The Global Financial Crisis
From NYC to LATAM

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Abstract: In this brief summary paper we analyze the impact of the global financial crisis on the Latin American economies. We discuss the contagion channels resulting from the international turmoil and the policy responses of the different countries of the region. We will focus on their ability to cushion the adverse effects on the real economy. In the first part, we summarize the origins of the global crisis, the region's economic outlook, and the main channels of international contagion. In the second part, we lay out the current policy responses and suggestions for future policy. We identify three groups of countries according to their initial conditions that determine the governments' ability to respond by countercyclical policies. We finally stress the fundamental uncertainties for the coming years.

Keywords: Financial contagion, Latin America, financial crisis

1. INTRODUCTION

Firsts signs of severe financial sector weaknesses were apparent in August 2007, when numerous disclosures reached the press that highly leveraged financial institutions were holding toxic securitized US subprime mortgages. Increasing risk perception and uncertainty about the size and scope of crisis translated into a sudden closure of financial wholesale markets, including interbank borrowing (Buiter (2007)). Faced with the disappearance of normal sources of funding, banks and other financial institutions, especially short-term financed special purpose vehicles (SPV), began selling assets to raise liquidity to meet their maturing obligations. With illiquid asset markets, these asset sales triggered a sharp decline in asset prices. Given market-to-market valuation, this caused capital ratios to fall below critical levels in other institutions, triggering further asset sales that turned the asset price decline into a collapse. In the wake of the Fed's failure in bailing out Lehman Brothers in September 2008, many financial sectors in advanced economies began to collapse. Bank lending, issuance of corporate bonds, commercial papers, and a wide variety of other financial products largely ceased (Krugman (2008)). The

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liquidity crunch turned into a credit crunch and affected the real economy.

The roots of the crisis, however, are a thing of the past. In the 1970s, Fannie Mae (Federal national Mortgage Association), Ginnie Mae (Government National Mortgage Association) and Freddie Mac (Federal Home Loan Mortgage Corporation) began the process of securitization of residential mortgages (Buiter (2007)). Asset securitization involves the sale of income generating assets, such as mortgages or car loans, by the originator to a SPV, an off-balance sheet entity vis-à-vis the originator, that finances the purchase of these assets by the issue of bonds, which are secured by those assets. Private banks took quickly advantage of these securitization techniques and sold their illiquid loan portfolios to SPV, which bundled them up and traded them as mortgage-backed securities (MBS) and other forms of collateralized debt obligations (CDO). This new model of financial intermediation enhanced the scope of risk-trading, however, it also resulted in highly complex and opaque financial instruments. Similarly, the creation of off-balance sheet entities allowed banks to seek out and take on additional risks. Compared to the traditional model of financial intermediation in which banks monitor borrowers until repayment, the new model created adverse incentives towards excessive risk-taking. The opportunistic behavior of market participants, coupled poorly designed incentives structures, such as bonus systems or stock options, resulted then in a vicious upward circle between increasing mortgage lending, loan-risk, housing prices, and bank leverage.[2] As Stiglitz (2009) argues, the US financial system has misallocated capital to homes beyond peoples' ability to pay and in places where homes were not needed.

The roots of the global financial crisis have an important global macroeconomic dimension. Rapid growth of major emerging market economies with high propensities to save, including the BRIC economies and major oil-producing economies, resulted in increasing global liquidity and declining real interest rates. This trend was reinforced with the breakdown of the Tech bubble in 2000. Policies of undervalued exchange rates and financial conservatism increased the demand for default-risk-free assets in a stable currency, remarkably towards US Treasury bills. The financial conservatism, however, turned into greater willingness to take risks and assets were increasingly shifted out of high-grade sovereign obligations to equity and other high-yielding investments.

The realization that risk was underpriced started in late 2005, when delinquency rates on mortgages began to increase. Many of the mortgages granted in 2005 and 2006 had adjustable interest rates. As a result of the financial turmoil, these interest rates raised and delinquencies of borrowers increased. Prices of subprime mortgage credit default swaps began to fall late in 2006 and plummeted in mid 2007, resulting from the higher perceived default risk. The widening of credit risk spreads in late 2008 was not only confined to subprime related instruments and the involved banks, rather a temporary dry up of financial markets followed.

2. The Global Financial Crisis and Latam: Where did we stand?

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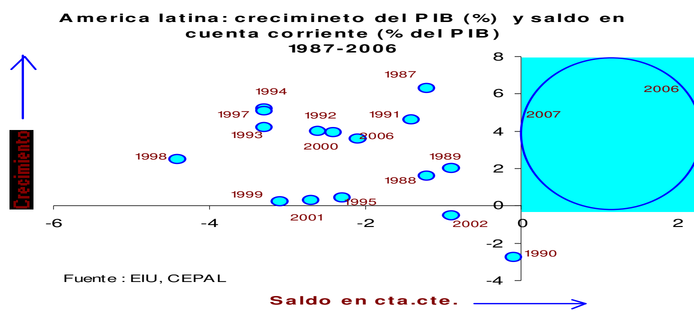
2 For instance, the total volume of outstanding home mortgages grew from $5.36 trillion to $9.71 trillion during 2000-06 - a 72per cent increase - more than doubling the 31per cent increase during 1992-99. This came at the expense of loan-quality, i.e. near-prime and subprime mortgages - high risk loans to clients with poor credit records - shot up from 9per cent of newly originated securitized mortgages in 2001 to 40per cent in 2006 (Danielle and Duca (2007)).

Until mid-2008, Latin American countries appeared well-equipped to weather an economic crisis coming from extra regional planets of the global galaxy. As can be seen in Figure 1 (see below) and Figures 2 to 5 (see Appendix), most countries recorded improved budget balances, lower levels of debt, high levels of international reserves, and current account surpluses driven by a boom in the export sector. The region's seven largest economies, i.e. Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela that account for 91per cent of the region's GDP, grew 5.8per cent on average between 2003 and 2007, however, in part boosted by the boom in commodity prices.

Figure 1: GDP growth (y-axis) and current account balances (x-axis)



The original idea of *decoupling* was then in fashion. The novel argument was that this time emerging markets would not suffer the usual contagion experienced in other international financial crisis originated in other emerging economies or coming from the mature markets of the northern hemisphere. The fundamentals of this view hinged on the robust position of the external accounts, the generally healthy state of public finance and the generally high levels of international reserves. Furthermore, the role of China as a new locomotive of world growth reinforced this emerging market optimistic approach. If China and other BRICs make a significant contribution to global economics, they may not yet counterweight a strong slowdown in the major developed economies. Moreover, China has a strong dependence on the demand for industrial goods of the mature economies of Europe and the US. In turn it may affect negatively the commodities markets where China has become a major actor. Latin America will feel the financial epidemics either as a provider of raw materials or as a competitor of Asia in third countries. The robust macroeconomic stand of the Latam countries will help to contain the damage inflicted by the global financial crisis, but the decoupling of this part of the world from the international turmoil will prove to be a chimera.

By September 2008, the full impact of the financial distress in the US had begun to be felt in many other advanced and emerging market economies. Following the stock market crashes in the major financial centers (see Figure 6), growth projections have been critically revised in many countries. As can be seen in Figure 7, global GDP is estimated to drop by 5per cent. Following the advanced economies, growth began also declining in emerging economies, arising from weak external demand, tight conditions on global capital markets, and low

commodity prices. Following the output contraction and the fall in commodity prices, world inflation has dropped (see Figure 7).

3. Channels of contagion to Latin America: Trade, Remittances and Finance

The impact of the current international economic crisis will differ across Latin America, depending on initial specific country conditions such as the fiscal stance, the levels of public debt, the current account balance and international reserves, as well as trade exposure to the US, and the degree of export diversification (goods and geography). To understand the effects of the current crisis various channels of transmission that connect events in the advanced economies with the economic outlook for Latin America have to be distinguished. The most relevant seem to be: (1) trade flows and remittances, and (2) capital flows and financial contagion.

3.a. Trade flows and remittances

With respect to the trade dimension, Latin America is highly exposed to commodities, although there is important variation from country to country. As can be seen in Table 1, commodity participation in exports as a share of GDP is especially high in Venezuela (30per cent), Chile (27per cent), Ecuador (18per cent), Peru (18per cent) and Argentina (13per cent), whereas lower in Brazil and Mexico (4per cent). Similarly, fiscal revenues of the former countries also depend heavily on commodities: the share goes from 24per cent in Venezuela, to 8-10per cent in Chile and Ecuador, to 3-4per cent in Argentina, Mexico and Peru, and less than 1per cent in Brazil. The drop in commodity prices since mid-2008 (see Figure 8) has therefore a disproportionately strong impact (output, current account and public finance) on many Latam countries. The prices of industrial metals dropped by about 50per cent relative to 2007, oil prices by more than 70per cent, and prices of agricultural goods by about 40per cent. The ECLAC predicts a 7.8per cent decline in the region's terms of trade with a high of 30per cent in Chile and Peru, and 20per cent in the rest of the Andean nations.

The high degree of trade integration of certain Latin American economies with the US market, were good news in the days of sustained growth of this economy. It will turn sour in these days of severe contraction in the north. In particular, exports to the US represent 80per cent of total exports in Mexico, 58per cent in Venezuela, 44per cent in Ecuador, and 35per cent in Colombia. In view of this strong trade dependence, these countries will be most likely adversely affected by the fall in the American import demand. The geography of export markets, will also show in potential complementarities or competition with the major economies of the day: we should highlight the diversity in Latam trade relations with China, where Mexico is a competitor in the US market and Mercosur, Chile and Peru have strong complementarities (demand for commodities). Therefore, the impact of the crisis on particular Latin American countries will also depend strongly on the dynamics of the Chinese economy.

Remittances

Remittance flows are particularly important in Central America and the Caribbean. In Central America remittances account for more than 10per cent of GDP, with the exception of Costa Rica, and are as high as 22per cent in Honduras and 35per cent in Haiti (see Cárdenas (2009a)). Important reductions in remittances have been observed in Ecuador (-12per cent in September

2008), Guatemala (-5per cent in December), and Mexico (-2per cent in December). While remittances in the northern region of Latin America originate principally in the US and other advanced economies, there are countries such as Paraguay and Bolivia that depend on remittance flows within the region, especially worker remittances from Argentina and Brazil. If the latter countries suffer a significant impact of the international financial crisis, the remittances channel will bring in turn a negative effect to the former economies.

3.b. Capital flows and financial contagion

Latin American EMBI spreads reveal an increased risk perception of international investors with regard to Latin America (see Figure 9). The increase has been much higher in Argentina (1800 bp), Ecuador (4000 bp), and Venezuela (1800 bp). Beyond macro fundamentals these countries pay the price of volatile policies, arbitrary regulatory practices, default risk, and uncertain property rights leading to very high discount rates. The end of the booming days of commodities may only deteriorate market expectations. In most Latam economies such as Brazil, Chile, Colombia, Mexico, Panama, Peru, and Uruguay spreads have converged to levels around 400-450 bp, reflecting an increase close to 200 bp from February 2008. But compared to other periods of economic epidemics of the 1990s (Tequila, Asia, Russia) the local scene looks difficult, but rather less dramatic.

The increased risk perception has affected exchange rates as a result of increased capital outflows of both foreign and domestic investors (see Figure 10). Again relative to a year ago, currencies have depreciated by approximately 30per cent in Brazil (following a sharp appreciation in the previous years), Colombia, Chile, and Mexico, and to a lesser extent in Argentina, Uruguay, Peru, Costa Rica, and El Salvador. Interestingly, currencies have continued to depreciate since October, even though EMBI spreads have stabilized. The generally lower levels of liability dollarization in Latin America will help the economies to adjust to the currency depreciations without triggering a broader banking or sovereign debt crisis.

As global portfolios have shifted to U.S. Treasuries and high grade debt securities guaranteed by rich countries, capital inflows have fallen. As such Latin American stock markets have joined the global sell off and continue to drop, ranging from -56per cent in Peru, to about -30per cent in Mexico and Brazil, and -10per cent in Colombia. The Merval in Argentina has shown a downward adjustment before the world financial panic. The Chilean IPSA has shown greater resilience. Similarly, corporate and sovereign bond issues have collapsed and their average maturity increased (see Figure 11). In the seven largest Latin American economies, corporate bond issues have dropped from 21.2 billion USD in Q4/07 to 2.5 billion USD in Q1/09, while the share of issues with maturities of less than one year has increased from near 0per cent of total issues to 40.5per cent in Q1/09. Sovereign bonds declined from 97.8 billion USD in Q2/07 to 56.6 billion USD in Q1/07. Therefore, if this development continues, governments only external source of funds will be multilateral finance, while firms, shut out from capital markets, will likely face a severe liquidity crunch (higher spreads and shorter maturities), where the most affected will be small and medium size enterprises.

The financial contagion through the banking systems is limited, a paradox of financial disintermediation. The recurrent financial crises in the region have resulted in a relatively lower level of financial development compared to the advanced economies. Consequently, mortgage

markets in Latin America are less developed, making banks more reliable in the current crisis (no subprime risk or heavily leveraged structures). Although bank credit to the private sector has decelerated in the region, particularly in the consumer segment, real domestic credit growth is still positive in most countries. Credit growth remained particularly high in Brazil (25per cent), Colombia (10per cent), and Chile (5per cent). Mexico is facing the highest contagion risks, due to its large exposure to international banks, especially US banks, which represent 80per cent of bank assets. But the balance sheets of local banks may suffer the negative effect of the current crisis, if the economic slowdown in the region deepens and the private sector solvency deteriorates.

3.c First signs of economic slowdown

Table 2 shows annualized growth rates of quarterly GDP and industrial production for several Latin American economies. In terms of GDP, only the Mexican economy shrank by -1.6per cent in the 4th quarter of 2008 relative to a year ago, while nearly all countries' industrial production contracted, reaching -17.2per cent in Brazil. The contagion to the real economy is on the way.

Whether the global financial crisis will have long-lasting adverse effects on Latin America and the Caribbean depends critically on the success of the stabilization policies presently undertaken in the US and other advanced economies, the impact of the crisis on China, and on the speed of the commodity price recovery. Annual average output growth in the region's seven largest economies could slow to 1.5-2.5per cent between 2009 and 2013, if developed nations begin their recovery in the second half of 2009 (see IDB (2009b), and reports of major financial institutions). However, growth could slow down to an annual average of only 0.1per cent during the next five years, if the recovery in the advanced economies takes longer than expected.

The crisis is likely to have important social consequences in Latin America such as increases in unemployment and poverty. The International Labor Organization estimates that the number of people living in 'work poverty', i.e. those active in the labor market but earning an income below the poverty line, will rise from 6.8 percent in 2007 to 8.7 percent in 2009. Moreover, if growth rates are as projected, about 4 million people are likely to lose their jobs in 2009. The impact of the current economic turmoil on the most vulnerable sections of society will depend on the degree of economic stress, the effectiveness of policy interventions, as well as on the time profile of the current crisis.

4. Policy responses: Money and Public Finance

Despite substantial analysis of the determinants and consequences of financial crises, a lot less attention has been paid to policy responses. Little is known about the role of policies, both in cushioning the impact on the real economy and in paving the way for a fast recovery. Moreover, policy responses are not only relevant in the aftermath of the financial turmoil, but they certainly also have longer-term implications. The implications for monetary and fiscal policy in Latin America differ importantly from those of other advanced economies. While the US and UK have to fight severe financial market turmoil and solvency problems of systematically important financial and non-financial institutions, Latin America faces other problems, mainly

caused by the contagion channels mentioned before. Therefore, Latin America does not need large public bailout programs or large-scale bank insurance or restructuring programs. The falling external demand and deterioration in credit conditions, however, calls for fiscal Keynesian-style interventions and monetary easing.

It is not unambiguous whether emerging markets can afford expansive monetary and fiscal policies in times of crisis, or whether they should instead restore credibility by tightening monetary and fiscal policy. Much of the outcome depends on the initial conditions, including fiscal stance, policy credibility, liability dollarization, and relations to foreign investors. Important for the right policy response is the fact whether the incoming shock is persistent, since liquidity issues can quickly turn into solvency issues when the shock is long-lasting. In the following we will compare the different policies undertaken in Latin America to confront the global crisis, as well as the countries' initial conditions.

4.a. Monetary policy

As inflationary pressures slow down generally, central banks in Latin America are in a better position to cut interest rates in response to the negative external environment and domestic credit conditions. As such, monetary policy has been loosened in particular countries, as in Brazil (cut by 150 bp to 11.25per cent), Chile (500 bp to 1.75per cent), Colombia (200 bp to 7per cent), Mexico (150 bp to 6.75per cent) and Peru (150 bp to 5per cent). As these countries still have relatively high real interest rates, further efforts can be expected. However, these policies will be constrained by international capital arbitrage and capital flows. If capital outflows prevail, the reduction in interested rates will have to be reversed. In addition, the degree of liability dollarization, which is still high in Argentina, Peru, and Uruguay, works as a constraint on monetary policy, creating fear of floating in a situation in which a major adjustment in the exchange rate would be necessary when financing disappears.

Although many Latin American governments have reduced or stabilized their external debt, private external borrowing has either increased or remained high. Following the dry up in external financing, many central banks have provided foreign currency liquidity to the private sector to ensure both the continued operation of the foreign exchange market and the availability of external financing, including trade finance. Most central banks supplied foreign currency liquidity through intervention or operations in the foreign exchange market, including foreign exchange spot, repo and swap transactions.

Complementary measures have been implemented to increase liquidity on financial markets in several countries. Brazil, for example, eased mandatory bank reserve requirements during September and December 2008. Similar to its response to the sudden stop of 2002, Brazil made also parts of its reserves available to protect export credit lines, alleviating the financial constraints faced by the export sector. Foreign currency trade finance in the region has also be supported by international institutions. For instance, between July 2008 and March 2009 the International Finance Corporation increased trade finance guarantees in Latam by 86per cent to 520 million dollar. The Peruvian central bank lowered marginal reserve requirements on foreign currency from 49per cent in October to 30per cent in December 2008. From December 2008 to March 2009, the legal reserve requirement on foreign currency was lowered from 9per cent to 6per cent. In addition, it lowered marginal reserve requirements on domestic currency deposits from 25per cent in September 2008 to 6per cent in March 2009. Similarly, reserve requirements were lowered in Colombia and marginal reserve requirements temporarily removed.

Foreign-exchange market interventions have been relatively modest, i.e. highest in Mexico and Costa Rica, aimed at shorting up liquidity in periods of tight market conditions and moderating excessive volatility in the exchange rate, rather than seeking to maintain a given parity (see Figure 10 on exchange rates and Figure 12 on international reserves). There was some variation in intervention strategies. While many countries focused on operations in the spot market, Brazil and Chile focused on operations in the swap market, see Figure 13. The explanation for this is that foreign exchange swap markets are more developed in these countries and that, in contrast to spot operations, swaps do not deplete foreign reserves as they involve the reversal of the foreign currency sale by the central bank in the future. Some of the foreign exchange market interventions have been non-discretionary to undermine that central banks were not targeting an exchange rate parity. For instance, the Mexican central bank introduced in October 2008 a rule according to which the central bank would auction 400 million dollar on any day after which the exchange rate depreciated by more than 2 percent. A price floor was set at 1.02 times the average currency value of the previous day. The Colombian central bank adopted a rule in which it responds to large exchange rate movements by auctions of so-called volatility call options that gives market participants the option to buy foreign currency from the central bank. Such auctions have been triggered in October 2008 and January/February 2009, involving 235 million dollar and 369 million dollar, respectively. Despite the foreign exchange market intervention, international reserves are in a solid position in major LATAM countries, see Table 5. In most considered countries, reserves amount to more than 250 percent of external short-term debt and more than 50per cent of imports.

Sovereigns from advanced economies or multilaterals have provided additional resources to Latam. In October 2008, reciprocal currency arrangements between the central banks of Brazil and Mexico and the Fed have been established, totalling 30 billion dollar. The use of these swap linesm, however, has been relatively limited, i.e. in April 2009 the Mexican central bank auctioned 4 billion dollar to support the rollover of maturing debt in the corporate sector. Moreover, the IMF has attributed recently 47 billion dollar to Mexico and 10.5 billion dollar to Colombia through its facilitated credit line arrangements.

Many advanced and emerging market economies have announced other policy measures to confront the liquidity squeeze and loss of confidence involving deposit insurance, borrowing guarantees, purchase of toxic assets, temporary suspension of market-to-market accounting rules, and recapitalization of troubled banks. As can be seen in Table 3 (see below), such intervention has been particularly high in the US, UK, Russia, and Germany, while it has been relatively modest in Argentina, Brazil, and Mexico.

Table 3: Overview of policy measures by G20 plus Spain and Netherlands (Feb. 2009)

	Liquidity	Borrowing guarantees	Deposit insurance	Recapitalization	Asset purchase
US	+	+	+	+	+
UK	+	+	+	+	+
Russia	+	+	+	+	+
Germany	+	+	+	+	+
Netherlands	+	+	+	+	
South Korea	+	+		+	+
Japan	+			+	+
Italy	+	+		+	
France	+	+		+	
Australia	+	+	+		
Spain	+	+	+		
Saudi Arabia	+	+	+		
Canada	+	+			+
Brazil	+				+
Indonesia	+		+		
Mexico	+	+			
China	+				
Turkey	+				
South Africa	+				
India	+				
Argentina	+				

(source: IMF – G20 Meeting March 2009)

While financial sectors in Argentina and Brazil are certainly less affected and need no such major interventions, the Mexican financial sector is likely to suffer heavily, given its high exposure to banks from the US. If US banks in Mexico operate with branches rather than with subsidiaries, the contagion to Mexico is likely to be more important, since branches are a direct part of the parent bank and therewith fully exposed to potential distress in the parent bank. Finally, if Latin American authorities have to engage in rescuing failing institutions, they should take into account Bagehot's principle: lend freely, against collateral that will be good in the long run (even if it is not good today), but at a penalty rate. To different degrees, all major central banks (Fed, ECB, BoE) have not followed this advice, risking to create incentives for future excessive risk taking (Buiter (2008)).

4.b. Fiscal policy

There are important limitations to fiscal policies in particular Latin American countries. Lack of savings during periods of economic boom make it difficult to follow expansionary policy, because future growth projections are typically low at the time of crisis, as well credibility about future tax collection to compensate for current expansionary policy. In addition valuation effects stemming from real exchange rate depreciation typically increase debt-to-GDP ratios. These factors trigger uncertainty about a country's solvency and repayment capacity, leading to creditors' refusals to provide the required resources. The Table below shows last year's public debt, deficit, and expenditure ratios across Latin America.

Table 4: Fiscal situation and announced stimulus packages in LATAM

(source: M. Cardénas (2009b))

Table 1. Fiscal Situation and Estimated Size of Announced Fiscal Stimulus Packages in Latin America and the Caribbean

	Initial Conditions			Estimated size of stimulus		
	Gross Public Debt (percent 2008 GDP)	Budget Balance (percent 2008 GDP)	Budget Expenditure (percent 2008 GDP)	USD amount (bb)	Percent 2008 GDP	Estimated tax cut share
Argentina	44.2%	1.3%	27.4%	4.4	1.3%	0.0%
Belize	N/A	-3.9%	38.7%	-	-	-
Bolivia	43.5%	5.8%	41.1%	-	-	-
Brazil	35.8%	-1.4%	N/A	8.6	0.5%	100.0%
Chile	4.8%	5.3%	19.0%	4.0	2.2%	63.0%
Colombia	42.6%	-0.8%	35.2%	-	-	-
Costa Rica	38.3%	0.2%	15.2%	-	-	-
Cuba	35.3%	-6.7%	73.8%	-	-	-
Dominican Republic	32.8%	-3.1%	19.8%	-	-	-
Ecuador	30.5%	2.2%	42.8%	-	-	-
El Salvador	37.4%	-1.0%	18.9%	-	-	-
Guatemala	23.8%	-1.5%	12.6%	-	-	-
Guyana	N/A	-5.8%	42.9%	-	-	-
Haiti	N/A	-2.2%	14.7%	-	-	-
Honduras	22.0%	-3.9%	22.3%	-	-	-
Jamaica	113.5%	-5.8%	30.2%	-	-	-
Mexico	20.3%	-0.1%	24.9%	8.6	1.0%	0.0%
Nicaragua	54.7%	-4.8%	23.7%	-	-	-
Panama	45.5%	0.4%	25.8%	-	-	-
Paraguay	23.9%	0.2%	18.2%	-	-	-
Peru	24.4%	2.2%	27.5%	1.4	1.1%	0.0%
Trinidad & Tobago	24.7%	1.2%	29.9%	-	-	-
Uruguay	70.3%	-1.2%	27.8%	-	-	-
Venezuela	20.6%	-1.1%	30.5%	-	-	-

Sources: EIU, IMF, news sources.

Chile is best prepared to confront the crisis with expansionary fiscal policy. The stock of public debt was only 4.8per cent of GDP in 2008, coupled with a fiscal surplus of 5.3per cent. In addition it can build on the countercyclical Stabilization Fund, amounting to 10.5per cent of GDP. Accordingly, the Chilean government has announced the largest fiscal stimulus package in the region, amounting to 2.2per cent of GDP. Regarding revenues, corporate, personal and value-added taxes are planned to be reduced temporarily to boost consumption and investment. On the expenditure side, the package consists of employment subsidies for low-wage young workers and cash transfers to low income households.

Some countries have important limits in counteracting the global crisis by expansive fiscal policy, especially Argentina, Nicaragua, Venezuela, Ecuador, and Bolivia. Governments have spent most of the bonanza from the five preceding years of sustained growth and have limited access to capital markets, or lack good relations with foreign investors. In addition, government revenues in these countries depend importantly on commodities, such as oil in Ecuador and Venezuela, or agricultural products in Argentina and Bolivia. Unless commodity prices recover, governments will be under important pressure. On the fiscal side, Nicaragua is at the worst position, with a public debt-to-GDP ratio of 54.7per cent and a deficit of 4.8per cent. Regarding investors' risk perception, Ecuador is worst hit as its EMBI spread exploded up to 4000bp (see, Figure 9). Among these countries, Argentina is the only country that announced a fiscal stimulus package by March 2009. If commodity prices do not recover and capital markets remain closed, the government is likely to face financial difficulties. The package amounts to 1.3per cent of GDP and includes reductions in taxes on exports and employers' social security contribution, and a raise in spending on social programs and public work plans. The fiscal stimulus package, however, was partly financed by the nationalization of pension funds.

Beyond the case of Chile, other countries that are likely to have more fiscal space include Colombia, Peru, and Brazil that benefit from more sustainable policies in the recent years. They have taken advantage of the commodities boom to work on their sovereign liabilities and

improved fiscal positions. In addition, large stocks of reserves have been accumulated (see Figure 12). Public debt ranged from 42.6per cent of GDP in Colombia to 24.4per cent in Peru and deficits from 1.4per cent in Brazil to a surplus of 2.2per cent in Peru. Brazil and Peru have announced fiscal stimulus packages. While Brazil's focus is set on tax cuts (tax on financial transactions and on low income), Peru strengthens demand by increasing expenditures on infrastructure, housing, hospitals, and social programs.

The situation in Mexico and the smaller economies of Central America and the Caribbean depend importantly on the US as an export market, source of workers' remittances, and tourism revenue. The Mexican government has announced a fiscal stimulus package of 1per cent in light of a low public debt ratio of 20per cent coupled with a deficit of 0.1per cent in 2008. In addition, it has access to a 47 billion dollar credit line from the IMF to improve investor confidence and stabilize the currency.

5. Policy suggestions

Whether a fiscal stimulus package is effective depends on the circumstances prevailing in each country. Without good initial conditions, such as lower levels of debts and deficits, and political stability, governments have limited scope to counteract the crisis with expansive fiscal policy. With narrow local financial markets the limits to fiscal expansion may be attained rather quickly. The danger is that the market becomes uncertain about the capacity to repay, and the risk of speculative attacks may rise, triggering a liquidity crisis that is likely to be followed by a painful adjustment. In such a case, no fiscal policy intervention may improve the economy's recovery relative to a scenario with policy intervention. Flexibility and consistency should be aimed for in turbulent waters. Multilaterals such as the IMF, the IDB or the WB could support coherent policy interventions, helping to alleviate such constraints.

Another important aspect of effective policy response which is criticized my numerous economists, including Buiter (2008), Krugman (2009), and Stiglitz (2008), is the fact that policy responses should be incentive compatible. That is, financial support should be given conditionally, at a penalty rate, and not across the broad. For instance, the US financial rescue packages are criticized to create incentives for future excessive risk taking, since ultimately the taxpayer bears the loss, while bondholders, shareholders, and managers get the reward. Therefore, an effective recovery program needs to take such issues into account.

The political economy in times of crisis

The role of popular perceptions in shaping policies during crises seems particularly relevant for Latin America in the current scenario. The pressure for bigger spending may gather popular support in countries that do not have the right conditions to engage in over expansionist initiatives. The demand for inconsistent public policies may increase or cause the reversion of a coherent agenda. Unreasoned protectionism and derailing consistent regulation are certain risks in the face of social and political anxiety, all the more understandable in times of crisis. This trend of events is a potential risk, in view of a dozen elections to be held in Latin America during 2009 and 2010. In 2009 there will be presidential elections in Panama, El Salvador, Chile, Uruguay, Ecuador, Bolivia, and legislative elections in Argentina and Mexico.

Fiscal packages should consider various dimensions. Countercyclical programs should include investments in infrastructure and human capital, and direct transfers or tax cuts for the low

income groups. The policy responses should aim at protecting the social gains of the last years in order to prevent that the financial crisis turns to a human and social crisis. Increased support to the most vulnerable parts of the society through well targeted social protection packages should be fostered: ensure broad access to health insurance, protect public spending cuts on key areas such as nutrition and vaccines, and expand existing conditional cash transfer programs. The time profile of the crisis (deep but short or japanese fashion of the 1990s) is a critical constraint for the degrees of freedom for countercyclical policies and the long term social costs of the current international economic turmoil.

APPENDIX

FIGURES

Figure 2: Budget balances

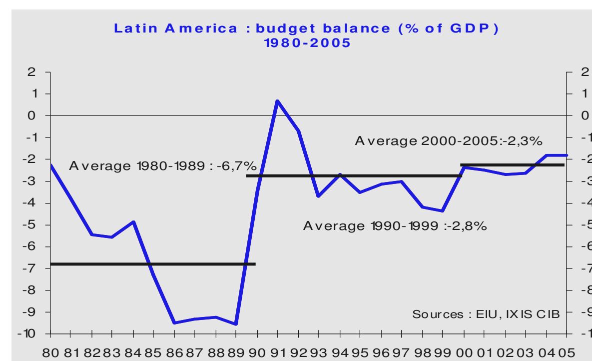
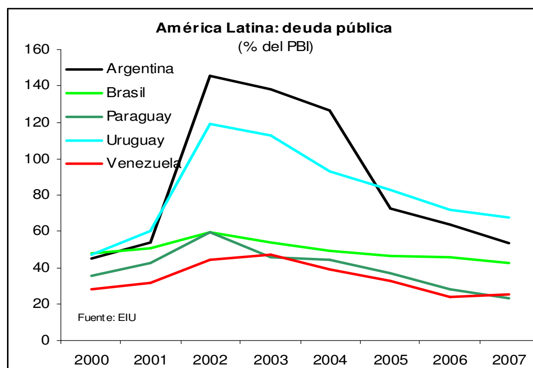


Figure 3: Public debt (per cent of GDP)



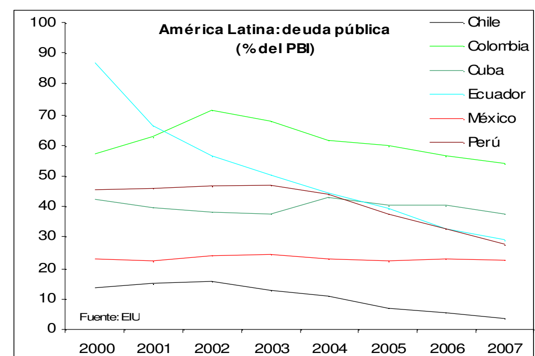


Figure 4: Official reserves in billions of USD, 2000-2006

Figure

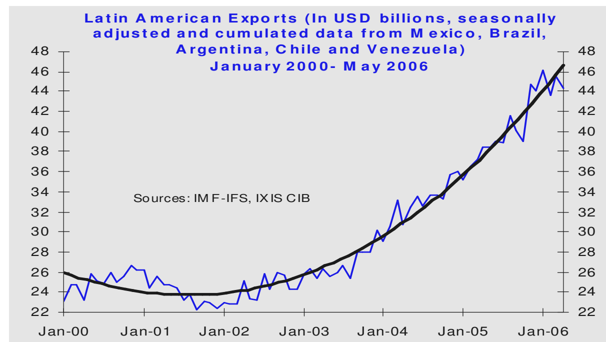


Figure 6: Stock markets in advanced economies

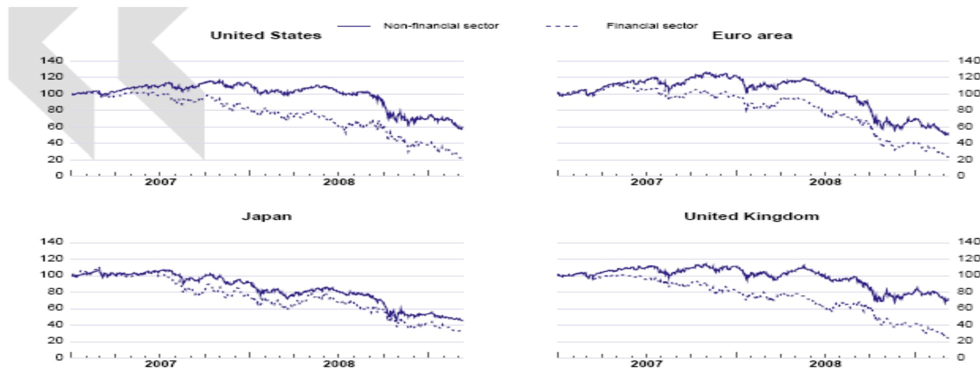
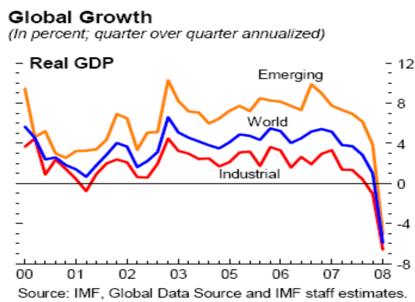
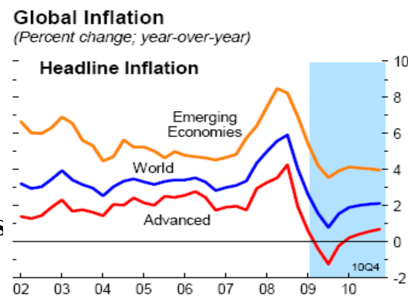


Figure 7: World growth and inflation



rices for metals



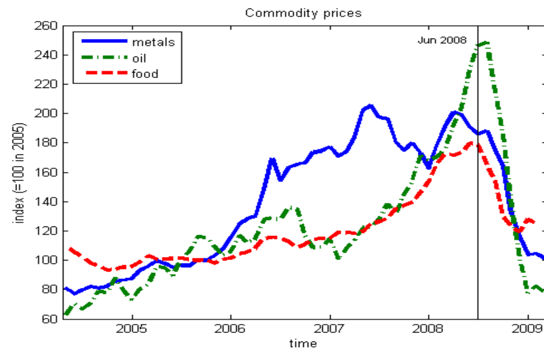
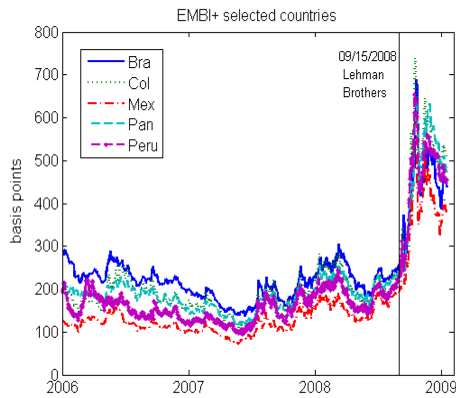


Figure 9: EMBI+ spreads



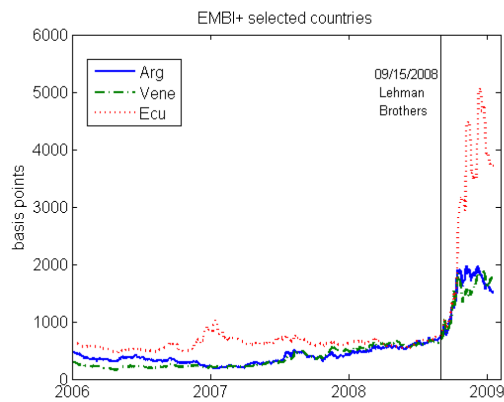
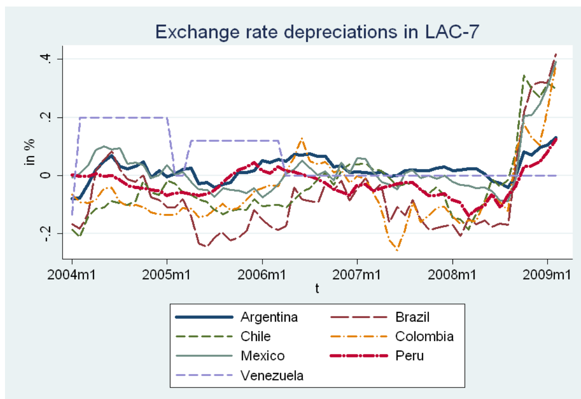


Figure 10: Exchange rates



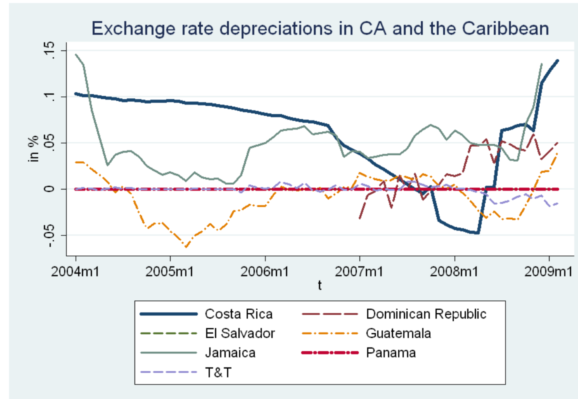


Figure 11: Corporate and sovereign bonds: Issues and maturities

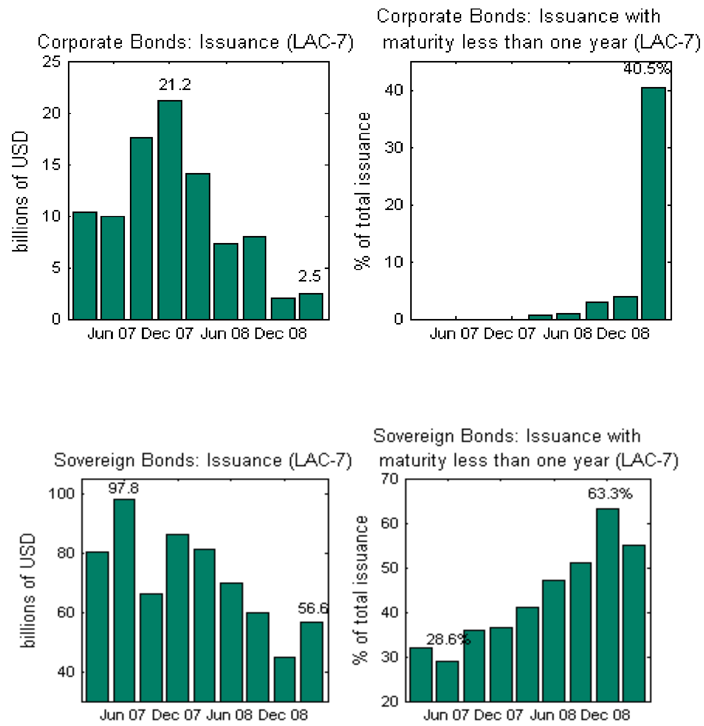
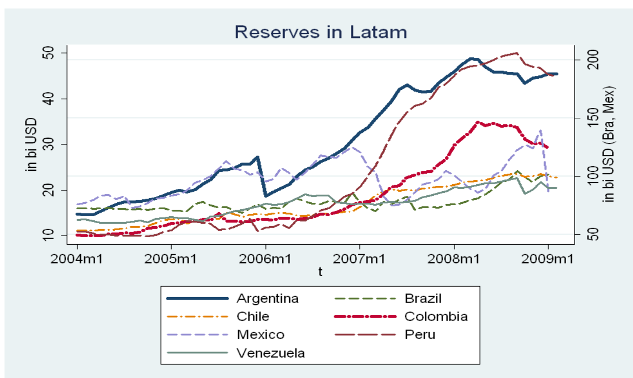


Figure 12: International reserves in Latin America and the Caribbean



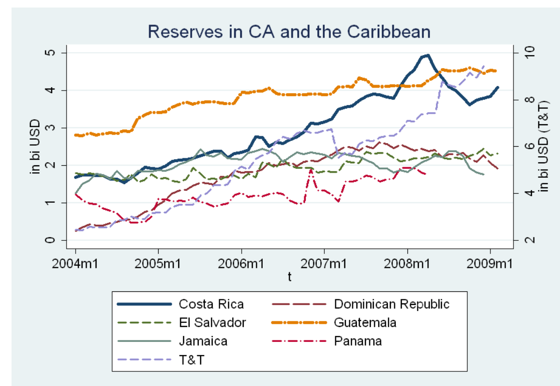
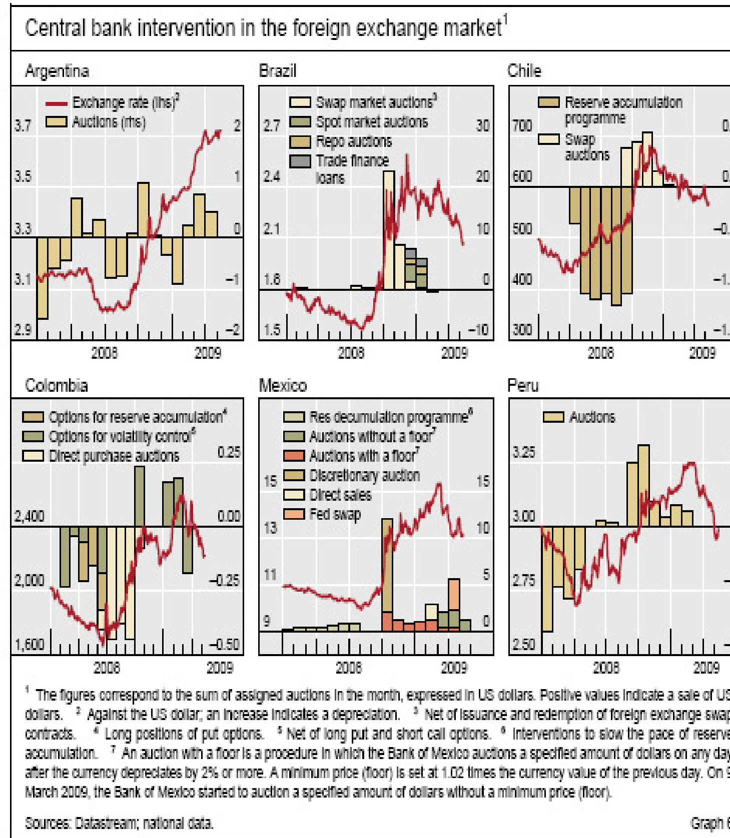


Figure 13: Central banks FX interventions



TABLES

Table 1: Exposure to commodities

LATAM: Commodities and fundamentals (% GDP)

	Commodity Participation in	
	Exports	Fiscal Revenues
Argentina	12.9	3.9
Brazil	4.1	0.8
Chile	27.0	8.3
Colombia	7.8	3.4
Ecuador	17.9	9.4
Mexico	3.9	4.2
Peru	18.0	3.1
Venezuela	30.3	24.0

Source: Global Markets Research

Table 2: Industrial production and GDP growth

	Industrial production Q4/09 (% change p.a.)	GDP Q4/09 (% change p.a.)
Argentina	-4.4	4.9
Brazil	-17.2	1.3
Chile	-8.9	0.2
Colombia	-9.3	0.5
Mexico	-6.7	-1.6
Peru	n.a.	6.6
Venezuela	2.4	3.2

Table 3: Overview of policy measures by G20 plus Spain and Netherlands (Feb. 2009)

see Section 4.1.

Table 4: Fiscal situation and announced stimulus packages in LATAM

see Section 4.2

Table 5: Foreign reserve adequacy in LATAM

Foreign reserve adequacy[1]

Outstanding year-end reserves position

	In billions of US dollars				As a percentage of:								
					GDP	Short-term external debt[2]				Imports			
	96	07	08	09	08	96	07	08	09	96	07	08	09
Argentina	18	44	44	44	14	60	200	279	274	75	99	77	84
Brazil	58	179	193	186	12	111	292	342	329	109	149	111	115
Chile	16	17	23	24	14	201	86	113	114	89	38	40	47
Colombia	9	20	23	23	9	142	201	390	352	69	61	58	57
Mexico	19	86	94	84	9	60	256	241	218	21	31	30	29
Peru	11	27	30	30	24	166	284	248	243	135	137	106	111
Venezuela	11	24	33	19	10	273	347	972	569	125	57	72	42
Memo:													
Latin America[3]	*142*	*397*	*440*	*410*	*13*	*145*	*238*	*369*	*300*	*89*	*82*	*71*	*69*
Asia[4]	*246*	*2,327*	*2,685*	*2,712*	*40*	*284*	*624*	*889*	*908*	*60*	*120*	*106*	*120*
Southeast Asia[5]	*91*	*270*	*283*	*289*	*27*	*119*	*431*	*500*	*498*	*39*	*64*	*54*	*60*
Central Europe[6]	*40*	*124*	*133*	*138*	*17*	*383*	*177*	*169*	*175*	*49*	*31*	*29*	*33*
Other[7]	*29*	*569*	*513*	*465*	*15*	*59*	*260*	*279*	*254*	*19*	*96*	*70*	*70*
Total EME's[8]	*548*	*3,688*	*4,054*	*4,015*	*22*	*188*	*343*	*452*	*429*	*58*	*80*	*68*	*72*

[1] For the outstanding year-end position, regional aggregates are the sum of the economies listed; for percentages, simple averages. For 2009, latest available data. [2] Consolidated cross-border claims to all BIS reporting banks on countries outside the reporting area with a maturity up to one year plus international debt securities outstanding with a maturity of up to one year. [3] Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. [4] China, Chinese Taipei, India and Korea. [5] Indonesia, Malaysia, the Philippines and Thailand. [6] The Czech Republic, Hungary and Poland. [7] Russia, South Africa and Turkey. [8] Sum of the regions listed.

Sources: IMF; Thomson Reuters; national data. Table 1

Source: BIS (2009)

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