

BBVA



adelante.

Latinwatch

Economic Research Department

Second semester 2007



A more uncertain global economy
Growth continues in Latin America
Commodities sustain momentum
Biofuels: an opportunity for Latin America?
Brazil strong capital inflows
Who will be the next investment grade?

Index

Cut-off date: 22 October, 2007

Editorial	2
I. Economic and financial environment	3
International outlook	3
Situation and outlook for Latin America	5
II. Commodities	8
Overview	8
Biofuels: an opportunity for Latin America?	10
III. Economic observatory	13
Brazil: capital inflows continue	13
Remittances: a defence against sudden stops in foreign financing?	15
Evaluation of the impact of remittances on inflation and economic-policy responses	19
Analysis of free trade agreements in Latin America	22
Inflation and monetary policy	25
Exchange rates and capital flows	27
FDI in Latin America	29
Target: investment grade	32
IV. Statistics and Forecasts	35
International context	35
Country forecasts	36

This publication has been elaborated by:

Giovanni Di Placido

giovanni_diplacido@provincial.com

Tatiana Alonso

tatiana.alonso@grupobbva.com

Beatriz Asensio

beatriz.asensio@grupobbva.com

Antonio Marín

antonio.marin.campos@grupobbva.com

David Martínez

José Ramón Perea

jramon.perea@grupobbva.com

Elvira Prades

elvira.prades@grupobbva.com

Editorial

Latin America will grow 5.1% in 2007, the fifth year in a row of growth of over 4%. This dynamism has allowed an accumulation of real GDP per capita growth of 18%, with an average of 3.4% annually over the past five years. This contrasts with the period 1980-2002 when average real growth per capita was zero. The jobless rate has fallen from 11% of the labour force in 2003 to 8.5% in 2007. As a result, the standard of living of many Latin Americans has improved in this period, with an estimated 20 million emerging from poverty.

While the region is in the middle of a strong boom in commodities, whose prices on average have doubled, this has taken place after the culmination of a series of reforms which have brought about greater macroeconomic stability. The results of this include a drop in financing costs and a sharp increase in foreign direct investment, which together with improvements in the terms of trade have led to a significant increase in the international reserves of the region.

The increase in real activity which has taken place has been accompanied by a process of greater diversification in the majority of countries. Fiscal management has been more prudent than in previous commodities shocks, with the majority of countries generating a primary surplus along with a current account surplus.

Monetary policy management has been more orthodox, with central banks enjoying more independence, which has allowed the inflation rate to come down to 5%.

Control of inflation and macroeconomic stability in general have favoured the setting of expectations by agents, reducing uncertainty, and encouraging investment as well as consumption. This is driving lending in the region, with average real growth rates of over 15%.

The depth of these strengths has been made evident by the current financial crisis that has affected the world's main economies, which have seen a strong increase in aversion to risk in the financial markets, sparked initially by the problems of the subprime mortgage sector in the United States.

All of this has led to a liquidity problem which required rapid intervention by the main central banks by injecting funds into the money markets. The central banks are operating under the assumption that this is a liquidity crisis which can be resolved with short-term credit, and, therefore, the risks are limited. However, the possibility exists that investors perceive a further-reaching crisis and do not renew lending, leading the current liquidity tensions to develop into a credit crunch.

The reaction of the region to these events has been encouraging. Risk premia have been relatively unaffected with a few exceptions linked to idiosyncratic factors. Inflows of capital have continued and there should be no impact on growth in the region in 2007.

The recent turbulence in the financial markets suggests a somewhat less favourable international environment. However, it is most likely the effects will be limited. But in any case, we are looking at a scenario of slowing growth in the main developed economies.

The impact on the region over the next two years will be limited, with regards to both real and financial activity. The classic sudden drying up of portfolio flows to the region appear currently to have less importance due to the stock of international reserves, the entry of foreign direct investment, and a fall in the stock of foreign debt. In addition, demand from Asia will remain strong, thus avoiding a strong adjustment in demand for commodities. This will show itself in the continuing strength of the current account performance.

All of this will allow the economy of the region to grow at 4.6% in 2008 in a stable macroeconomic environment. If we enter a credit-crunch scenario, we are looking at a situation with greater effects, but with greater strengths to confront these.

1. Economic and financial environment

International outlook

A more uncertain economic picture...

The economic outlook has turned less positive over the past few months. A combination of loose monetary policies, a glut of global savings and large-scale financial innovation lie behind the current vulnerability of the global financial system, and subsequent uncertainty surrounding the world economic outlook. What set this off was the crisis in the subprime home loans market in the United States, the U.S mortgage market with the weakest credit quality, which later spread to other assets and geographical areas. The peak of the crisis came in the middle of August with the emergence of liquidity tensions in the major interbank markets, and these have not yet returned to normal.

The persistence of these and other uncertainties makes it difficult to accurately assess the impact on the real economy, the main question being whether we are facing a liquidity crisis or the start of a credit crisis. In this sense, it is important to bear in mind that the world economy is vulnerable in several areas. Of these the most notable are the high levels of household indebtedness and a lack of knowledge about the real extent and magnitude of the current problems. There are however plenty of supports. It should not be forgotten that interest rates remain structurally low in an environment of low inflation expectations, solid corporate conditions, and greater macroeconomic strength in the emerging market countries. All of this suggests that a liquidity crisis is a more likely scenario than a credit crunch.

The risk of the latter scenario emerging is, however, far from negligible for several reasons. First of all, it is now apparent that the current liquidity shock is more intense and persistent than was first expected. Secondly, central bank intervention to mitigate the liquidity crisis has proved to be of limited effectiveness. Thirdly, there has been an increase in the preference for liquidity. And fourthly and finally, the first signs of tightening credit conditions are apparent, while doubts remain about the ability of markets to meet the financing requirements of the financial system. To this must be added the recent trends in a number of activity indicators, which show an increase in downside risks to growth.

...although the world economy will continue to post strong growth

All of the above leads us to envisage a central scenario in which the world economy will grow more slowly than originally expected. However, the downward revision of growth forecasts is of limited magnitude and asymmetrical, with the biggest impact likely to be seen in the US economy. In this sense, the adjustment in the real estate sector will last longer than expected, until 2008, taking the economy to a growth rate of 1.9% this year and 2.2% next year. For its part, the European economy, while less affected, is expected to have already peaked this cycle, and activity indicators point to a somewhat more intense slowdown in growth than initially forecast. The sharp appreciation of the euro will also weigh heavily on growth, which is forecast to come in at 2.5% this year and 2.0% the next.

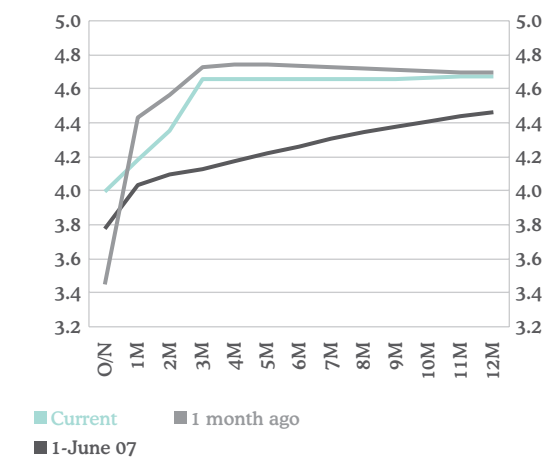
In contrast, the situation in the emerging market countries is stronger than in previous crises, as a result of which the current crisis is expected to have very little impact. In this sense, Latin America has a number of factors lending much more support than in previous episodes and together with the Asian countries, in particular China, should continue to expand, although at slightly slower rates.

USA: Libor yield curve



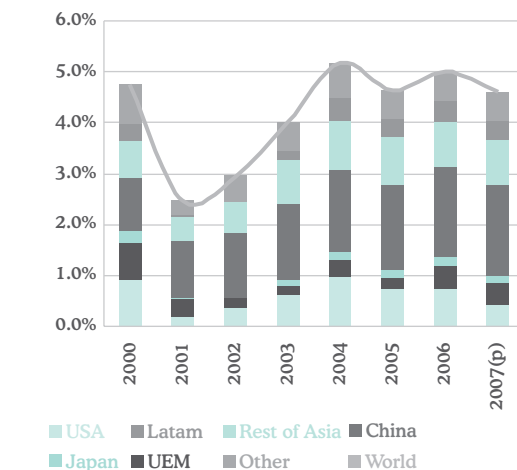
Source: SEE BBVA

EMU: Euribor yield curve



Source: SEE BBVA

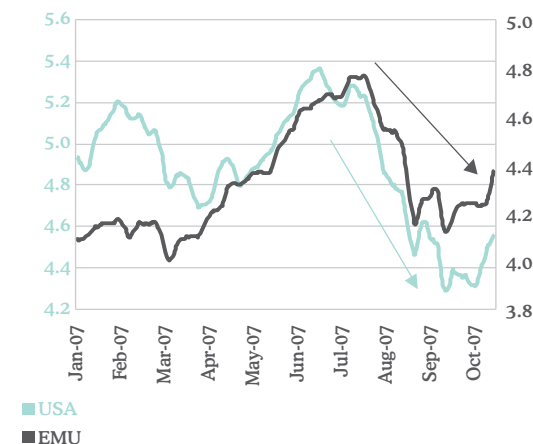
World growth and contribution by area (%)



Source: IMF and BBVA

Monetary policy expectations one year ahead

(1-week moving average)



Source: BBVA

Financial forecasts (end of year)

	2006	2007	2008
Official rates			
USA	5.25	4.25	4.50
EMU	3.50	3.75	3.75
10-year rates			
EE.UU	4.7	4.3	4.5
EMU	3.9	4.2	4.3
Dollar-euro	1.32	1.41	1.38

Source: BBVA

Dollar-euro



Source: Bloomberg

The result of all this will be slower growth in the world economy, though rates of growth should stay above 4%.

As regards inflation, there is no indication of inflationary pressures at a global level, and the expected slowdown in growth will contribute further to this situation. By region, in the United States underlying inflation is expected to continue to trend downwards, while Europe could see a rise to over 2% in the final part of the year because of basis of comparison effects. Thereafter, inflationary pressures are expected to ease in 2008.

Central banks change course...

Central banks have played a key role in the current period of volatility, in particular after the emergence of liquidity tensions in the interbank markets forced them to make constant injections of liquidity into banking systems, for unprecedented amounts and lengths of time.

These uncertainties have led central banks to shift their approach to monetary policy. First to move was the European Central Bank (ECB). In August it pre-announced a 25-basis-point rise in interest rates for September, but by September the ongoing liquidity pressures had forced a rethink and rates were held at their current 4% level. In the current context of slower growth, together with the sharp appreciation of the euro and reduced inflationary pressures, our central scenario envisages a reduction in refi rates of 25 basis points. The doubt is whether this move to official interest rates of 3.75% will take place in December 2007 or January 2008. This contrasts with market expectations, which are discounting official interest rates stable at their current levels for the next few ECB meetings.

Meanwhile, in the United States the Federal Reserve at its September meeting lowered the official price of money by 50 basis points, to 4.75%. This was a surprise move for the market to some extent, as the predominant expectation was for a rate cut of only 25 basis points. For the period ahead, two further cuts of 25 basis points in official rates are expected, to 4.25%, at the future Fed meetings. The market, for its part, has turned slightly more positive and, while at least one 25-basis-point cut is being factored in, a high probability is given to the Fed holding rates steady at its October meeting.

...and the financial outlook changes

In this context, with downward revisions of both growth and expectations of monetary policy, the financial outlook is also very different. In the United States, a combination of more subdued economic prospects and Fed loosening of monetary policy, which is expected to continue over the rest of the year, is driving yields lower, with the yield on 10-year bonds at the end of this year at 4.3%. In Europe, meanwhile, there is a similar situation: the outlook is for slighter weaker growth; the ECB, in our central scenario, will have brought to an end its tightening cycle and will move to loosen monetary policy to 3.75% in the coming months; and there will be a knock-on effect from the United States. As a result, in the short term 10-year yields are likely to stand at 4.2% at the end of 2007.

For its part, the dollar is still weakening against the euro and the exchange rate currently stands at record lows since the creation of the euro, at around 1.41-1.42 \$/€. Looking ahead, given that the crisis will have a greater impact on the US economy, the dollar is expected to remain weak. Our exchange rate forecast for the end of the year is around 1.41 \$/€. It is then expected to edge higher as the US economy recovers. However, in a context of narrowing long-term interest rate differentials between the United States and Europe, the outlook for the dollar is still for further depreciation, to which, as mentioned above, must be added the risk of a credit-crunch.

Situation and outlook for Latin America

No halt in growth

The region is sustaining a strong pace of economic growth in 2007, at rates faster than expected at the start of the year, as the expansion phase that started over more than 3 years ago continues. According to National Accounts data for the first half of the year, Latin America grew at an average annual rate of 5.4%, with Venezuela and Argentina once again recording the strongest growth, followed closely by Peru and Colombia.

In this context, we have revised up our aggregate growth forecast for 2007 by six tenths of a point, to 5.1%, and by 9 tenths of a point, to 5.7%, in the case of South America. This, in spite of the global financial turbulence, which we examine below, and the fact that the outlook for two of the three major economies in the region, Argentina and Mexico, is less positive in this period. In the case of the latter, this is largely a result of a weaker economic scenario in the United States. Stronger growth in Brazil is helping to compensate for this, as are significant contributions from Venezuela, Chile and Peru, all economies which are expected to end 2007 with growth rates of over 6%. In Colombia, growth forecasts have been revised downwards only very slightly, largely because of a slight fall in optimism from levels earlier in the year.

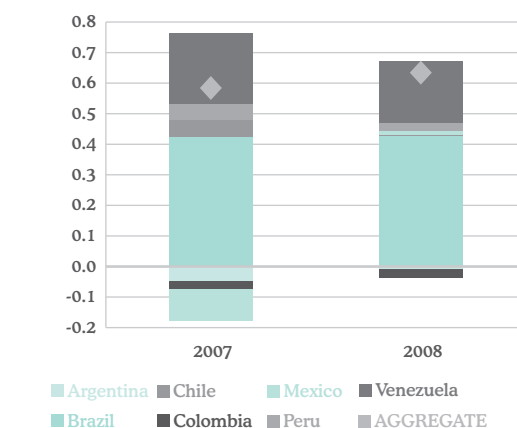
In addition to the good aggregate results, it should be noted that the cyclical alignment of the economies in the region is still increasing. We expect 2007 to be the year in Latin America with the lowest volatility in growth rates for the past 25 years, with levels of volatility below the previous lows registered in 1984 and 1997. Despite these figures, it cannot be said that in the current expansion the real sectors of the different economies in the region are more closely linked. The situation, rather, is more one of parallel developments working successfully to produce stronger growth. A favourable international environment, together with the application of sounder economic policies, would appear to account for this.

The paradigm can change

In the current expansion phase, as occurred in the periods 1984-1987 and 1991-1997, it is domestic demand that is driving growth. True, the trade account is running a large surplus, but if we strip out the effect of the terms of trade, we find that the external sector has been making a negative contribution to growth as a result of a big increase in real imports. One notable development is the role of investment, whose contribution has been bigger than in previous periods of growth, contributing in aggregate terms 40% of the increase in GDP since 2003. Within gross fixed capital formation, with the exception of Argentina and Venezuela, a crucial contribution has come from private investment in machinery and equipment, in comparison with public investment, and investment in the construction sector.

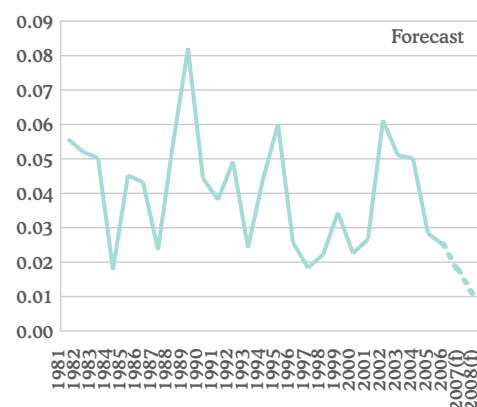
In the above context, we might ask whether a change in paradigm for growth in Latin America is a real possibility. The figures in this regard are so far beyond doubt, in the sense that they show a very small contribution from productivity to the increase in GDP over the past few decades. However, the current investment process could be serving as the basis for potential gains that exist in many sectors of the economy. The progressive opening up to trade of the region's economies, whether unilateral or through trade treaties, is helping to drive this process. There is however scope for further progress in the functioning of the domestic markets, both in the domestic goods market and the factors market. It is in this area where, in the current climate of strong fundamentals,

Change in growth forecasts for 2007-2008 (contribution by country; in percentage points)



Source: BBVA

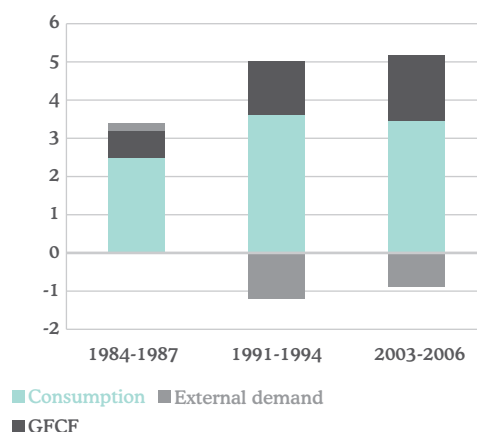
Cyclical alignment of growth in Latin America*



* Standard deviation of the annual rate of GDP growth in Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela
Source: BBVA

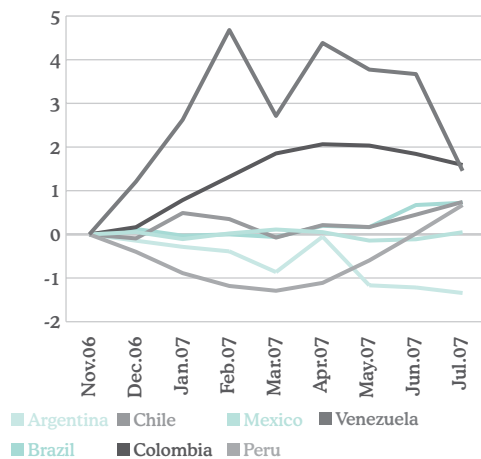
Contribution of GDP components to growth in Latin America

(annual average in first 4 years of expansion)



Source: BBVA using IIF data, * Argentina, Chile, Colombia, Mexico, Peru and Venezuela

Change in year-0n-year inflation (since Nov-06; percentage points)



Source: BBVA using Bloomberg data

efforts should be concentrated in order to achieve a higher rate of potential growth in the future.

Overheated economies?

As a result of the strong expansion in domestic demand over the past few years, a number of economies face the risk of overheating. While we undertake a more detailed analysis of the behaviour of inflation and the different monetary policy responses further on in this report, it would be useful here to take a brief look at this question. The aggregate figures show that price developments were very positive up until the end of 2006, after which inflation began to trend upwards. Since then it has risen by half a point, to 5.5% in July, with significant increases in Venezuela and in Colombia, where inflation is now above the central bank's targeted rate. In Brazil, Chile and Peru there have also been significant upturns, but to less worrying levels still below 4%. Inflation in Mexico is relatively unchanged, while it continues to fall in Argentina, to its lowest rate since June 2005. In this latter case, however, the official figures are likely to be underestimating the real rate of inflation.

To sum up, in our view, leaving aside seasonal factors, the inflation problems are moderate and concentrated in some of the economies in the region. In addition to this, the monetary authorities have responded in a normal fashion to inflation outcomes, adopting more restrictive policies in order to comply with the overriding objective of price stability. The levels of inflation are nonetheless worrying in Argentina and Venezuela, both economies where the adjustment in competitiveness is taking place through domestic prices rather than via nominal exchange rates. We anticipate 2008 in these two countries to be no better, as they move further away from the positive development in the other economies in the region, which should take inflation at the end of next year to below 4%.

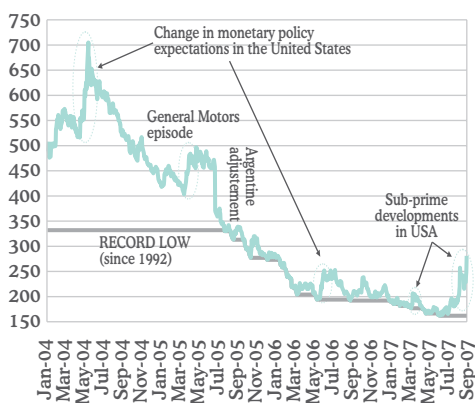
Solid performances in the face of global instability

There have been different episodes of turbulence in world financial markets during this expansion phase in Latin America. Five of these stand out in particular: two connected with expectations of a tightening in Federal Reserve monetary policy (April-May 2004 and May 2006); bankruptcy rumours surrounding General Motors, the biggest industrial group in the United States (March 2005); and two associated with the negative forecasts for the real-estate market and the sub-prime home loans sector in the United States (February-March and July-August 2007). It is this latter episode of turbulence which has had the relatively biggest impact on the region, since it has led global investors at times to unwind overweight portfolio positions in favour of developed market assets. The region's risk premium rose by almost 50% between the middle of July and the middle of August, compared with adjustments in the range of 15-35% in previous episodes. Also, those currencies which had appreciated most over the course of the year, the Brazilian real and the Colombian peso, fell sharply.

However, Latin America's direct exposure to the sub-prime sector is low, as domestic financial entities' portfolios are focused on local assets. In addition, as pointed out on previous occasions, the region is now better equipped to deal with situations of global instability. The improvements implemented in the area of macroeconomic management, with low levels of inflation and fiscal deficits, coupled with the increased external solvency of the different countries in the region due to a significant rise in reserves, constitute a solid cushion to dampen the negative effects of such episodes. That is not to say that the region will no longer be affected by periods of volatility and uncertainty in the world economy. It does mean, however, that in a more negative sce-

Risk premium in Latin America and episodes of global instability

(EMBI+; basis points)



Source: BBVA, JP Morgan

nario it can limit the level of losses without a full-blown crisis developing. The exception in the current period of volatility is Mexico, whose economy would be more negatively affected by a sharp slowdown in activity in the United States.

Towards less exclusive growth

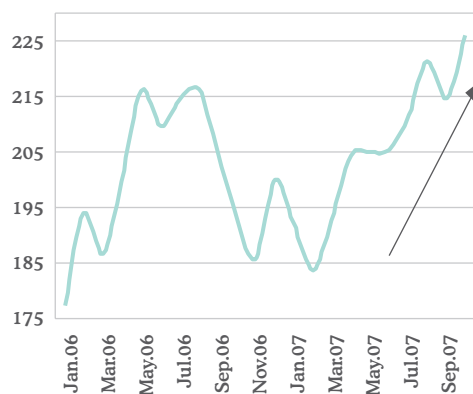
Latin America, therefore, finds itself in a situation which combines a sustained rate of growth with a strengthened macroeconomic situation and – so far – relative immunity to periods of instability whose origins are in other geographical areas. However, in addition, this new economic situation in some countries brings with it a series of added effects which have positive consequences for the distribution of national income. This is, for example, the case with formal employment, which in 2007 remains on the growth path started last year, both in terms of job numbers and wages¹. Another example is in the recovery in lending in the region, and its spread to segments of society previously excluded access to credit. Lastly, the adoption of social policies (in the area of education, health, and direct transfers of income) is another of the elements helping bring about economic growth of which more people share.

As a result of these processes, the middle class, one of the sectors which has suffered badly from the crises which have hit the Latin American economies over the past two decades, is growing in the majority of countries in the region. If this trend consolidates itself, the region could find itself with two positive effects as regards its future economic development. On the one hand, the existence of a wide sector of society with greater purchasing power could help extend the current cycle and eventually transform the current growth model by increasing the importance of domestic demand as a motor of growth. At the same time, a large middle class has traditionally been considered one of the factors which have most impact in the consolidation of democratic regimes. This in turn would translate into a social preference for more stable economic policies and a lower proclivity for experiments. In this sense, the past few years have definitely been witness to a greater political consensus regarding the need for disciplined economic policy. However, this is taking place in an unusual context of export-driven prosperity, the disappearance of which could lead to more polarization in the political debate on the economy. In this way, the emergence of a new middle class which increases its social representativeness and purchasing power could become one of the main supports for an extension of the current growth cycle, while at the same time minimising the possibilities of economic policies which threaten current macroeconomic health.

¹ According to CEPAL's latest Economic Study, the rise in formal employment in the region in 2006 was 2%. Average real wages rose at the same rate, with countries such as Argentina, Brazil, Colombia, Uruguay and Venezuela registering higher than average rises.

Antonio Marín Campos
antonio.marin.campos@grupobbva.com
José Ramón Perea
jramon.perea@grupobbva.com

BBVAMAP commodity index



Source: BBVA

II. Commodities

Overview

The commodity rally roared ahead in 2007. Developments in commodity markets have been characterised in recent months by serious supply-side constraints (geopolitical, climatological, structural) that are making it difficult to keep up with increasingly robust global demand. It is therefore no surprise that during 2007 aggregate commodity indices have registered very pronounced rises and that the moderation observed in the second half of 2006, thanks to falling prices of oil and some base metals, has all but disappeared.

Oil

The upward trend in the price of oil has resumed in 2007, and new price highs have been hit in the oil market. While towards the end of 2006 an unusually warm winter in the United States and a correction in expectations combined to push down prices, this year has seen a cumulative rise in West Texas and Brent oil prices of 40% and 37%, respectively, with both hitting new all-time highs.

The behaviour of the oil market over the past two months reveals greater price stickiness at current levels, associated with supply factors and expectations. Demand has moved in line with expectations, while the surprises have come on the supply side. Unexpected problems with production in non-OPEC producing countries and the OPEC cartel's improved quota setting have created a temporary imbalance between supply and demand that has brought about a fall in OECD stocks.

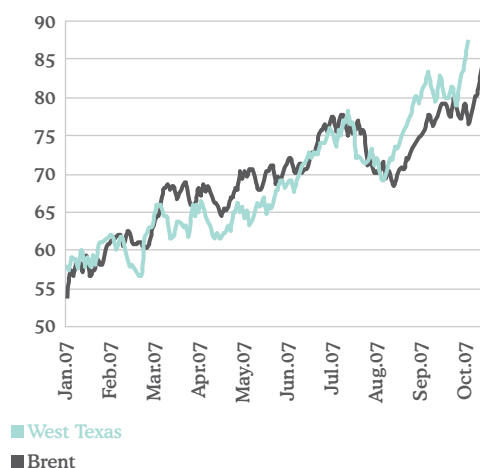
In addition to the shrinking gap between supply and demand, there has been a very busy summer driving season in the United States compounded by bottlenecks at refineries. A number of refineries in fact were forced to shut down for maintenance work following a long period in continuous operation because of the difficulties associated with Hurricane Katrina.

On top of this situation, supply fears before the start of the Northern winter have been heightened by an upsurge in violence in Nigeria's main oil producing region and increasing threats of clashes between Turkey and the Kurds in the north of Iraq, one of the country's main areas of oil production and reserves.

These are new developments to be added to an already complicated situation in Iraq and the scant progress being made in resolving the conflict between Iran and the West over the former's refusal to abandon its nuclear programme. Taken together, these have brought about a marked rise in geopolitical risk, the main factor behind the rise in prices alongside the behaviour of supply.

The perception of a tightening oil market seems to have had little effect on OPEC's quota policy. The cartel agreed to increase daily oil production by 500,000 barrels but such a small increase will do little to alleviate the current tensions. OPEC's unwillingness to hike output further reflects its adoption of a wait-and-see approach to the uncertainties threatening the global economy. In concrete, if the credit crisis in the United States were to deteriorate further, demand for oil in the world's largest consumer would fall. Yet even with this assumption, the relationship between the subprime crisis and global oil demand is far from clear. On the one hand, the likelihood of the main emerging market economies withstanding the impact of a crisis in the United States has strengthened in the past few months, thanks in particular to their unprecedented macroeconomic strength. And on the other, the measures adopted by the Federal Reserve to deal with the crisis, including among

Brent and West Texas daily oil prices (2007)



Source: Bloomberg

others a 50-basis-point cut in interest rates on September 18, make emerging market assets more attractive and help to keep demand for energy high in these countries. We therefore see several reasons that are likely to prevent an eventual slowdown in US activity spilling over into a marked reduction in world oil consumption.

In the light of this evidence, it is likely that OPEC will again adjust its output quotas at future meetings. Saudi Arabia will play a key part in any decision to increase output by a further 500,000 or 1,000,000 barrels a day.

Finally, the weak dollar has boosted buying in global commodity markets, an element which may be a further factor driving up the prices of oil and other commodities.

Agricultural and metal commodities

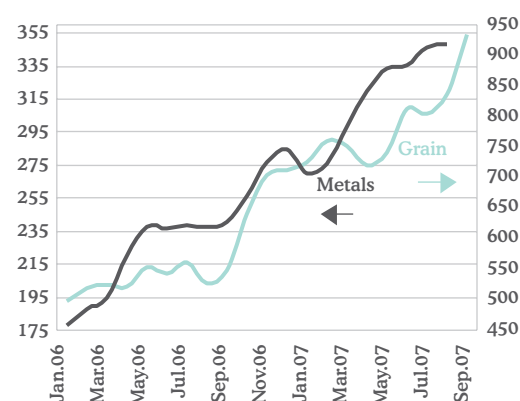
Base metals were the key players in the rise in commodity prices last year, and this year they have been joined by agricultural raw materials. One of the biggest movers in this group is wheat, whose futures contract hit an all-time high in the middle of September of \$9.11 per bushel. Behind this record were the adverse weather conditions in several of the main exporting countries such as Canada, Russia and the United States. Global inventories have fallen, as a result. As a consequence, the harvest in the producing countries in the Southern Hemisphere will be crucial to deal with the relative shortage in supply on the world market. This possibility would appear remote, however, after drought forced Australia to reduce this year's expected production by almost one-third.

Another notable trend in 2007 is the relative ease with which price rises are being transmitted from some agricultural products to others. The surge in wheat prices has an effect on its substitution for maize as a fodder in the livestock sector, which in turn pushes up the price of maize. Agricultural commodity prices were already under upward pressure from expectations for the biofuel industry in the United States. In line with these trends, soya has also seen sharp price rises. In an effort to benefit as much as possible from the higher prices of maize and wheat, many farmers have switched to these crops, chiefly to the detriment of soya beans. In the United States, for example, it is estimated that the surface area dedicated to soya bean cultivation will shrink by 15% this growing season, with production facing a similar fall.

For their part, base metals have in general shown the same trend as the above commodities, with low inventories and insufficient supply to meet demand. The onset of a US loans crisis slowed prices slightly given the prospect of the slowdown in the construction industry in the United States weakening demand for these raw materials. On the other hand, however, rapid urbanization and a high rate of infrastructure provision in China and other emerging countries has impacted to a much greater extent on prices and has ended up keeping prices on an upward trend.

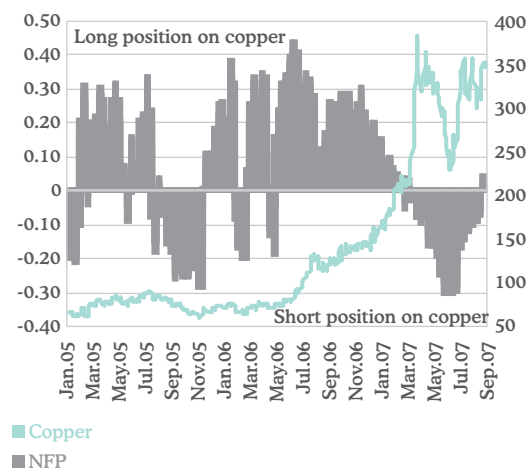
In addition to the effect that these new sources of demand have on practically all of the base metals, more specific factors have also been influencing the prices of a number of them. This is particularly the case for copper, a necessary reference for base metals as a whole, the price of which has found additional supports in the threat of a strike in the world's leading producer, Chile, and a fall in inventories in the third quarter. Given the existence of these elements, it is no surprise that non-commercial copper demand returned to a net-long position at the start of October. This is the first time such a situation has been seen since the spring of 2006, and is clearly in keeping with a picture of higher prices in the period immediately ahead.

Metals and grain futures index



Source: Commodity Research Bureau

Net non-commercial positions on copper futures



Source: BBVA - Capital Flows, CFTC and Bloomberg

Biofuels: An opportunity for Latin America?

In the past decade biofuels have taken up an important position in the agenda of regulators and companies as a way of promoting rural development and as a means of reducing dependency on oil and emissions of contaminating gases.

Apart from Brazil, whose successful entry into the biofuels field is well documented, the main centre of production and use is in the United States and the European Union. Thanks to ambitious national support programmes, both areas stand at the top of the world rankings for ethanol and biodiesel production respectively. However, the biggest natural potential lies in regions such as Latin America, Eastern Europe and Sub-Saharan Africa.

This box analyses the opportunities which the biofuels market affords the countries of Latin America and the Caribbean (LAC). In the majority of the economies in the region, the production and local use of biofuels would help promote investment and employment in rural areas and reduce dependency on oil. In addition, some countries have the necessary resources to position themselves as significant suppliers in the international market for biofuels.

WHAT ARE BIOFUELS?

Biofuels are fuels produced from biomass (biological agricultural products or waste). The most commonly used as fuels for transport are ethanol and biodiesel.

Ethanol is obtained from sugar (sugar cane, sugar beet) or from starch (corn, wheat and other cereals). It is usually used in a 5%-10% ethanol-gasoline mix although there are vehicles which work with higher ethanol compositions. It accounts for about 90% of global production of biofuels.

Biodiesel is obtained from processing vegetable oils (soya, palm and rape) and animal fats. It is usually mixed with diesel at 5% (Europe) and 20% (US) but with slight modifications, conventional vehicles can run on 100% biodiesel¹.

CURRENT SITUATION IN THE BIOFUEL MARKET

The main consumers of biofuels are the US, Brazil and the European Union. Growing political will in these countries to increase energy security and reduce greenhouse gas emissions has led to them drawing up a series of ambitious targets for the use of "green" energy.

As a result, since 2000 world demand for ethanol has more than doubled, and has grown sixfold in the case of biodiesel. Likewise, the International Energy Agency is forecasting world demand for biofuels will increase by more than 600% through to 2030.

Although in relative terms the use of biofuels is still reduced (in 2005 they accounted for only 1% of world consumption of transport fuels), in absolute terms the size of the potential market is very large.

The US and Brazil are joint leaders in the production of ethanol, with both having a market share of 45% each. A long way behind come China and the European Union, with the latter nonetheless the undisputed leader in biodiesel production, with 70% of the world market.

With a large part of production and consumption concentrated in developed countries, only 10% of world output of biofuels is acquired in the international market. However, looking to the future, a number of different factors of a physical and economic nature (availability and cost of land, crop yields, labour costs etc) point to a greater presence of certain developing regions in the international market, among which Latin America stands out.

ECONOMIC ANALYSIS OF BIOFUELS?

The main factor in the cost of producing biofuels is the raw material, the cost of which represents between 50% and 70% of the total in the case of ethanol and 80% in the case of biodiesel.

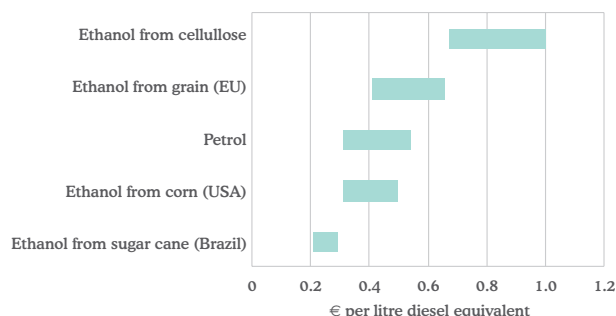
In this sense, the tropical countries have a clear competitive advantage and are ideal for crops with high yields such as sugar cane, which is also relatively low in the use of energy and fertilisers. It is, therefore, not surprising that currently sugar cane serves as the base for producing over 40% of ethanol in the world.

Latin America is estimated to have the greatest potential for sugar-cane production in the world. Brazil is the leading world producer, and half of its output goes to make ethanol, with yields per hectare of close to 6,500 litres, compared with 3,100 obtained using corn in the US, and 2,500 from wheat in the European Union.

The following charts show the production costs for ethanol and biodiesel on the basis of the different base crops and by region.

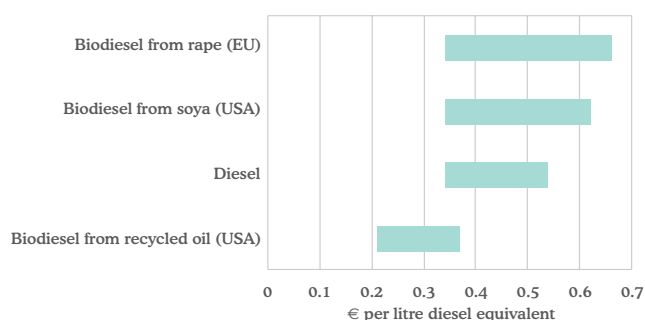
¹ For technical reasons, very high mixtures of ethanol/biodiesel are not considered viable in temperate and cold climates.

Cost ranges for ethanol and petrol production, 2006



Source: Worldwatch Institute

Cost ranges for biodiesel and diesel production, 2006



Source: Worldwatch Institute

These cost differences translate into different yield thresholds for biofuels in relation to the price of oil. While ethanol in Brazil is competitive with oil prices at around €30 per barrel, for US ethanol this is the case from €45, and for European biodiesel from €70.

However, these thresholds are expected to fall to the extent that significant advances are made in the area of biotechnology applied to agriculture. Likewise, biofuel producers can also extract economic value from two important subproducts: glycerine and CO₂ certificates. In the case of the first, it is calculated the sale of glycerine could cover between 10% and 20% of the cost of producing biofuels. On the other hand, according to the World Bank, with prices of CO₂ at between €2.5/tCO₂ and €16.5/tCO₂, the reduction certificates obtained within the framework of the

Kyoto Protocol would cover between 1% and 15% of the total biofuel cost.

Finally, it is expected that over the course of the next decade, the use of “second-generation” raw materials for industrial-scale production of biofuels could become a reality, mainly using cellulose to produce ethanol². This could put an end to the competitive advantage of less efficient “first-generation” producers and provide an opportunity for countries with less favourable natural conditions.

POTENTIAL IN LATIN AMERICA

The bio-energy potential of LAC is enormous. With only 8.5% of the world's population, the region has the biggest cultivated area in the world for sugar cane, and accounts for more than a third of all the theoretically cultivatable land on the planet.

However, despite the strong presence of various Latin American countries in the international agricultural markets, with the clear leadership of Brazil in the world's production of ethanol, only 20% of the potential cultivatable land in Latin America is being currently used.

Brazil boasts the most ambitious and successful track record in the history of biofuels. The *Proálcool* programme which emerged at the end of the 1960s gave rise to the flowering of the most competitive ethanol industry in the world. Brazil is currently the leading exporter of ethanol and 70% of its new vehicles run to a greater or lesser extent on ethanol.

In addition to sustained support from authorities (also during times when low oil prices made ethanol little profitable), a key element in Brazil's success has been the use and development of biotechnology. In the past 30 years the number of varieties of sugar cane has increased by 55, and the production season has gone from 150 to 220 days a year. At the same time, sugar-cane yields have tripled, while the final cost of producing a barrel of ethanol has been cut to a third of what it was.

Apart from Brazil, which has ambitious plans to develop the biodiesel industry in the north of the country, the rest of the Latin America countries have shown little or no interest in the area of biofuels. Only Colombia, Mexico and a number of Central America countries have significant production³.

² Ethanol derived from cellulose could be sourced from a wide variety of agricultural and industrial waste products, as well as energy crops not suitable for food such as *jatropha*.

³ Colombia currently produces 1% of the world's ethanol, is a pioneer in the production of ethanol using tapioca and has an ambitious programme to develop biodiesel using African Palm.

The main export potential, apart from Brazil (which has set a target for growth in ethanol production of 40% by 2010, and to triple it by 2030), lies in countries which are already major producers of sugar cane such as Colombia, Argentina, Guatemala and Cuba. Although these countries are better placed to produce ethanol on a large scale, a big increase in biodiesel output in the near future cannot be ruled out, particularly in Brazil, Argentina and Colombia.

The rest of the countries in the region, Mexico included, have the required natural potential to develop a domestic industry to cover local demand (except perhaps in the case of Chile, which nonetheless could benefit in the future from the production of ethanol using wood chips).

However, all of these countries lack to a greater or lesser extent the regulatory and/or economic incentives required for the development of the biofuel industry. Some of them, such as Peru, are promoting consumption and production and even research in the area of biofuels in collaboration with Brazil. The vast majority of them, however, have been little active. The two clearest cases are Venezuela and Bolivia, where, despite their clear natural potential, the abundance of fossil-fuel energy resources and the regulatory uncertainty in the energy sector have undermined public and private interest in biofuels.

CONCLUSIONS:

The biofuels industry provides Latin America with a unique opportunity to promote the development of its rural communities, the energy security of its economies, and the global fight against climate change.

The region has great bio-energy potential, and the production of biofuels is a well-spread reality, although generally at low levels and for own consumption. However, the majority of countries have the required natural resources to develop a domestic industry which would allow growing local needs to be met. Also, Brazil, Colombia, Argentina and Guatemala could find the export option interesting.

The international market for biofuels is currently very narrow due to strong support by the governments of developed countries for domestic production, and what is even more of a drawback, the existence of high tariffs and import quotas. However, the ability of these countries to meet their future demand is limited, and the potential of the market is, therefore, very significant.

In the short term it is likely Latin America will need to compete for international demand with the countries in Sub-Saharan Africa and with those of the former Soviet Union. In the medium-to-long term the major threat will come from the production of "second-generation" biofuels. Therefore, the region should consider starting to exploit its comparative advantage in the production of "first-generation" biofuels as soon as possible in order to have a strong position in the international market.

Despite the uncertainty which exists about the future evolution of the price of oil, the price of commodities, and the future of the carbon market, Brazil's example shows that the production of biofuels can be economical in itself if it can count on the required institutional support and necessary volume of investment.

The key to economic viability of biofuels most likely lies in biotechnological development. With Brazil leading the way, the region has the opportunity to opt for R+D+I in this area, encouraging investigation into new crops and improving the productivity of existing ones. Public support will be vital in the first phases of setting this up, although the target should not be to promote fuels at any cost, but rather those with the best medium-term prospects from the economic, social and environmental point of view.

REFERENCES.

- Biofuels for transport. Worldwatch Institute. 2007
- Biofuels The magical formula for rural economies of LAC?. Peter Pfaumann. Inter-American Development Bank. November 2006.
- Biofuels: Is the cure worse than the disease? Richard Doornbosch and Ronald Steenblik. OECD. September 2007.
- A Blueprint for Green Energy in the Americas. Strategic Analysis of Opportunities for Brazil and the Hemisphere. Garten Rothkopf. Inter-American Development Bank. 2007.

Tatiana Alonso
tatiana.alonso@grupobbva.com

III. Economic observatory

Brazil: capital inflows continue

FDI, the best capital to receive because of its low volatility

The composition of capital flows received by countries is a key factor in analysing their positive contribution to economic development. In this sense, the volatility of capital flows, inexorably linked to the time horizon for investment, makes it the best indicator for classifying these flows. Within this frame of reference, foreign direct investment¹ (FDI) constitutes the most stable and lasting form of flows, and therefore, the most beneficial for recipient economies. In addition, FDI favours capital formation, the transfer of knowledge and technology, improves salaries and enhances work opportunities². Within FDI, two types of flows are distinguished: a) Capital investment (Greenfield and capital increases, henceforth Greenfield) and b) Mergers and Acquisitions (M&A). An investment is considered to be of the Greenfield type when it is carried out "from zero". This includes the start-up of new production units and increases in installed capacity. To the extent that Greenfield drives fresh investment, it makes a positive contribution to economic growth from the start. For its part, M&A includes all operations in which a foreign investor holds at least 10% of the ordinary shares and voting rights of the company. For example, M&A would include the acquisitions carried out in the wave of privatizations in the second half of the 1990s.

The rest of capital flows: a) portfolio inflows and b) other types of capital inflows made up of what is known as "Hot Money" or assets which move rapidly from one form of investment to another in order to take advantage of changes in exchange and interest rates and in the stock markets. Portfolio investment, although volatile, also constitutes support for a country's performance to the extent that the purchasing of bonds usually reflects confidence from international investors in the economic evolution of a country, while the purchase of stocks reflects favourable expectations about corporate prospects.

Lastly, the most fickle forms of flows are those related to bank deposits. An example of these would be flows linked to "carry trade" strategies, based on taking advantage of differences in interest rates among different countries.

The importance of flow stability

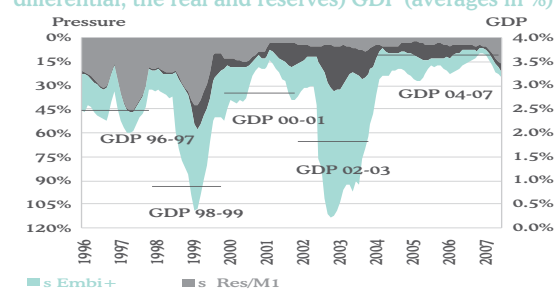
Stability in capital movements has historically been accompanied by high growth rates in Brazil. Eichengreen (1996) shows that countries which have had a volatile balance of payments performance, whether this be on the current or capital account, have responded to this through a combination of devaluation, higher interest rates and the loss of official reserves. A simple indicator designed to capture the pressure on the balance of payments, with this being taken for the pressure deriving from strong fluctuations in financial variables, is a faithful representation of this reality. The indicator takes the form of an aggregate of standardized exchange-rate volatilities, the EMBI differential, and the change in reserves weighted for growth in M1. The aggregate can simply be these three components, or weighted for average historical volatility, as is shown in this article³. The information provided by either of these two alternatives is very similar.

¹ OECD 1999: "OECD Benchmark definition of foreign direct investment". Third Edition.
Bank of France: 12-14 December 2005: "Expert Meeting on Capacity Building in the Area of FDI: Data Compilation and Policy Formulation in Developing Countries".
² World Health Organization: Foreign Direct Investment (FDI).
³ IMF, December 2006: "Brazil's Long-Term Growth Performance—Trying to Explain the Puzzle", Ricardo Adrogué, Martin Cerisola, and Gaston Gelos.

Nicolás Trillo
nicolas.trillo@grupobbva.com

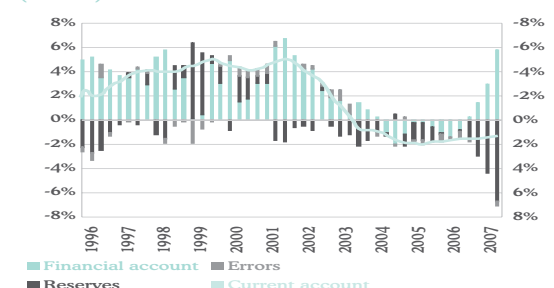
Brazil: balance of payments pressure

(Weighted sum of annual volatilities of EMBI differential, the real and reserves) GDP (averages in %)



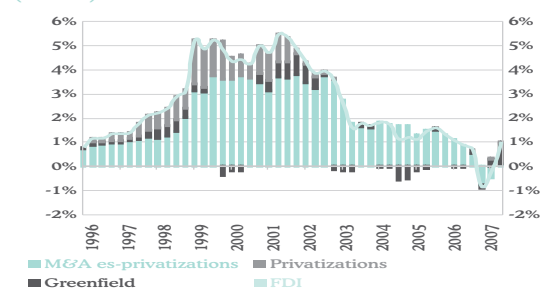
Source: Datastream and Bloomberg

Brazil: breakdown of balance of payments (% GDP)



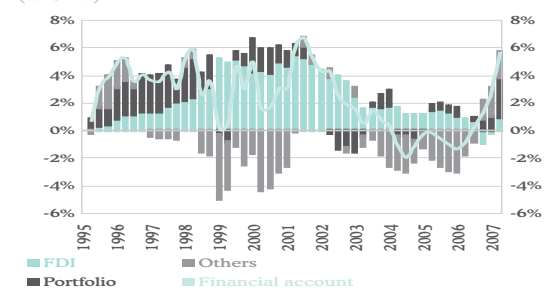
Source: Central Bank of Brazil, Datastream and Bloomberg

Brazil: breakdown of FDI (% GDP)



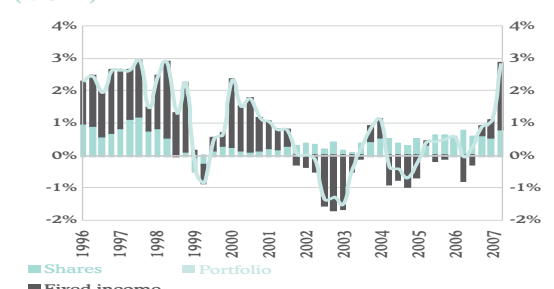
Source: Central Bank of Brazil and Datastream

Brazil: breakdown of financial account (% GDP)



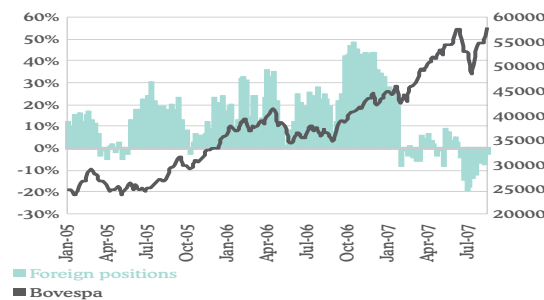
Source: Central Bank of Brazil and Datastream

Brazil: breakdown of portfolio investment (% GDP)

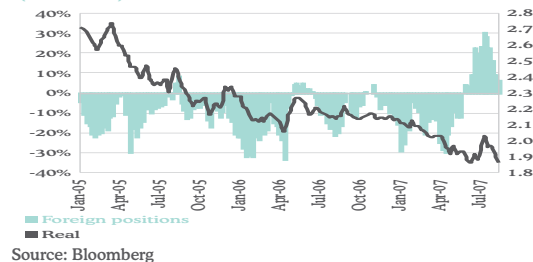


Source: Central Bank of Brazil and Datastream

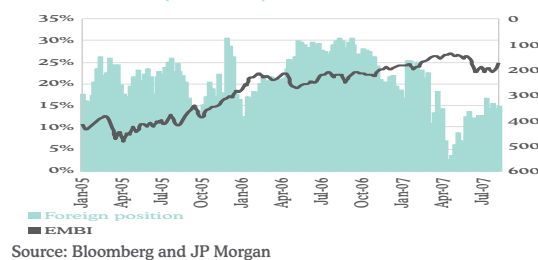
Brazil: stockmarket futures positions by foreign institutional investors vs Bovespa (% of total)



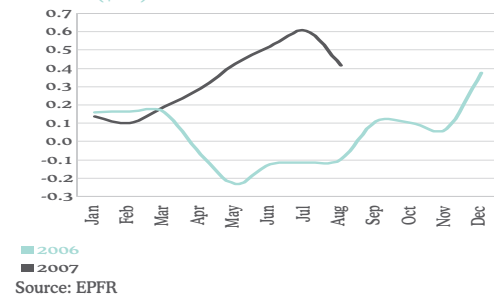
Brazil: foreign exchange futures positions by foreign institutional investors vs real (% of total)



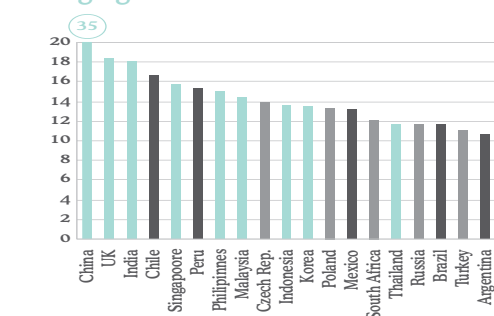
Brazil: fixed income futures positions by foreign institutional investors vs EMBI+ differential (% of total)



Net inflows to Brazilian fixed income funds (\$bn)



Emerging markets: estimated PERs for 2008



The most telling aspect is the fact that the periods of least pressure (2000-2001 and from 2004 onwards) have been those coinciding with the highest growth rates of the past decade.

Brazil: favourable evolution of flows in the first half

Brazil has become one of the biggest positive surprises in 2007. On the one hand, there has been a recovery in the economy supported by high commodity prices and controlled inflation. On the other hand, the Central Bank of Brazil has reduced official interest rates by 200 bp to 11.25%. Both elements have made an ideal framework for the reception of international flows, mainly of the Greenfield type, although there have also been portfolio investments and flows for carrying out carry trade strategies, the latter particularly favoured by the low volatility environment in the first half of the year.

Brazil: historical evolution of the balance of payments

The structure of flows received in 2007 is different from that of other historical periods: i) a current account surplus of around 1.5% of GDP, compared with the deficit seen in the second half of the 1990s and at the start of the current decade; ii) a lower contribution from FDI. FDI was very dynamic up to 2002, basically due to M&A activity and the privatization process that took place up until 2001. In the case of Brazil, Greenfield has accounted for a small percentage of FDI. However, growing investment of the Greenfield type that Brazil has been receiving in 2007 should be pointed out. This impulse is offsetting net M&A outflows which have recently taken place as a result of Brazilian commodities companies making overseas acquisitions. Undoubtedly, the pick-up in Greenfield is a very positive signal for the Brazilian economy.

Similarities can also be identified: i) portfolio inflows are similar to those during boom peaks. Capital flows to stocks have, surprisingly, had a very stable evolution, given that there have been net entries since 1999. For their part, movements in fixed-income flows, besides accounting for the biggest percentage of portfolio inflows, have better reflected periods of maximum uncertainty: Brazilian crisis (1999), Argentinean default (2001), recession and low growth in the US (2002 and 2003), credit crisis linked to GM and Ford (2005) and the periods of volatility in the middle of last year; ii) The entry of more speculative funds is comparable only to that seen in 1996. These flows have already previously shown the risks they bring with them, as seen in the net outflows that took place because of contagion from the Asian crisis (1997), the Russian crisis and the collapse of the Long Term Capital Management hedge funds (1998), as well as Brazil's own crisis (1999) and contagion from the Argentinean crisis (2000-2001).

Conclusion: are there supports in place to overcome the current tension?

What could happen over the rest of the year with the turbulence taking place in the international markets? The most speculative flows did not wait to react. Despite the return to normality over the past few weeks, future positions of foreign investors in the exchange-rate and stock markets reversed, while in the fixed-income market they fell significantly. Along the same lines, there have been outflows recently of net subscriptions to Brazilian stock and bond funds. In all, and despite the fact volatility could continue in the short term, we believe that once the current uncertainties have been dispelled, Brazil will continue to benefit from its good macroeconomic fundamentals as manifest in recent upgrades to its ratings. Also, the high yields offered by Brazilian debt, along with attractive stock valuations compared with the rest of the emerging markets, should provide support for this outlook.

Remittances: A defence against sudden stops in foreign financing?

The strong growth seen in remittances by emigrants in recent years has converted this form of transfer into a fundamental source of foreign financing in many developing countries. As a result of this trend, the economic literature has shown growing interest in the effects deriving from the receipt of remittances. Generally using a microeconomic approach, the initial studies focus on establishing the possible impact of remittances in reducing household poverty, on the intertemporal allocation of consumption, and on the accumulation of capital. With time, the greater availability of statistical series for aggregate flows of remittances has allowed studies to be carried out relating these transfers to the evolution of macroeconomic aggregates¹. This is precisely the focus of this study in which we examine whether the existence of remittances reduces the probability of drastic deteriorations in the current account balance.

Remittances in Latin America: A few stylized facts.

The adjoining graph shows the importance remittances have acquired for Latin America in the past few years. Particularly from 1995, the region has seen a strong increase in the entry of remittances to the extent of it becoming the biggest recipient among the main emerging areas. This growth has also made remittances the second source of foreign financing in the region, only behind Foreign Direct Investment (FDI) flows.

Within this development, the role played by Central American countries stands out. These countries combine a number of factors that favour the entry of remittances, which constitute their major source of foreign flows. The graph with the main destinations for remittances in the region allows us to deduce some of the determinants which characterise them: small economies and low per capita income are two of the factors which are usually behind the relative greater importance of remittances, above all because they tend to inhibit other flows (particularly FDI² and portfolio investments). In this way, one of the most interesting aspects of these flows becomes evident: their apparent capacity to substitute for other forms of foreign capital in that remittances target to a greater extent those countries where traditional flows fail to achieve a significant presence³. Another significant aspect of the make-up of remittance flows is the geographical proximity of a country to one of the main destinations for immigration (in the case of Latin America, the US), which facilitates the transfer of workers⁴. These are factors which make Central American countries those with most propensity for the receipt of remittances in the region.

However, apart from constituting an efficient alternative source of financing for those countries which have little attraction for foreign private capital, these transfers have the added benefit of being stable and non-cyclical. As the adjoining table shows, the average volatility of remittance flows to developing countries is less than that for the rest of flows⁵. Likewise, remittances also appear as the least pro-cyclical type of flows, particularly when compared with portfolio investments.

¹ Rapoport and Docquier (2005) provide an exhaustive review of the literature dealing with remittances.

² In the empirical literature, the size of the domestic market appears again and again as one of the main determinants of FDI.

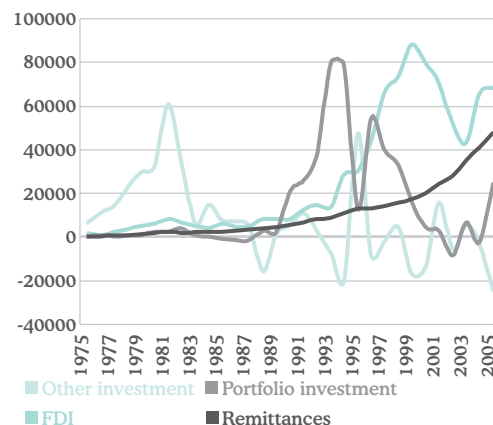
³ Mexico stands as an exception within Latin America in that it is a recipient of considerable volumes of both remittances as well as capital flows.

⁴ Ecuador is the obvious exception to this trend in the region in that it combines a high percentage of remittances in terms of GDP with the geographical distance of the main destination for migratory flows (Spain).

⁵ We include within these FDI flows, portfolio investments, and other investments (basically commercial debt). In calculating both indicators, we exclude countries which have less than 10 years data available for any of the type of flows considered.

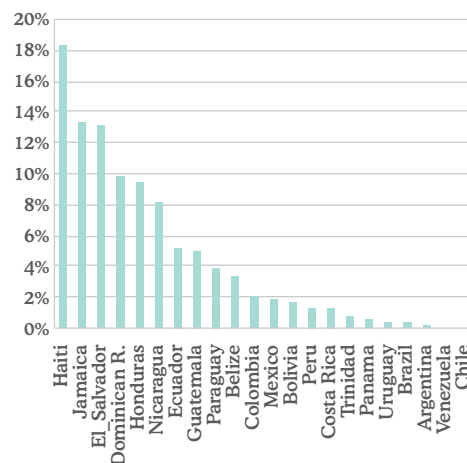
José Ramón Perea
jramon.perea@grupobbva.com

Latam: remittances vs. capital flows (US\$m)



Source: FMI

Latam: remittances by country (% GDP, average 1985-2005)



Source: IMF

Capital flows to developing countries: volatility* and cyclical**

(1985-2005)

	Volatility	Cyclical
FDI	0.28	0.18
Portfolio investment	0.54	0.24
Debt	0.32	0.11
Remittances	0.015	0.06

* standard deviation of ratio of flows to GDP.

** correlation between cyclical component of GDP and that of corresponding flow.

Source: BBVA

There are various reasons behind this phenomenon. The fact that remittances are transfers of an altruistic nature, and therefore the least concerned with investment activities, makes them relatively immune to economic cycles. For the same reason, the entry of remittances does not entail an obligation to make payments in the future (in the form of interest, dividends, the repatriation of profits etc.), which could increase their variability over time. These aspects make such transfers potential contributors to a stable flow of foreign financing. This objective in Latin America has not always been guaranteed, particularly in those cases in which the opening up to foreign capital brought with it in the financial account a concentration of speculative flows (*hot flows*), which were the habitual suspects in creating financial crises during the 1990s.

The frequency and seriousness of these crises has given rise to studies on the factors behind abrupt halts to foreign capital (Milesi-Ferreti and Razin, 1999; Edwards, 2004, etc.). But in general, these studies have not analysed transfers of remittances in that these are not strictly speaking capital flows⁶, and because they play a marginal role in the main emerging economies. As we understand it, however, including remittances in a study of this nature is well justified, both as a result of their growth in the past few years, as well as their stability compared with other forms of foreign financing.

Objective and methodological aspects

With these conditioning factors, our objective is to investigate whether the receipt of significant remittances prevents blowouts in the current-account deficit, particularly in Latin America. In order to do so, we have chosen a methodological framework characteristic of the literature on financial crises, and whose dependent variable is a dummy which accounts for drastic blowouts in the current account deficit. In defining such an event, we follow the steps of one of the key studies in the literature (Edwards, 2004), assuming a crisis to be an annual reduction in the current account deficit of at least 4 percentage points of GDP⁷.

With a limited dependent variable, we base our econometric specification on a Probit model, in which we include some of the explanatory variables on which the literature has most focused⁸ (see adjoining table). Separately, our variable of remittances as a ratio of GDP (REMGDP) is constructed using the guidelines in the IMF's balance of payments manual, which consists in summing three series included in this data base. Firstly, we include entries of *compensation of employees* and *workers' remittances*, both included in the current account, and differentiated according to the status of the worker sending the flow of remittances⁹. We also include the *migrants' capital transfers* series, which comes under the capital account, and which reflects transfers relating to the flow of goods stemming from the movement of emigrants from one country to another¹⁰. With these variables, we construct a panel with 85 developing countries¹¹, for the period 1980-2006¹², using annual figures.

⁶ As we saw previously, remittances are not included in the financial account.

⁷ Other studies (Milesi-Ferreti and Razin, 1999) set a longer time horizon for the emergence of this type of crisis.

⁸ In order to reduce possible skews due to endogeneity, the explanatory variables are included in the econometric model with a one-year lag.

⁹ *Workers' remittances* include transfers by persons with resident status in the country of origin of the flow of remittances. Transfers by non-residents are accounted for in the entry of *compensation of employees*.

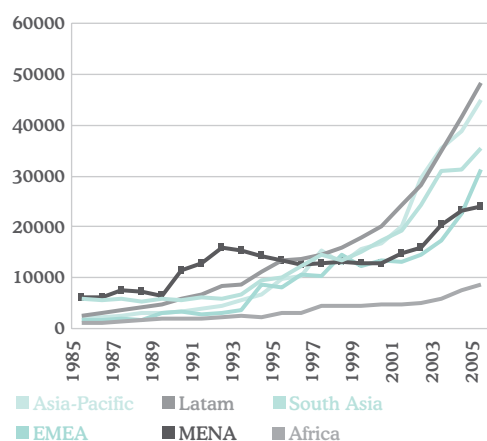
¹⁰ The series on the different capital flows has been taken from the IMF's *Balance of Payment Statistics* data base, while the rest of the variables are from *International Financial Statistics*, (also compiled by the IMF), and *World Development Indicators*, published by the World Bank.

¹¹ Due to the absence of figures for some countries, the final number varies according to the chosen econometric specification.

¹² We have opted to exclude previous years due to the lack of data for the 1970s.

Inflows of migrant remittances

(US\$m)



Source: World Bank

Results

The starting specification (base model) includes entirely our own control standard variables in order to establish the fit of our panel with previous studies. In line with some of these, our initial estimates find the current account balance as a ratio of GDP (CAGDP) and the percentage of short-term debt (STD) to be the most influential variables in the emergence of this type of crisis¹³. A less intuitive result we obtained concerns the initial level of development (GDPCAP), which turns out to be positive and significant in some of the specifications. This, however, might be due to the fact that in our sample medium-income countries, particularly vulnerable to this type of crisis, have the highest initial levels of GDP.

With these preliminary results, the rest of the analysis focuses on identifying the role of remittances in the behaviour of the dependent variable. In this sense, no significant effects appear by directly including the remittance variable. More interesting results emerge, however, when we compare geographic areas. We do this by using different specifications with regional *dummies*¹⁴, which are included in the model by means of an interaction variable with our remittances indicator (panel 1¹⁵). In this way, we try to identify regions where the relationship between remittances and the crisis variable is significant. The results obtained for CAGDP and STD (both positive and significant) hold for these new specifications. There are also no changes as regards the remittances variable, which also does not turn out to be significant in any of our estimates. However, on the other hand, the interaction coefficient for remittances and the Latin American *dummy* is the only one which turns out to be negative and significant. We thus obtain the first indication that remittances play a stabilizing role in the current account balance in Latin American countries.

The use and interpretation of interaction terms in non-linear models presents a number of problems of consistency¹⁶, which is why we decided to use an alternative, which consists of using regional sub-samples in the estimation of our reference model (panel 2) rather than this type of variables. This alternative essentially gave the same results: only in the case of the sample of Latin American countries we find a negative and significant coefficient in our remittances variable.

Additional considerations

The above evidence has to be treated with caution in the absence of a number of tests for statistical robustness in this analysis. This could be the case for possible skews due to endogeneity which are not corrected as a result of using a one-year lag for the explanatory variables. This could be the case, for example, if the senders of remittances were sufficiently forward-looking as to see a crisis coming a year down the line, and increased the transfer of remittances ahead of time. Bearing in mind that the empirical literature has looked at various regressors not included in this study, another possible source of skews could arise from variables which have been omitted, and which are correlated with our interaction variable, thus making for a spurious relationship between this and the dependent variable.

¹³ The two variables are significant at the 5% confidence level, with a positive sign. On the other hand, unlike the results obtained by Edwards (2004), the percentage of foreign debt with respect to total debt is not significant in any of our estimates.

¹⁴ We look at the following geographical areas: Sub-Saharan Africa, Latin America, Asia-Pacific, Eastern Europe, the Middle East and the Maghreb.

¹⁵ With Sub-Saharan Africa as the control group.

¹⁶ Chunrong and Norton (2002) provide a detailed analysis of the problems stemming from the use of interaction terms in Probit models.

Base model: Explanatory variables

name	variable	Expected sign
CAGDP	Current account balance as a % of GDP	+
STD	Percentage of short-term debt long-term debt (%)	+
GDPCAP	GDP per capita in first year of sample (constant \$)	-
OPEN	Trade openness	-
EXTD	Percentage of foreign debt to total debt	+
RES	Reserves as a % GDP	-

Countries included in the sample

(by geographic areas)

Sub-Saharan Africa	Angola, Burundi, Benin, Botswana, Cape Verde Is., Cameroon, Congo (Rep.), Ivory Coast, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Liberia, Lesotho, Madagascar, Mauritania, Mozambique, Nigeria, Senegal, South Africa, Tanzania, Zambia, Zimbabwe.
Asia-Pacific	Cambodia, China, Philippines, Indonesia, Laos, Malaysia, Papua New Guinea, Thailand.
South Asia	Bangladesh, India, Maldives, Nepal, Pakistan, Sri Lanka.
Latin America	Argentina, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Dominican Republic, El Salvador, Venezuela.
Eastern Europe	Albania, Armenia, Belarus, Czech Republic, Slovakia, Estonia, Georgia, Croatia, Hungary, Kazakhstan, Latvia, Lithuania, Poland, Russia, Turkey, Ukraine.
Middle East and Magreb	Algeria, Egypt, Jordan, Lebanon, Libya, Morocco, Oman, Syria, Tunisia, Yemen.

Panel 1: interaction term coefficient

(remittances x regional dummy)

Asia-Pacific	-0.78 ^
South Asia	-4.47 ^
Latin America	-5.55**
Eastern Europe	1.49 ^
Middle East and Magreb	2.96 ^
** significant at 5% confidence level	
^ not significant	

Panel 2 (regional sub-samples): remittances variable coefficient (REMGDP)

Sub-Saharan Africa	0.28 ^
Asia-Pacific	3.49 ^
South Asia	4.59 ^
Latin America	-5.62**
Eastern Europe	-3.89 ^
Middle East and Magreb	0.61 ^
** significant at 5% confidence level	
^ not significant	

On the other hand, the existence of significant effects only in the case of Latin America could reflect the existence of threshold effects in the stabilizing role of remittances. In our sample, Latin America is the region with the greatest number of countries with high percentages of remittances compared to GDP. But even if this were the case, our results indicate that transfers of remittances can from a certain level become an efficient antidote against the emergence of a sustained current-account crisis. In this way, they constitute an added benefit to those of reducing poverty, inequality, and increasing human and physical capital which have been identified in the literature.

References

- CHUNRONG, Ai and NORTON, Edward (2003): "Interaction Terms in Logit and Probit Models". *Economic Letters* 80, 123-129.
- EDWARDS, Sebastian (2004): "Financial Openness, Sudden Stops and Current Account Reversals". National Bureau of Economic Research. Working paper 10277.
- MILESI-FERRETI, Gian Maria and RAZIN, Assaf (1999): "Current Account Reversals and Currency Crises". NBER conference on Currency Crises.
- RAPOPORT, Hillel and DOCQUIER, Frédéric (2005): "The Economics of Migrants' Remittances". Institute for the Study of Labor (IZA). Discussion Paper No. 1531. Bonn, Germany.

Evaluation of the impact of remittances on inflation and economic-policy responses

The entry of significant remittance flows to a good number of Latin American countries poses a number of questions as regards their social and economic effects. There is a very wide range of factors to be studied, and these involve issues of great complexity. In this publication we have already addressed some of these issues, such as the characteristics of flows of human beings and an estimate of the impact of remittances on competition. This time around we are looking to evaluate the impact such flows are having on inflation and the possible economic-policy responses to this.

Transfer channels

The receipt of remittances is mainly included in revenues deriving from current transfers in the balance of payments. This means the entry of foreign currency and an increase in the international reserves of a country. All other things being equal, the increase in this asset with respect to the rest of the world translates into an increase in money supply (M in the attached table). However, the final evolution of this variable depends on many factors such as the magnitude of other current and financial flows which swell the reserves of the economy, the bank multiplier and the use of sterilization policies by the central bank.

From the point of view of income, the receipt of remittances increases the potential purchasing power of the economy. If we add the balance of current transfers and income to GDP we get gross disposable national income (GDNI). This is the amount available to domestic economic agents to consume and save as they deem fit. A higher level of GDNI compared to GDP leads to a greater percentage of GDP going to private consumption, a relationship which appears to stabilize once a certain level of spending is reached.

From the interaction of the above factors we need to start to address the issue of the impact of remittances on inflation. A big increase in money supply unaccompanied by growth in real activity leads to inflationary forces and a tightening of monetary policy. However, conventional methods for putting a cap on growth in prices could end up having a negative impact as we will see later.

Measurement of the impact on inflation

Methodology

In this section we attempt to gauge the impact the entry of remittances has had on price increases through an estimate of a simple VAR model. We take the two endogenous variables to be GDNI and the consumer price index (CPI). The first is the real value obtained by applying the GDP deflator to the nominal size of the National Account. The two variables are given as neperian logarithm differences. The figures are annual and the VAR includes a lag. In addition, in order to calculate external shocks which affect the trend in domestic growth we have included as exogenous variables the change in the terms of trade at international prices (TTINT) and the change in the nominal effective exchange rate index (NEERI) corrected for the weighted inflation of the trading partners in question.

The evaluation of the impact on inflation of remittances derived from the VAR model is based on two assumptions: a) The GDNI in real terms is the observed; b) The real GDNI is the observed corrected for the remittances received. The simulated evolution of inflation in both cases is compared for the following countries with significant flows of remit-

David Martínez Turégano

Remittances in Latin America

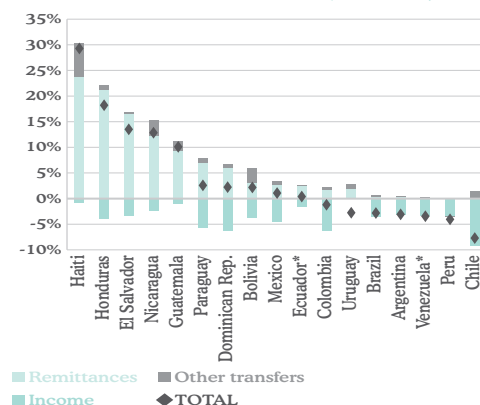
Country	Period of increasing remittances	Average annual change		
		Remittances / GDP	Reserves / GDP	M / GDP
Haiti	1998-2003	4.0	-0.9	3.3
Honduras	1997-2005	2.0	2.4	2.4
Guatemala	2001-2005	1.3	0.5	2.9
Nicaragua	1992-2005	0.9	0.6	1.6
Ecuador	1999-2005	0.9	-0.2	0.5
El Salvador	1992-2000*	0.8	-0.5	-1.2
Dominican Rep.	1998-2003	0.6	-0.1	2.2
Colombia	2002-2005	0.5	0.7	0.8
Bolivia	1995-2003**	0.5	0.7	-2.8

Source: BBVA using IMF data

*The 1999 crisis distorts reserves and money supply data

**The 2003 crisis distorts reserves data

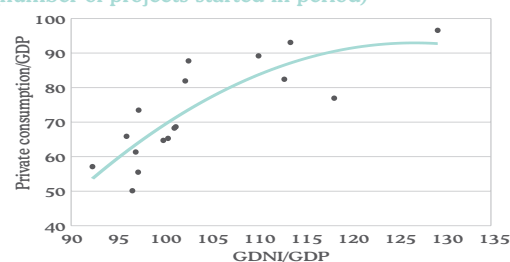
Difference between gross disposable national income and GDP (% of GDP; 2205*)



Source: IMF; *2004

New investment projects

(number of projects started in period)

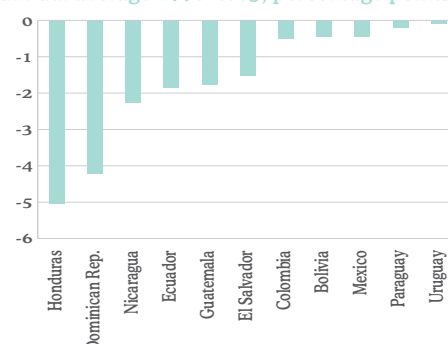


Source: IMF

*Argentina, Brazil, Chile, Dominican Rep., El Salvador, Haiti, Guatemala, Honduras, Mexico, Nicaragua, Peru and Uruguay; 2004 for Paraguay, Bolivia and Venezuela; 2003 for Colombia and Ecuador

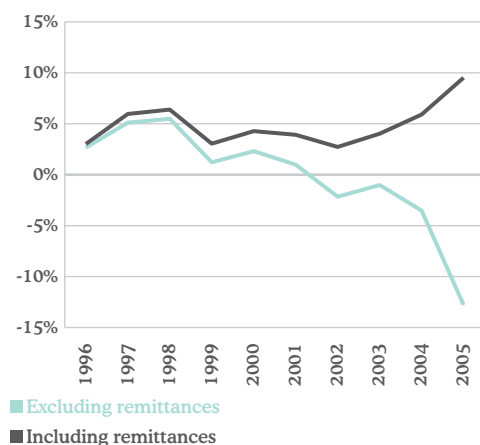
Difference between real GDNI including and excluding remittances

(annual average 1996-2005; percentage points)



Source: BBVA using IMF data

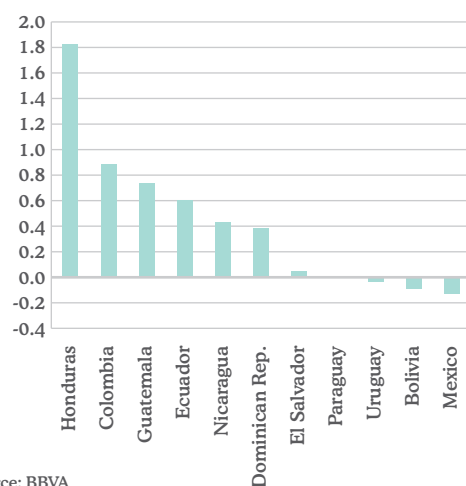
Real growth rate GDNI in Honduras



Source: BBVA using IMF data

Estimated inflationary effect of remittances

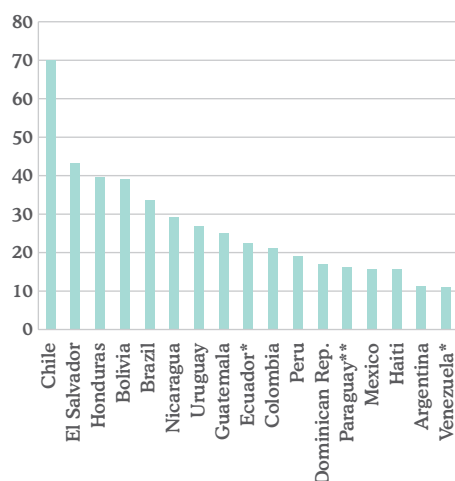
(annual average 1996-2005; percentage points)



Source: BBVA

Domestic lending to private sector

(% GDP; 2005)



Source: FMI; *2004; **2003

tances in the past few years: Bolivia, Colombia, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Paraguay and Uruguay. The figures are annual in all cases and generally cover the sample period 1980-2005.

Although the methodology can be subjected to criticism, the results provide an initial approximation to the measurement of the impact of remittances on inflation. One has to take into account in these results the existence of a possible substitution effect of wage or business income for remittances. This could be the case of Honduras, where the differential in growth between real GDNI with or without remittances has been significant since the start of the current decade, with the latter figure even registering negative changes. This factor, given the methodology used, upwardly skews the inflation differential in both scenarios.

Results

The quantitative evaluation probably does not provide accurate evidence in gross terms, but it does when comparisons of the different economies are made. In this sense, the country where a greater impact of this phenomenon is seen is Honduras, followed by Colombia, Guatemala, Ecuador, Nicaragua and the Dominican Republic. On the other hand, the impact is practically zero in Bolivia, El Salvador, Mexico, Paraguay and Uruguay. All of this with the previously mentioned proviso of the substitution effect in some countries.

In any case, the inflationary impact of remittances appears clear in those countries where such flows have a significant specific weight, and could be so in other countries where remittances are a growing phenomenon. The transfer channel through disposable income is clear, and is explained basically by the fact the segments of the population receiving such funding have a high marginal propensity to consume and financial restrictions against them spreading out consumption over time.

Implications for economic policy

The impact of remittances on the trend in inflation seen in some Latin American countries requires a response from economic policy instruments. There is in fact a twin objective; on the one hand consolidating control of price stability in the short and medium term, and on the other helping to ensure the resources received are channelled towards projects with a multiplier effect in the long term and not only to direct spending by households.

The initial response to the first aspect that comes to mind is restrictive action in the area of monetary policy, channelled through the issue of public instruments to sterilize the entry of remittances, a rise in benchmark interest rates and an increase in the bank capital ratio for deposits. All of these measures help to contain demand, but in order to do so it is necessary for the banking channel to function correctly. However, the levels of banking penetration are very low, and thus the effectiveness of measures to put a cap on consumption may be limited. On the other hand, there could be a bigger impact on investment, given that companies have the biggest bank debt, and therefore, are those which suffer most from an increase in the cost of financing and lending restrictions deriving from the placement of public instruments in the banking system and an increase in the bank capital ratio.

In the fiscal area, the analysis is conditioned by low levels of direct taxation, given that the lack of control over the revenues of the population prevents the adoption of measures which favour the saving of remittances over investment, and which provide incentives for the recipients of such transfers to continue to work. At the expense of a reform of direct taxation, there remains more room for action in indirect tax forms.

A rise in taxes on consumer goods could be an option, but that would constitute an unfair measure in those countries where there is a high percentage of households with low income who do not receive remittances.

Another economic policy measure which could enter the debate is the imposition of a tax on the entry of such flows. What one has to take into account here is that the desired effect is not really to dissuade the entry of these resources, which improve the position of aggregate external solvency of an economy, but rather to channel them towards more productive ends which do not generate inflationary pressures.

In this complex context, characterized by the weakness of the bank channel of monetary policy, the evasion of direct taxation, and the desire not to dissuade the entry of remittances, one needs to resort, at least until the above obstacles can be reduced, to more imaginative solutions. As mentioned previously, the key lies in finding adequate incentives, in order both for households receiving remittances not to stop making their labour available, as well as encourage them to put aside a greater percentage of these resources in the form of savings.

This could, therefore, take the form of a tax with a social purpose in which a percentage of the amount of remittances goes to carrying out public works and services of common benefit. There would be a greater incentive if the public project were to be in the region of the households receiving remittances, although the Government would face the challenge of not creating regional distortions in the distribution of national income. In this respect, being able to draw on an efficient tax system would help enormously.

Conclusions

In a context in which certain migrant flows are reaching significant levels, the sending of funds by those who have had to emigrate is increasing considerably. While this requires an economic effort on the part of the labour remitting the funds, the final outcome is clearly positive, given that the usefulness of the remittances for the recipients is much greater than the cost for the remitters.

However, the arrival of remittances also poses challenges of great interest and difficulty for economic policy management. The direct increase in the income of a country is of great magnitude in some cases, which is creating tensions in demand and inflation. Although a substitution effect between foreign flows and domestic income from salaries could be taking place, it appears clear that remittances require vigilance and for their impact on the evolution on prices to be followed.

In this situation, the ideal solutions might not lie with the traditional management of monetary policy, but rather with new mechanisms which allow remittances to be channelled towards productive activities in order to achieve the twin objective of maintaining inflation under control and of driving long-term growth. A few experiences in this sense have shown relative success on a small scale, although the challenge is to extend this to economies as a whole, while always taking into account local specifics.

Free trade agreements signed by the United States (USA)

Partner country	Date of signature	Date of entry into force	Share of exports (2006*) USA (Partner /Total)	Partner (USA/Total)
Israel	Apr-85	Sep-85	1.1%	36%
Canada	Dec-92	Jan-94	22.2%	82%
Mexico	Dec-92	Jan-94	12.9%	85%
Jordan	Oct-00	Dec-01	0.1%	25%
Singapoore	May-03	Jan-04	2.4%	10%
Chile	Jun-03	Jan-04	0.7%	16%
Australia	May-04	Jan-05	1.7%	7%
Morocco	Jun-04	Jan-06	0.1%	2%
El Salvador	Aug-04	Mar-06	0.2%	23%
Nicaragua	Aug-04	Apr-06	0.1%	35%
Honduras	Aug-04	Apr-06	0.4%	35%
Guatemala	Aug-04	Jun-06	0.3%	50%
Dominican Rep.	Aug-04	Mar-07	0.5%	40%
Bahrain	Sep-04	Jan-06	0.0%	2%
Costa Rica	Aug-04	pending	0.4%	36%
Peru	Apr-06	pending	0.3%	24%
Oman	Sep-06	pending	0.1%	1%
Colombia	Nov-06	pending	0.6%	41%
South Korea	Jun-07	pending	3.1%	13%
Panama	Jun-07	pending	0.3%	39%
TOTAL			47.5%	

Source: www.sice.oas.org y COMTRADE (United Nations)

* Latest available data

Analysis of free trade agreements in Latin America

The processes of trade integration in Latin America continue to develop in different directions, or at least without a common vertebral axis. As we pointed out last year¹, there are two different trends in the region. On the one hand, there is a group of countries in favour of establishing an integrated framework for the whole of the region, and which is critical of the approach made by the United States. On the other hand, there are those economies which have opted for bilateral treaties. Given the absence of a transparent agenda in the case of the first group, and that in the case of the second the processes are taking place at the same time, in this article we have carried out a review of the free trade treaties in the region. Starting from the basis of the current negotiations in different countries and analysing the results achieved from agreements which have been in place for a number of years, we conclude with an evaluation of what can be expected in the area of trade integration in the future.

Driving bilateral agreements

In the past few years, the United States in the face of a lack of progress in multilateral initiatives has intensified its policy of signing bilateral agreements with different countries in Latin America. The FTA with Chile came into effect in 2004, while the CAFTA with Central America and the Dominican Republic was signed by Honduras, Nicaragua and Guatemala last year, and in March with the Caribbean country. The agreement was put to a referendum in Costa Rica in October of this year, and was approved with 51.6% of the votes cast. In 2006, the United States also signed¹ a FTA with Colombia and Peru and with Panama in June 2007, none of which have yet been made effective. Separately, negotiations with Bolivia and Ecuador were broken off last year, although in the case of the latter they could be renewed in the future. Below we look at the cases of Peru and Colombia.

Peru is close to finally sealing the agreement signed in December 2005. Since then, problems arose which delayed it coming into effect². Firstly, protests in the Andean country and general elections in April of 2006 delayed the approval of the agreement by the Peruvian Congress. Afterwards the change in the majorities in the US Senate and Congress resulted in greater demands in labour and health, which were ratified in May of this year by the Peruvian Congress. The final version of the FTA was approved at the end of June, and in September Congress in Washington was expected to ratify the changes which were introduced. Until that time, the trade advantages granted unilaterally by the United States under the Andean Trade Promotion and Drug Eradication Act (ATPDEA) have been extended to February 2008.

The situation in Colombia is not so promising. Negotiations with the United States concluded in February 2006, an event which served to trigger Venezuela's exit from the Andean Community. However, and despite the signing of the document last November and its ratification by Colombia's Congress in June of this year, the new Democrat majority in the legislative bodies in the United States, and the so-called "parapolitical scandal" in which President Uribe has been directly involved, and the closeness of legislative elections in Colom-

¹ "Polarization of trade policies". Latin Watch. Second Quarter of 2006. http://serviciodeestudios.bbva.com/TLBB/fbin/LW_2T06_esp_tcm208-80338.pdf

² See details in "The FTA with the US and its economic implications". Economic Watch. 14/05/2007. Second Quarter of 2006. http://serviciodeestudios.bbva.com/TLBB/fbin/LW_2T06_esp_tcm208-93957.pdf

bia have weakened the prospects for final approval this year. All of this despite the excellent relations of the presidents of the two countries and the numerous meetings Uribe has held with US congressional members, who continue to make strong demands in the area of human rights, and who announced their rejection of the FTA a few months ago.

Prospects: The Mexican experience

The signature of free trade agreements is not new to Latin America. For more than a decade similar agreements have been made, mainly at the initiative of Chile and Mexico³. The current importance of FTAs stems from the region's limited share of world trade and strong competition from other emerging economies, particularly Asia, in the main export market for Latin American products, namely the United States. The question which immediately arises within this context is whether a FTA is the best solution for the Latin American economies.

The immediate reference point which comes to mind is what can be learned from the experience of other countries. In this sense, the case of the FTA signed in 1992 by Mexico with Canada and the United States and which came into effect in January 1994 (NAFTA) serves as a paradigm. The Latin American country in the middle of the 1980s had initiated a unilateral process of opening up its economy to trade, but the real driving force came from this treaty. According to World Bank estimates⁴, NAFTA helped drive non-oil exports, mainly manufactured goods, up by 25% and foreign direct investment by 40%. However, this development was not solely due to the dismantling of customs duties. It was also the result of the favourable cyclical situation in the United States, the modernization of industry, the strengthening of the institutional framework, and the parallel application of responsible policies in fiscal and monetary areas. This same lesson applies to the current situation, where an absence of necessary reforms in energy, labour and fiscal areas is limiting scope for the benefits to be derived from the NAFTA.

Estimates have been made for the possible impact of FTAs coming into effect in the different countries currently engaged in trade talks. In the case of Peru, it is estimated a FTA would increase GDP growth by 0.6% in the first five years in which the treaty is in effect, which would generate a permanent rise in GDP of 3.3% and create more than 30,000 jobs⁵. A study published by the Bank of the Republic of Colombia estimates that in the three years after the treaty coming into effect, overall trade would add one point to GDP, and double that in the case of trade with the United States, while more than 2 billion dollars would be added to foreign direct investment.⁶

The above forecasts are without doubt encouraging, and it appears well established throughout time that trade has been positive for growth for many economic areas. However, the complacent belief that a FTA is a panacea to cure all of the problems of international entry and competition is today as naive as it is dangerous.

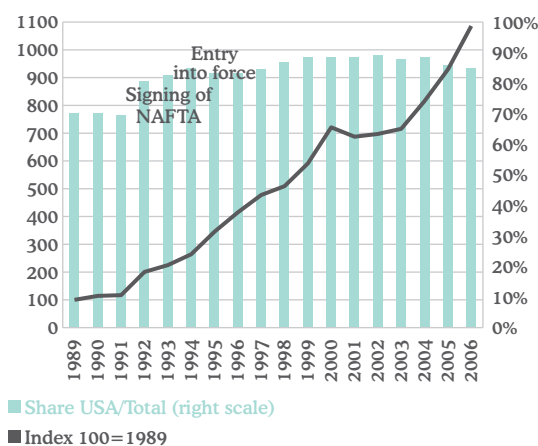
³ Chile has signed FTAs with MERCOSUR, Canada, Mexico, Costa Rica and El Salvador, the United States, South Korea, EFTA and China, while treaties with Japan, Panama, Peru and Colombia are pending approval. Mexico for its part has signed FTAs with Canada and the United States, Colombia and Venezuela, Costa Rica, Bolivia, Nicaragua, Chile, the European Union, Israel, Honduras, El Salvador and Guatemala, EFTA, Uruguay and Japan.

⁴ Lederman, D., Maloney, W.F. and Luis Servén (2003). "Lessons from NAFTA for Latin American and Caribbean (LAC) Countries: A Summary of Research Findings". World Bank.

⁵ See document cited in Note 2 for references.

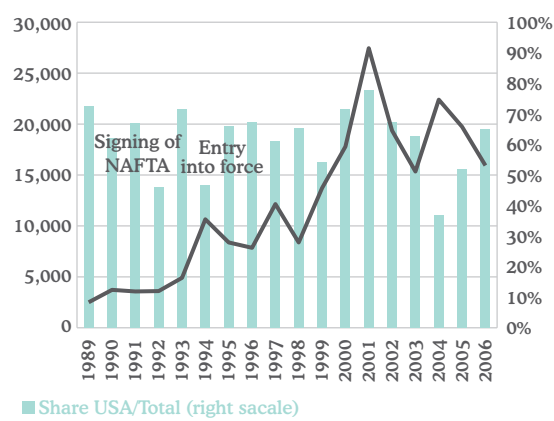
⁶ Toro, J., Alonso, G., Esguerra, P., Garrido, D., Iregui, A.M., Montes, E. and Juan Mauricio Ramírez (2006). "The impact of the Free Trade Agreement (FTA) with the United States in the balance of payments to 2010". Bank of the Republic.

Mexican exports



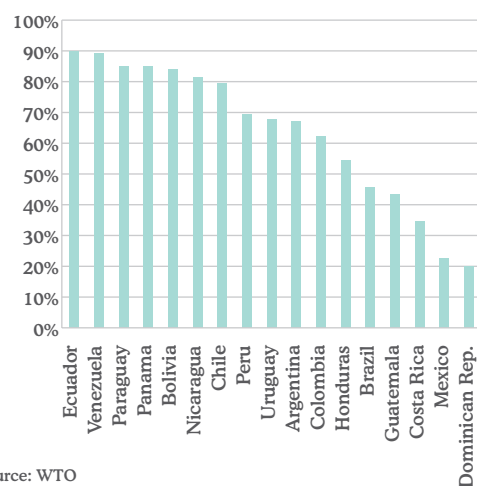
Source: COMTRADE (United Nations)

Foreign direct investment in Mexico



Source: INEGI; *methodological change

Exports of agricultural, energy and mining products (2005)



Source: WTO

The future of the FTA as a strategy in the region

As a result of the serious obstacles which exist to successfully conclude the multilateral round of talks under the auspices of the World Trade Organization (WTO), economies will continue to explore areas for less ambitious agreements, but with more immediate benefits. The signing of a FTA remains a good alternative to promote exports and domestic competition, but it needs to be accompanied by reforms which allow the economy to gain in stability and efficiency. The advances made in the past few years in Latin America are on the right track, but these achievements have to be consolidated, and new initiatives taken on.

One has to add to this general framework the events that have taken place in the United States in the past year, which have become factors to take into account when it comes to evaluating the trends in trade integration in the region. The legislative majority of the Democrats, who are more sensitive to the domestic effects of signing free trade agreements, and the end of the presidential powers to fast-track trade negotiations have altered the playing field for action. This scenario, which could be reinforced if the Democrats win the 2009 presidential elections, does not, however, mean abandoning FTAs as a mean of opening trade with the Latin America economies. While the Democrats remain demanding in the areas of labour, environmental, human rights and non-tariff barriers issues, there is no frontal opposition to free trade in itself. Besides, a large number of these conditions could serve as positive incentives to improve how domestic markets work.

From a positive perspective, it is worthwhile to add that the region is diversifying its risks with the United States. The signature of bilateral agreements, whether these be FTAs, framework agreements, or partial agreements is becoming widespread with other globally important economic areas such as the European Union and Asia, and which are being used to also boost trade integration among Latin American countries. Examples of this are the FTA subscribed by Peru and Thailand in November 2005 and the one signed by Chile and Colombia at the end of last year⁷.

In any case, the process of opening up to trade, both as a unilateral initiative as well as through accords with other countries, and the just mentioned strategy of geographical diversification will allow Latin America to protect against external shocks and increase competition in the sector for tradeable goods. However, the question remains as to how to deal with their specialization in commodities. From the point of view of the historical evolution of real prices for these products, prospects are not favourable; but it could be hasty to draw a negative conclusion from this. On the one hand, it remains to be seen whether the strong expansion of Asia might mean a structural change in demand for commodities, thereby, reducing price cycles. On the other hand, agricultural, energy and metallurgical production is not limited to the sale of goods, and could be a source for a value-added chain which increases national income. If this level of differentiation is achieved, the current lack of intra-regional trade and trade integration in Latin America could cease to be a concern in the future. Until then, and in the absence of a multilateral agreement, the best option is the strategy of signing FTAs with complementary and dynamic markets.

⁷ Information on all of the agreements in place and those pending in Latin America by country can be found at: http://www.sice.oas.org/countries_s.asp

Inflation and monetary policy

Over the past decade most countries in Latin America have adopted a monetary policy strategy primarily aimed at preserving price stability. The recent rise in the prices of commodities and agricultural products, such as maize, wheat and oil, is being felt most strongly in the food section of the shopping basket, and may start feeding into other components of the index, making inflation targets difficult to be met. In fact, some countries such as Mexico and Venezuela have already missed their inflation targets.

The effect of this shock on other prices largely depends on whatever impact it has on marginal costs. The pass-through from marginal costs to final prices can only be offset if there are increases in productivity or if companies reduce profit margins. Other factors determining the impact on final prices are the degree of pass-through of exchange-rate movements, the openness to trade and the degree of dollarization.

Recent developments raise concerns as to whether the increase in food prices will be transitory in nature or whether, on the contrary, the upward trend will continue for an extended period of time. An important issue is what monetary authorities can do in response to such shocks.

Commodity prices continue to rise

The increase in demand for agricultural products for use as biofuels has exerted upward pressure on the prices of maize and wheat. Demand for agricultural land for growing maize and wheat as inputs for the production of ethanol has surged over the past year. The use of biofuels as a source of energy is attractive as an alternative to oil because they contaminate less and because of the doubts surrounding the supply of oil over the next few decades. The use of ethanol is still limited but is expected to expand rapidly in the coming years when second-generation ethanol begins to become available. For now, the reduction in CO₂ emissions has been small, and a recent OECD report warns that the subsidies granted by a number of countries to promote the use of biodiesel are creating distortions in the markets. Despite this, it is to be expected that the prices of these agricultural products will continue to rise in the years ahead.

The increase in the prices of agricultural products has a direct impact on consumers and the marginal costs of production, thereby generating a cost-push effect. The degree of pass-through of this shock to final prices largely depends on the economic structure of each country and the existence of other forces capable of compensating for the negative effect.

Inflation in the region has been relatively controlled since anti-inflationary monetary policies began to be implemented. A number of countries, such as Brazil and Colombia, have undergone episodes of sharp deviation of inflation from target, but this has not led to their abandoning their inflation targeting strategy.

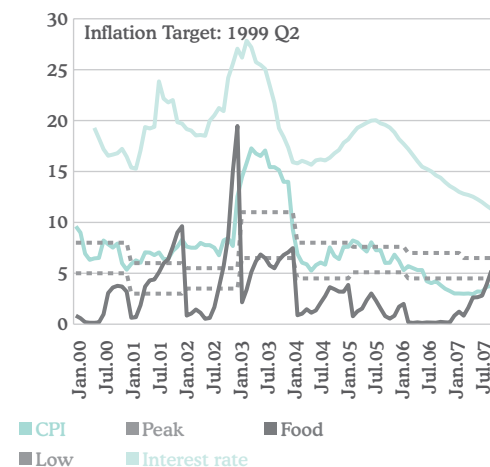
What should monetary authorities do?

In spite of the inflationary pressures, with rates of inflation close to targeted rates, most of the monetary authorities in the region have left interest rates unchanged. In Colombia the current targeted rate of inflation for 2007 is between 3.5% and 4.5%, while accumulated inflation so far this year stands at around 4.7%. In Mexico the inflation target is 3%, and accumulated inflation has reached 2.21%, while the year-on-year rate is running at 3.8%. A similar pattern is found in Chile and Peru. However, the food component of the index, either as a result of the cold weather that has affected harvests or the recent rise in the prices of

Elvira Prades Illanes
elvira.prades@grupobbva.com

Brazil:

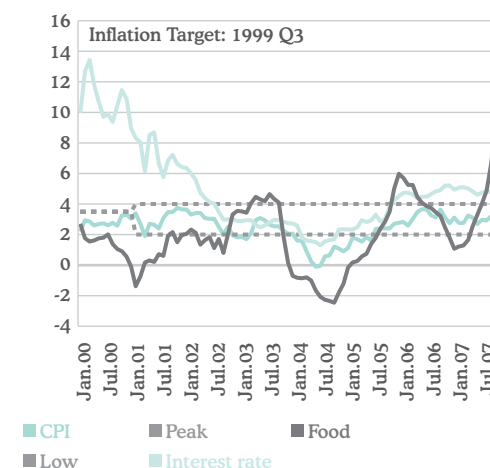
Inflation (% oya)



Source: IMF and National Statistic Institute

Chile:

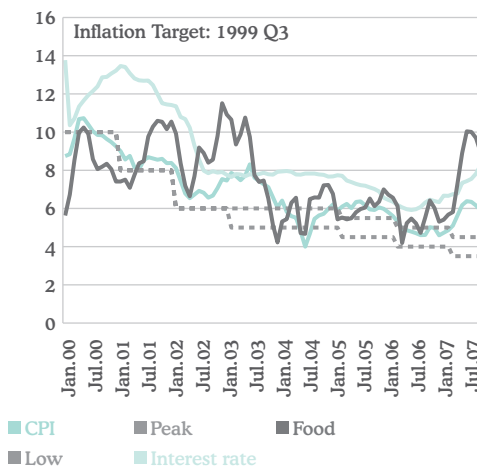
Inflation (% oya)



Source: IMF

Colombia:

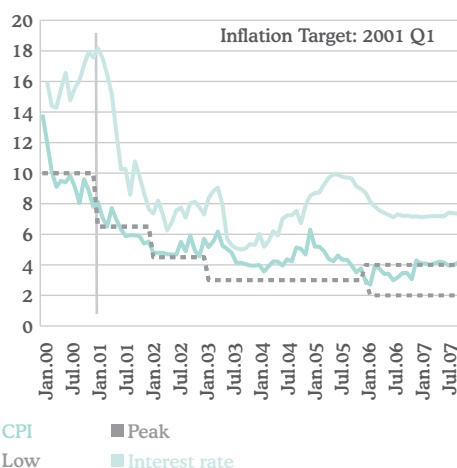
Inflation (% oya)



Source: IMF

Mexico:

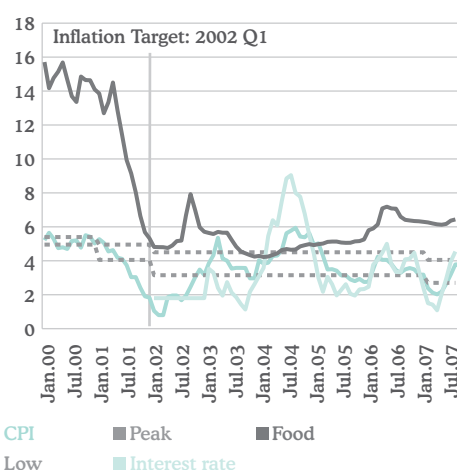
Inflation (% oya)



Source: IMF

Peru:

Inflation (% oya)



Source: IMF

Inflation expectations in 2007

	Inflation forecast				Change in forecast	
	Jan-07		Aug-07		2007	2008
	2007	2008	2007	2008		
ARGENTINA	10,3	10,2	8,7	10,6	-1,6	0,4
BRAZIL	4,0	4,1	3,6	3,8	-0,4	-0,3
CHILE	2,9	2,9	4,8	3,2	1,9	0,3
COLOMBIA	4,1	3,9	5,1	4,2	1,0	0,3
MEXICO	3,5	3,5	3,6	3,5	0,1	0,0
PERU	2,0	2,2	2,4	2,0	0,4	-0,2
VENEZUELA	16,1	16,3	18,7	22,5	2,6	6,2

Source: Consensus Forecast (average)

agricultural products, has also risen rapidly in the past few months, and this is expected to pass through to other components of the index. In Brazil, which is one of the countries most affected by the strong demand for agricultural products, overall inflation has remained in check, at rates below those targeted. However, the annual rate of food inflation reached 6.7% in August.

Inflationary tensions can arise from different sources and depending on the source monetary authorities adopt different strategies. The factors that affect inflation can be grouped into the following categories:

- external factors: exchange rate movements and changes in import prices
- supply shocks
- financial and monetary indicators

In most of these countries, the upswing in prices is due to a supply shock, with the exception of Colombia, where prices have risen because of increasing pressure from domestic demand. In the case of Chile, the increase is largely the result of adverse weather conditions that have affected harvests and therefore reduced supply, as well as the increase in international grain prices. However, these shocks, unlike in the case of demand shocks, bring about a change in relative prices and are generally of a transitory nature. The monetary authorities should therefore simply allow relative prices to adjust on their own. Only if the supply shock were to affect inflation expectations, monetary authorities should switch to more restrictive policies.

...inflation expectations have barely changed

In the adjoining table, we can see how inflation expectations for the end of 2007 have hardly changed. The exceptions are Chile and Colombia, where several factors are exerting inflationary pressures and expectations have risen by 1.2 and 0.9 points, respectively. The Central Bank of Chile has raised official rates to 5.5%. In the case of Colombia, higher inflation is due to buoyant demand generating strong pressure on prices. The Central Bank of Colombia has raised its intervention rate 13 times over the past year and a half. The Central Bank of Mexico has also hiked rates.

The effect of higher interest rates has been to attract capital flows into the region, which can in turn add further appreciation pressures on exchange rates. Brazil has reduced the SELIC rate largely because of the appreciation of the real as a result of high interest rates, which are attracting strong capital inflows. The other central banks have held intervention rates unchanged.

...and some governments have taken measures

In order to limit the negative effect of higher prices on the lowest incomes, the measures that have been adopted have mainly emanated from governments. In the case of Peru, customs duties on basic foodstuffs have been eliminated in order to reduce costs. And Mexico has fixed the price of maize. These measures make it possible to continue to anchor inflation expectations, but cannot be maintained for an indefinite length of time.

Conclusion

The recent run-up in the prices of agricultural products is affecting inflation in a number of countries in the region. In principle, as this is the result of a shock on the supply side, monetary authorities will take little action. However, whether this remains so will depend on the length of time inflation expectations of agents are affected.

Exchange rates and capital flows

Most of the currencies in the region have been under upward pressure against the dollar throughout 2007. The Colombian peso and the Brazilian real have gained the most ground. This year they have accumulated an appreciation of 12% and 10%, respectively, up to the financial turbulence in August. The Chilean peso and the Peruvian nuevo sol have clocked up more modest gains of between 4% and 2%. In contrast, the Mexican peso and the Argentine peso have depreciated to a moderate extent. In the case of the Argentine currency, the appreciation pressures have been contained by monetary authority intervention in the currency market.

Explaining and predicting exchange rate movements is perhaps one of the most difficult tasks in economic analysis. Several theories exist to explain the short-, medium- and long-term movements of exchange rates. Among the factors which determine the exchange rate in the medium term, the following can be highlighted:

- The current account position
- Financial flows
- Interest rate differentials
- Monetary authority intervention

The balance of payments theory of exchange rate determination predicts that the currency of a country with a current account deficit will tend to depreciate, whereas a persistent surplus will tend to lead to appreciation. Following the crises at the end of the 1990s and the sudden drying up of capital inflows, many of the Latin American economies which were running current account deficits moved into surplus. The relationship between a surplus in the current account and an appreciation trend is found in most of the economies in the region (see adjoining Table).

However, the growing importance of financial flows over the past decade, whether as capital inflows in the form of foreign direct investment or as asset purchases of shares and bonds, is having a strong impact on demand for foreign exchange. The recent increase in capital inflows into the region and the current account surplus of the last few years has boosted demand for domestic currencies.

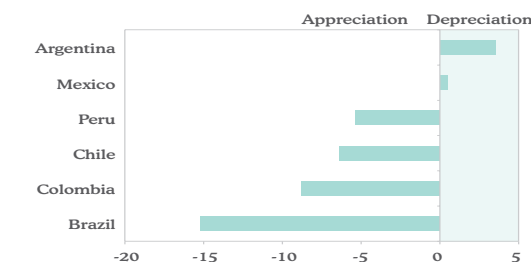
The strength of financial flows is mainly due to the macroeconomic stability of the region. But high interest rates have also attracted inflows of capital in carry trade activity. In the adjoining graphs it can be seen how the balance of payments, defined as the sum of the current account balance and net inflows of FDI and portfolio operations, is running a large surplus and has been accompanied by an appreciation of domestic currencies in the absence of intervention on the part of monetary authorities to check the appreciation pressures.

Strong reserve accumulation

A balance of payments surplus and interventions in the foreign exchange market have led to a sharp increase in international reserves in the Latin American countries. Although the increase is below the level of reserve accumulation in a number of Asian countries, both in terms of volume and as a percentage of GDP, it raises questions as to the reasons that lie behind it, the optimal level of reserves and the possible macroeconomic consequences.

Elvira Prades Illanes
elvira.prades@grupobbva.com

Exchange rates vs. US dollar

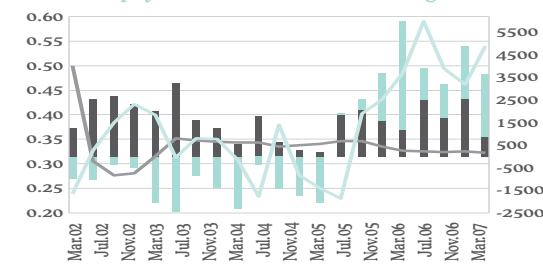


% change, 3 January 2006 - 22 October 2007

Source: Bloomberg

Argentina:

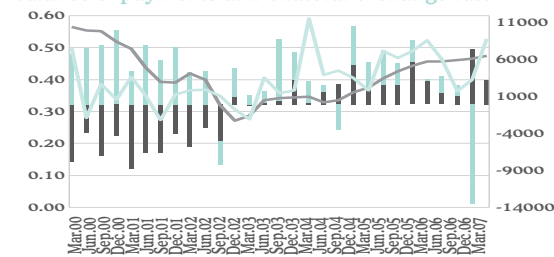
balance of payments and bilateral exchange rate



Source: FMI and Bloomberg

Brazil:

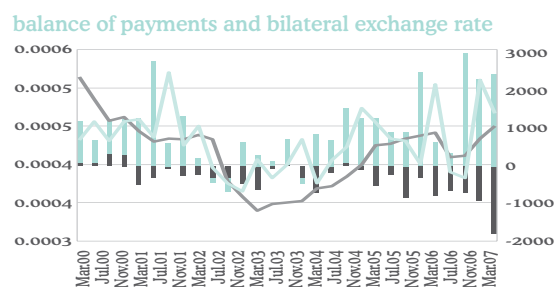
balance of payments and bilateral exchange rate



Source: FMI and Bloomberg

Colombia:

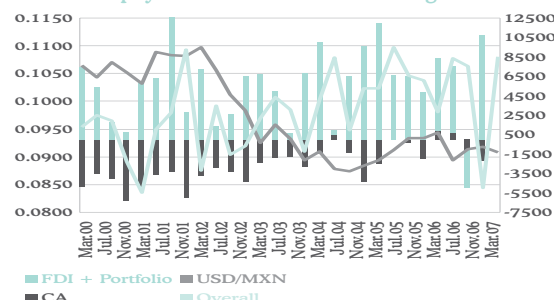
balance of payments and bilateral exchange rate



Source: FMI and Bloomberg

Mexico:

balance of payments and bilateral exchange rate



Source: FMI and Bloomberg

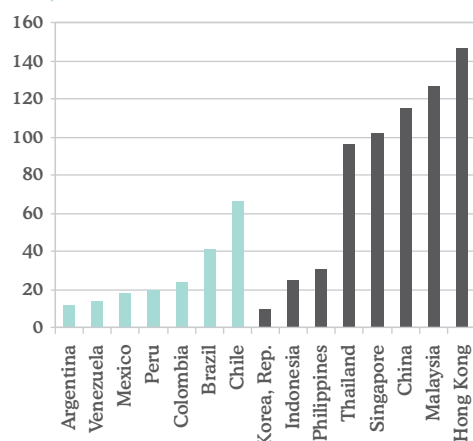
Relationship between current account and exchange rate

	Current account	Nominal appreciation vs. Dollar	FX market intervention
Argentina	+	non	yes
Brazil	+	yes	yes
Chile	+	yes	
Colombia	-	yes	yes
Mexico	-	non	
Peru	+	yes	
Venezuela	+	-	

Source: BBVA

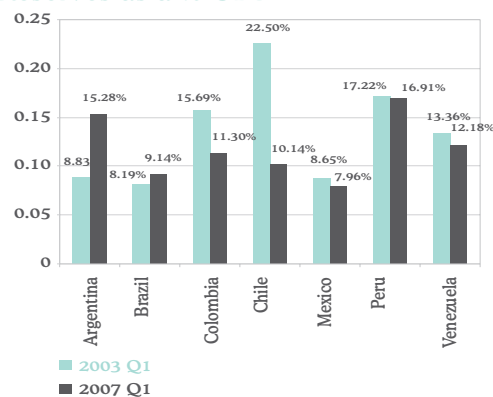
Domestic lending to private sector

(% GDP)



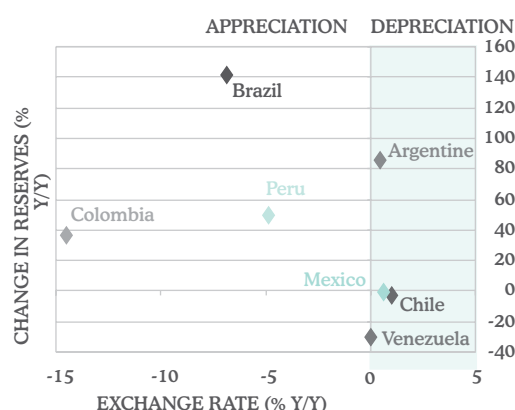
Source: World Bank

Reserves as a % GDP



Source: IMF

Changes in reserves and exchange rate



Latest available data: May 07
Source: FMI and Bloomberg

Recent theories argue for what is referred to as the “new mercantilism”¹. Following the sudden drying up of capital that occurred in the 1990s, reserves came to be seen as a financial cushion for times of crisis and the volatility of capital flows, and to protect against fluctuations in the economic cycle. The low level of financial development and the financial system’s inability to offer savings vehicles with which to make intertemporal transfers in a number of economies would also account for the fact that many Latin American countries have become net savers. One of the variables for measuring the degree of financial development is the ratio of domestic credit to GDP. It can be seen that this ratio has risen much less in Latin America than in Asian countries, and is far below the levels reached in these countries.

The literature has sought to identify the optimal level of reserves. Holding reserves implies both a quasi-fiscal cost and an opportunity cost. The quasi-fiscal cost is estimated as the difference between the yield obtained on reserve assets and the yield that has to be paid on issued paper, due to the fact that in order to avoid inflationary tensions, the monetary authority must drain liquidity from the financial system by issuing bonds.

Most of the countries in Latin America have significantly increased their volume of reserves, although compared with the first quarter of 2003, reserves as a percentage of GDP have fallen. This is largely the result of the upturn in GDP after the crisis, that is to say a denominator effect. One exception is Argentina, where in the first quarter of 2007 reserves reached 15.3% of GDP. In an effort to stabilize the exchange rate and stave off appreciatory pressures, the Central Bank of the Republic has intervened in the foreign exchange market. As can be seen in the adjoining scatter graph, in the last 12 months **Argentina** has increased reserves by 40%, and the exchange rate against the dollar has barely changed. Elsewhere, **Brazil** has been the economy that has seen the biggest rise in the volume of reserves. And in spite of some one-off interventions in the foreign exchange market, the Brazilian real has appreciated considerably. A recent study estimates the optimal level of reserves to be around 10% of GDP². On this measure, the LATAM countries have reserves around this value, whereas the Asian countries are well above the benchmark level. Other classic means of assessing the optimal level of reserves are the ratios of reserves to imports, to short-term debt and to M2. In the region’s economies, these ratios have improved significantly.

As regards the possible economic consequences of this accumulation of reserves, it is worth noting that on the one hand reserves are a guarantee when the need arises to deal with crises, and in averting negative consequences of the type experienced at the end of 1990s. However, on the other hand, they represent a challenge for the monetary authorities, who must take into account the opportunity costs, inflation pressures when operations to drain liquidity are carried out, and the quasi-fiscal costs. The level of reserves accumulated in Latin America is so far not excessive, but if the trend observed over recent years continues, it could become a source of vulnerability.

¹ Durdu, C., Mendoza, E. and Terrones, M., “Precautionary demand for foreign assets in sudden stop economies: an assessment of the new mercantilism”, NBER Working Paper 13123, May 2007.

² Jeanne, O. and Ranciere, R., “The optimal level of international reserves for emerging market countries; formulas and applications”, IMF Working Paper, WP/06/229.

Fdi in Latin America; challenges for the future in a situation of moderate optimism

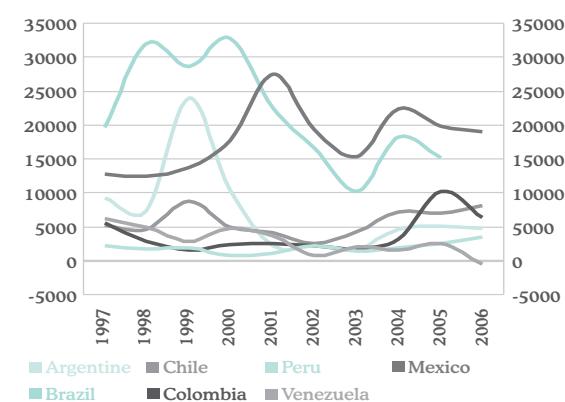
The current economic cycle, characterized by lower levels of aversion to risk and significant institutional improvements, allowed global Foreign Direct Investment (FDI) to grow 34% in 2006 to 1.23 trillion dollars. The main increase took place in Eastern European countries and developed economies, while FDI remained relatively stable in Latin America. The big Asian economies such as China and India form another of the important focal points to take into account as regards FDI both globally as well as regionally.

FDI in Latin America: Evolution

FDI in Latin America in 2006 amounted to 72.440 billion dollars, somewhat above the 71.360 billion reached in 2005 and the 66.000 billion in 2004¹. While this remains a positive figure, it means the pace of the recovery after the fall suffered in the first few years of this decade has been slowing slightly.

As a result, there has been a decrease in Latin America's share of global FDI to 8% of the total, falling for the second year in a row to the second lowest level in the decade. FDI barely grew 1.5% in the region, compared with significant growth globally, and well below the 10% increase in other developing areas.

Net foreign direct investment in America Latina



Source: FMI; BoP Statistic Yearbook 2006; USD Million

However, the most important development in FDI in Latin America in 2006 came from the emergence of new investing countries, which in turn highlights greater diversification in the source of FDI. The traditional sources of Western Europe and the United States are gradually leaving the way clear for the entry of large developing economies such as China, which has become the main investor in South America.

In short, we can say that FDI in Latin America has been regaining the average levels seen in the second half of the 1990s after the sharp falls seen in Argentina and Brazil in the period 2000-2003. Inflows have stabilized in the past two years, and in 2007 there was a strong recovery in FDI in some of the economies in the region.

Inversión extranjera directa en América Latina y Caribe por país receptor

	1992-1996 ¹	1997-2001 ¹	2002-2006 ¹	2005	2006
Latin America	27,537	76,903	61,163	71,361	72,439
South America	16,989	53,362	35,811	44,778	44,679
Argentina	4,683	10,605	3,640	5,008	4,809
Brazil	4,497	27,075	15,746	15,067	18,782
Chile	2,465	5,544	5,809	6,960	8,053
Colombia	1,443	2,964	4,706	10,255	6,295
Peru	2,000	1,535	2,227	2,579	3,467
Venezuela	996	4,492	1,269	2,583	-543
Mexico and Caribbean	10,548	22,542	25,352	26,583	27,760
Mexico	8,724	17,113	19,114	19,643	18,939

Source: Cepal. Foreign Direct Investment in Latin America. Annual Report 2006.

1: Annual averages

Performance by Country

Looking at the total FDI figures, in terms of flows as a percentage of GDP, none of the large Latin American and Caribbean economies achieved rates placing them at the top of the rankings. Small countries such as Trinidad and Tobago, Uruguay and Costa Rica were those which headed the FDI/GDP rankings.

Both Asia and Latin America share some of the classic determinants identified in economic literature in attracting FDI, such as market size, labour costs and the level of productivity. However, in many cases other key factors need to be taken into account such as the quality of a country's institutions and infrastructure development.

¹ Foreign Investment in Latin America and the Caribbean, 2006. CEPAL.

The main recipients of FDI in Latin America have traditionally been Brazil and Mexico. This is borne out by the survey carried out by UNCTAD of experts and employees of multinational companies, who continue to see the two countries as the most attractive in the region, basically because of the size of their markets. Both Brazil and Mexico accounted for 26% (52% together) of the total investment received in Latin America and the Caribbean in 2006. In the case of Brazil, this was 25% more than in the previous year.

The role of India and China: Growing interest

One of the stand-out trends when it comes to looking at the evolution of FDI in the region is the recent entry of the two Asian giants. The main reasons behind this are their high growth levels (10.7% in the case of China and 9.2% in India in 2006) and the need to access natural resources in a situation of limited supply. The combination of these two factors means that while China has its own resources, its sustained high level of growth has created levels of demand which outstrip what it can source domestically or obtain within Asia.

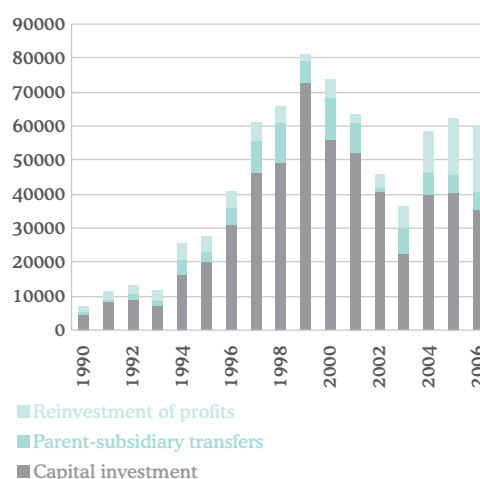
It is striking that the return of this model of development of FDI comes at a time when conditions do not appear ideal given the context of growing nationalism that has led to some renegotiations of the control of natural resources, but in the face of which China has been little affected, and in some cases has found more scope for its investments. Chinese investments in the region have covered a wide range of products, and have impacted the majority of countries. For example, China National Petroleum Corporation (CNPC) has been operating for several years in Venezuelan oilfields, and has recently signed a number of additional agreements. It has been named as a possible partner of Colombia in the construction of an oil pipeline and could play some role in its hydrocarbons sector. In 2004, 50% of Chile's copper exports went to China, while the Asian giant accounted for 60% of Argentina's soya exports in 2005. Its business activities have also focused on other sectors such as iron and steel.

Funding FDI

There are three possible sources of FDI funding for a country. On the one hand, there is the reinvestment of profits of companies already established in a country. On the other hand, there are in-company transfers made by the parent to a subsidiary. These are synonymous with economic stability in the region. Lastly, there are new investments, which might appear the most desirable from the point of view of economic development.

In 2006 the trend of profit reinvestment by companies consolidated itself. This points to a scenario of corporate stability and the consolidation of investments. After the growth in FDI seen in the middle of the 1990s through mergers and acquisitions, there appears to have been a shift in the origin of FDI as from 2003. While capital investment remains the main source of investment with almost 60% of the total (although this percentage has fallen since 1990), reinvestment of profits has been gaining weight. This marks a trend towards investor stability in the region (accounting for 31.67% of investment obtained in 2006, which constituted the biggest contribution in more than 15 years, and almost 25 percentage points more than at the start of the 1990s). Separately, parent-to-subsidiary flows have decreased in importance (accounting for 9.21% of the total in 2006 against 18% in 1996).

FDI in Latin America and Mexico



Source: BBVA a partir de BoP FMI

As seen in the recent evolution of FDI, forecasts for the future are encouraging. Mexico and Brazil, the two main recipient countries in the region, continue to be the most attractive destinations for business. Brazil received a record 10.318 billion dollars in FDI in June 2007, ten times more than the 1.060 billion obtained in June the previous year, and even more than total FDI inflows in the first half of 2006. Growth in Brazil in the first half of 2007 was 182.5%, compared with the same period a year earlier. FDI in Mexico for its part in the first quarter of 2007 amounted to 6.553 billion dollars, an increase of 118,1% from the 3.005 billion dollars in the same period in 2006, and the second highest quarterly figure.

Most attractive business locations in 2005 and 2006

	Experts	TNC's (1)
1	China (85%)	China (87%)
2	USA (55%)	India (51%)
3	India (42%)	USA (51%)
4	Brazil (24%)	Russia (33%)
5	Russia (21%)	Brazil (20%)
6	UK (21%)	Mexico (16%)
7	Germany (12%)	Germany (13%)
8	Poland (9%)	UK (13%)
9	Singapoore (9%)	Thailand (11%)
10	Ukraine (9%)	Canada (7%)

Source: Unctad

(1) Multinational companies

In short, FDI in Latin America faces significant challenges, above all from an institutional point of view in order to attract quality investment. These challenges, however, will be faced from a reasonably optimistic perspective. The goal of attracting FDI is the main objective of the governments of the countries in the region. In order to do so, governments need to try to improve, among other things, the quality of education, infrastructure, the political climate, coordination between the public and private sectors, the quality of institutions and macroeconomic stability; in doing so, leaving aside the passive policies adopted so far.

REFERENCES

- *Foreign direct investment and transnational companies in Latin America and the Caribbean. CEPAL 2006 Annual Report.*
- *Trends and recent developments in foreign direct investment. OECD. June 2007.*
- *World Investment Report 2006. FDI from Developing and Transition Economies: Implications for Development. UNCTAD. New York and Genoa, 2006.*
- *New UNCTAD Surveys: Foreign Direct Investment Prospects Promising for 2005-2008.*

Antonio Marín Campos
antonio.marin.campos@grupobbva.com

Target: Investment grade

Latin America is immersed in a process of significant changes. Most of Latin America in the past few years has shown a significant increase in credibility and economic and financial stability. This, however, has not taken place without sensitivity to external changes, although even in the most unstable cases, a process of reducing foreign debt has taken place, along with the development of domestic markets and an increase in confidence on the part of foreign markets.

Gaining investor confidence is precisely one of the objectives of the region. As a consequence of the improvements made, the ratings of the countries in the region have risen, and are now increasingly closer to achieving investment grade status.

Investment grade in Latin America countries

	In 2002	Today
Chile	A-	A
Peru	BB-	BB+
Brazil	B	BB+
Argentina	D	B
Mexico	BBB-	BBB+
Venezuela	B	BB-
Colombia	BB	BB+

Source: Fitch

Chile and Mexico have graduated

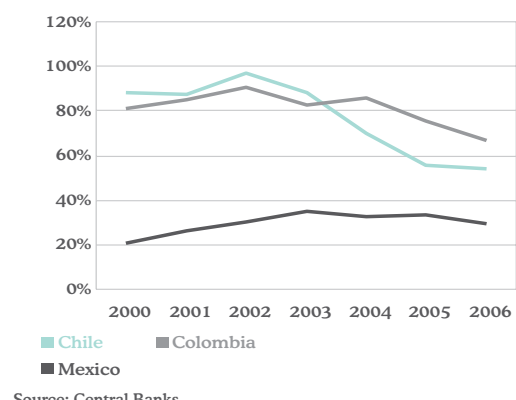
There are currently two countries in Latin America with investment grade: Chile and Mexico. This facilitates access to funding and the development of trading activities. Chile gained investment grade status before 1993, while Mexico did so more recently (2002). Chile enjoys economic stability and a geographical situation which have allowed it to stand at the top of the rankings in the region. It currently has the highest rating in all of Latin America, and is at the same level as a number of developed economies. Of the 18 emerging European markets, 12 have investment grade, such as is the case of Poland whose rating was raised in 2007 from BBB+ to A-.

Chile and **Mexico** have undergone big changes since they achieved investment grade status, mainly due to a fall in financial costs and greater demand for their bonds. Chile's

rating has not been questioned and it remains the country with the lowest risk in Latin America. However, a stabilization in its growth has been observable over the past few years within an environment of greater external and domestic risks. On the other hand, Chile has continued to benefit from a favourable international scenario. It continues to push for free trade agreements, and its trade relations have benefited from increased demand for Chilean products, as well as an improvement in its terms of trade. The prospects for the future are, therefore, very optimistic.

Mexico has significantly reduced the level of its debt, which provides it with greater stability. It has also signed a free trade agreement with the European Union, and ties between the two economic regions should start to increase.

Ratio of reserves to imports (fob)



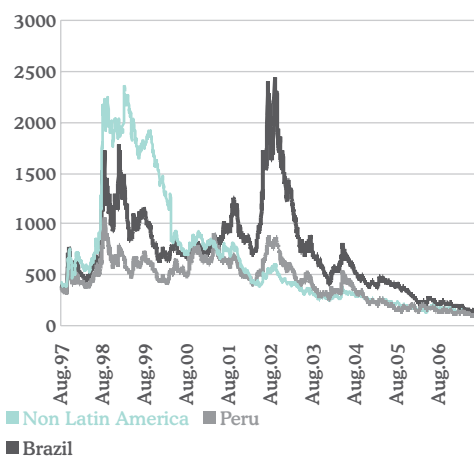
Brazil and Peru are on the right path

With the current cycle of growth and reforms, the debate centres on which other countries could gain investment grade status in the coming months. In the case of **Brazil** many reforms remain pending, although the changes introduced so far have had a big impact. But in order to achieve investment grade status, the Brazilian government needs to push forward with an agenda of reforms in the areas of both social security and pensions, as well as the rationalization of its tax structure, which may be a factor dragging on investment and greater growth.

The prospect of lower credit risk has already sparked greater demand in the country for fixed assets and stocks. The target of achieving investment grade has speeded up the stabilization process: the public deficit has gone from 2.5% to 2.1% of GDP. Since the crisis in confidence suffered in 2002, the fall in Brazil's risk premium has been the biggest in the region, mainly due to significant macroeconomic consolidation. Due to the significant increase in its reserves, Brazil will become a net lender in 2008-2009.

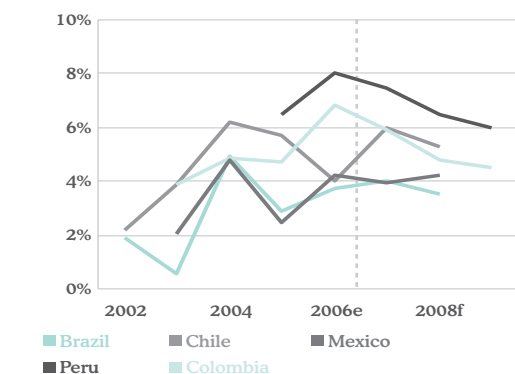
As a consequence of all of these positive changes, on August 23, during the height of the crisis in the markets, the ratings agency Moody's raised Brazil's rating by a notch, leaving it only one below achieving investment grade. Given the period of instability in which the global economy found itself, this appears to be a clear signal of the good performance of the country.

EMBI+



Source: Datastream

GDP growth



Source: Central Banks

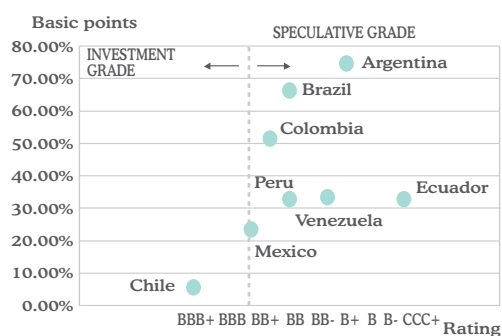
Peru is another country which could shortly achieve investment grade status due to its positive macroeconomic efforts. In the past few years it has shown the highest economic growth in Latin America, posting an average of almost 6%. Peru has very positive indicators: a low ratio of public debt to GDP (31.5% at the end of 2006), low inflation, and an improvement in its terms of trade as well as an increase in private-sector savings are a few of the indicators of Peru's current economic situation.

The markets are factoring in the improvements in the Brazilian and Peruvian economies. This is evidenced in the perception of sovereign risk, with the sovereign spread converging towards the levels of countries with investment grade status.

Prospects for Colombia are also good

Colombia has followed a very positive growth path in the past few years. Standard and Poor's reassigned it investment grade status for its long-term foreign-currency debt in 2007 after having lost it in 1999 due to the economic crisis then. The upgrade was based on the strength of its institutions, low volatility in GDP, and the strict fulfilment of international commitments and payments. Other agencies are now expected to upgrade their ratings for the Andean country. Investment grade status brings with it a number of benefits such as access to funding in the international capital markets, and the acquisition of Colombian bonds by investors. Large institutional investors limited to buying only instruments with investment grade status can now include Colombian foreign debt in their portfolios. This puts Colombia, along with Chile and Mexico, in a favourable position among the countries in Latin America. The indicators show that Colombia's performance in the past few years has been positive. The chances, therefore, of Colombia achieving ratings upgrades towards investment grade status are good. However, in order to get there a series of reforms is required which stretch from fiscal to pension issues.

Credit rating and public debt as % of GDP (2006)



Source: BBVA using JP Morgan, Standard and Poor's data

The improvements seen in the perception of risk in the region have occurred as a result of an improvement in the fundamentals of the majority of countries, more than due

to the favourable cycle for commodities, which has brought wealth to the foreign sector of the region. This is evidenced by developments during the crisis in the markets last August when there was no significant movement in the Latam EMBI, nor sharp and sustained changes in exchange rates, nor significant outflows of capital, and much less a halt to inflows to the region. This has resulted in a very different and promising performance compared with similar crises in the past.

The strengths shown by the majority of the countries in Latin America will allow growth in the region to continue at rates of over 4% in the next few years. In this environment, the countries which have best done their homework to obtain investment grade status are: Brazil, Peru and Colombia.

Beatriz Asensio
beatriz.asensio@grupobbva.com

International Context

	Real GDP (%)				Consumer prices (%. average)			
	2005	2006	2007	2008	2005	2006	2007	2008
USA	3.2	3.3	1.9	2.2	3.4	3.2	2.6	2.1
EMU	1.5	2.7	2.5	2.0	2.2	2.2	2.0	1.9
Japan	1.9	2.2	1.9	2.2	-0.3	0.1	0.0	0.5
China	10.4	11.1	10.9	9.9	1.8	1.5	4.5	3.4

Official interest rate (%. end of period)					Exchange rate (vs \$. end of period)			
	31/12/06	jun-07	dic-07	dic-08	31/12/06	jun-07	dic-07	dic-08
USA	5.25	4.75	4.25	4.50				
EMU (\$/€)	3.50	4.00	3.75	3.75	1.32	1.40	1.41	1.38
Japan (yens/\$)	0.25	0.50	0.75	1.25	117	115	115	110
China (cny/\$)	6.12	7.56	8.64	8.64	7.81	7.61	7.3	7.4

América Latina

	Real GDP (%)				Consumer prices (%. end of year)			
	2005	2006	2007	2008	2005	2006	2007	2008
Argentina	9.2	8.5	7.5	6.3	12.3	9.8	9.0	11.0
Brazil	2.9	3.7	4.5	4.2	5.7	3.1	3.5	3.8
Chile	5.7	4.0	6.0	5.3	3.7	2.6	6.2	3.6
Colombia	4.7	6.8	5.9	4.8	4.9	4.5	5.1	3.8
Mexico	2.8	4.8	3.0	3.4	3.3	4.1	3.6	3.5
Peru	6.7	7.6	7.4	6.3	1.5	1.1	3.5	2.0
Venezuela	10.3	10.3	7.8	5.7	14.4	17.0	17.7	16.0
LATAM ¹	4.6	5.4	5.1	4.6	6.0	5.1	5.4	5.3
LATAM Ex-México	5.2	5.7	5.7	5.0	6.9	5.5	6.0	6.0

	Fiscal balance (% GDP)				Current account balance (% GDP)			
	2005	2006	2007	2008	2005	2006	2007	2008
Argentina ²	1.8	1.8	1.5	1.3	3.1	3.8	2.1	0.5
Brazil	-3.1	-3.0	-3.6	-3.0	1.8	1.6	1.1	0.9
Chile ²	4.5	7.7	7.0	5.8	1.0	3.6	5.4	2.3
Colombia	0.0	-0.8	-0.9	-1.0	-1.5	-2.1	-3.9	-3.7
Mexico	0.1	0.2	0.0	0.0	-0.7	-0.2	-1.6	-2.0
Peru	-0.3	2.1	1.6	0.8	1.4	2.8	0.8	-0.4
Venezuela ²	1.6	0.0	-1.2	-3.0	17.7	15.0	10.8	5.5
LATAM ¹	-0.7	-0.5	-1.1	-1.1	1.9	2.3	1.0	0.2
LATAM Ex-México	-1.0	-0.8	-1.6	-1.5	3.3	3.5	2.2	1.3

¹ Average of the countries. ² Central Government.

Exchange rate (vs \$. end of year)					Interest rates (%. end of year) ³			
	2005	2006	2007	2008	2005	2006	2007	2008
Argentina	3.01	3.06	3.18	3.26	6.4	8.9	9.8	11.0
Brazil	2.28	2.15	1.85	1.90	18.00	13.25	10.75	10.00
Chile	514	528	503	500	4.50	5.25	5.75	6.25
Colombia	2284	2239	2063	2158	6.3	6.8	9.3	9.3
Mexico	10.69	10.88	10.96	11.36	8.0	7.0	6.9	6.5
Peru	3.42	3.21	3.10	3.16	3.25	4.50	5.25	5.50
Venezuela	2150	2150	2150	2150	11.7	10.3	11.0	11.0

³ For each country interest rate see the following page.

Argentina

	2005	2006e	2007f	2008f
PIB (%)	9.2	8.5	7.5	6.3
Inflación IPC (%. fin de año)	12.3	9.8	9.0	11.0
Balanza comercial (m.M. \$)	11.7	12.3	9.6	6.3
Cuenta corriente (% PIB)	3.1	3.8	2.1	0.5
Reservas (m.M. \$. fin de año)	28.1	32.0	43.2	48.9
Tipo de cambio (fin de año vs US\$)	3.01	3.06	3.18	3.26
Saldo sector público (% PIB) ¹	1.8	1.8	1.5	1.3
Tasa de interés (fin de año) ²	6.4	8.9	9.8	11.0
T. cambio efectivo real (fin de año. dic-97=100)	52	52	51	55
BBVA-MAP (fin de año. jun-95=100)	118	140	150	146
¹ Argentina: Central Government Balance. Excluding privatisation receipts				
² Argentina: 30-d deposits interest rate in pesos; Brazil: SELIC rate				

Brazil

	2005	2006e	2007f	2008f
	2.9	3.7	4.5	4.2
	5.7	3.1	3.5	3.8
	44.8	46.1	41.3	35.0
	1.8	1.6	1.1	0.9
	53.8	85.8	95.0	101.0
	2.28	2.15	1.85	1.90
	-3.1	-3.0	-3.6	-3.0
	18.00	13.25	10.75	10.00
	81	83	89	86
	78	81	81	84

Chile

	2005	2006e	2007f	2008f
GDP (%)	5.7	4.0	6.0	5.3
Consumer prices (% end of year)	3.7	2.6	6.2	3.6
Trade balance (\$bn)	10.2	21.3	26.6	18.2
Current account (% GDP)	1.0	3.6	5.4	2.3
Reserves (\$bn. end of year)	17.0	19.4	16.8	16.8
Exchange rate (end of year vs US\$)	514	528	503	500
Fiscal balance (% GDP) ¹	4.5	7.7	7.0	5.8
Interest rate (end of year) ²	4.50	5.25	5.75	6.25
Real effective exchange rate (end of year. dec-97=100)	87	93	92	91
BBVA-MAP (end of year, Jun-95=100)	110	139	147	126
¹ Chile: Central Government				
² Chile: Official interest rate (from August 2001 in nominal terms); Colombia: 90-d DTF interest rate				

Colombia

	2005	2006e	2007f	2008f
	4.7	6.8	5.9	4.8
	4.9	4.5	5.1	3.8
	1.4	-0.1	-3.3	-3.4
	-1.5	-2.1	-3.9	-3.7
	15.0	15.4	21.3	21.8
	2284	2239	2063	2158
	0.0	-0.8	-0.9	-1.0
	6.3	6.8	9.3	9.3
	92	91	100	96
	144	158	160	156

Mexico

	2005	2006e	2007f	2008f
GDP (%)	2.8	4.8	3.0	3.4
Consumer prices (% end of year)	3.3	4.1	3.6	3.5
Trade balance (\$bn)	-7.6	-6.1	-14.3	-21.1
Current account (% GDP)	-0.7	-0.2	-1.6	-2.0
Reserves (\$bn. end of year)	68.7	67.5	65.0	65.0
Exchange rate (end of year vs US\$)	10.69	10.88	10.96	11.36
Fiscal balance (% GDP) ¹	0.1	0.2	0.0	0.0
Interest rate (end of year) ²	8.0	7.0	6.9	6.5
Real effective exchange rate (end of year. dec-97=100)	114	112	112	111
BBVA-MAP (end of year, Jun-95=100)	184	203	208	194
² Mexico: 28-d Cetes interest rate; Peru: Interbank interest rate				

Peru

	2005	2006e	2007f	2008f
	6.7	7.6	7.4	6.3
	1.5	1.1	3.5	2.0
	5.3	8.9	8.0	7.2
	1.4	2.8	0.8	-0.4
	14.1	16.7	n.d.	n.d.
	3.42	3.21	3.10	3.16
	-0.3	2.1	1.6	0.8
	3.25	4.50	5.25	5.50
	87	88	86	83
	113	135	145	128

Uruguay

	2005	2006e	2007f	2008f
GDP (%)	-11.0	2.2	11.8	6.6
Consumer prices (% end of year)	25.9	10.2	7.6	4.9
Trade balance (\$bn)	0.0	0.2	0.0	0.0
Current account (% GDP)	3.1	-0.5	-0.8	0.6
Reserves (\$bn. end of year) ¹	0.8	1.9	2.3	3.1
Exchange rate (end of year vs US\$)	27.1	29.2	26.6	23.5
Fiscal balance (% GDP) ²	-4.1	-3.2	-1.8	-2.5
Interest rate (end of year) ³	69.9	7.5	5.7	4.6
Real effective exchange rate (end of year. dec-97=100)	90	75	81	87
BBVA-MAP (end of year, Jun-95=100)	87	88	88	83
¹ Venezuela: Central Government				
² Uruguay: 30-d BCU Papers interest rate in pesos; Venezuela: 90-d Certificado Participaciones rate				
³ Venezuela: including FIEM				

Venezuela

	2005	2006e	2007f	2008f
	10.3	10.3	7.8	5.7
	14.4	17.0	17.7	16.0
	30.4	33.2	30.0	17.9
	17.7	15.0	10.8	5.5
	29.6	37.3	29.2	29.2
	2150	2150	2150	2150
	1.6	0.0	-1.2	-3.0
	11.7	10.3	11.0	11.0
	90	101	114	130
	265	310	324	294

For more information please contact:

Servicios Generales Difusión BBVA Gran Vía 1 planta 2 48001 Bilbao P 34 944 876 231 F 34 944 876 417 www.bbva.es

Register in Madrid: M-31252-2000

Economic Research Department:

Director:

José Luis Escrivá

Chief Economist:

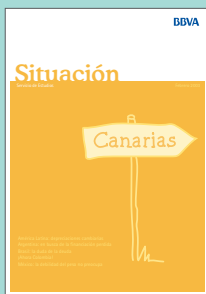
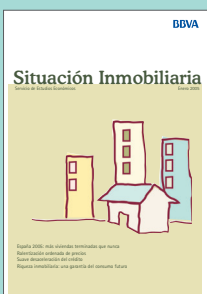
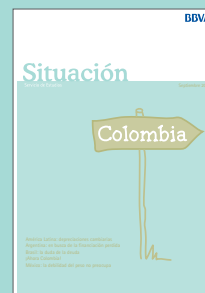
Europe and financial scenarios: Mayte Ledo
Financial systems and scenarios: Carmen Hernansanz
Spain and sectoral analysis: Julián Cubero
Europe: Sonsoles Castillo
Quantitative research and development: Rodolfo Méndez

Latam and Emerging Markets: Giovanni di Placido
Argentina: Ernesto Gaba
Chile: Miguel Cardoso
Colombia: Juana Patricia Téllez
Peru: Hugo Perea
Venezuela: Alejandro Puente

North America: Jorge Sicilia
United States: Nathaniel Karp
Mexico: Adolfo Albo

Global Trends: Joaquín Vial

other publications



This document was prepared by Banco Bilbao Vizcaya Argentaria's (BBVA) Research Department on behalf of itself and its affiliated companies (each a BBVA Group Company) for distribution in the United States and the rest of the world and is provided for information purposes only. The information, opinions, estimates and forecasts contained herein refer to that specific date and are subject to changes without notice due to market fluctuations. The information, opinions, estimates and forecasts contained in this document have been gathered or obtained from public sources believed to be correct by the Company concerning their accuracy, completeness, and/or correctness. This document is not an offer to sell or a solicitation to acquire or dispose of an interest in securities.