world, which explains the disproportion between the relatively small size of the subprime sector and the importance of the magnitude of its effects on asset values, stock market capitalization, and systemic worldwide contagion, consists mainly in the combination of widespread adoption of off balance sheet funding with pro-cyclical leverage management practices.

Off balance funding, in an unregulated context, during the boom phase allowed financial institutions to reach very high levels of leverage. In fact, the high leverage ratios for financial institutions across different regions and countries indicate that these relied mainly on debt financing. In 2007, the commercial banks of the United States exhibited average leverage ratios of 10-12. Those recorded by investment banks were higher reaching ratios of 20-30. In the case of Japan and Europe the average leverage ratio stood at 18 and 34 respectively.

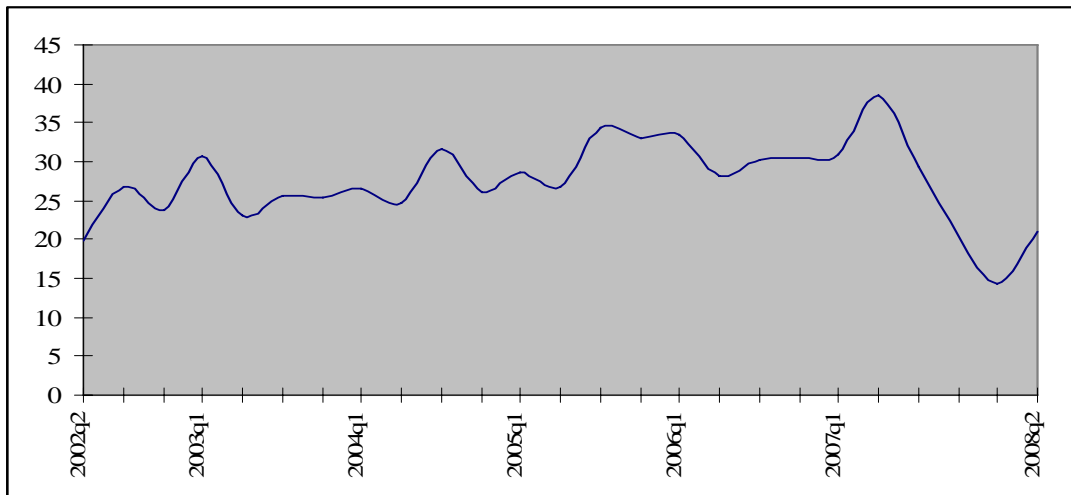
When the boom turned into a bust due to the fall in the price of the asset backed collateral (real estate mortgages), financial institutions were forced to deleverage. This pro-cyclical deleveraging resulted in an excess supply of assets putting downward pressures in their prices. In turn, the further fall in the price of assets translated into further adjustments in the leverage ratio which depressed the price of assets even further. Moreover asset price deflation which entails reductions in equity and contractions in balance sheets undermined the capacity of banks to lend. Hence, the stage was set for a 'credit crunch'.¹⁵

Indeed, the contraction in the value of assets and balance sheets of financial institutions has led to an important reduction in credit accessibility (credit crunch). The crisis affected as of September 2008, more than 63 of the most important financial institutions in the world. The total value of the write down and losses of these institutions amounted to US\$ 594 billion dollars from the start of the crisis to September 2008. As well, available evidence for the United States shows that total net lending declined from

¹⁵ See, From subprime to megaprime effects: An analysis of the current financial crises and its consequences. CEPAL. Unidad de Estudios para el Desarrollo (2009).

33% to 14% of GDP between the second quarter of 2006 and the first quarter of 2008 (Figure 2.1).¹⁶

Figure 2.1
United States. Total net lending as a percentage of GDP (2006q2-2008q1)



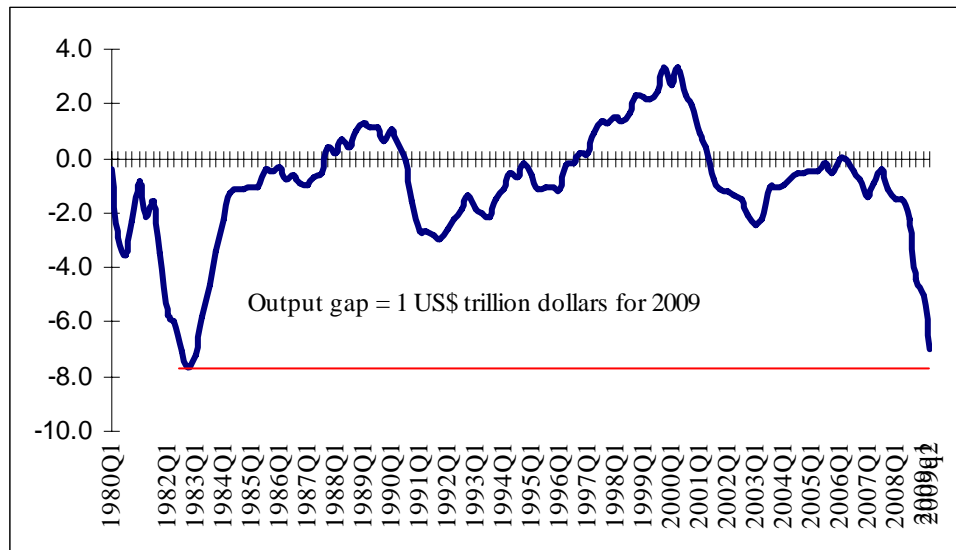
Source: FRED and Federal Reserve Bank of the United States (2009)

Thus far, this situation has implied a significant contraction in income and aggregate demand in developed economies. Since the last quarter of 2008, most developed economies are facing a severe contraction of economic activity and the available evidence indicates that this situation will continue and deepen during 2009. The output gap in the US is estimated to be equivalent to US\$ 1 – 2 trillion for 2009 and currently the cumulative decline of World GDP relative to its trend caused by the subprime crisis is equivalent to roughly 3 trillion dollars. See Figure 2.2.¹⁷

¹⁶ An alternative measure of the credit crunch is the differential between the London Interbank Offered Rate (LIBOR) and the federal funds rate. LIBOR provides a benchmark for the interest charged on short-term interbank lending. It represents the costs of funds on which financial institutions add a markup. Prior to the financial crisis the LIBOR rate exceeded the federal funds rate by 10 basis points increasing to 50 basis points in the summer of 2007 and over a hundred points by October 2008. See Evans (2008) and also, Ivashina and Scharfstein (2008) and Kwan (2009). For a contrary view see, Chari et al. (2008). The same result is arrived at by the spread between the LIBOR and the risk-free yields on U.S. government securities with corresponding maturities (the TED Spread). The TED spread hovered around more than 200 basis points at the end of 2007 and 2008 reaching a peak of more than 400 basis points in the October 2008. See, Lucjan (2008).

¹⁷ It should be noticed that for the US economy the current Output Gap is similar to that prevailed during the 1980s.

Figure 2.2
United States
Output Gap over Potential GDP



2.2 Consequences for Latin American of the Subprime crisis

The financial turmoil that has characterized the US since the middle of 2007, and that turned into a global crisis in the second semester of 2008, was initially viewed as a crisis of developed economies. It was thought that major emerging market economies like China, India and Russia, that have gained prominent role as engine for growth in recent years, would not be significantly affected by the crisis.

In consonance with this line of thought, Latin American economies could also be spared from the sphere of contagion of the current crisis. This belief was somehow reinforced by the fact that the international financial markets in developed economies and that of emerging markets seem to behave in a rather unsynchronized manner.¹⁸

In opposition to this early but still prevailing view of the contagion effects of the crisis in some quarters of the economics profession, this section argues, that on the basis of preliminary evidence, the interpretation of a possible decoupling between the business cycles of the developed economies and Latin American economies was rather an optimistic view of the crisis. In fact, the external restrictions in the form of curtailed

¹⁸ See Izquierdo and Talvi (2008).

external credit and contraction of external aggregate demand are already visible working mechanisms for the transmission of the crisis to the region.

In terms of the external conditions for the region, the current global crisis has implied the slowdown of international trade (exports), a reduction in commodities prices, and a deceleration of financial flows. Notwithstanding, the evidence thus far available for a sub-set of Latin American countries, LAC(7)¹⁹, suggests a more prominent role for international trade variables (exports) rather than to financial flows. The region is currently showing a reduction of output growth and constant downward revisions of output growth projections, the deterioration of domestic credit conditions, and a significant reduction of imports.

An analysis of the available evidence indicates that, in an initial stage, the subprime crisis did not expressed itself in the traditional sharp contraction of capital flows into the region, but this situation could be possible changing, and become most severe in the near future, due to the weakness of international financial markets, the higher demand for financial resources by developed economies and the lower tolerance toward risk exhibit by international investors.²⁰

In fact, specialized institutions anticipate a significant reduction of capital flows to emerging market economies for 2009, and Latin American and Caribbean economies will not be an exception. It is expected that private capital flows to the region could be halved between 2008 and 2009, implying a new reduction, since between 2007 and 2008 the net private capital flows also declined.²¹

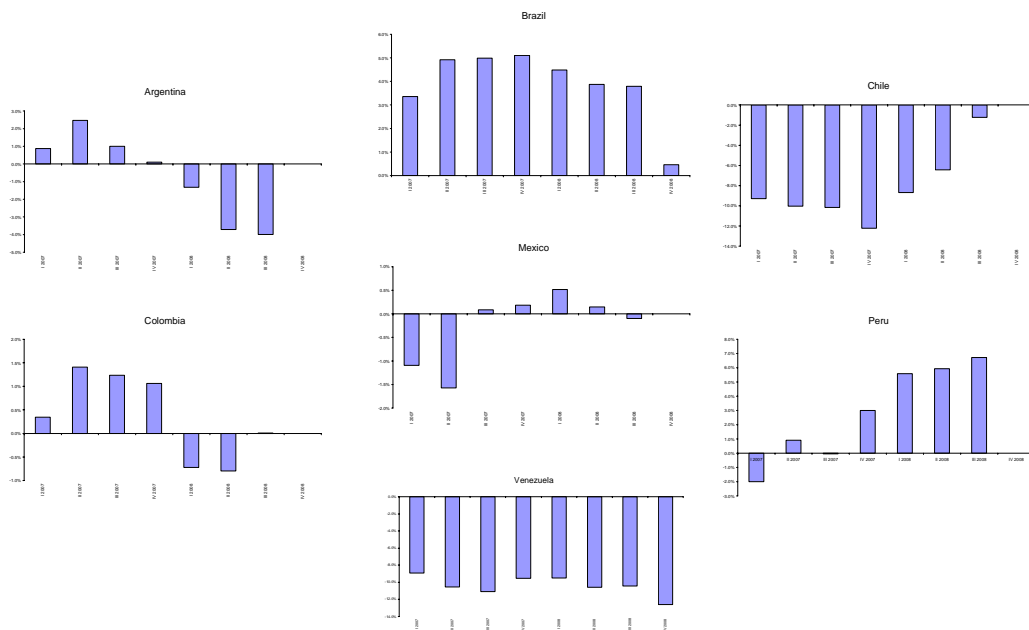
¹⁹ LAC(7) comprises Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. Those countries represent roughly a 95% of regional GDP.

²⁰ The greater demand for finance for developed countries responds to a big extend to the stimulus packages which currently amount to US\$ billion 937, 29, 103 for the United States, the United Kingdom and Germany. There is also a demand for finance to bail out financial institutions which is estimated in more than 50% of its GDP.

²¹ For 2009 the Institute for International Finance estimates that net private capital flows to the region will be close to US\$ 43 billion. The estimated value for 2008 was US\$ 89 billion and for 2007 it was US\$ 184 billion.

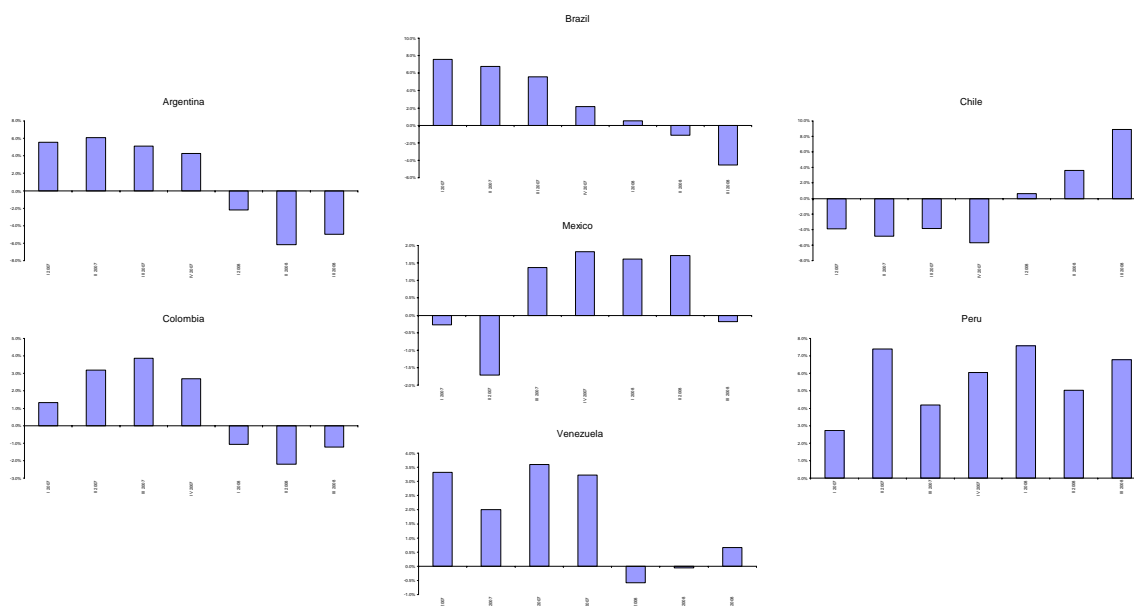
Thus far, the evidence available on the dynamics of capital flows, (measured as non-foreign direct investment (FDI) financial flows/GDP), can be interpreted as mixed. Figure 2.3a shows that Argentina and Colombia witnessed a change in their situation between 2007 and 2008 from being net recipients of non-FDI financial flows to net exporters of financial resources. Some economies such as, Brazil, Mexico and Venezuela have not seen a significant variation in their conditions in terms of net recipients of financial flows. Others, such as Chile and Peru have even improved their relative position in the same period. Nevertheless at the aggregate level for LAC(7), the ratio of non FDI financial flows to GDP dropped 2% between the III quarter of 2007 and the III quarter of 2008 (Figure 2.3.b, below).

Figure 2.3.a
Dynamics of non-FDI financial flows during current financial crisis
 (One year cumulative value as percentage of GDP)



Source: Own computations based on National sources information (2009)

Figure 2.3.b
Dynamics of non-FDI financial flows during current financial crisis
(Change in terms of GDP)

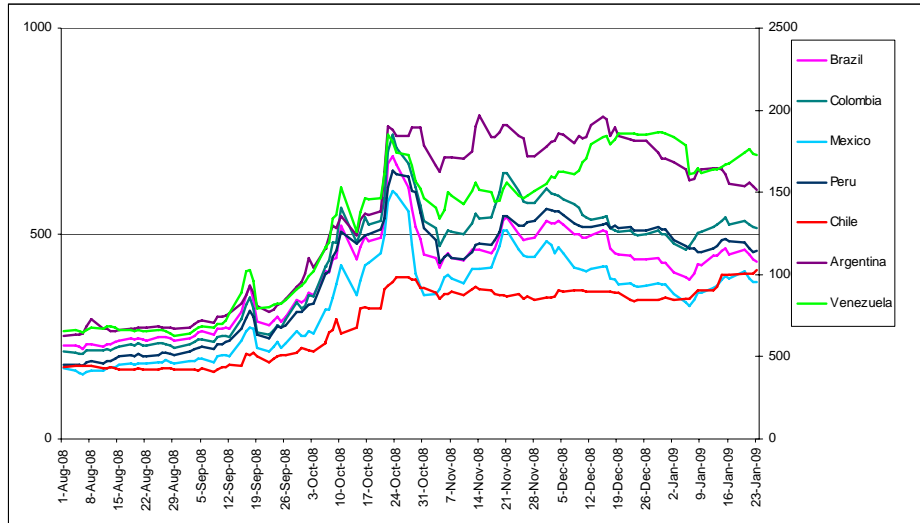


Source: : Own computations based on National sources information (2009)

As in the case of past crises and consistent with the current less favorable external conditions, the EMBI for most economies in the region shows a sharp increase between August 2008 and January 2009, reaching a maximum in October 2008. This dynamics is common across countries but with different intensities.²² (See Figure 2.4, below)

²² The dynamics of the EMBI indicator for some countries in the region, as well as for other variables, has expressed not only the deterioration of their external conditions but also the increase in risk associated to idiosyncratic political considerations that explain the differences in the level in the case of the Argentinean and Venezuelan EMBI indicators.

Figure 2.4
Recent evolution of EMBI for LAC(7)



Source: On the basis of Bloomberg (2009).

Also as in previous crises episodes, exports dynamics are playing an important role in transmitting the effects of the current financial crisis to the region. The significant recession that has affected the developed world and the slowdown of the main market emerging economies have induced a significant reduction of global international trade, which is expected to decline more than 2% for 2009 (IMF, 2009).²³ The consequent decline in world aggregate demand has induced a sharp reduction in commodities prices, and the projections foresee similar conditions to prevail in the near future.²⁴

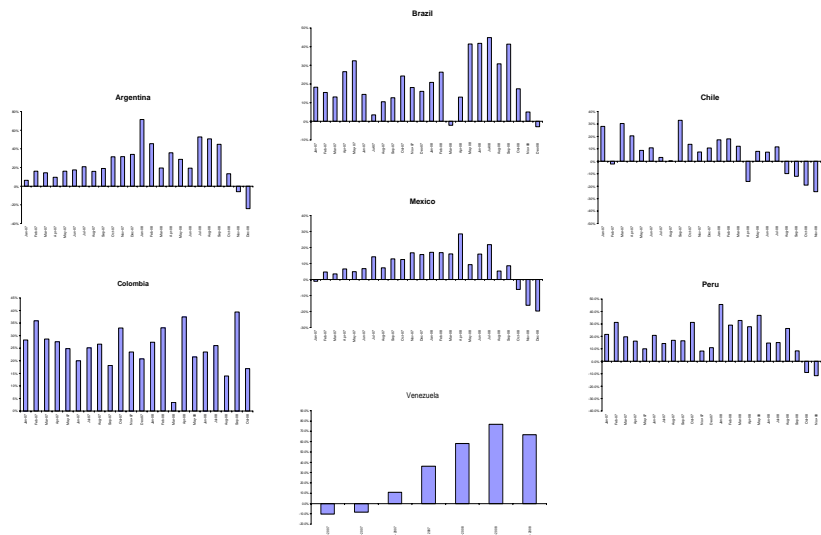
Moreover, the contraction of the external demand for manufacturing goods will also affect the capacity of Latin American countries to restrain the drop in non commodity exports. Figure 2.5 illustrates the dynamics of LAC(7) exports during 2007

²³ In the World Economic Outlook November update, the IMF estimates that imports of the Developed economies as a group will experience a contraction of -0.1%, whereas imports for emerging and developing economies will still growth 5.3%, but this rate is less than half of that 2008.

²⁴ Between March of 2008 and January of 2009, oil's prices have declined more than 74.9% in the case of WTI, close to US\$ 109 per barrel. In the same period, a composite commodities index indicates a contraction of 53.5%. For 2009, IMF estimates a reduction of 31.8% in oil prices and of -18.7% for non-fuel commodities.

and 2008, and shows that the annual growth rate of exports²⁵ for all of the LAC(7) economies has been negative or has presented a significant slowdown since the second semester of 2008.²⁶

Figure 2.5
Dynamics of Exports during current financial crisis
 (% change respect same period previous year)



Source: Own computations based on National sources information (2009)

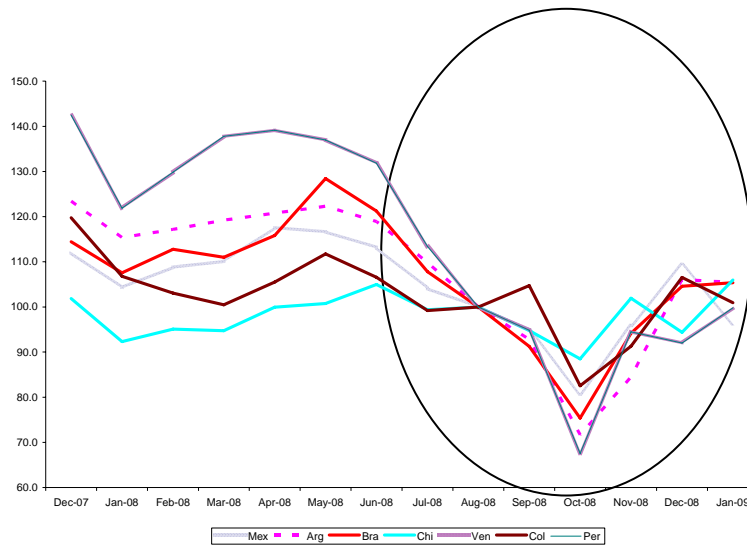
Traditionally international financial crisis have been accompanied by a deterioration in the stock markets and the depreciation of the nominal exchange rate of countries across the region. During the current financial crisis, at least in its initial stages, there was an apparent, or temporal, decoupling in the dynamics of these markets in the region and those in the developed world. Both the stock markets and the nominal exchange rates of countries in the region were getting stronger while those markets in the developed world were sinking. This behavior seems to have come to an end during the second semester of 2008 and the stock markets in LAC(7) have declined since June of 2008 (Figures 2.6).

²⁵ Percentage change respect equivalent period in previous year.

²⁶ For those countries with exports falling (Argentina, Chile, Colombia, Mexico and Peru) the median decline was 29.3% between the IV quarter of 2007 and that of 2008, and the difference in the growth rate for the country with a slowdown in exports(Brazil), was above 12.7 percentage points (pp) for the same period.

Regarding the dynamics of the nominal exchange rate, Figure 2.7 shows that during this crisis episode the exchange rate of the LAC(7) also presented two distinct phases. Until July of 2008, most of the nominal exchange rates across the region tended to appreciate. However, since August of 2008, most countries have witnessed significant depreciations of their exchange, more than 30% in the Mexican and the Brazilian cases.²⁷

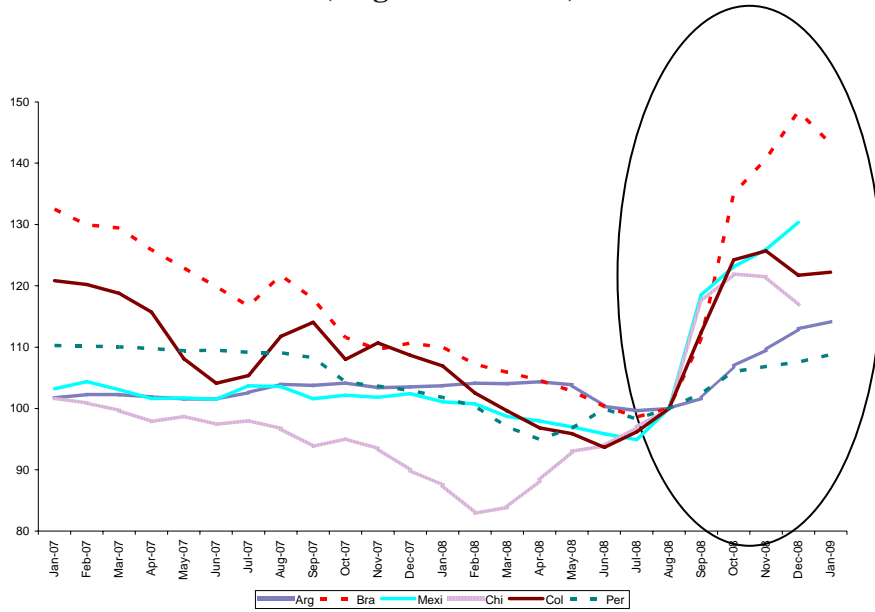
Figure 2.6
Recent evolution of stock markets indexes for some Latin American economies (August 2008=100)



Source: : Own computations based on Bloomberg (2009)

²⁷ The Venezuelan official exchange rate has not been modified since March of 2005.

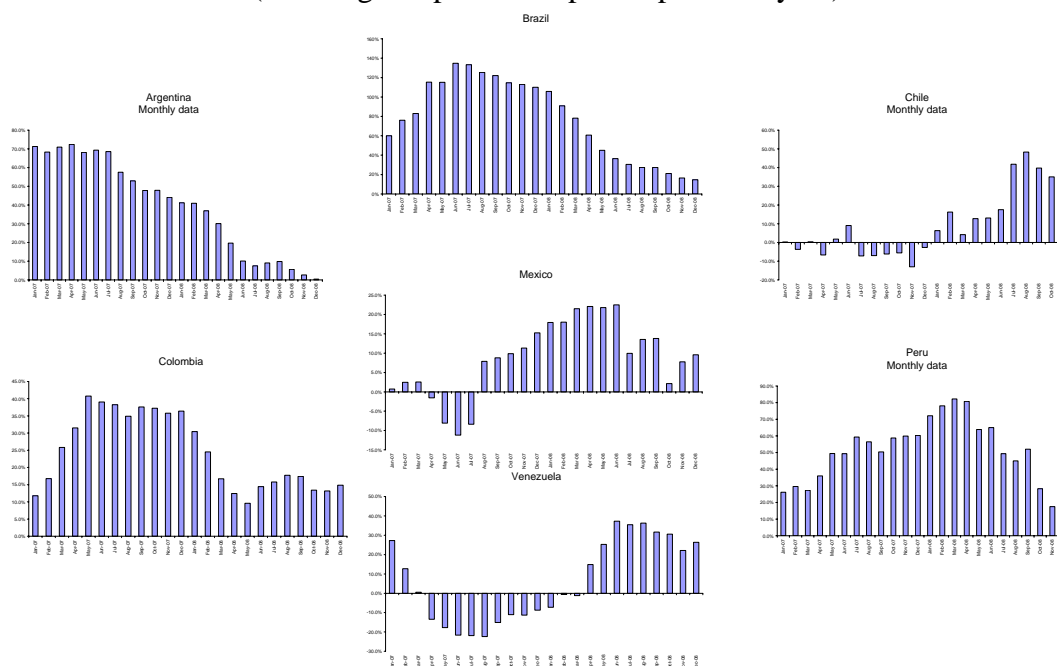
Figure 2.7
**Recent evolution of nominal exchange rate for some Latin American economies
 (August 2008=100)**



Source: Own computations based on Bloomberg (2009).

In the context, of lower exports and the desacceleration in net capital inflows, the international reserves of the LAC(7) economies has slowed down significantly their growth rate since the second semester of 2008. The median deceleration of the international reserves growth rate between the second semester of 2007 and that of 2008 reached 6.9% (See Figure 2.8., below).

Figure 2.8
Dynamics of International Reserves during current financial crisis
 (% change respect same period previous year)

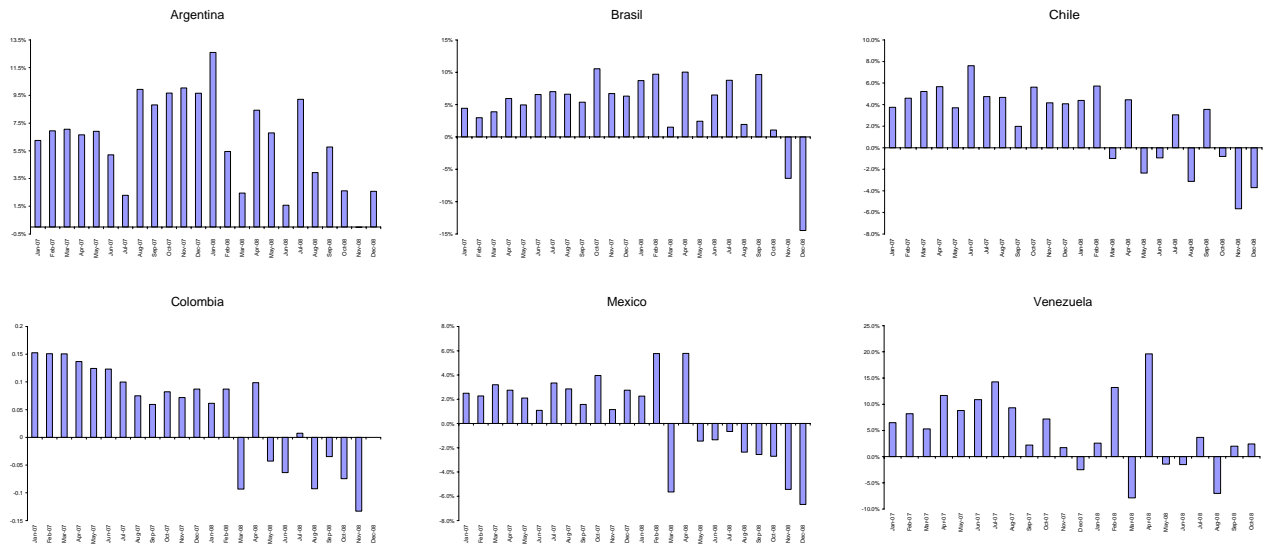


Source: : Own computations based on National sources information (2009).

Since the current financial crisis began to spread across the developed world, questions about the real consequences of the subprime crisis in Latin American economies began to surface. Initially the discussion focused on the existence of a possible decoupling of business cycles; currently the debate is about the intensity of the impact and whether the outcome will turn out to be a significant slowdown of growth or a recession.

The available evidence shows that economic activity in the region could be heading to a new episode of significant contractions. Thus far, and consistent with the dynamics exhibited by exports, most of the LAC(7) economies, (Brazil, Chile, Colombia, Mexico and Venezuela), have presented negative annual growth rates in industrial production (monthly indexes), a pattern that in some cases has been present for several months. See Figure 2.9.

Figure 2.9
Dynamics of Industrial production during current financial crisis
 (% change respect same period previous year)

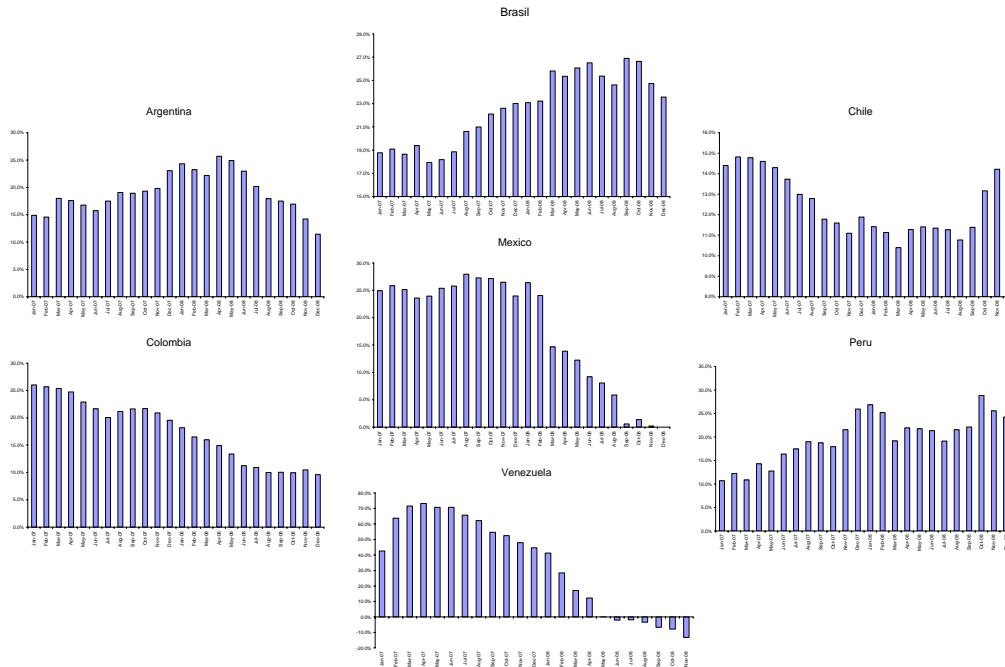


Source: Own computations based on National sources information (2009)

Leading indicators of economic activity, like credit to private sector and imports, are validating the negative expectations on GDP dynamic. The growth rates of the credit provided by financial institutions to the private sector are still in positive territory for all the LAC(7) but with the exception of Venezuela, however, during the last semester of 2008 they have declined and have done so significantly in countries like Argentina, Colombia and Mexico. In the Venezuelan case, credit to private sector has been declining in the same period. See Figure 2.10.

Figure 2.10

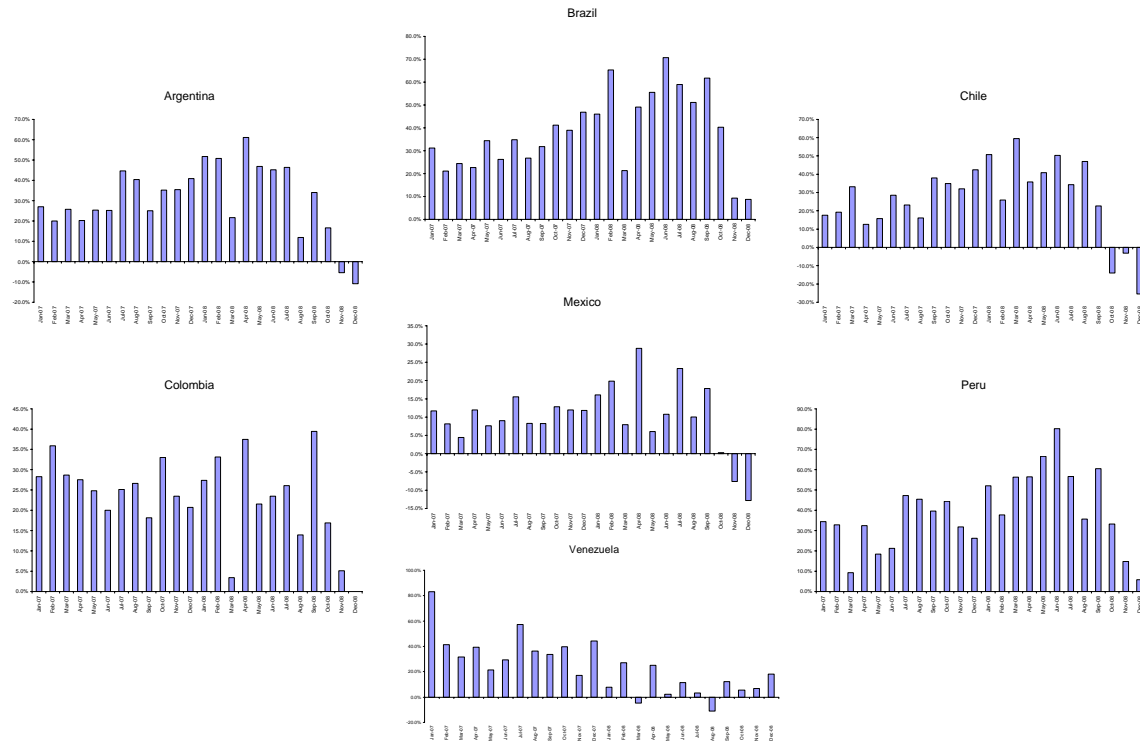
Dynamics of credit to private sector (banking system) during current financial crisis
(% change respect same period previous year – real terms)



Source: On the basis of Bloomberg

Imports dynamics shows a marked reduction in its growth rates in all the LAC(7) and in some countries, such as Argentina, Chile and Mexico, in the last months of 2008, the annual growth rates were negative. (See Figure 2.11).

Figure 2.11
Dynamics of imports during current financial crisis
 (% change respect same period previous year)



Source: On the basis of Bloomberg (2009)

In line with the preliminary evidence available in the region, and the performances observed by developed economies, forecasts of the region performance have been revised systematic and drastically downwards during all this process and there are opinions that sustain that given that the current crisis is still an unfolding event, further revisions of the projections could be in place. Table 2.1 summarizes the initial and the most recent projections for the region which predict a negative rate of growth of -1.3% for 2009. As in previous crisis episodes, the effects across the region are not going to be homogeneous; some countries could be more affected than others.

Table 2.1
Latin America: Real GDP (percentage change over a year ago)
2007-2009

	2007	2008	2009 a/	2009 b/
Latin America	5.3	3.9	0.9	-1.3
Argentina	8.7	7.0	-1.0	-1.5
Brazil	5.7	5.3	2.0	0.8
Chile	5.1	3.7	2.5	-1.5
Colombia	7.5	3.1	2.5	0.5
Ecuador	2.5	6.9	2.0	0.0
Mexico	3.2	1.3	-0.6	-4.0
Peru	8.9	9.1	5.3	4.0
Venezuela	8.4	4.8	1.5	0.0

Notes:

a/ Forecasts corresponding to 19 December 2008.

b/ Forecasts corresponding to 27 February 2009.

Source: JP Morgan Chase Bank. Global Economic Outlook Summary. 19 December 2008; February 27 2009

3. Final comments

The analysis of the effects of past financial crises on the region's economic performance can improve our understanding of the possible consequences of the current crisis episode. To this end this paper analyzed past international financial crises episodes in order to extract statistical regularities to delineate the potential implications of the current crisis for the Latin American region. The main lessons extracted from the empirical evidence for over three decades are as follows:

1. Financial crises have deep and protracted negative effects on the economic performance of the region. The analysis of the dynamics of per capita GDP in past crisis episodes shows that the regional median drop ranged between 1.2% during the Argentinean crisis to 12.6% during the Debt crisis. Similar patterns were exhibited by investment, which regional median decline rates varied between 13.7% in the Mexican and Argentinean crises and 46.6% during the Debt crisis episode.
2. The deep and protracted effects are explained mainly by the extent to which countries face restricted access to external finance and disruption of international trade channels. During the crises episodes here analyzed the regional median decline of capital inflows was between 2.7% of GDP during the L&S crisis and 8.4% of GDP during the Debt crisis, whereas the regional median contraction of exports was between 4.1% during the Mexican crisis and 38.2% during the Debt crisis.
3. The negative economic results and the restricted access to external finance were common for a large number of countries across the region, despite the significant heterogeneity that these economies exhibit in aspects that the literature has established as critical to explain the financial crises consequences such as level of development of financial markets, integration to international financial markets, degree of openness, exports bias, economic conditions at the beginning of the crises, and policy response toward the crises.

4. In the current crisis episode countries also face restricted access to finance and international trade channels show severe disruptions. Since the second semester of 2008, private capital flows are slowing down, and even reversing in some countries. The median reduction in non-FDI private flows between the III quarter of 2007 and that of 2008 was 2% of GDP. Furthermore, estimates of private capital flows to the region for 2009 are significant smaller (50%) than those of 2008. At the same time global trade is also expected to decline, more than 2%, during 2009, and some countries in the region are already witnessing declines since the second semester of 2008.
5. As a result, the analysis and empirical evidence suggests that in the case of Latin America, the current episode and its manifestations are not an exception to previous crises patterns. That is, the current global financial crisis is “old wine in new goatskins” for Latin America.
6. Responding to the immediacy of the current situation, governments of the region have announced counter-cyclical measures to try to shield their economies from the effects of the international financial crisis. The improvement in domestic conditions in the past six years, including a more balanced fiscal position, the reduction of external debt, low inflation and accumulation of international reserves for some countries, are helping some economies to finance those fiscal policies. The resources allocates to these stimulus packages represent 5.7% of GDP in Argentina, 1,9% in Bolivia, 1.0% in Brazil, 2.2% in Chile, 4.2% in Colombia, 0.7% in Costa Rica, 0.8% in Guatemala, 0.6% in Honduras, 0.6% in Mexico, and 2.4% in Peru.
7. Notwithstanding the importance of countries efforts to mitigate the effects of the crisis, these may be insufficient to avoid the stagnation or even the expected contraction of economic activity in the region, given the unprecedented magnitude and systemic character of the current crisis episode.

8. Moreover, the analysis in the paper shows that financial crises have affected in a deep and protracted manner Latin American economies with independence of their specificities and initial macroeconomic conditions. There is no evidence that this current crisis episode will be any different.

Annex 1. Data sources

Indicator	Units	Sample	Source
I. National accounts			
GDP	1990 and current US\$	1980-2007	UN Stats, National Accounts database
GDP	1990 US\$	1980-2007	UN Stats, National Accounts database
Investment	1990 and current US\$	1980-2007	UN Stats, National Accounts database
II. Balance of payments			
Exports	Million of US\$	1980-2007	ECLAC
Exports	Million of US\$	2000-2009	LAC(7) national sources
Imports	Million of US\$	1980-2008	ECLAC
Imports	Million of US\$	2000-2009	LAC(7) national sources
Foreign direct investment (assets)	Million of US\$	1980-2008	ECLAC and LAC(7) national sources
Foreign direct investment (liabilities)	Million of US\$	1980-2008	ECLAC and LAC(7) national sources
Portfolio investment (assets)	Million of US\$	1980-2008	ECLAC and LAC(7) national sources
Portfolio investment (liabilities)	Million of US\$	1980-2008	ECLAC and LAC(7) national sources
Other investment (assets)	Million of US\$	1980-2008	ECLAC and LAC(7) national sources
Other investment (liabilities)	Million of US\$	1980-2008	ECLAC and LAC(7) national sources
III. Others			
CPI index	Index number	1980-2007	World Economic Outlook, FMI
Unemployment	Percentage rate.	1980-2007	World Development Indicators, WB
International reserves	Million of US\$	1980-2007	World Economic Outlook, FMI
Real exchange rate	Index number	1980-2007	ECLAC
Population	Persons.	1980-2007	UN Stats, National Accounts database
Credit to private sector	Percentage of GDP.	1980-2008	World Development Indicators, WB. And LAC(7) National sources
Nominal exchange rate	Domestic currency by US\$	2000-2009	Bloomberg

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