THE BOARD OF DIRECTORS' REPORT TO THE

CONGRESS OF COLOMBIA

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The Board of Directors' Report to The Congress of Colombia

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Banco de la República
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Bogotá, August 3, 2012

Honorable Chairmen and Members
Third Standing Constitutional Committees of
The Senate and
The House of Representatives

Dear Sirs,

Pursuant to Law 31 of 1992, Article 5, the Board of Directors of the Banco de la República hereby submits for consideration by Congress a report on the country's macroeconomic results for the year to date. The report also presents the Board's targets for this year and the outlook for the different macroeconomic variables. The last two chapters describe the composition of the international reserves and discuss the Banco de la República's projected financial position for 2012.

Yours truly,

José Darío Uribe Escobar
Governor General

MONETARY, EXCHANGE-RATE AND CREDIT POLICY

MONETARY POLICY

Colombia's Constitution of 1991 provides that "The State, through the Banco de la República, shall ensure that the purchasing power of the currency is preserved." Subsequently, by Decision C-481 dated July 7, 1999, the Constitutional Court expanded on the coordination that should exist between monetary, exchange-rate and credit policies under the charge of the Banco de la República's Board of Directors, and fiscal, wage and employment policies under the charge of the government:

> "...the Bank's duty of preserving the currency's purchasing power shall be performed in coordination with the general economic policy…"

The constitutional mandate of keeping prices stable in an economy provides several advantages. A major advantage is that achieving this aim will protect the underprivileged from the tax represented by inflation. This social group, whose income cannot keep pace with rising prices for basic goods, will see their purchasing power strongly reduced by acceleration in inflation.

Monetary policy should ensure price stability in coordination with a general policy designed to foster growth in output and employment. In this context, raising output over and above the country's installed capacity must be avoided, for besides generating inflationary pressure it will jeopardize the economy's sustained growth. Accordingly, monetary policy should also aim to stabilize output and employment at their long-term sustainable levels.

The Bank's inflation-targeting strategy, introduced by the Board of Directors in 2000, is geared toward fulfilling this constitutional mandate. Monetary policy applies this strategy to lower inflation and keep it stable and smooth out fluctuations in output and employment around a path of sustained growth.

For 2000 and 2001 the Board set specific inflation targets, but from then on it started to announce a target range for the following year, still with the aim of reducing growth in the prices of basic goods and safeguarding the currency's purchasing power. Moreover, in November 2001 the Board announced that the long-term inflation target was to be 3%, explaining that this amounted to fostering price stability in the country. Thus, by mid-2009 inflation had fallen to around 3%, and since 2010 the set range (2%-4%) has been centered on the long-term target.

The inflation target range is a communications strategy to inform the pubic that inflation dynamics involves uncertainty and inflation control is subject to transitory shocks that cannot always be counteracted by monetary policy. Such temporary fluctuations do not imply a lack of commitment on the part of the central bank regarding the aim of keeping prices stable.

Monetary-policy decisions are based on analysis of the current state and outlook of the economy, and evaluation of inflation forecasts and expectations relative to the long-term target (3%). Thus, the Board determines the value that its main monetary instrument, the benchmark interest rate (or policy rate, or intervention rate), should have in order to stabilize inflation at 3%. The chief criteria the Board takes into account in setting the benchmark rate are the following:

- If the analysis of current and future inflation and of the variables explaining it indicates that it may deviate from 3%, the Bank's intervention rate is altered to move inflation to the long-term target within a reasonable time. If the deviation is exclusively due to temporary supply factors (for example, higher food prices) and inflation expectations are "anchored" to the target, no alteration is made to the monetary-policy stance.
- In setting the intervention rate the aim is to keep an appropriate balance between meeting the inflation target and accomplishing the objective of smoothing out fluctuations in output and employment around their paths of sustained growth. In this respect, Colombia's inflation targeting is flexible, in that it seeks to keep inflation at 3% and to avoid excess spending or output capacity.
- Another aim in setting the intervention rate is to have monetary policy help to mitigate the risk of financial imbalances, understood as excessive leveraging or high asset prices that jeopardize the country's financial stability. Monetary policy would thus be instrumental in moving the economy close to its path of sustained growth in medium- and long-term horizons.

The above criteria are incorporated into monetary-policy decisions in such a way as to reach a balance between them. Thus, the intervention rate is altered gradually, except in conditions posing a highly probable (or certain) risk that inflation will deviate considerably from target or the economy from its path of sustained growth.

Another function of the Banco de la República is to ensure there is liquidity in the market. The Bank performs this function on a daily basis by carrying out one-day repo operations with the financial system, at a cost equal to the intervention rate.

EXCHANGE-RATE POLICY

Colombia has been operating a flexible exchange-rate regime since September 1999; this means that the price of the peso against other currencies is given by the free supply and demand of foreign exchange in the currency market. This regime, besides being consistent with inflation targeting, has the following advantages:

- Exchange-rate flexibility is desirable for countries that often face real shocks. For example, sharp falls in the terms of trade are usually accompanied by nominal depreciations that help to smooth the shock. Thus, exchange-rate movements tend to accommodate relative prices in the economy and lessen the impact of shocks on activity and employment.

- In the face of external shocks, a good part of the adjustment is made by the exchange rate, which means that the domestic market interest rate is more stable in a flexible regime than in a fixed exchange-rate system.

- In a floating exchange-rate regime the authorities of a small and open economy, such as Colombia's, have greater autonomy in formulating monetary policy and are thus able to react to their own economic cycles. In contrast, where the exchange rate is pegged to the currency of a developed country, monetary policy would be subject to decision-making by the foreign monetary authority. And if the economic cycles of the two countries are not synchronized, the developed country's monetary actions could have negative effects on output and employment in the emerging country.
- A flexible exchange-rate system discourages currency mismatches, which arise when an agent's income is in local currency and part of his liabilities in another currency without any kind of hedging. They pose a risk to a country's financial stability.
- With inflation expectations standing at the mid-point of the target range, exchange-rate flexibility is a useful tool for stabilizing output. In fact, since the flexible regime was introduced in this country, monetary policy has been strongly counter-cyclical, in contrast to what it was in the nineties.

It follows from the foregoing that setting target levels for the exchange rate may be inconsistent with the inflation target, weakening the inflation-targeting scheme and undermining monetary-policy credibility. Furthermore, any attempt to fix the exchange rate is attended by risks of financial instability since economic agents do not incorporate exchange-rate risk in their borrowing decisions.

Nevertheless, the Banco de la República as the exchange-rate authority has the power to intervene in the currency market. Inflation targeting in the context of a flexible exchange-rate regime must assess whether such intervention is consistent with meeting the inflation target in the medium term. Exchange-rate management thus recognizes the importance of flexibility as a central element of inflation targeting.

Since the flexible exchange-rate regime was put in place, the Bank has taken part in the currency market with sterilized interventions, without seeking to fix or reach any specific exchange-rate level. The main reasons for the interventions have been the following:

- To mitigate exchange-rate movements that are clearly out of step with the behavior of the economy's fundamentals, the aim being to avoid subsequent currency-price corrections that may jeopardize the inflation target.
- To reduce exchange-rate volatility to around its trend.
- To increase the level of international reserves, so as to reduce external vulnerability and improve the conditions of access to external credit.
- To ensure foreign-currency liquidity needs.

MONETARY POLICY AND FINANCIAL STABILITY

Monetary policy also seeks to avoid financial imbalances arising, for example, from high leveraging and excessive risk taking, which usually cause financial crises and strong fluctuations in output and employment. There are a variety of measures for dealing with such situations, and use of any specific subset of them can be justified according to the general conditions of the economy and of the particular financial problem to be dealt with.

Economic theory and country experience teach that one of the determinants of financial instability is having “abnormally” high or low policy interest rates over long periods. Where policy rates are abnormally low, agents tend to underestimate risk, asset prices may rise beyond what is sustainable, and there is a general tendency to invest in riskier assets. Lending bodies, for their part, increase loans as a proportion of capital, and sometimes they also lower the requirements for granting them. In addition, financial-market participants replace safe assets by riskier ones, to obtain higher returns. The economy may thus be faced with high levels of debt and risk, becoming more vulnerable to unexpected income adjustments caused, for example, by employment losses.

Where policy rates are exceptionally high, economic activity and asset prices may fall and unemployment rise, increasing the risk of loan delinquency or default. If this risk materializes, default by debtors and the adverse impact of lower asset prices will threaten the solvency of credit establishments and generally hamper the proper functioning of financial markets and monetary policy.

Strong prolonged deviation of the policy rate from its “normal” level may thus make it more likely for situations of financial instability to arise. Mitigating this risk is therefore one of the criteria that the Bank’s Board of Directors applies in setting the policy rate.

However, policy-rate movements do not suffice to prevent financial imbalances from forming. In a context such as this, the Bank may also use other instruments if it considers it necessary to supplement the policy rate in order to counteract, for example, potentially excessive lending. The use of such other instruments should be based on a careful cost-benefit analysis. Furthermore, institutions sharing the aim of preserving financial stability, such the Financial Superintendency, the Ministry of Finance and Fogafín (deposit insurance agency), may adopt different measures to discourage financial imbalances.

Lastly, the Banco de la República, as the central bank and currency issuer, has to ensure the secure and efficient functioning of the payment systems, in addition to being the “lender of last resort”.

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Introduction

Despite great uncertainty on the international front, the Colombian economy continued to grow at a faster pace than its average since 2000, thanks mainly to household consumption.

The first half of 2012 saw, besides relatively robust economic activity, progressive convergence of inflation toward the 3% long-term target, with the rate falling from 3.73% in December 2011 to 3.2% in June 2012.

To avoid excessive borrowing in the private sector and to reduce inflation to 3%, the Bank's Board of Directors decided to raise the intervention rate by 25 basis points in January and a further 25bp in February, up to 5.25%. Subsequently, in view of greater weakening of the global economy, which is already affecting Colombia's economy, the Board decided on July 27 to lower the rate by 25bp to 5.0%.

In the first quarter of 2012 international markets were optimistic about the likelihood of a solution being found to the European crisis and US economic recovery gathering momentum. But this optimism faded away in the second quarter as political and financial tensions grew in Europe and economic performance in the US proved to be less than expected. This was reflected in loss of stock values on exchanges, weaker global demand, lower oil and commodity prices and higher risk premiums.

The market optimism shown in the first quarter of 2012 was dispelled in the second quarter by greater political and financial tensions in Europe.

The year began relatively well thanks to confidence inspired by the new support plan for Greece with private-sector participation, and to the European Central Bank's decision to provide abundant market liquidity. In addition, good growth began to be shown by developed economies such as Germany and Japan, and in the US there were signs of improvement in the labor market and of recovery in industrial activity. This positive climate deteriorated fast around May on account of political uncertainty in the euro zone, a heightening of Spain's banking-sector problems, and release of discouraging US growth figures that pointed to the continued existence of many structural problems in the US economy. Moreover, *Despite high uncertainty and volatility on the international front, Colombia's economy grew by 4.7% in the first quarter of 2012.*

declining global demand resulted in considerable slowdown of economic activity in China and other emerging Asian economies and also in Brazil.

Economic nervousness on the international front subsided somewhat as political uncertainty in the euro area decreased and the European authorities began to make progress on issues of banking integration and strengthening of the rescue fund.

Amid so such external uncertainty and volatility, the Colombian economy has shown considerable macroeconomic stability, becoming more attractive to foreign investment. In the first quarter of 2012, annual GDP growth was 4.7%, slower than growth in 2011 (5.9%) but faster than the average for the decade of 2000 (4.3%) and similar to the economy's estimated potential capacity.

The Colombian economy's growth in such a problematic international setting resulted from domestic demand remaining high, particularly household consumption, which expanded by 5.9% and contributed 3.8 percentage points to first-quarter growth. Strong consumption, in turn, resulted from lower unemployment, firm consumer confidence, and rapidly rising consumer borrowing (21% annual growth in the first quarter, much the same rate as in the previous two quarters). Investment grew by 8.3%, faster than GDP but much more slowly than in 2011. The slowdown in investment came from a fall in civil works (-8.1%), including road-infrastructure construction, transportation equipment and constructions for mining. Lastly, the first quarter saw the effects of deterioration in the international situation on Colombian foreign trade, with growth falling in both exports (6.3% against 11.4% in 2011) and imports (13% against 21.5% in 2011). The slowdown in external sales affected all kinds of goods, particularly mining and industrial products, while imports lost pace because of declining growth in purchases of capital goods, particularly transport equipment, and commodity imports. The different branches of activity exhibited a mixed behavior. Some sectors, such as mining, transportation and financial services, continued to expand at much the same pace as in 2011. Others, such as farming, industry, construction and commerce, slowed down, significantly in the case of farming and industry, because of supply problems in some cases, and in others because of weakening global demand, as discussed in detail further below.

The Colombian economy's first-quarter growth resulted from domestic demand, particularly a 5.9% increase in household consumption.

Despite the slowdown in economic activity, labor-market conditions continued to improve during the first months of the year compared with conditions twelve months earlier. According to the National Statistics Agency (DANE), in May unemployment for the country as a whole stood

In a context of relatively good growth in economic activity, inflation over the first half of 2012 converged toward the long-term target of 3%, from 3.7% in December 2011.

at 10.7%, down by 0.5 pp on May 2011, and for the thirteen major cities at 11.9%, up by 0.9 pp. Moreover, the quality of work has improved so far this year, with the number of wage earners in the thirteen cities growing on average by 5.0% up to May and the number of non-wage earners by 3.8%. Higher growth in wage employment has been boosted by the sectors of construction and industry, while slower growth in non-wage employment has resulted from a fall in the number of domestic workers and farmhands.

In a context of relatively good growth in economic activity, inflation over the first half of 2012 gradually converged toward 3%, the long-term target set by the Bank's Board of Directors. At the end of 2011 inflation stood at 3.73%, and by the end of the first half of 2012 it had dropped to 3.2%. Several factors have contributed to this drop, the most important perhaps being a significant decrease in inflation expectations: from more than 3.5% on a 12-month horizon and more than 4% on longer horizons, at the end of 2011, to around 3% today. This decrease in inflation expectations, which has helped to moderate price increases in many basic items, has resulted in good measure from a monetary policy that has reaffirmed by actions its commitment to control inflation.

Other factors that also helped to reduce inflation in the first half of this year included, notably, lower international oil prices, which allowed the government to moderate price increases for gasoline and other fuels. With the result that in June the annual rate of fuel price increase was just 1.84%, (down from 4.8% in December), which in turn led to lower increases in public-transport charges. Another major factor has been moderate price rises for food, particularly perishables, thanks to improved weather conditions that have greatly increased agricultural supply. Lastly, cost pressures in the first half of 2012 have been slight, as evidenced by the producer price index, which plunged from an annual rate of 5.5% in December to -0.69% in June. Lower cost pressures resulted from lower prices for oil and other commodities and from appreciation in the exchange rate.

The drop in inflation resulted largely from the decline in inflation expectations brought about in good measure by an active monetary policy committed to inflation control.

On the basis of rigorous analysis of the state of the economy and the outlook for inflation, the Bank's Board of Directors decided to raise the intervention rate by 25bp in January and by a further 25bp in February, up to 5.25%. This decision was consistent with the aim of keeping inflation low and stable and smoothing out fluctuations in output around a path of sustained growth. The Board's reasons for adopting this stance, as explained in good time through statements by the Board, minutes of Board meetings and Inflation Reports, consisted of the need to moderate rising

To prevent excessive borrowing and ensure stable growth, the Board raised the intervention rate by 25bp in January and by a further 25bp in February, up to 5.25%

domestic demand, prevent excessive private-sector borrowing, and ensure the economy's growth in line with its potential.

The monetary-policy measures described above have helped to ensure convergence of inflation toward the 3% target and to preserve macroeconomic stability. Their effects have been transmitted in due course to interest rates in the economy on savings and loans, thereby moderating growth in household spending and borrowing.

Subsequently, the Board cut the intervention rate by 25bp to 5% at its meeting on July 27, 2012. This decision was taken on the basis of a detailed assessment of the current state of Colombian and global economy, forecasts for inflation and growth, and analysis of different risks. Special weight was given to the global economy's greater-than-expected weakening, which has slowed Colombia's economic growth through lower external demand and lower international prices for the country's main exports. Particular attention was also paid to the favorable behavior of inflation expectations and their forecast for this year and next.

As in previous years, the peso's nominal exchange rate against the dollar has shown a mixed behavior so far this year. So, for example, it appreciated in January and February (as did other currencies of the region) because of a lower perception of international risk. In March and April the peso remained relatively stable in the face of a diversity of global news. In May it exhibited a depreciation trend, as the perception of international risk was increased by political uncertainty in Greece and banking-sector problems in Spain. In June the peso began to come under pressure again to appreciate, on the strength of a number of decisions by European leaders that reassured the markets.

Subsequently, the Board cut the intervention rate by 25bp in July because of greater-than-expected weakening of the global economy, which has in turn slowed Colombia's economy.

The real exchange rate, which takes into account relative external and domestic prices, is a better indicator of competitiveness than the nominal rate. It, too, has been mostly subject to appreciation pressure. From January to June the real exchange rate appreciated on average by 3.9% based on the producer price index, and by 5.1% based on the consumer price index. As a result, the real exchange rate index fell below its average historical levels. This trend is shared by several of our trading partners and has been caused by weakness of the global economy, greater confidence in emerging markets, and favorable terms of trade with the resulting capital inflows, particularly of direct foreign investment.

To moderate exchange-rate volatility and maintain a level of international reserves consistent with the size and needs of Colombia's economy, the

In the first half of 2012 nominal exchange-rate behavior was mixed and volatile because of international uncertainty, whereas the real exchange tended to appreciate.

Banco de la República has continued to apply the policy of accumulating reserves through competitive auctions of at least $20 million a day. According to the latest statement from the Board, this policy is to be extended at least up to November 2nd of this year. Auctions during the first half of the year provided $1,959m, raising the total of international reserves to $34,272m by the end of June. Colombia is thus able to keep its international-liquidity indicators at levels in line with the patterns recommended by organizations such as the International Monetary Fund. This places the country in a secure position for dealing with any unexpected capital outflows caused by such factors as deterioration in the terms of trade, financial panic, or international financial crises. It also helps to reduce the country's external vulnerability and maintain confidence in the economy. The international-liquidity indicators presented in this Report include notably, among others, the ratio of net international reserves to foreign-debt repayments to be made the following year. In 2012 this ratio is over 1.6, indicating that the economy is fully capable of meeting its loan obligations to the rest of the world, should access to international finance be curtailed. Colombia's international-liquidity ratios are similar to those of other economies of the region such as Chile, Mexico and Brazil.

Furthermore, on May 6, 2011 the IMF approved a two-year line of contingent financing for Colombia in the amount of 3.87 billion special drawing rights, equivalent to $5.98bn at May 4, 2011, providing the Colombian economy with considerable supplementary liquidity in the event of external funding being abruptly cut off.

To moderate nominal exchange-rate volatility and keep an appropriate level of international reserves, the Bank's Board of Directors has extended at least up to November 2, 2012 the policy of daily purchasing of at least $20m.

In today's highly uncertain and complex international environment, it is particularly difficult to define economic outlooks. At all events, economic growth in the euro zone is expected to be negative in 2012, and pressure in public-debt markets is projected to continue affecting business and consumer confidence. Nevertheless, recent measures announced by European leaders to promote greater financial and fiscal integration have made a disorderly solution to the crisis less likely. In the case of the United States, everything points to GDP growth continuing to run below the historical average (2.4% since 1990) this year and next, because of persisting structural problems and the declining pace of global demand. Emerging economies, including China, are also experiencing a slowdown from the effects of weaker expansion in the advanced economies.

Although Colombia's economic fundamentals are robust and the country has so far enjoyed consumer and investor confidence, it will not be immune to the impact of the international crisis. If external demand continues to weaken, the Colombian economy will be exposed to contagion through

Although Colombia's economic fundamentals are robust and the country has so far enjoyed consumer and investor confidence, it will not be immune to the impact of the international crisis.

various channels, some of which were clearly in operation during the 2009 crisis. They include, notably, negative income shock from deterioration in the terms of trade, and especially lower oil prices, which mainly affect state revenues. Another channel that transmits the impact of external crisis is a decrease in worker remittances, which will reduce household income; and if this situation persists it may raise the unemployment rate by increasing the overall participation rate, which is a measure of labor supply. Yet another channel, strongly in evidence in 2009, is loss of consumer and investor confidence, which ends up by affecting household consumption and business investment.

Colombia's monetary authority and government are on the alert for changes in the situation at home and abroad, by means of technical monitoring of economic variables. This enables them to take coordinated, timely, counter-cyclical action to lessen the impact of the external crisis on the country's economy. If any good has come of past crises, it is the knowledge of how to deal with them. This valuable experience, and institutional characteristics of such importance as exchange-rate flexibility, which cushions the impact of external crisis on the country's economy, are key advantages, should the international situation grow any worse.

* * * *

The present *Report to Congress* contains four chapters. Chapter I describes the international context, with emphasis on the crisis in Europe and its impact on the United States and emerging economies. Chapter II provides a detailed analysis of Colombia's economy, based on figures available to date, and discusses the outlook for 2012. More specifically, it describes the behavior of economic activity, employment, the financial sector, and the balance of payments. It also contains a special section that analyzes the behavior of the economy in the different regions of the country. Chapter III reviews the management of the country's international reserves, a subject requiring particular attention, given the current volatility of external markets. Lastly, Chapter IV describes the financial position of the Banco de la República. As usual, the *Report* also includes several boxes providing in-depth analyses of technical matters considered to be particularly relevant to understanding the current economic situation and monetary-policy design.

I. International context

In the first half of 2012 the European authorities took measures to reduce uncertainty about the outcome of the region's public-debt crisis. At the same time a number of developed economies exhibited a better-than-expected performance, generating a wave of global optimism.

From May, however, the resurgence of political, economic and financial tensions in the euro zone raised once more the perception of global risk and lowered business and consumer confidence. This, together with greater contagion of the European crisis to other economies, has reduced outlook for global growth for this year and next. In this context the European authorities have made progress on policies to strengthen the region's economy.

The relative optimism that prevailed in early 2012 about the outcome of the European crisis has gradually dissipated in recent months with the intensification of political, economic and financial tensions in the region. Thus, despite the surprising rise in first-quarter growth in some developed economies such as Japan and Germany, other developments have provided evidence of the expected global slowdown.

Since May greater political, economic and financial tensions in the euro zone have reduced confidence about the outcome of the European crisis.

The most vulnerable euro-zone countries contracted again in the first quarter, which confirmed the weak position they were in, and recent information indicates that at the same time growth slowed in the United States, Germany, China and Brazil. Moreover, the first-quarter GDP of the US has been revised down, an unexpected development for the market; and in some emerging economies, such as China and Brazil, expansion has been slowing faster than expected.

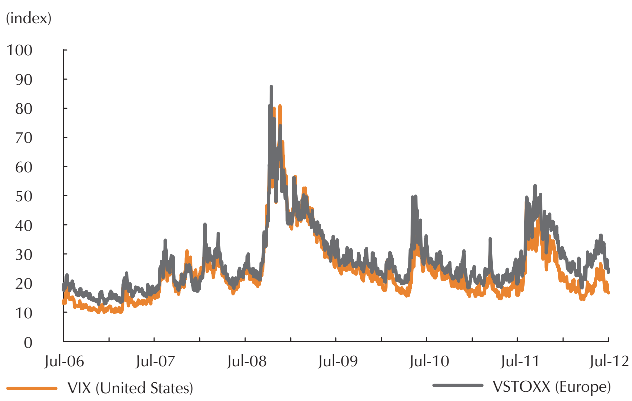
Available information on the second quarter suggests that global economic activity has continued to lose pace, particularly in industry and international trade, partly because of greater contagion from the European crisis. Thus, the emerging economies, especially in Asia, that have stronger commercial ties with the euro zone show clear signs of deceleration.

A. RECENT EVOLUTION OF THE EUROPEAN CRISIS

The measures taken by the ECB between December 2011 and February 2012 to provide liquidity to the European financial system helped to reduce tensions in the region. Similarly, the approval in early 2012 of a new aid plan for Greece, which included greater participation by the private sector, allowed some recovery of confidence in the euro zone and created the expectation that the crisis was being contained. Such favorable developments in Europe coincided with positive data on the US labor market and stronger performance by the US industrial sector, which led major analysts to raise their 2012 growth forecast for the country.

However, uncertainty returned to international markets from May (Graph 1), as a result of rising political tensions in Europe and the evident weakness of Spanish commercial banks. Specifically, the first round of elections in Greece, which proved inconclusive, increased the likelihood of the country leaving the monetary union. But such speculation decreased when the June elections brought into office a government in favor of keeping Greece in the euro zone.

Graph 1
US and Europe volatility indices



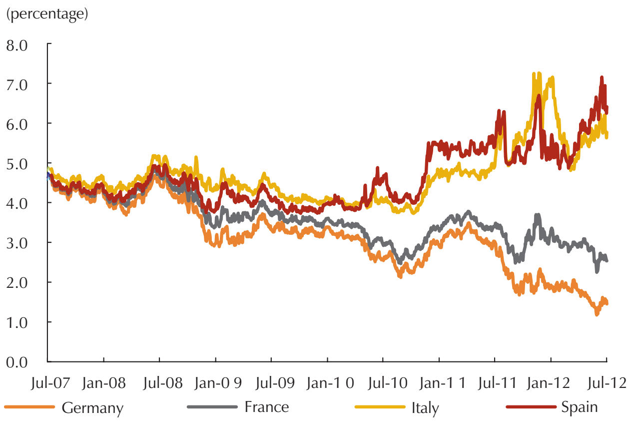
Source: Bloomberg.

Furthermore, financial tensions have increased in the more indebted economies of the region and are reflected in higher risk premiums, deterioration in both public-debt[1] and variable-income markets (Graph 2), and lower business and consumer confidence. Higher interest rates on public-debt securities jeopardize the fiscal targets of the governments involved, as their funding costs increase. The above developments may be affecting already weakened economies, intensifying the recession they are going through. So, for example, in Greece the uncertainty about its remaining in the euro zone

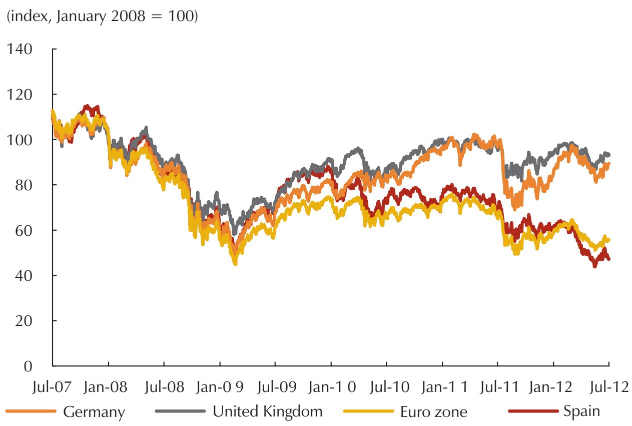
1 Up to the end of June the aid requested by Spain involved a considerable increase in its public debt, which could raise it to 90% of the country's GDP for this year.

Graph 2

A. European countries: interest rates on 10-year public-debt securities

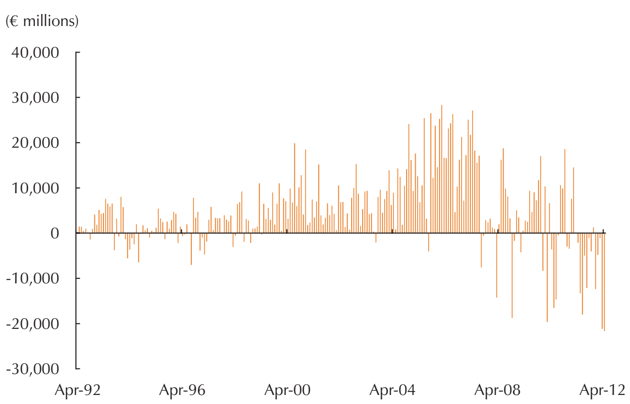


B. European economies: stock indices



Source: Bloomberg.

Graph 3
Net FDI and portfolio investment in Spain



Source: Datastream.

has led to a decrease in bank deposits, which further threatens the country's financial stability.

In Spain the central bank has reported outflows of both short- and long-term capital (Graph 3). At the same time, the commercial banks' high exposure to the property market (in crisis for several years) has compelled the government to intervene in one of Spain's major banks and to apply for resources from the euro-zone rescue fund.[2] Moreover, various rating agencies have in recent months strongly downgraded the credit ratings of a large number of Spanish commercial banks. However, short-term uncertainty decreased after the European Commission, meeting on June 28 and 29, approved the possibility of direct capitalization of Spanish banks[3] through use of euro-zone rescue funds.

Despite the announced measures, Spain's public-debt market has continued to be under pressure because of uncertainty about the conditions of the loans to commercial banks and the possible increase of the country's public debt. The Eurogroup Declaration of July 20 made it clear that the loans were to be guaranteed by the Spanish government, which would thus become liable for the amounts lent, should any bank requesting help go into bankruptcy. In that event, the government's public debt would expand and jeopardize its fiscal targets.

Furthermore, the European authorities have approved a €120bn plan (equivalent to 1% of the region's GDP) to stimulate economic growth.

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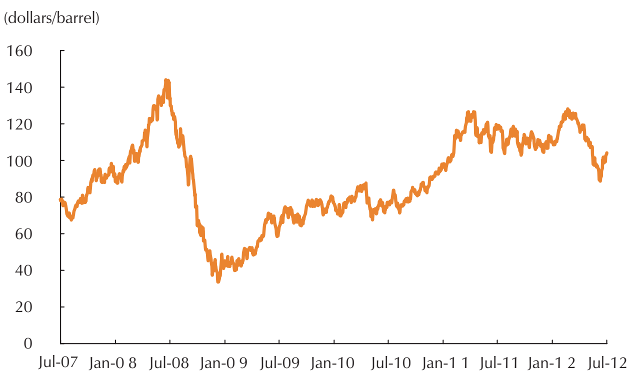
2 Up to the end of June the aid requested by Spain involved a considerable increase in its public debt, which could raise it to 90% of the country's GDP for this year.

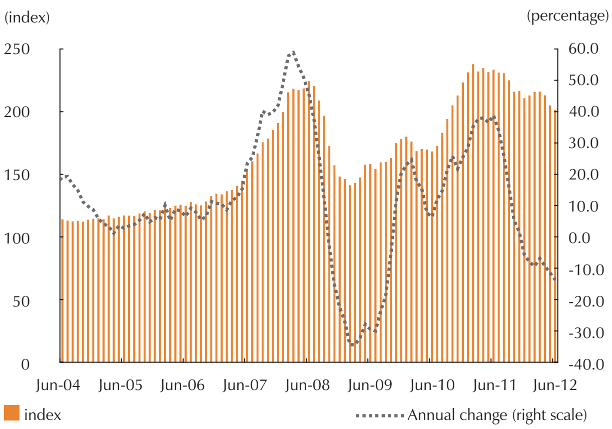
3 This is subject to the establishment by the end of 2012 of a unique and effective financial oversight mechanism in which the ECB will play a part. In the meantime, the first tranches of aid for Spanish banks will be made through the Spanish government; once the oversight body has been created they be furnished directly

Graph 4
International oil price (Brent)



Source: Datastream.

Graph 5
International food prices



Source: FAO.

European economic and political authorities have thus begun to speak of the possibility of banking integration and are designing an agenda for reactivating economic growth. If these measures are implemented rapidly and convince markets that they are far-reaching enough to stabilize the region's economy and lead to recovery, uncertainty in financial markets might decrease and confidence might stop declining, giving greater room for maneuver to governments, such as Spain's, that are currently under greater pressures.

Lastly, the slowdown in global demand, together with lower geopolitical tensions in the Middle East and North Africa and satisfactory levels of US crude inventories, has reduced pressure on international oil markets, bringing down oil prices to mid-March levels (Graph 4). Declining demand has also lowered international food prices (Graph 5), reducing the inflationary pressures faced by some emerging economies, particularly in Asia.

Lower inflationary pressures will thus give central banks more leeway to maintain loose policies, thereby allowing the ECB to keep its intervention rate at all-time lows,[4] in view of the possibility of the euro-zone crisis intensifying. In the case of commodity-exporting economies, however, lower international prices would have negative effects on their external revenues and on their real activity.

To sum up, the European situation has clearly deteriorated in recent months, with the result that, in an already weak economy, declining confidence and rising financial restrictions could deepen the crisis and intensify the peripheral countries' problems. Although the authorities have taken measures to avoid economic and financial collapse in the region, they need to continue advancing quickly and efficiently on the issues of integration and stimulus for growth, so as to restore confidence and revitalize the euro zone.

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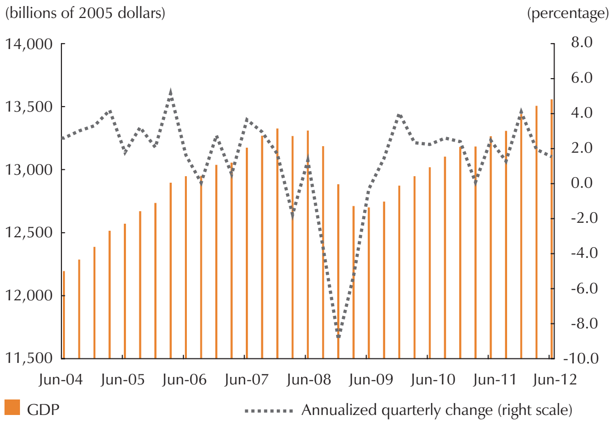
4 Note that in the second quarter the ECB bought no debt from the region's indebted countries. But in the final days of July the ECB president, Mario Draghi, made clear his willingness to safeguard the euro; hence new stimulus measures are expected to be taken in the coming months.

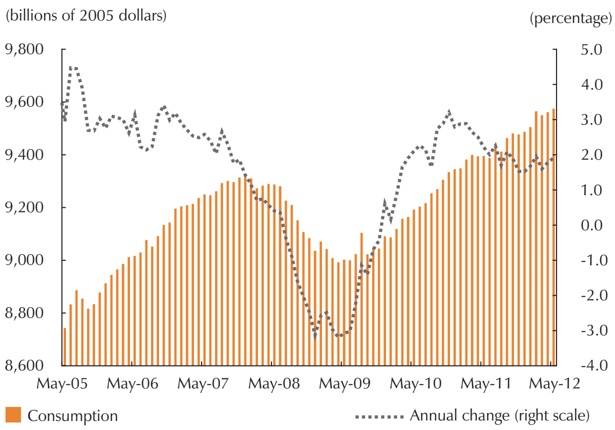
Graph 6
US real GDP



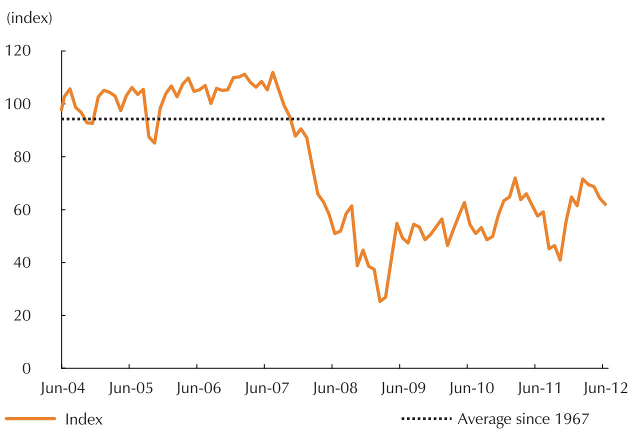
Source: Bureau of Economic Analysis.

Graph 7

A. US real personal consumption



B. US consumer-confidence index (Conference Board)



Sources: Bureau of Economic Analysis and Datastream.

B. DEVELOPED COUNTRIES' PERFROMANCE IN THE FIRST HALF OF 2012

1. United States

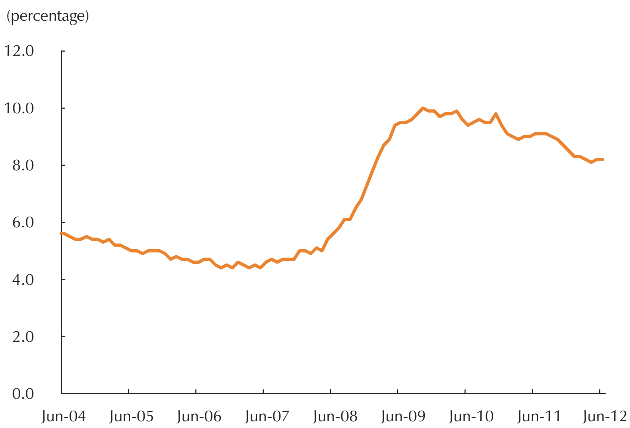
In the first six months of the year the US economy maintained a moderate pace of expansion that was below its historical average (3.3% annualized quarterly rate (aqr) since 1947, and 2.4% in 1990-2007). This indicates persistence of the structural problems that prevent greater growth. Thus, although the housing market has shown signs of recovery in recent months, it is still far below the pre-2008 levels.

The second quarter of 2012 saw the US economy expanding by 1.5% aqr, more slowly than in the first quarter, when output grew by 2% aqr (Graph 6). The loss of pace resulted mainly from a slowdown in consumption growth (from 2.5% aqr in the first quarter to 1.5% aqr in the second), and from contraction in government spending (-1.4% aqr), for the ninth quarter in a row. Despite that, growth in domestic investment accelerated, from 6.1% aqr to 8.5% aqr, thanks in particular to higher inventory accumulation. Similarly, exports grew by 5.% aqr in the second quarter, compared with 4.4% aqr in the first, while import growth rose from 3.1% to 6%.

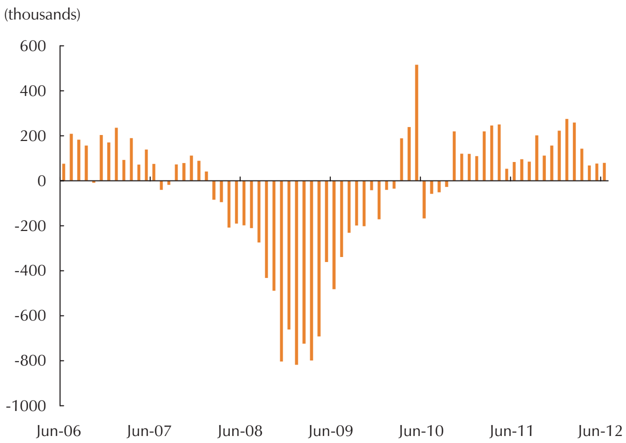
A number of indicators were already pointing to moderation in US economic activity. Based on figures to May, household consumption continued to grow in annual terms, but more slowly. In fact, although higher consumption has been accompanied by credit recovery (eleven consecutive months of growth), consumer confidence has deteriorated in recent months, owing to negative labor conditions and greater international uncertainty (Graph 7).

Graph 8

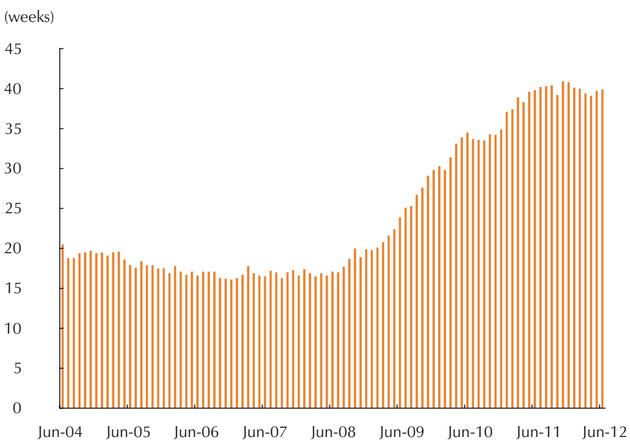
A. US unemployment rate



B. US net non-farm job creation



C. US average duration of unemployment



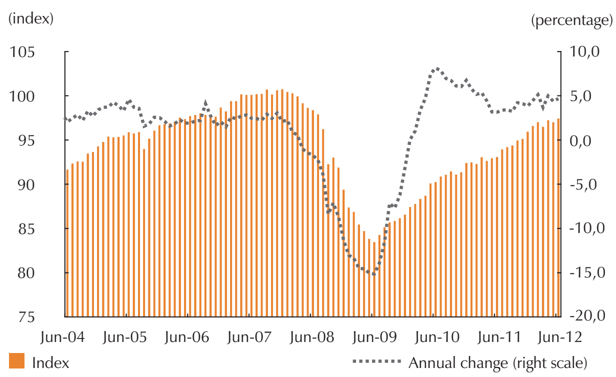
Sources: Datastream and Bloomberg.

The unemployment rate, having trended down from August 2011 to April 2012, rose slightly in May, from 8.1% to 8.2% (remaining the same in June), which suggests that labor-market recovery may be slow in the coming months. Furthermore, net job creation in non-agricultural sectors has slowed, from 275,000 jobs in January to 80,000 in June. The average duration of unemployment remains over 39 weeks, albeit with a decreasing trend. Initial unemployment claims are around 370,000, going up unexpectedly in some weeks (Graph 8).

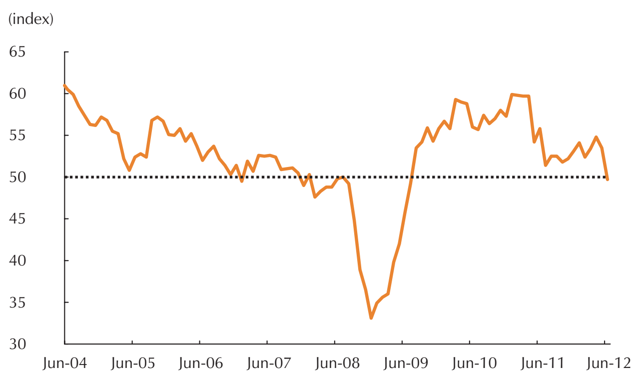
On information to June, US industrial output continued to expand at an annual rate of nearly 5%. Yet the manufacturing sentiment index turned negative in June, suggesting that US output might slow down in the coming months (Graph 9).

Graph 9

A. US industrial output index

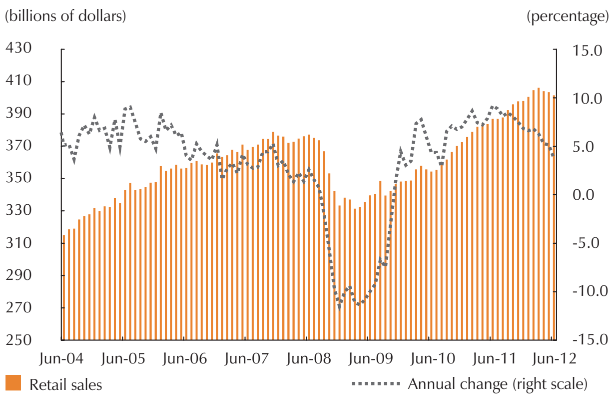


B. US manufacturing-sentiment index



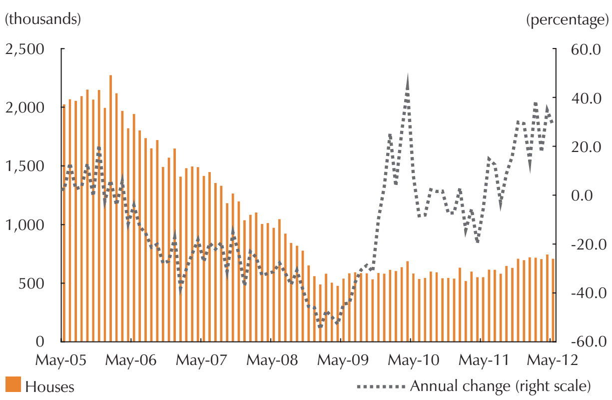
Source: Datastream.

Graph 10
US retail sales



Source: Datastream.

Graph 11
UShousing construction



Source: Datastream.

Records for June show US retail sales continuing on the downtrend exhibited since early 2012 (Graph 10). In contrast, the housing market has started to show positive signs, as evidenced by some indicators of the sector (Graph 11).

The current environment of moderate economic growth, low labor-market recovery and stable inflation has allowed the US Federal Reserve to maintain an expansionary monetary policy, with interest rates kept at all-time lows. At the June meeting of Federal Reserve bank presidents, the federal funds target rate was left unchanged, and "operation twist" (sale by Fed of short-term securities and purchase of longer-term ones) was extended at least up to the end of the year. The aim was to further reduce long-term interest rates and improve credit conditions.

In this context, although the recent decline in international oil prices might boost consumer spending, the fact remains that a worsening of the European situation could affect the US economy, through greater deterioration of household confidence and greater tightening of global credit.

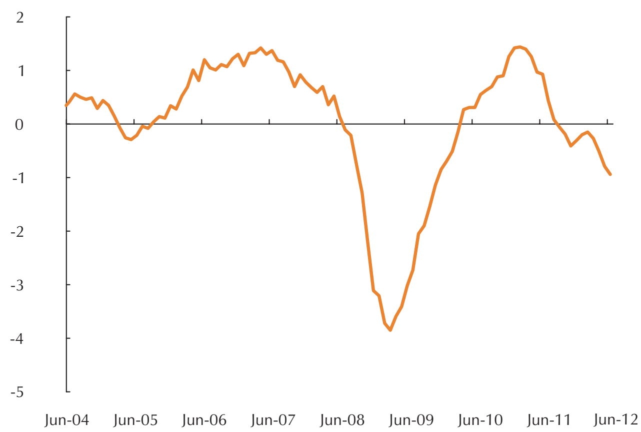
2. Euro zone

First-quarter growth in euro-zone GDP was 0%, in both quarterly and annual comparisons. Thanks to an increase in German growth, this result was better than expected by analysts. However, the region's indebted countries contracted once again, making evident the structural problems they still face. Specifically, quarterly growth in Germany was 0.5%, up from -0.2% in the previous quarter. In France it was 0%, down from a 0.1% expansion in the last quarter of 2011. The economies of Spain, Italy and Portugal contracted by 0.3%, 0.8% and 0.1%, respectively, in quarterly terms in the first three months, completing several periods of downturn in their output.

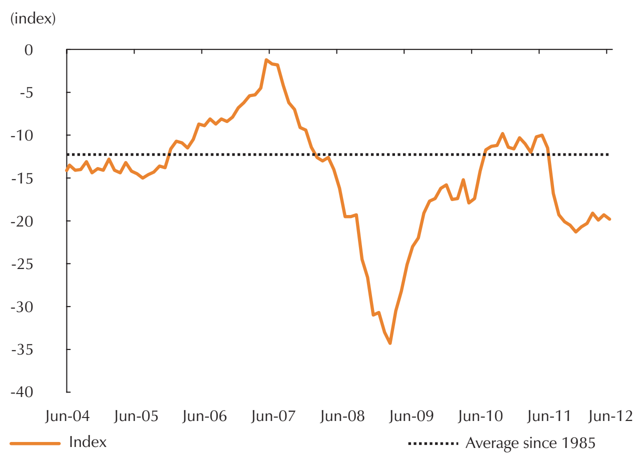
For the second quarter, real-activity indicators, such as business and consumer confidence and indices of sentiment in manufacturing and services, show that the region's economy has continued to deteriorate, anticipating

Graph 12

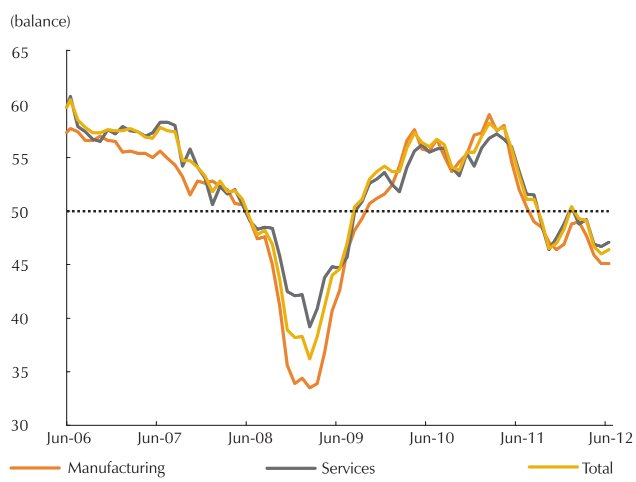
A. Euro-zone business-confidence index



B. Euro-zone consumer-confidence index



C. Euro-zone business-sentiment index (PMI) a/



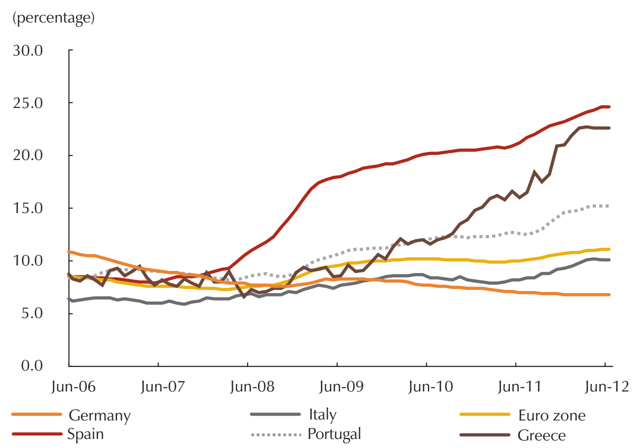
a/ Purchasing Managers' Index
Sources: Datastream and Bloomberg.

a new fall in output, much as occurred at the end of 2011 (Graph 12). Regarding the labor market, unemployment in the euro zone stood at 11.1% in June, higher than in the preceding months. Moreover, credit conditions have continued to tighten, revealing the reluctance of commercial banks to reactivate credit.

Thus, in the most indebted economies the indices of sentiment in manufacturing and services, as well as industrial output and retail sales are still depressed, and there are still no signs of recovery. Loss of pace in these economies' real activity continues to affect their labor markets: in June Spain still had the highest unemployment rate (24.6%), followed by Greece (22.6%) and Portugal (15.2%). It is also jeopardizing the new fiscal targets, making it necessary to implement new adjustments. But a smaller fiscal stimulus could have contractionary effects in the short term, further affecting the behavior of these economies.

Furthermore, in Germany and France movements in a number of indicators might be showing the impact being product on their economies by contraction in the peripheral countries. In Germany, although retail sales grew in May

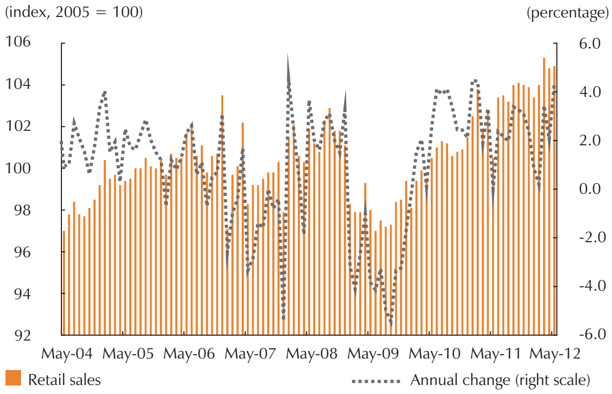
Graph 13
European economies: unemployment rates



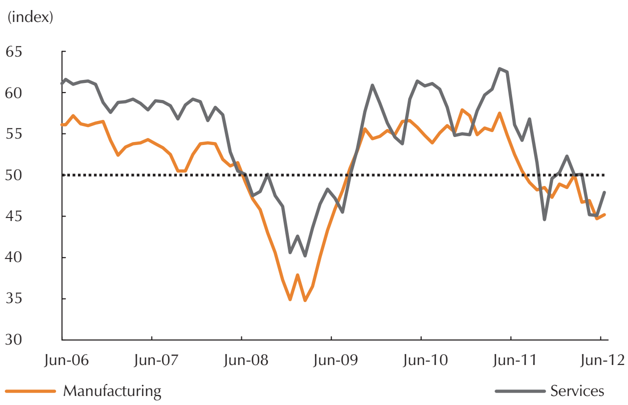
Source: Bloomberg.

Graph 14

A. Germany: retail sales

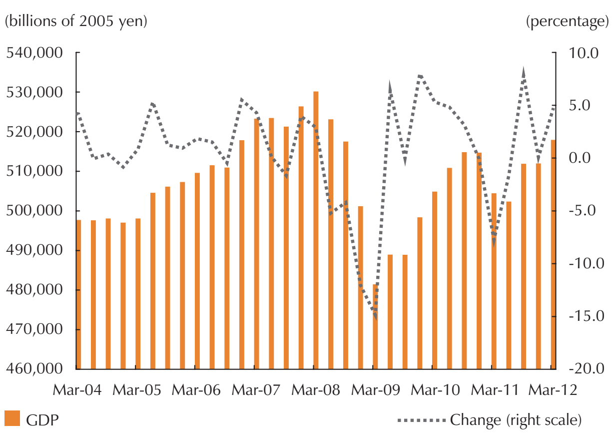


B. France: manufacturing and services business-sentiment indices (PMI) [a/]



a/ Purchasing managers index.
Fuentes: Datastream y Bloomberg.

Graph 15
Japan: real GDP



Source: Datastream.

at an annual rate of 4.4%, the manufacturing-sentiment index was again depressed in June as it had been for several months in a row, anticipating a slowdown in industrial activity. In France, the indices of sentiment in manufacturing and services showed new signs of contraction in May (Graph 14).

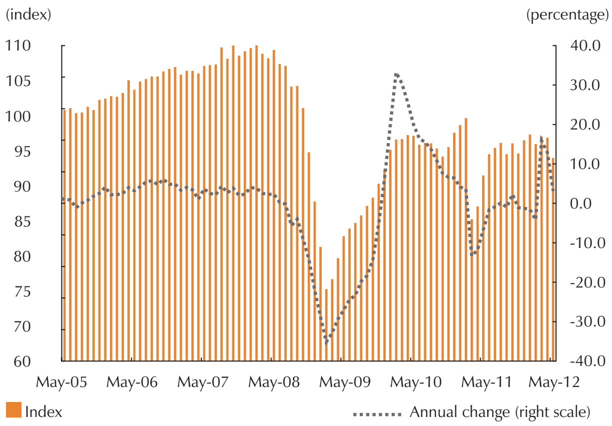
3. Japan

The Japanese economy grew by 4.7% aqr in the first quarter of 2012, faster than in the last three months of 2011, when it expanded by 0.1% aqr (Graph 15). By type of spending, all components of Japan's GDP grew faster in the first quarter than in the previous three months. This was due in part to higher domestic demand, driven by private consumption and government spending on reconstruction of earthquake-damaged areas, and to higher exports, driven by reactivation of the supply chain in the region, after its disruption by floods in Thailand.

On the external front, although the current-account balance has remained positive, it has deteriorated in recent months because of a larger deficit on the goods and services account. The natural disaster of March 2011, which led to the closing down of various nuclear plants (including the Fukushima and Hamaoka plants), reduced Japan's power generation and forced it to import energy to meet domestic demand, thereby affecting the country's trade balance.

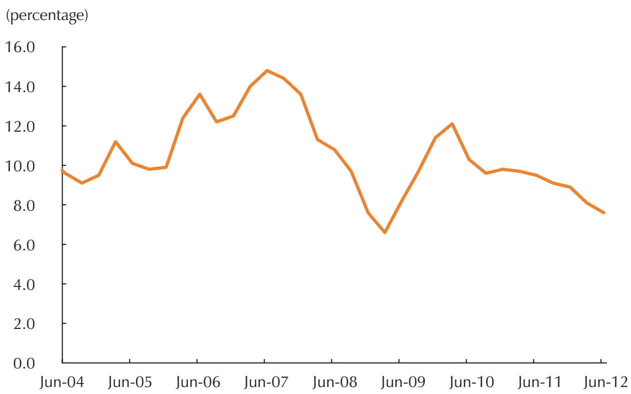
Although industrial output expanded by 3.1% in annual terms in May, it did so more slowly than in the preceding months (Graph 16). This slowdown, together with deterioration in the manufacturing industry's opinion indicators, anticipates a new weakening of the Japanese economy, which is feeling the contagion effect of loss of pace in global activity (export growth in April was less

Graph 16
Japan: industrial output index



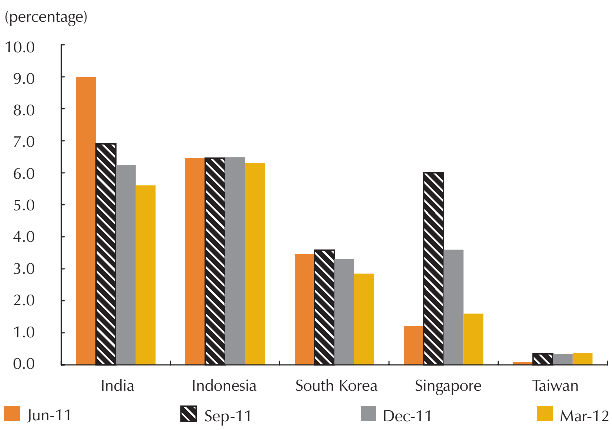
Source: Datastream.

Graph 17
China: annual GDP growth rate



Source: Datastream.

Graph 18
Asian emerging economies: annual growth



Source: Datastream.

than expected). Annual growth in May was high owing to a low base of comparison in 2011, caused by the natural disaster that occurred in Japan last year. Lastly, it should be mentioned that in late May the rating agency Fitch downgraded Japan's rating from AA to A+, on account of the country's high and rising level of public debt.

C. EMERGING ECONOMIES' PERFORMANCE IN THE FIRST HALF OF 2012

1. Emerging Asia

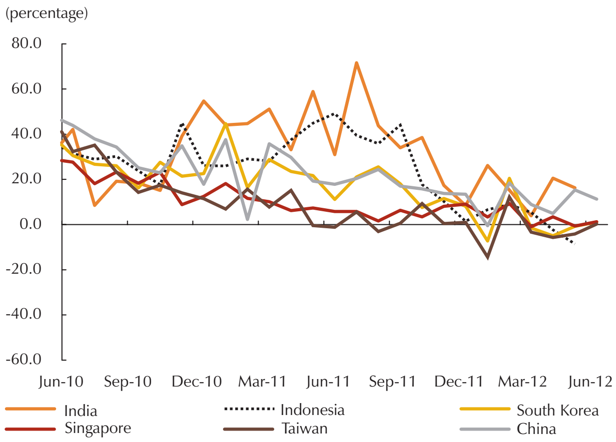
In the first half of 2012 the major emerging economies of Asia continued to lose pace in economic activity because of decelerating external demand and normalization of local spending. This is evidenced by moderate growth in industrial activity and exports.

In annual terms, China's GDP expanded by 7.6% in the second quarter of 2012, compared with 8.1% in the first quarter (Graph 17). Based on information to the first quarter, output in India grew by 5.6% (down from 6.2% in the fourth quarter of 2011), in Indonesia by 6.3% (down from 6.5%), in South Korea by 2.8% (down from 3.3%), in Singapore by 1.6% (down from 3.6%), and in Taiwan by 0.4% (up from 0.3%) (Graph 18). The only economy of the region where output expanded faster in the first quarter of 2012 than in the previous three months was Thailand, rising from 8.9% to 0.3%, as a result of normalization of the supply chain after the floods that occurred in the last quarter of 2011.

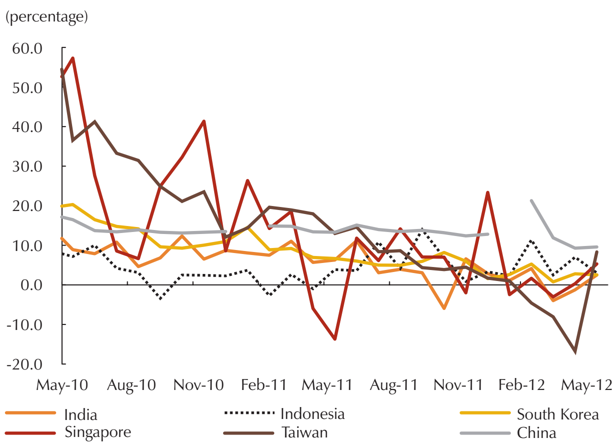
Second-quarter indicators show no change in these trends, since generally speaking exports have continued to lose pace and industrial growth has stagnated (Graph 19). In the specific case of China, exports grew by 11.3% in June, a significant fall from their 25.6% average growth

Graph 19

A. Asian economies: annual change in exports



B. Asian economies: annual change in industrial output



Fuente: Bloomberg.

rate in 2011. The country's industrial output also lost pace, expanding in June by 9.5%, down from the 2011 average rate of 13.7%.

In other countries, such as South Korea, Thailand and Singapore, exports have contracted in some months, making their average first-half growth rate significantly lower in 2012 than in 2011. Similarly, their industrial output has expanded more slowly, stagnating in some months.

The slowdown in both domestic demand[5] and external demand has decreased the inflationary pressures that arose in the first quarter of 2011. This has allowed the region's central banks to maintain a loose monetary policy either by reducing reserve requirements (as in China[6]), or by cutting the intervention rate, as the Indian monetary authority did in April this year.

The recent evolution of the European crisis, in addition to a cooling of these economies in 2012 forecast by analysts, might be having a greater impact on the growth of Asian countries.

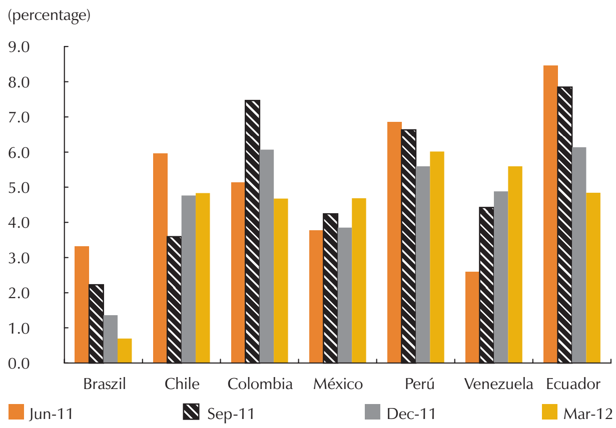
2. Latin America

The region's economies, excluding Brazil, have been expanding at rates close to their averages for the past two decades, driven by domestic demand and by still favorable terms of trade and external funding. However, slowing global demand, greater tensions in international capital markets, and Brazil's declining growth could affect the region's economic behavior in the coming months.

5 For example, in May retail sales in China grew at a nominal annual rate of 13.8%, a lower rate than in the previous two months, and lower also than the 17.4% average for 2011. Moreover, in much of the country housing prices have continued to fall, which might account for a slowdown in domestic demand, especially in investment in the property sector.

6 As part of this strategy, the monetary authorities in China reduced the intervention interest rate in early June.

Graph 20
Latin-American countries: real annual GDP growth



Source: Datastream.

Based on figures up to the first quarter of 2012, GDP growth in annual terms was 4.7% in Mexico, 4.8% in Chile, 6.0% in Peru and 5.6% in Venezuela (Graph 20), faster in every case than in the fourth quarter of 2011. This provides evidence of continuing expansion in these countries, despite the slowdown in other regions. The first quarter saw Brazil's economy growing by 0.7% relative to a year earlier, down from 1.4% in the fourth quarter of 2011; in Ecuador the decline was from 6.1% to 4.8%, while in Colombia first-quarter growth was 4.7%, down form 7.5% in the third quarter of 2011 and from 6.1% in the fourth quarter.

Information for the second quarter shows the Brazilian economy continuing to lose pace: in May the real-activity index (calculated by the central bank) and industrial output shrank again in both annual and monthly terms. In Mexico in June, although the business-climate indicator (closely linked to manufacturing) remained in expansionary territory (and better than in previous months), exports decelerated to an annual expansion rate of 6.7%, down from 11.6% in April, apparently in response to slower growth globally, especially in the US.

In May, Chile's industry continued to expand at a favorable rate (about 3%), but other indicators started to decelerate, with retail sales growing at an annual rate of 3.2%, down from 5.5% in April, and business confidence deteriorating. In Peru, exports contracted strongly in April and May in real terms, revealing the possible effects of lower external demand, and industrial production also decreased in May; yet unemployment fell again in June.

In this context, though real-activity indicators for the second quarter remain in expansionary territory in some economies of the region, such as Mexico and Chile, the situation is less clear for Peru and more particularly for Brazil, where growth has continued to lose pace.

The global economy's behavior during the rest of 2012 and in 2013 will depend chiefly on how the European crisis unfolds.

D. OUTLOOK FOR THE REST OF THE YEAR AND FOR 2013

The global economy's performance for the rest of this year and in 2013 will depend particularly on how the European crisis unfolds. The euro zone's economic growth in 2012 is expected to be negative, because the peripheral countries are in recession and the impetus provided by Germany may be smaller.

Moreover, the recent episode of financial turbulence that put greater pressure on markets for Spanish and Italian public debt will still be affecting the region's performance, by further deteriorating business and consumer confidence.

Note, however, that the European authorities' recently announced measures, designed to foster greater financial and fiscal integration, have reduced the likelihood of a disorderly solution to the crisis. The global economy's performance in 2013 will therefore depend on progress made on the agenda for integration of the euro zone.

In the case of the United States, GDP growth in 2012 and 2013 expected to continue below the historical average (2.4% since 1990), owing to the structural problems that persist in the economy and to a smaller impetus from global demand. The expiry of a number of tax exemptions at the end of 2012, together with discussions on borrowing limits, could have repercussions on confidence and economic activity in the early quarters of 2013.

Growth in the emerging economies is expected to moderate in 2012 relative to 2011, because of withdrawal of stimulus policies and declining global demand. However, real activity is expected to pick up toward the end of the year in China, India, Brazil and other countries, owing to relaxation of fiscal and monetary policies designed to counteract the effects of the slowdown in the advanced countries, particularly in the euro zone. The emerging economies should therefore expand somewhat faster in 2013, but not as fast as in 2010 and 2011.[7]

Lastly, China's mortgage behavior continues to pose a non-negligible downside risk: if a bubble were to form and burst in the coming years, it would involve a significant fall in global demand, with considerable repercussions on commodity prices and world exports. It should also be pointed out that the governments of Japan and the United States have still not designed any policies to reduce their public debt as a percentage of GDP in the medium term. This could intensify pressure on these markets in the coming years and destabilize their funding.

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7 Note that in the past decade some emerging economies posted growth rates above their historical averages, owing to credit expansion and deepening of the financial system. The foregoing could be over-estimating these economies' potential growth and leading them to an unsustainable path.

Box 1
COMMODITY PRICES

Mineral and energy booms, whether resulting from the discovery of a non-renewable natural resource or from favorable international prices, may become a source of growth and development for a country or lead to undesired deindustrialization there. The result will depend in great measure on how the resources of the boom are managed.

This Box contends that to make efficient use of the advantages provided by a boom several factors need to be taken into account in exploiting the natural resource in question. It is essential, in this respect, to generate savings from mining surpluses and sale of the resource. These revenues should be efficiently managed by an institutionally strong entity and should help to increase productivity in the other sectors of the economy. Very great care should be taken also in projecting income and expenditures based on the behavior of international prices for the resource, because price trends may not be sustainable in the long run.

1. The Dutch disease

A country presents symptoms of the Dutch disease when a commodity export boom, driven by the discovery of greater reserves of a natural resource or by favorable international prices, has negative effects on the rest of the economy's tradable sectors.

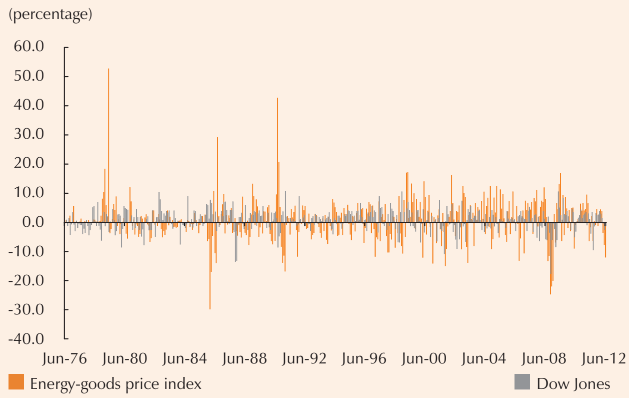
Specifically, expectations of greater profits from exploitation of the natural resource increase foreign direct investment in the sector and cause the local currency to appreciate, the appreciation intensifying with higher exports of the resource. Moreover, the booming sector's higher demand for factors of production (capital and labor) reduces the quantity of resources available to the other sectors of the economy and increases their costs, making those other sectors less competitive. Similarly, insofar as the currency appreciation translates into appreciation of the real exchange rate, goods exported by the non-mining tradable sector will become less attractive for other countries, which will reduce their demand. All this leads to a change in the structure of the economy, with the mining-energy sector gaining participation while the rest lose pace.

In this context, although some sectors of the economy are affected by the transition, GDP may in fact rise. But the country clearly becomes more vulnerable to changes in international prices, for the new economic structure is highly dependent on revenues from the exploitation and sale of the commodity.

2. Commodity-price volatility and its effects on national income

External commodity prices, particularly for energy goods, have become more volatile, and even more so than some stock market indices (Graph B1.1). This variability in revenues from commodity sales may jeopardize the sustainability of spending in an economy, especially where there is no policy of saving money in good times, which would make it possible to maintain a stable consumption path over time.

Graph B1.1
Monthly return on the price index of energy goods and Dow Jones



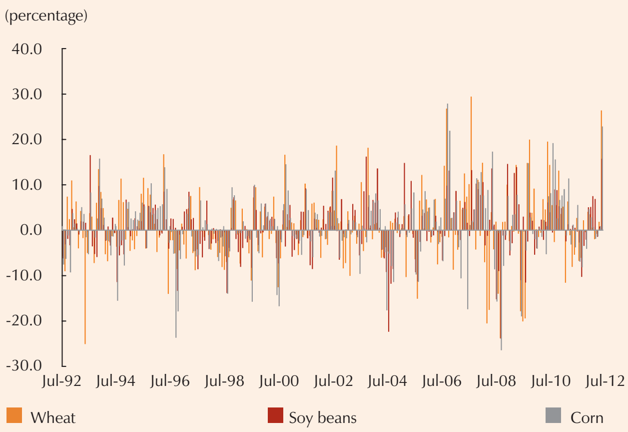
Sources: World Band and Bloomberg.

The high volatility of commodity prices is largely connected with the nature of commodities, for commodity markets are subject to supply factors, such as climate, that are difficult to anticipate and have a considerable impact on prices when they do occur. Demand for commodities is generally inelastic or varies over long periods, so that it is not usually a source of volatility. An example of the effect of climate is the fact that international prices for corn, soy beans and wheat have risen sharply in recent weeks because of drought in the US (Graph B1.2).

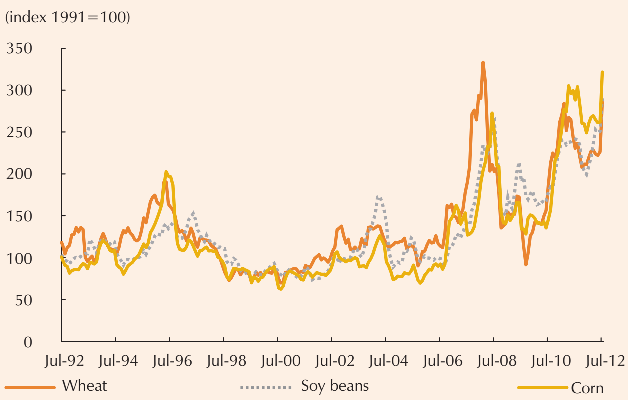
The volatility of international prices, combined with their rising trends in recent decades (Graph B1.3), may

Graph B1.2

A. Monthly return on international prices for wheat, soy beans and corn

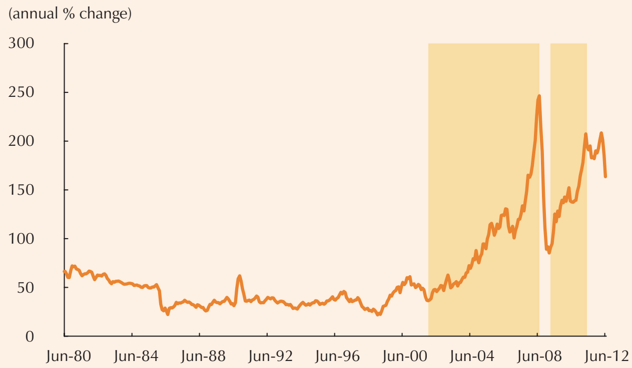


B. International prices for wheat, soy beans and corn



Source: Datastream.

Graph B1.3
Monthly price index of energy-goods



Source: World Bank.

lead to paths of spending and investment unsustainable in the long term, since future price expectations may not be met. For this reason, the main challenge facing a country rich in non-renewable natural resources consists of generating a permanent and steady flow of income that allows it to finance its spending in a sustained manner.

By way of an example, let us assume an economy can produce only two goods: an exportable natural resource and a service. The exportable good is produced by the government, whose income is thus wholly derived from the sale of the natural resource. Consider further that the government exploits the resource in a sustainable manner, that is, in such a way that it does not become rapidly depleted. Lastly, let us assume that the international price the government expects is 10, and that with this its fiscal accounts are kept in balance (without deficit or surplus).

Now, if the price eventually falls and instead of 10 it is 5, the government's revenues are reduced by half, unless it doubles its production and prematurely depletes the natural resource. In the first scenario, public debt rises significantly from one year to the next and will continue to rise unless the government cuts spending, causing GDP to fall. In this same scenario if the government makes no adjustment, debt will grow unsustainably and force the government eventually to correct spending strongly, causing output to fall in the years after the adjustment.

In the second scenario, the government may maintain the level of spending for a number of years, but once the natural resource is depleted it will no longer have the revenues, and spending and output will eventually have to fall. Hence, regardless of the scenario, in an economy highly dependent on international prices for a commodity, a wrong forecasting of these prices will have significant effects on economic activity. In a less simplified economy than the one considered the channels of transmission are a little more complex, but the negative effects are the same.

3. Measures taken by some countries to avoid the Dutch disease.

The effects of a commodity export boom will be favorable if steps are taken to control undesired outcomes and avoid the Dutch disease. To this end it is essential to implement a savings policy in the sector where the boom occurs, in such a way as to generate a path of spending sustainable over time and avoid bubbles forming or overspending that destabilizes the economy. Moreover, the entity in charge of managing the resources should be institutionally strong enough to distribute the revenues efficiently and not be subject to political pressures that undermine the resources from early on.

To avoid over-appreciation of the exchange rate, which would lessen the competitiveness of other sectors of the economy, some countries save a fraction of the export revenues. Thus, surplus revenues will not generate additional pressures on the exchange rate.

Other measures that have been used to neutralize the effects of an economy's high dependency on natural resources are: diversifying the export sector, fiscal discipline, investment policies, and flexibilizing the labor market. More specifically, it is essential to encourage export activity in other sectors of the economy to avoid dependence on exploitation of the natural resource. To this end, the government can design policies to increase competitiveness in other sectors (higher productivity), which can be partly achieved by using the exchange-rate appreciation (resulting from greater foreign direct investment) to import technology, machinery and equipment.

Prudent government spending is another factor to be taken into account. Public spending should not rise as fast as the increase in revenues from the natural resource, for that would generate inflationary and exchange-rate pressures, besides helping to make output more volatile. It is therefore important that the government save part of the surplus revenues by creating stabilization funds, and avoid incurring expenditures that would later be difficult to cut. The savings may well be used to reduce the current public debt or to fund future expenditures, thereby serving as an inter-generational transfer.

Regarding investment policies, surplus revenues from natural-resource exploitation can be channeled to other productive activities, thus avoiding concentration of investment in a single sector. For this policy to be effective it is important that the resources be allocated to activities with a high output potential, otherwise funding would go to uncompetitive activities and the surplus revenues would not be efficiently used.[1]

An example of fiscal management and creation of stabilization funds is provided by Norway, where the state has a stake in the two major oil-producing companies (Statoil and Norsk Hydro). In 1990 Norway created the Government Pension Fund for the purpose of stabilizing fiscal spending (in connection with short-term fluctuations generated by oil revenues), and funding the deficit that will result from rising pension expenses and falling oil revenues.

The Norwegian Fund receives revenues from taxes (on the sector's CO2 emissions), oil-company dividends, and sale of oil-company stock, among other income. These resources are invested abroad in their entirety and do not therefore generate any exchange-rate pressure or affect the competitiveness of other sectors of the economy in this way. Moreover, in anticipation of rising pension expenditures, the Fund would ensure current-account surplus in the future, once oil activity has declined. Lastly, regarding fiscal management, it is established that the state may spend only 4% of the value of the Fund in any normal year, that figure being the average annual return on the Fund's resources. However, transitory deviations from this rule are allowed, depending on the phase of the economic cycle or extraordinary shocks.

Although the Norwegian experience has been successful, it is important to point out that creating a stabilization fund does not ensure policy success, for bad fund management or setting a rule that is easy to evade can waste the resources generated by the boom.

To sum up, various factors need to be taken into account if good use is to be made of a commodity boom. First, it is essential to save some of the surplus revenues from the exploitation and sale of the resource. The savings should be managed efficiently by an institutionally strong entity and should help to boost the other sectors of the economy. And, secondly, great care must be taken in projecting revenues and expenditures based on movements in international prices, for their trends may not be sustainable in the long term.

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1 One example of efficient investment would be to invest in infrastructure spending, which increases the country's multifactor productivity.

II. The colombian economy: 2012 results and outlook

Colombia's economy grew at an annual rate of 4.7% in the first quarter of 2012, more slowly than in the second half of 2011 and also more slowly than anticipated, largely because of a decrease in civil works. Although civil works should pick up in the following quarters, the economy is likely to continue growing at a slower pace than forecast earlier in the year, because of the impact of the global economy's weakening.

Inflation in the first half of the year came down close to the 3.0% target and should not change substantially over the rest of the year. There may be some shocks in 2013 from unfavorable weather conditions and high international prices, which should be transitory and not hinder meeting the long-term inflation target.

A. ECONOMIC ACTIVITY

The Colombian economy's first-quarter performance occurred within the context of a delicate international situation. Specifically, the slowdown in some European countries and the United States was of a size to have some effect on Colombia's foreign trade. This partly explains why the first quarter saw a slower pace of growth in the country's exports, which had expanded after the 2009 crisis at double-digit average rates during four quarters. Note that the slowdown in exports was not peculiar to Colombia; rather, as stated in Chapter I, it was a global phenomenon.

In the first quarter of 2012 the delicate international situation affected Colombia's foreign trade.

On the domestic front, there was a contrast in growth between private consumption and investment. Household consumption continued to grow fast, at much the same rate as at the end of 2011, boosted by a favorable

Household consumption continued to grow fast, whereas investment slowed significantly.

labor market and a level of consumer confidence unaffected by news from abroad. In addition to the foregoing, real interest rates still remain below their averages since 2000, despite increases in the intervention rate.

In contrast, the first quarter of 2012 saw investment slowing as a result of lower purchases of transport equipment and machinery, and above all because of a sharp fall in civil-works investments, although foreign direct investment did expand. Note that a high base of comparison, resulting from historically strong expansion in investment items since 2010, also explains in good measure the lower rate of investment growth.

Consequently, according to the National Statistics Agency (DANE), Colombia's economy grew at an annual rate of 4.7% in the first quarter of 2012, down from 6.1% in the last quarter of 2011 and down also from the 5.9% growth rate for the whole of 2011. A few months ago both the market and the Banco de la República had expected a reduction in the pace of growth, but the result was lower than forecast. The annual rate of GDP growth in the first quarter also involved a slowdown in quarterly terms (0.3% in the third quarter of 2011 against 1.2% in the fourth) which, despite representing a quarterly expansion, was the lowest observed since mid-2010. All the same, the annual rate of first-quarter growth in 2012 was still above the average since 2000 (4.3%).

Domestic demand in the first quarter of 2012 slowed for the second consecutive quarter, to stand at 6.1%, below the rate for the whole of 2011 (8.8%), though still above its average growth since 2000 (5.3%).

1. 2012 first-quarter GDP growth by type of spending

GDP grew at an annual rate of 4.7% in the first quarter, more slowly than expected.

By type of spending, the biggest contribution to annual GDP growth in the first quarter of 2012 was made by household consumption, with an annual growth of 5.9% (Table 1). Household consumption, the single biggest component of GDP, thus registered two years of growth at rates above its average since 2000. The growth rate of nondurable goods stands out in the first quarter–thanks mainly to food purchases–, as does the expansion in service consumption, the two together accounting for some 85% of private consumption. Spending on semi-durable and durable goods slowed from the quarter before, more markedly in the case of durable goods. The relatively low growth rate of durables in the first quarter of 2012 can be largely explained by a high base of comparison in the first quarter of 2011 (note that in 2011 the growth was 23.9%) and, in any case, the base was also higher than the level observed in the second half of 2011.

Table 1
Real annual GDP growth, by type of spending

	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2011 Full year	2012 Q1	Contribution to Q1 2012 annual growth
	(percentage)						(percentage points)
Total consumption	**5.1**	**6.8**	**5.9**	**5.4**	**5.8**	**5.2**	**4.2**
Household consumption	5.5	7.8	6.6	6.1	6.5	5.9	3.8
Non-durable goods	2.9	5.9	4.8	3.6	4.3	5.5	1.2
Semi-durable goods	13.5	19.4	13.8	13.7	15.1	13.1	0.8
Durable goods	35.8	34.4	19.9	8.9	23.9	4.3	0.2
Services	3.8	4.4	4.9	5.1	4.6	4.6	1.5
Final government consumption	2.4	2.6	2.6	3.0	2.6	2.9	0.5
Gross capital formation	**11.2**	**19.6**	**24.2**	**14.2**	**17.2**	**8.3**	**2.2**
Gross fixed-capital formation	12.9	14.2	24.0	15.7	16.7	7.8	2.0
Farming, forestry, hunting & fishing	2.5	2.6	1.6	1.8	2.1	4.7	0.0
Machinery & equipment	26.8	29.0	28.0	19.9	25.8	16.7	1.4
Transport equipment	52.1	52.3	40.7	38.6	45.2	23.5	0.9
Construction & buildings	1.1	5.2	12.8	1.8	5.1	4.5	0.3
Civil works	(6.4)	(9.6)	29.3	19.8	6.7	(8.1)	(0.5)
Services	5.0	5.8	9.4	1.2	5.3	3.5	0.0
Domestic demand	**7.1**	**9.7**	**10.5**	**8.0**	**8.8**	**6.1**	**6.6**
Total exports	**10.1**	**7.6**	**12.0**	**16.2**	**11.4**	**6.3**	**1.1**
Total imports	**20.3**	**24.4**	**20.1**	**21.3**	**21.5**	**13.0**	**(3.3)**
GDP	**5.0**	**5.1**	**7.5**	**6.1**	**5.9**	**4.7**	**4.7**

Source: DANE. Calculations by Banco de la República.

The large rise in overall private consumption during the first quarter of this year is connected with strong growth in credit consumption over that period. In effect, real consumer loans increased at a high annual rate of about 21%, much the same as in the previous two quarters. In this respect, the interest-rate rise may not have yet been reflected in any moderation in consumer loans or consumer spending, though it is well to remember that other factors may have produced a compensating effect on household spending; they include: higher terms of trade up to March, good labor-market behavior, lower inflation, and higher remittances up to December.

Government consumption performed slightly better than it did on average in the second half of 2011; but, with an annual growth rate of 2.9%, it was again one of the least dynamic aggregates of GDP.

Most components of investment slowed in growth, particularly investment in civil works.

The first quarter of this year brought confirmation of a break in the positive trend shown by investment growth since early 2011. Specifically, the latest data show that gross fixed-capital formation slowed for the second consecutive quarter, with a first-quarter growth rate that was half the rate of the last quarter of 2011 and also lower once more in quarterly terms.

Among the components of fixed-capital investment, civil works stood out with an 8.1% fall in annual terms, accompanied by a 21% contraction in quarterly terms relative to the end of 2011. The first quarter of 2012 also saw a considerable annual fall in highway, road and street construction and a strong deceleration in investment in pipelines for transportation and construction in mining, which fell by nearly 27% in quarterly terms. Under fixed-capital formation, investment in transport equipment and in machinery and equipment also slowed in the first quarter of this year, expanding on average at an annual rate of 20%, down from 35% in 2011. Investment in building construction rose faster, as it had the year before, at an annual growth rate of 4.5%, one of the highest in two years and approaching the peak reached in the third quarter of 2008.

Considering the world economy's delicate situation and low growth among some of the country's main trading partners, it is not surprising that the types of spending connected with international trade should have been the most affected in the first quarter. Colombian exports grew by 6.3% in annual terms, which is not a particularly low rate, being somewhat higher than the series average, but it is considerably lower than the 11.4% average for 2011 and far below the 16.2% rate at the end of 2011. Export growth moderated because of considerable slowdown in sales of all types of goods, particularly mining products and industrial goods.

Import growth also decelerated in the first quarter of 2012 and did so at a faster pace, rising by 13% in annual terms, compared with 21.3% in the previous quarter. The deceleration came from slower expansion in capital goods purchases and commodity imports and was in line with investment behavior. The evolution of exports and imports caused the trade deficit–measured on the basis of national accounts–to widen slightly over the first quarter of this year.

2. 2012 first-quarter GDP growth by branch of activity

Imports decelerated at a faster pace than exports.

On the side of supply, the different branches of activity exhibited a mixed behavior in the first quarter of 2012. Some sectors such as services and

Some branches of activity continued to grow at the same pace as in 2011, boosted by domestic demand. Others were beset by supply shocks.

transport continued to grow at the same pace as at the end of last year, hand in hand with growth in private domestic demand. But other branches were beset by certain adverse supply shocks that reduced their rate of expansion. The slowdown was evident in the farming and mining sectors, with coffee and oil production falling in quarterly terms, and also occurred in manufacturing, as specified further below.

The sectors that contributed most to annual GDP growth in the first quarter of 2012 were, in descending order, financial, property and corporate services, mining, commerce, and restaurants and hotels (Table 2). In the case of financial services, overall credit maintained its fast pace of growth over the first quarter, particularly in consumer loans, and allowed the value added by financial intermediation to continue to expand at annual rates of nearly 15%, similar to rates at the end of 2011. Note that good growth in overall credit was driven by demand, which continued to rise despite higher market interest rates; it was also driven by competition in the sector becoming greater and further stimulating financial deepening. As a result, financial services, with their strong increase and their large share in GDP, made the biggest contribution to expansion in the economy as a whole.

Although the mining sector maintained double-digit growth, making the second biggest contribution to economic expansion, it lost considerable momentum relative to the second half of 2011. This was caused, in particular, by oil production receding in quarterly terms–for the first time since 2003–, on account of public-order problems and difficulties in crude transportation, among other factors. Oil and gas GDP expanded at an annual rate of nearly 10%, down from an average close to 20% for the past two years. In contrast, coal production grew at a faster pace than the average for the two years before; and production of metal minerals surged by 31%, owing particularly to the statistical effect caused by last year's partial disruption of ferronickel production to allow maintenance work to be done on one of the ovens at the Cerro Matoso mine.

The sectors that contributed most to growth were the financial sector, mining and commerce.

Another sector that made a notable contribution to growth in the first quarter was the sector of commerce, restaurants and hotels. Although value added through commercialization of goods lost momentum slightly, its annual expansion continued to outpace growth in the economy as a whole, thanks to rising private domestic demand. The loss of momentum came from moderation in the supply of commercializable goods (mainly by industry), and from a slowdown in some segments of retail trade, especially in the more durable goods. The GDP of restaurants and hotels expanded at a

Table 2
Real annual GDP growth, by branch of economic activity

Sector	2011				2011 Full year	2012 Q1	Contribution to Q1 2012 annual growth
	Q1	Q2	Q3	Q4			
Farming, forestry, hunting & fishing	7.4	1.4	1.6	(1.8)	2.1	(0.4)	(0.0)
Mining and quarrying	9.6	11.0	19.1	18.2	14.5	12.4	0.9
Manufacturing	4.5	2.3	5.9	3.9	4.1	0.6	0.1
Electricity, gas and water	(1.0)	1.8	3.3	2.6	1.7	4.4	0.2
Construction	(1.5)	(3.7)	18.5	10.1	5.5	(0.6)	(0.0)
Buildings	1.4	5.0	12.1	1.1	4.8	3.5	0.1
Civil works	(5.6)	(10.7)	29.2	17.8	6.2	(8.1)	(0.2)
Commerce, repairs, restaurants & hotels	5.9	6.7	6.1	5.3	6.0	4.6	0.5
Transport, warehousing & communications	6.3	6.8	7.9	5.7	6.7	6.1	0.4
Financial, insurance, real estate and business services	4.5	5.9	6.5	6.5	5.9	6.7	1.3
Social, community and personal services	2.5	3.1	3.8	3.3	3.2	3.4	0.5
Subtotal value added	4.5	4.4	7.3	5.8	5.5	4.3	3.9
Taxes less subsidies	9.9	13.0	10.1	9.2	10.5	9.1	0.9
GDP	**5.0**	**5.1**	**7.5**	**6.0**	**5.9**	**4.7**	**4.7**

Source: DANE. Calculaions by Banco de la República.

more moderate annual rate, despite the positive statistical effect of the low base of comparison in last year's first quarter as a result of the rainstorms. Although hotel occupancy rates tended up in the first quarter, they did so slowly.

The manufacturing sector's first-quarter behavior was pretty modest, in line with industrial performance on the international scene. Annual growth in Colombia's industrial GDP was 0.6%, the lowest since 2009. A good part of this slowdown was due to sharp drops in oil refining and chemicals (representing almost 25% of the total sector), which were associated with supply factors. The 8.6% annual drop in oil-refining products resulted from scheduled closings of the major refineries for maintenance and refitting. The chemical industry shrank by 1.5%, beset by problems in the supply of raw materials, particularly propane gas.

Industry slowed as a result of a number of supply shocks and lower external sales.

Even excluding oil-refining and chemicals, the rest of the industrial sector also slowed in growth (from 4.3% in the fourth quarter of 2011 to 3.1% in the first quarter of 2012). The Banco de la República estimates that one-fourth of the first-quarter loss of pace in overall industrial GDP came from the supply factors referred to above, and the other three-

The sectors that registered annual falls were farming (coffee production), and construction (civil works).

fourths mainly from lower external sales, which were not offset by higher domestic sales.

Lastly, the sectors with the poorest first-quarter performance were farming and construction, registering negative rates of annual growth. Farming was affected by a strong contraction in coffee production, which, seasonally adjusted, fell to the lowest quarterly level in the past forty years. The coffee sector has been weak recently, reflecting not only temporary supply shocks but also structural problems.[8] The construction sector's GDP was affected by a strong annual downturn in civil works, which, as mentioned earlier, occurred mainly in highway, road and street building and was intensified by a quarterly fall in mining construction.

3. Economic outlook for the rest of 2012 and for 2013

Although the latest forecasts indicate that domestic demand will continue to be the main driver of growth in 2012, Colombia's economy will not be immune to international events. As in the first half of the year, the effects of the delicate international situation, of uncertainty caused by problems in Europe, of low US growth, and of the slowdown in China will be felt in Colombia through international trade and other channels. Colombian exports and imports are therefore expected to grow more slowly this year, losing the momentum they had gained after overcoming the worst effects of the 2009 crisis. Furthermore, export revenues should be affected by the downtrend occurring since April in some commodity prices, particularly oil, as a result of lower global demand for these products. Exports could, however, receive an extra impetus in 2012 from the entry into force of the free trade agreement with the United States. The effects of this trade agreement should begin to be seen in the second half of the year, helping to cushion, to a still undetermined extent, the impact of lower demand from China, Europe and elsewhere for Colombian exports.

The international context is expected to continue affecting Colombia's foreign trade throughout 2012.

Transmission of the increasingly difficult European situation to Colombia's economy may also be felt through higher risk premiums. If risk premiums do rise they would affect Colombia by making credit more costly, at the same time as reducing the flow of foreign direct investment and so dealing a blow to growth in capital formation within the country. In addition,

8 See Cano *et al.* (2012), "El Mercado mundial del café y su impacto en Colombia", *Borradores de Economía*, No. 710, Banco de la República.

The effects of the global context are expected to be felt not only through a lower volume of foreign trade but also through higher risk, lower transfers and lower commodity prices.

household consumption may be affected, albeit to a lesser extent, by Spain's precarious employment situation and by the resultant decrease in remittances from Spain.

Generally speaking, however, external effects are projected to be offset by a domestic environment that should remain relatively favorable. Accordingly, assuming no further worsening of the European situation, Colombia's economic growth in 2012 should be close to its average since 2000 and, though slower than in 2011, cannot be considered low.

By type of spending, the main driver of GDP in 2012 will be household consumption, which may grow more slowly than in recent years but should continue to expand at a still high rate. The slowdown relative to 2011 is expected to occur in all components of household consumption, particularly in purchases of semi-durable and durable goods, given their high base of comparison (in 2011 they grew at historically high rates). But the main cause of the slowdown is expected to be moderation in spending resulting, among other things, from slower credit growth because of higher interest rates and greater provisions by the financial sector, the repercussions of which should being to appear to a greater extent in the second half of this year.

Government consumption is expected to accelerate and come close once more to its average growth rate since 2000. This recovery from its modest 2.6% expansion in 2011 should be driven by the central government's projected higher tax revenues and by implementation of projects by a number of sub-national entities.

As in the case of private consumption, investment is expected to lose pace, though to a proportionately greater extent. Growth in fixed-capital investment should moderate considerably in 2012, owing to comparatively modest expansions in all its components, relative to 2011. As in the case of household spending, this behavior should result in part from a high base of comparison, and also from the fact that fixed-capital purchases, particularly aircraft imports, are projected to continue on the downtrend observed in the first quarter.

Household consumption should be the main driver of GDP in 2012.

In addition, investment in building construction and civil works is expected to slow down (to negative growth in the case civil works), moderating the recovery that began a year ago after downturns in 2010. Despite its deceleration, spending on building construction this year is projected to rise above the peak reached in 2008, before the financial crisis. This projection is based on the evolution of licenses approved

Investment growth is expected to moderate considerably relative to 2011.

in 2011 and most particularly on the government's stated intention of providing a considerable impetus to the construction of social housing. Poor performance in civil-works investment will be largely the outcome of a very slow start this year that cannot be offset by faster growth expected for the remaining quarters. Such faster growth should be driven by progress in the reconstruction of rainstorm-damaged roads, by initiation of new road and airport projects to meet the needs of a greater volume of foreign trade arising under the free trade agreements, and by stronger investment in the oil sector.

Export growth should exhibit a break in the trend that began in 2010. Thus, external sales should increase at a slightly higher rate than the average for the past decade. With the result that the contribution of exports to GDP growth should be modest, higher only than their contributions when external demand fell sharply, for example in 2002 and 2009.

Imports, too, should decelerate in 2012–in line with consumption and investment as described above–, growing at a rate below their average in recent years. The combined effect of import and export behavior in 2012 should be to cause a slight increase in the trade deficit (measured on information from the national accounts), and thus make a negative contribution to GDP growth. Note that these forecasts are subject to a further uncertainty, caused by the fact that it is not yet known what the exact effects will be for Colombia of the entry into force of the free trade agreement with the United States, for it is not yet clear whether in the short term this will prove of greater benefit to exports or imports.

Regarding GDP from the supply side, the strongest growing branches of activity throughout 2012 are expected to be mining, financial and related services, and transport and communications. In the case of mining, growth in oil GDP is revised down from the forecast made a few months ago, because of public-order problems and the difficulties in the transportation of crude, which moderated the sub-sector's expansion in the first half of the year. Nevertheless, crude-oil production is expected to average around 950,000 barrels a day this year, which is an increase on the year before. This, plus the fact that coal production should grow by over 10% relative to last year, to almost 95 million tonnes, will mean that mining GDP should perform better than any other branch of activity, though less well than in the past four years. The financial sector's GDP is projected to continue expanding fast, thanks to value added through financial intermediation, as a result of strong growth in bank credit. The transport and communications sector should be driven particularly by the telecommunications sub-sector's over 6% growth in internet and pay-tv subscribers.

Industry and construction are forecast to be the sectors performing least well in 2012.

The branches of activity expected to perform most modestly are industry and construction. Manufacturing GDP is forecast to perform poorly because of the expected slowdown in global demand and the impact of supply shocks suffered by the sector in the first half of the year. This forecast is consistent with the behavior of industrial output so far this year in different parts of the world. Moreover, the country's poor industrial performance is expected to have a partial contagion effect on other chained sectors, especially those of ground transportation and commerce, on account of reductions in this kind of supply. The low rate of expansion expected in construction is associated with civil-works investment, which, as mentioned earlier, might show negative growth.

For all the above reasons, Colombia's economy is expected to grow more slowly in 2012 than in 2011. This year's specific GDP growth figure will naturally depend on: the evolution of economic problems in Europe, the path of recovery in the US, the size of the slowdown in China, and also on contagion from these factors to emerging economies such as Colombia's. Accordingly, the 4%-6% growth rate for 2012 forecast by the Banco de la República earlier this year will be revised down, on account also of materialization of certain initially contemplated risks, in view of recent developments on the Old Continent.

The Colombian economy is expected to grow in 2013 at much the same pace as in 2012, based on projections regarding the international situation. Thus, for two years running the rate of GDP growth should be very close to the average since 2000. It must be pointed out, however, that if European economic problems intensity, Colombia's economy would expand at a much more modest pace.

B. LABOR MARKET

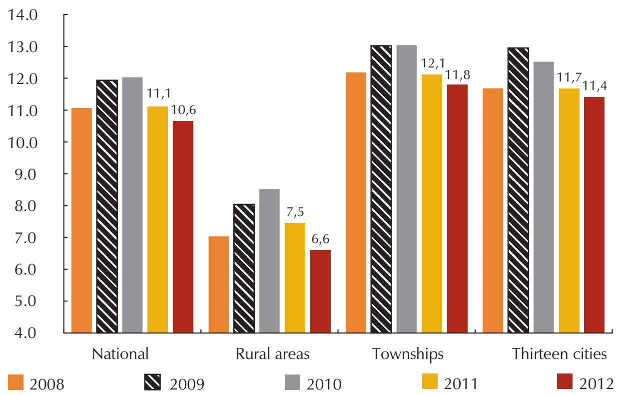
Employment conditions improved in the early months of 2012 relative to twelve months earlier. Throughout this period the unemployment rate continued to fall in annual terms, and job creation was focused on employment in the formal sector. But slower economic growth in 2012 than in 2011 does appear to have reduced the speed at which changes are occurring in labor conditions.

The unemployment rate continues on a downtrend but with smaller falls than in the final months of 2011.

1. Unemployment

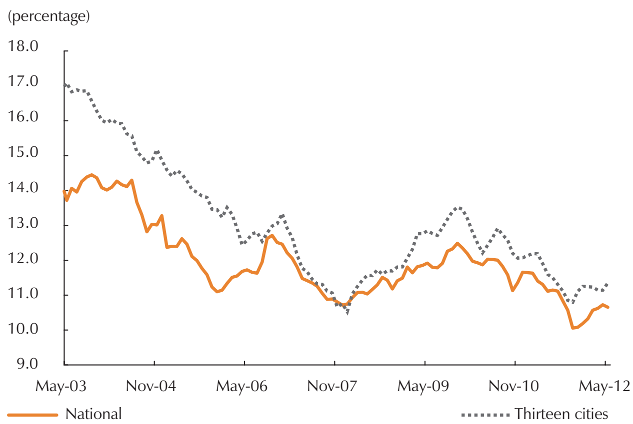
The latest information from the National Statistics Agency's Large-Scale Integrated Household Survey shows that the unemployment rate continues

Graph 21
Unemployment rate
(March-April-May moving quarter)



Source: DANE (Large-Scale Integrated Household Survey).

Graph 22
Unemployment rate
(seasonally adjusted moving quarter)



Source: DANE (Large-Scale Integrated Household Survey). Calculations by Banco de la República.

on a downtrend but with smaller falls than in the final months of 2011, which may indicate slower improvements in the labor market, and unemployment becoming stable over the coming months. The latest available figures show unemployment running at 10.7% in May for the country as a whole and at 11.9% for the thirteen largest cities. The national rate is 0.5pp lower than in May 2011, while the rate for the thirteen cities is 0.9pp higher.

Information for the moving quarter[9] (March-May) is clearer and confirms these trends: unemployment was 10.6% for the country as a whole (0.5pp lower than twelve months earlier), 11.4% for the thirteen cities (0.3pp lower), 11.8% for townships (0.3pp lower), and 6.6% for rural areas[10] (0.9pp lower) (Graph 21). Analysis of the seasonally adjusted series,[11] which reveals short-term trend changes, also corroborates the rate for the thirteen cities but is less clear on the national rate (Graph 22).

At all events, the slower decline in unemployment over recent months, though not yet a clear sign of deteriorating labor conditions, needs to be monitored carefully, given the present state of the global economy and the many channels by which contagion may potentially reach Colombia's economy.

9 According to the National Statistic Agency, DANE, moving-quarter information has fewer statistical errors, and analyzing it may therefore provide better conclusions about the labor-market situation and outlook.

10 In this *Report* 'rural areas' refers to the geoGraph ical domains classified as "the rest" by DANE.

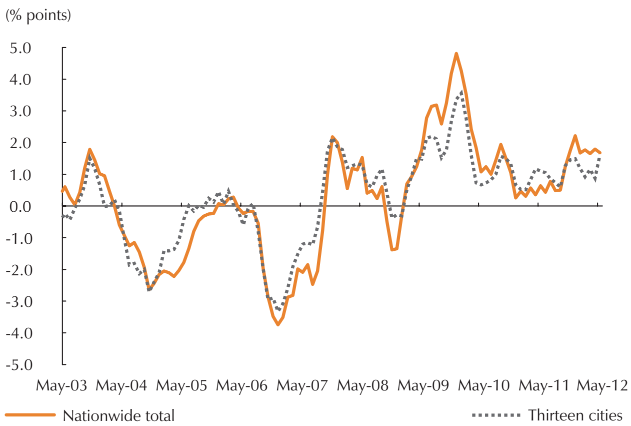
11 Labor-market information varies over the year, with each month or quarter having characteristics peculiar to it. This leads to erroneous comparisons of contiguous periods and hence to wrong conclusions based on them. To make valid comparisons, the series needs to be seasonally adjusted by eliminating the effects peculiar to the time of year in order for trend data to be comparable over time and throughout the same year.

Moreover, as discussed further below, it should be borne in mind that when the seasonally adjusted series is used the unemployment rate's recent behavior can be explained by a decrease in non-wage employment (usually identified as low-quality, highly unstable, low-income work) between December 2011 and May 2012, and an increase in wage-earning employment over the same period. This suggests that unemployment-rate and labor-market movements are the outcome on the one hand of a series of events indicating improvement in working conditions, and on the other hand of other events requiring greater attention and monitoring. Besides, although non-wage employment has shown greater annual variations than before, wage-earning employment has continued to expand considerably.

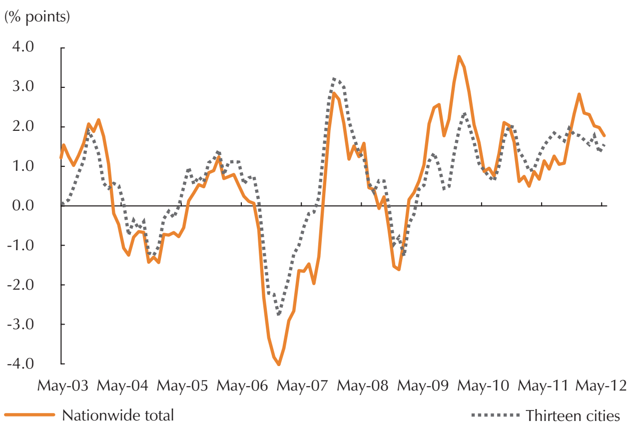
2. Labor supply and demand

Graph 23
Overall participation rate and employment rate: national and thirteen cities
(annual change in seasonally adjusted moving quarter)

A. Overall participation rate



B. Employment rate

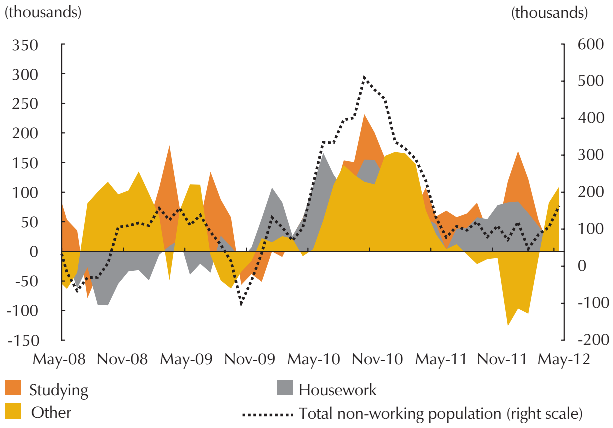


Source: DANE (Large-Scale Integrated Household Survey).

The behavior of the unemployment rate may be better understood by analyzing the movements and dynamics of labor-market supply and demand, represented respectively by the overall participation rate and the employment rate. In seasonally adjusted terms, both these rates rose in the moving quarter ended in May, in contrast to the successive quarterly falls observed since January 2012. Thus, the overall participation rate for the country as a whole was 1.7pp higher than in May 2011, but 0.5pp lower than in December 2011. For the thirteen cities the overall participation rate was 1.6pp higher than in May 2011; it was also 0.2pp higher than in December 2011, unlike the rate for the country as a whole. Relative to twelve months earlier, the employment rate was up by 1.7pp for the country as a whole and up by 1.5pp for the thirteen cities; relative to December 2011, it was down by 0.7pp for the whole country and up by 0.1pp for the thirteen cities (Graphs 23 A and 23B).

Thus, relative to the first quarter of 2011 labor demand has grown by more than labor supply, reducing the unemployment rate in annual terms. However, the seasonally adjusted series show that supply and demand have varied by similar amounts this year, resulting in a stable unemployment rate during 2012.

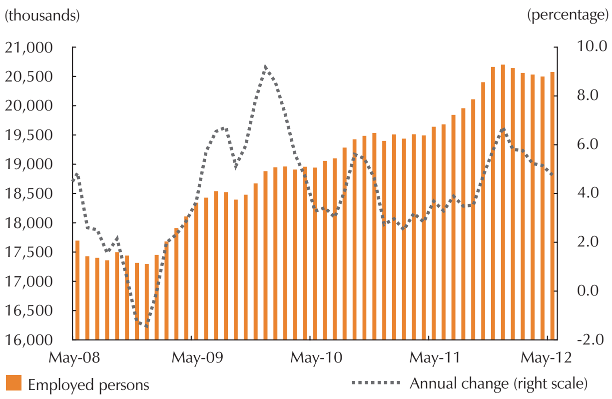
Graph 24
Non-working population in the thirteen cities
(absolute annual change in seasonally adjusted moving quarter)



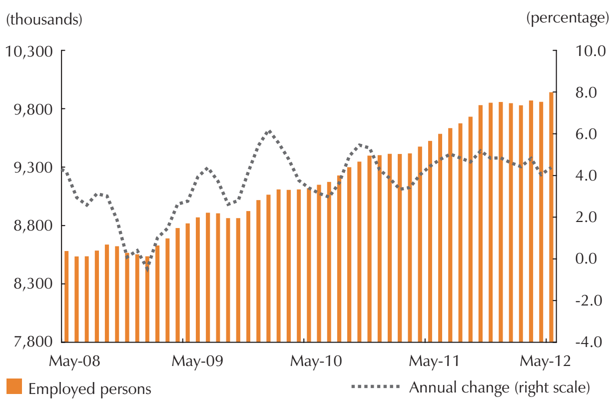
Source: DANE (Large-Scale Integrated Household Survey). Calculations by Banco de la República.

Graph 25
Employed persons
(seasonally adjusted moving quarter)

A. Nationwide total



B. Thirteen cities



Source: DANE (Large-Scale Integrated Household Survey). Calculations by Banco de la República.

Moreover, from January to May this year the number of non-workers increased by more than in the fourth quarter of 2011, especially the number of people who are now studying. This indicates that people who were participating in economic activity before are no longer doing so, because they see no need to work, or cannot work, or are not interested in undertaking any remunerated activity (Graph 24). This explains the fall in the overall participation rate during the early months of the year and implies a moderation in labor-supply growth that, if continued, will make it more possible for the unemployment rate to fall further.

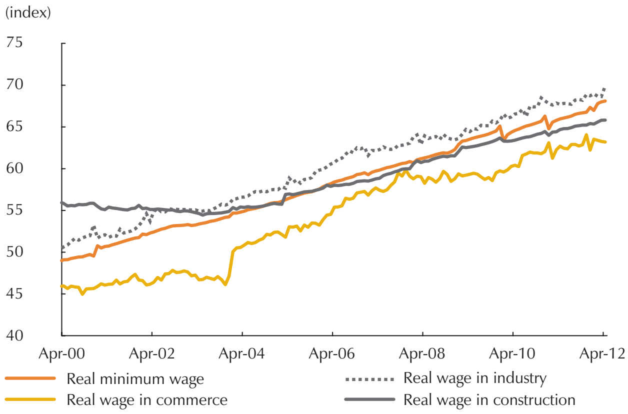
The employment rate's behavior is consistent with the recently observed numbers of people with jobs nationwide and in the thirteen big cities. Information to May from DANE's large-scale household survey confirms that the level of employment is higher than twelve months earlier. However, the seasonally adjusted series show a slowdown in the annual growth rate when current levels are compared with levels in the fourth quarter of 2011 (Graph 25). Something similar occurs with year-on-year comparisons. Note that analysis by type of employment shows that the seasonally adjusted series of people with jobs stagnates in quarterly terms, as a result of a strong increase in wage earners, offset by a fall in the number of non-wage workers.

Another indicator that reflects labor supply and demand conditions in the economy relates to wages. The latest data reveal that so far this year wage increases have been moderate and within the inflation target range. In real terms, wages in industry, commerce and construction have, on average, undergone annual variations of the order of 1.8% (Graph 26).

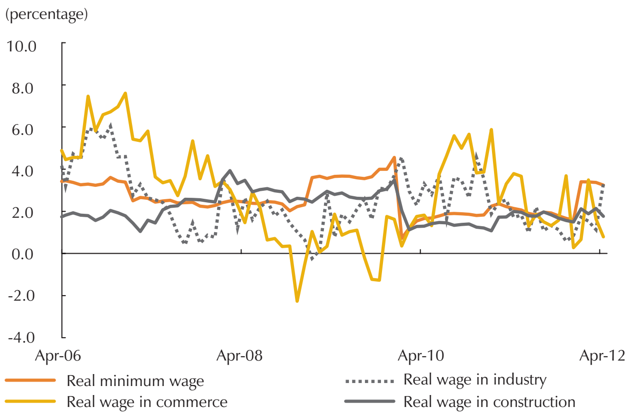
The minimum wage has shown higher annual growth, averaging 3.3% in real terms for 2012, in line with the 5.8% nominal increase decreed in

Graph 26
Real wages, and annual change in them
(seasonally adjusted, deflated by non-food, non-regulated CPI)

A. Real wages

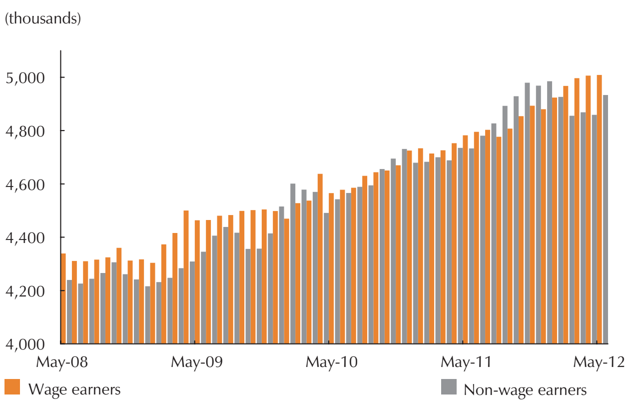


B. Annual change



Note: The real minimum wage was calculated with total PPI, real wage in industry with industrial PPI, and real wage in commerce with CPI.
Sources: DANE and Ministry of Social Protection. Calculations by Banco de la República.

Graph 27
Employed persons, by type of occupation: thirteen cities
(seasonally adjusted moving quarter)



Source: DANE (Large-Scale Integrated Household Survey). Calculations by Banco de la República.

December 2011. Based on the above information, it appears that wage increases in the first four months of 2012 did not yet fully reflect the labor-market tightening foreseen in the March 2012 Report to Congress.

3. Employment quality and labor-market conditions

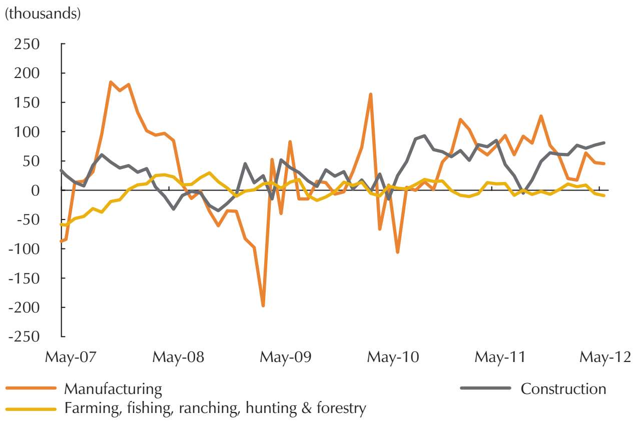
Available information indicates that, despite slower decline in the unemployment rate and stagnation in the number of people with jobs, labor conditions and employment quality are not deteriorating (as might be expected). As mentioned earlier, wage employment has grown faster than non-wage employment.[12] So far this year wage employment in the thirteen major cities has increased at an average annual rate of about 5% (237,000 workers), while non-wage employment has grown by 3.8% (176,000 people) (Graph 27).

By occupational position, construction and industry have driven the increase in wage employment. In contrast, non-wage employment has been affected by the recent fall in the number of domestic workers and farmhands. Hence, there appears to have been a shift of unskilled labor, from low-quality, unstable, low-income jobs, to sectors offering greater stability and better wages (Graph 28).

The above facts are confirmed by analysis of the National Statistics Agency's data on formal and informal employment. The number of informal workers decreased in the early months of this year relative to what it was at the end of 2011 (though it picked up in May) and grew at rates of about 3.2% on average for the first five months of 2012,

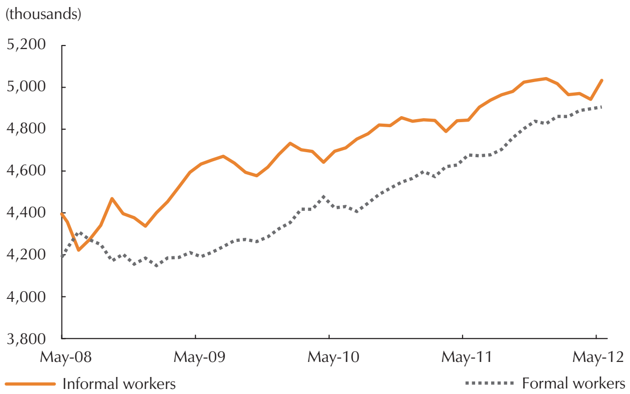
12 According to DANE's classification of occupational positions, wage earners are workers that come under the categories of private-sector employees, government employees, and laborers. Non-wage earners are workers under the categories of the self-employed, owners or employers, domestic employees, unremunerated family workers, day laborers and farmhands.

Graph 28
Absolute annual change in the number of employed persons
(seasonally adjusted moving quarter)



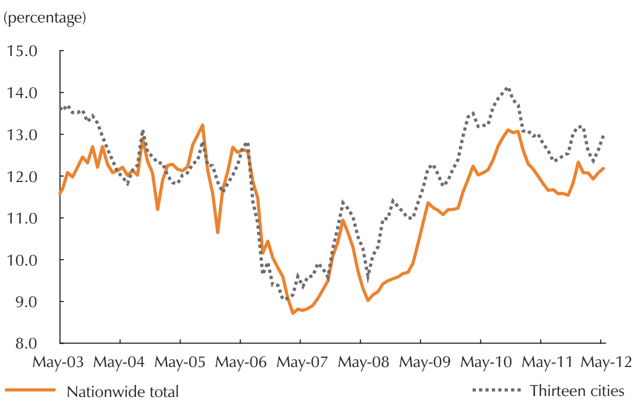
Source: DANE (Large-Scale Integrated Household Survey). Calculations by Banco de la República.

Graph 29
Number of formal and informal workers: thirteen cities
(seasonally adjusted moving quarter)



Source: DANE (Large-Scale Integrated Household Survey). Calculations by Banco de la República.

Graph 30
Objective underemployment rate
(seasonally adjusted moving quarter)



Source: DANE (Large-Scale Integrated Household Survey). Calculations by Banco de la República.

equivalent to an increase of 154,000 workers. In comparison, the number of formal workers continued to rise, expanding at annual rates of some 5.7%, an increase of 263,000 workers (Graph 29).

Lastly, the rate of objective underemployment[13] has varied so far this year. After rising in the fourth quarter of 2011, it fell sharply in the early months of 2012. But the latest information indicates that current levels are higher than twelve months ago (Graph 30). Hence, it could be held that employment quality and labor conditions have improved, but that, given the pace of growth in economic activity, the improvement had not taken root by the end of the second quarter. In this setting, therefore, it is uncertain what path the objective underemployment rate may trace in the second half of the year.

C. INFLATION

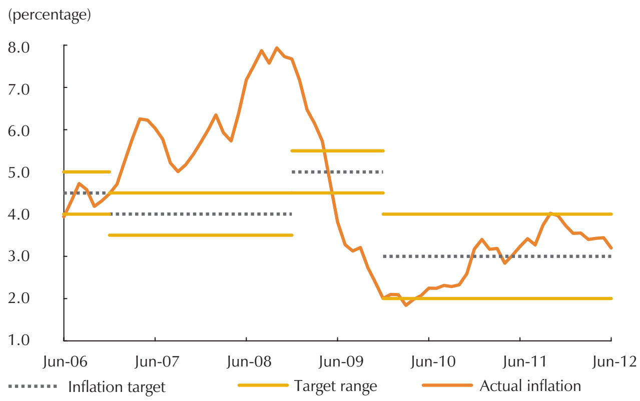
1. Consumer prices in the first half of 2012

Annual consumer inflation in the first half of the year remained above the 3.0% target set by the Bank's Board of Directors for 2012 and for the long term. But it did tend to decrease and, in this respect, behaved satisfactorily, running at 3.20% in June, down from 3.73% at the end of 2011 (Graph 31). This behavior was a little better than expected earlier in the year, as discussed in the March Report to Congress.

Headline inflation stayed very close to the 3% inflation target throughout the first half of the year. In June the four indicators monitored by the Bank averaged 3.0%, down from 3.15% in December

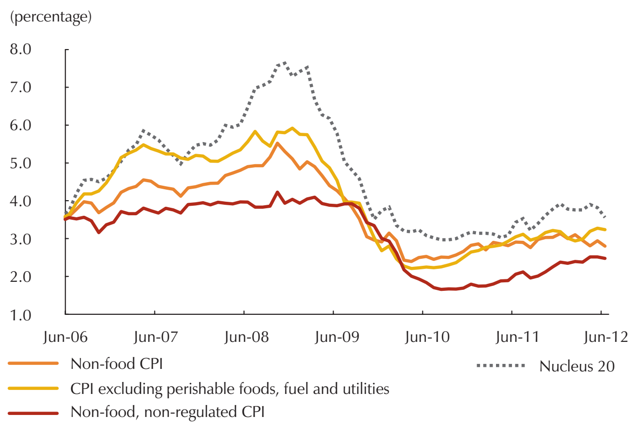
13 DANE defines objective underemployment as the condition of a worker with a stated desire to improve his income or the number of hours worked or to have a job more suited to his qualifications and abilities, and who has, moreover, taken steps toward achieving his aspiration and is in a position to make the change.

Graph 31
Headline consumer inflation



Source: DANE and Banco de la República.

Graph 32
Core-inflation indicators



Source: DANE. Calculations by Banco de la República.

last year. Two of the indicators–nucleus 20 and non-food CPI–registered some falls over this period, while the other two–CPI excluding food staples, fuel and utilities, and non-food non-regulated CPI–remained relatively stable (Graph 32 and Table 3).

Non-food CPI dropped from 3.1% in December to 2.8% in June. Nucleus 20 continued to register the highest level (3.6% in June), and non-food non-regulated CPI the lowest (2.5%) though it has been rising slowly but steadily since the end of 2010.

Several factors have made it possible for inflation to converge toward the target in the year to date. First, demand pressure has continued to be moderate, even a little more so than forecast earlier this year. This has probably meant that there has been scarcely any upward pressure on consumer prices, especially on prices for nontradable goods and services. Specifically, nontradable, non-food, non-regulated CPI stood at 3.6% in June, much the same level as in December, despite its slight uptrend from early 2011 to May of this year, when it reached 3.7%; its fall in June resulted in part from a very high base of comparison in June 2011 and might therefore be partly reversed in the coming months (Graph 33).

Secondly, inflation expectations decreased significantly in the first half of this year, which may be partly attributable to monetary-policy action. Lower expectations helped to moderate price rises in a broad range of consumer staples. Estimates by the Banco de la República show that inflation expectations play a major part in determining prices for nontradable, non-food, non-regulated goods and services, for some tradables, and for components of food CPI, such as eating out.

At the end of last year inflation expectations ran close to or over 4%, but by the end of the second quarter all the indicators were down to about 3%. So, for example, expectations measured on the basis of the Bank's monthly surveys of financial-market operators, for a twelve-month horizon, stood at 3.44% in December and by July had fallen slightly, to 3.37% (Graph

Table 3
Consumer-inflation indicators
(at June 2012)

Description	Dec-11	Mar-12	Apr-12	May-12	Jun-12
Headline CPI	**3.7**	**3.4**	**3.4**	**3.4**	**3.2**
Non-food CPI	**3.1**	**2.9**	**2.8**	**2.9**	**2.8**
Tradables	0.8	0.7	0.9	1.0	1.0
Nontradables	3.6	3.7	3.8	3.7	3.6
Regulated	5.8	4.9	3.8	4.4	3.9
Food CPI	**5.3**	**4.6**	**5.0**	**4.7**	**4.2**
Perishables	7.7	5.2	4.7	1.2	(2.0)
Processed	4.5	3.7	4.6	5.0	5.1
Eating out	5.6	5.9	5.9	5.8	5.5
Core-inflation indicators					
Non-food CPI	3.1	2.9	2.8	2.9	2.8
Nucleus 20	3.9	3.8	3.9	3.8	3.6
CPI excl. perishable foods, fuel and utilities	3.2	3.0	3.2	3.3	3.2
Non-food non-regulated CPI	2.4	2.4	2.5	2.5	2.5
Average of all indicators	**3.2**	**3.0**	**3.1**	**3.1**	**3.0**

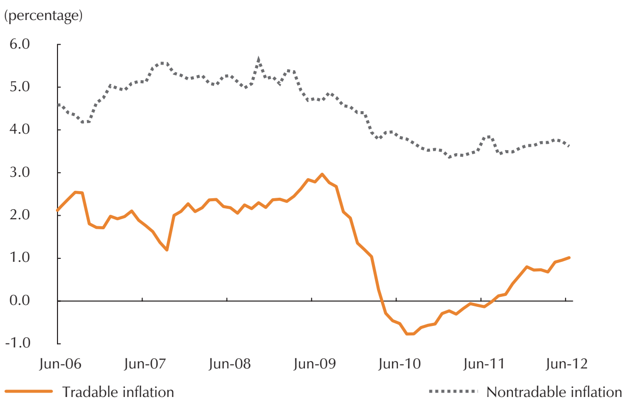
Source: DANE. Calculations by Banco de la República.

34). The same surveys reveal that in July expected inflation for December 2012 was 3.1%, down from 3.63% expected last December. The Bank's quarterly surveys of businesses, trade unions and analysts reveal a similar behavior (Graph 35).

Information drawn from interest rates on Treasury securities (TES) also showed significant decreases in expectations, particularly relevant in the case of long-term rates. A case in point is that of expected inflation in five years' time: at the end of last year it was 4%, and by June it had come down to approximately 2.8% (Graph 36).

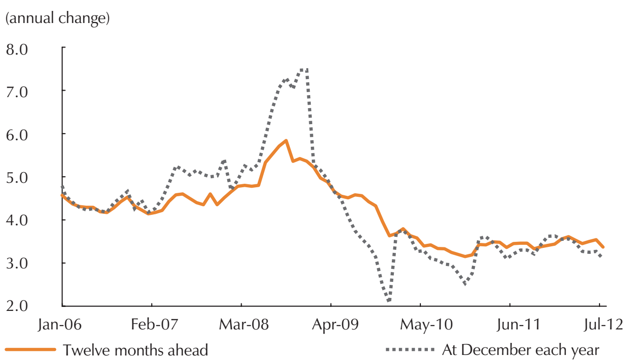
A third fact that contributed to the relatively good behavior of inflation was the (unforeseen) drop in international fuel prices from April on. This fact, together with appreciation in the exchange rate up to March, allowed domestic fuel prices to be raised by much less in the first half of this year than in the same period last year. Furthermore, the fall in the international price of oil made possible an absolute adjustment of almost 1.9% to the domestic price of gasoline between May and

Graph 33
Annual tradable and non-food, non-regulated nontradable inflation



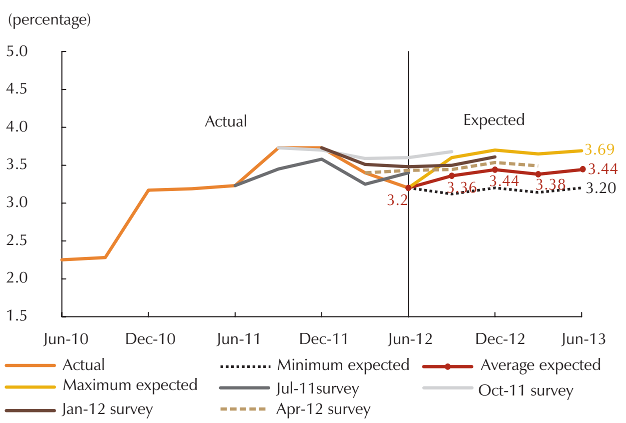
Source: DANE. Calculations by Banco de la República.

Graph 34
Banks' and stock-market brokers' inflation forecasts



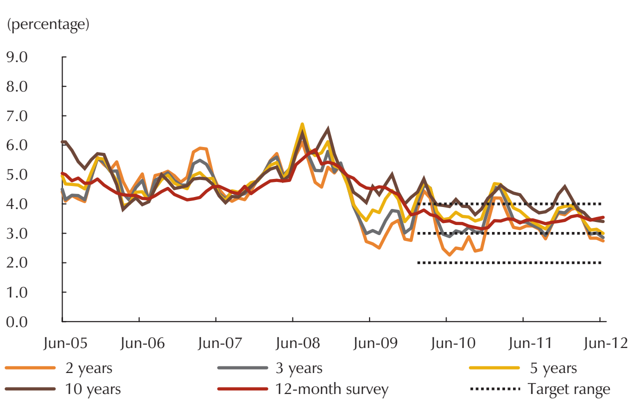
Source: Banco de la República.

Graph 35
Actual and expected inflation (for 3, 6, 9 and 12 months ahead)
(annual rate)



Sources: DANE and Banco de la República.

Graph 36
TES-derived inflation expectations
(for 2, 3, 5 and 10 years ahead)
(monthly average) a/



a/ Methodology Nelson and Siegel.
Source: Banco de la República.

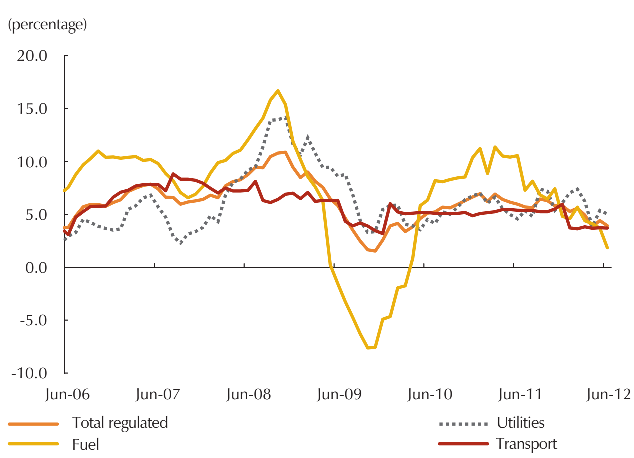
June. Thus the annual change in fuel CPI in June was just 1.8%, compared with 4.8% in December.

The slight rise in fuel prices has also meant moderate readjustments to the CPI of public-transport services, with the result that the annual change fell sharply, from 6.0% in December to 3.7% in June. A contributing factor was the decision by the Bogota city administration to postpone increases in the case of public transportation.

These two circumstances, together with the lowering of water-supply rates for low-income residents of Bogota, helped to reduce pressures on the basket of regulated goods and services during the first half of the year. Regulated inflation fell from 5.8% in December to 3.9% in June, becoming the item of non-food CPI that most helped to reduce annual inflation over that period (Graph 37).

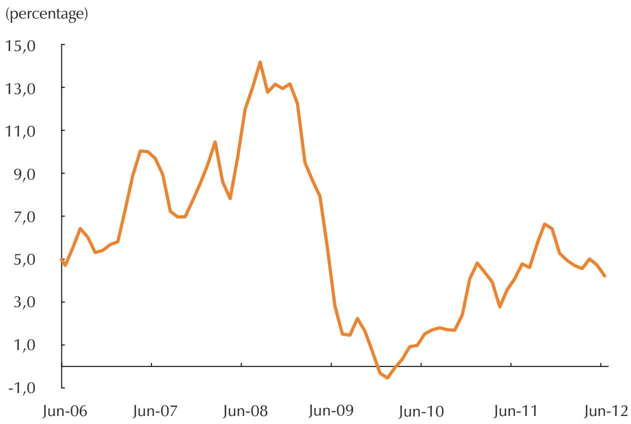
Another contributing factor may be the stimulus that domestic farm supply has received since the end of last year from improved weather conditions and from last year's high prices. This has resulted in moderate price increases for perishable foods so far this year, as evidenced by the substantially lower annual change in the CPI of such perishable

Graph 37
Annual inflation in regulated prices, by item



Sources: DANE. Calculations by Banco de la República.

Graph 38
Annual food inflation



Sources: DANE. Calculations by Banco de la República.

foods (Table 3), which has been attended by absolute price reductions for some products such as fruit and vegetables. As a result, the annual change in the all-food CPI dropped from 5.3% in December 2011 to 4.2% in June (Graph 38).

Despite that, other factors, such as higher domestic demand in certain markets, minimum-wage increases and exchange-rate depreciation at the end of 2011 and in April-June, kept annual variations high in other food subgroups, such as imported foods and eating out. In the latter case, the annual change rose over the first six months of the year, to 5.5% in June (up from 4.5% in December), completing 25 months at levels over 4.0% (Table 3).

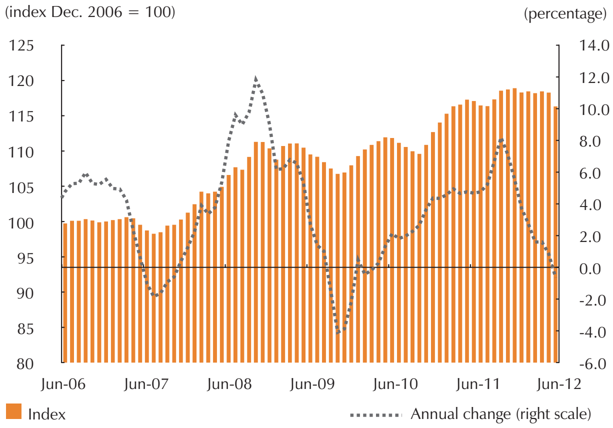
The influence of the exchange rate on consumer prices other than food prices seems to have been limited, as evidenced by the small pick-up in the annual variation in non-food, non-regulated, tradable CPI (Graph 33). This indicator, having accelerated in the second half of last year, has not exhibited any further large changes this year. This may be partly because the peso's price showed no marked trend for longer than three months, so that its effect on consumer prices was rather moderate. Moreover, other factors such as weak global demand and technological change may have continued to attenuate price increases.

Thus, prices for such goods as vehicles, electrical appliances, electronic devices and communications equipment tended to fall in the first two quarters of 2012, reversing the slight rises observed in 2011, which may have been partly caused by the peso's depreciation in the second half of last year. Resumption of exchange-rate depreciation from April this year was only slightly transmitted to consumer prices over the next two months, as suggested by the slightly faster change in tradable CPI. Note, however, that such transmission usually occurs with a lag of at least three months.

Non-wage cost pressures have been slight, thanks to lower international prices for oil and other commodities and the peso's appreciation.

Cost pressures have been slight in the first half of this year. The prices of intermediate goods, commodities and capital goods have exhibited small adjustments compared with what occurred in the same period last year, judging by PPI behavior. With the result that the annual PPI change plunged from 5.5% in December 2011 to -0.69% in June. The peso's appreciation at the beginning of the year and lower international prices for oil and other commodities as of April have helped to explain this behavior (Graph 39).

Graph 39
Headline PPI



Source: DANE.

Regarding wages, although the decreed 5.8% minimum-wage increase was significantly higher than the inflation target, other available indicators show smaller rises, based on figures to the second quarter. Thus, wages in industry, construction and commerce rose at a nominal annual rate of some 3.9% in the first half of 2012, which is compatible with the inflation target, when labor productivity gains of 1.0% are taken into account. Yet, the minimum wage may have in fact had an impact on consumer prices for some low-skilled, labor-intensive services, such as eating out, an item of significant importance (8.0%) in the consumer basket.

2. Inflation outlook for the second half of 2012 and f or the medium and long term

No major change is expected over the rest of the year in Colombia's annual inflation trends. The Bank's models suggest that inflation will remain at around 3% in the next two quarters, provided that no strong food-price shocks are caused by adverse weather conditions or lasting increases in international prices. Under normal conditions annual inflation tends to pick up slightly in the third quarter and fall back again in the final months of the year.

Non-food CPI and other core-inflation indicators should present no great changes in their levels over the rest of the year. A slight rise is expected to raise non-food CPI to 3.0% at the end of the second half. The annual change in one of its components, non-food, non-regulated, tradable CPI, is likely to remain at the mid-year levels, higher than forecast by the previous Report to Congress. In contrast, the annual variation in non-food, non-regulated, nontradables CPI is expected to rise significantly, driven particularly by acceleration in the annual change in housing rents, a variable that should continue on the moderate uptrend observed from several quarters ago.

Annual inflation is not expected to change its trend greatly over the rest of the year, remaining at around 3%.

Forecasts for the regulated group point to a stable annual CPI change over the next six months. This is a considerable downward revision of previous projections and is based on the fall observed in international oil prices since April this year. Lower oil prices should mean slower adjustments to domestic fuel prices, and allow that the announced reductions be made in public-transport fares for Bogota.

Colombia's inflation outlook for 2013 and 2014 is strongly tied to what happens on the external front.

For the food group the annual change is expected to decrease at a moderate pace between July and December, thanks to lower price increases for several perishable and processed products. However, this forecast assumes that weather conditions will be normal, and that international prices will not rise by very much or remain high for long.

Colombia's inflation outlook for 2013 and 2014 is projected to be strongly tied to what happens on the external front. The worsening perceived in the international environment and lower prospects of global growth for the rest of 2012 and for 2013, as discussed in previous sections, reduce the likelihood of domestic prices coming under demand pressure in the medium and long term. In these new circumstances, with the central scenario assuming a slowdown in the world economy and stagnation of demand in Europe, output gaps for the rest of 2012 and for 2013 are likely to be a little lower than forecast earlier in the year. This should curb the rise in a broad range of nontradable prices to a greater extent than was foreseen earlier.

In addition, commodity cost pressures for 2013 will be lower than previously forecast, given the recent price falls for oil and various minerals and the downward revision of medium- and long-term projections. Lower international prices for these products should affect the size of price adjustments in Colombia in 2013, especially for imported, regulated and transport-intensive goods and services, notably in the farm sector.

However, lower inflationary pressure from demand and costs in the medium and long term will not necessarily result in a significant reduction of headline consumer inflation in 2013, because deterioration in external conditions may be attended by greater pressure on the peso to depreciate. This may curb price falls for tradable and imported goods and, in some cases, raise their prices, much as occurred in the first half of 2009 as a result of the most recent global crisis. At that time tradable inflation tended to rise a little, driven by depreciation.

At all events, in the long run the downward influence of external demand and commodity prices should predominate over exchange-rate influence. Consequently, if the outlook for global growth remains weak, as it does today, or deteriorates further, the projected path of inflation can be expected to be lower by the end of 2013 and in 2014.

An upside risk to food-price inflation is the possibility of adverse weather conditions or lasting increases in international prices.

However, the above forecasts do not take into account the fact that by the end of this year prices for some imported foodstuffs might rise, owing to higher international prices for cereals and oilseeds, brought about by their global supply being hit by strong drought in the United States. If this shock does occur, its effects on Colombian inflation should be transitory.

Sharp rises in international prices for cereals and oilseeds could have some transitory effects on inflation in Colombia.

Much the same can be said about the possibility of El Niño weather conditions affecting Colombian farming, which has not been taken into account in the above forecasts. According to the pattern observed with this phenomenon, if it does occur in the second half of 2012, it will result in higher Colombian food prices in the first half of next year, particularly in the second quarter. There is currently a 65% chance of El Niño beginning to occur in September or October. But, since this is not yet a very high probability, there is great uncertainty about adverse weather conditions occurring and particularly about their possible intensity. At this writing, the Institute of Hydrology, Meteorology and Environmental Studies (IDEAM) believes that this year El Niño is more likely to be weak or moderate. Colombia's experience suggests that in that case El Niño will have a low impact on prices.

D. MONETARY POLICY, INTEREST RATES AND FINANCIAL SECTOR

Colombia's good economic growth in 2011 was favored by high terms of trade and satisfactory movements in investment and household consumption. The impetus provided by domestic demand indicated that the economy's spare capacity may be gradually diminished to the point of creating a situation of inflationary pressure.

As stated in the previous section, actual inflation in 2011 was on a rising trend, ending the year at 3.73%, up from 3.17% in 2010. Although this could not be regarded as runway inflation, it was worrying, for it was moving away from the 3% long-term target. In this environment, the different measures of inflation expectations for a year or more ahead increased during the year, to nearly 4%, which could jeopardize meeting the inflation target in 2012.

With consumption and investment growing well and signs appearing of inflationary pressure, the Board decided to change the monetary-policy stance starting from February 2011 by raising the policy rate in nine increments of 25bp, to 5.25% by February 2012.

Lending to businesses and households grew at high rates, driven by very low real lending and deposit interest rates. Such low levels of interest, intended originally to deal with the negative effects of the 2009 international financial crisis, were no longer consistent with the inflation target or with an economy growing at a good pace, and they could, moreover, become a source of financial instability.

In view of this situation, the Bank's Board of Directors felt that the economy no longer needed the monetary stimulus provided after the crisis and decided to change the monetary-policy stance gradually toward a less expansionary position. Accordingly, it had the policy rate raised, starting from February 2011, in nine increments of 25bp, up to 5.25% by February 2012, this rate being more consistent with rapid growth in domestic demand

The response of lending and deposit rates to the higher policy rate helped to moderate, over the first half of 2012, the rapid rise in borrowing observed at the beginning of the year.

and a positive output gap. In the following four months the Board kept the interest rate unchanged.

The policy-rate increments that began to be made in 2011 have been transmitted to both nominal and real lending and deposit rates, without being restrictive. And by June the only real lending rates running above their averages (estimated since 2000) were credit-card and treasury rates.

The response of lending and deposit rates to the higher policy rate helped to moderate, over the first half of 2012, the rapid rise in borrowing observed at the beginning of the year.

This response helped to moderate over the first half of 2012 the rapid rise in borrowing observed at the beginning of the year. Regarding risk, both the loan-quality indicator and the levels of overdue loans went into a phase of deterioration, but they are still far better than their historical averages and coverage is high.

The Board decided on July 27, 2012 to reduce the intervention rate by 25bp, prompted by signs of inflation remaining around the long-term target, and by greater than expected weakening of the global economy, which was affecting Colombia's economy through lower external demand and falling international prices for the major exports.

The Board decided at its July 27, 2012 meeting to reduce the intervention interest rate by 25bp, down to 5%. This decision was prompted by evidence of a greater than expected weakening of the global economy, which has slowed Colombia's economic growth through lower external demand and falling international prices for the country's major exports. Moreover, inflation dropped from 3.7% in December 2011 to 3.2% in June and is expected to remain stable around the long-term target (3%), according to signs from the different core-inflation indicators and inflation expectations.

1. Interest-rate behavior in the first half 2012

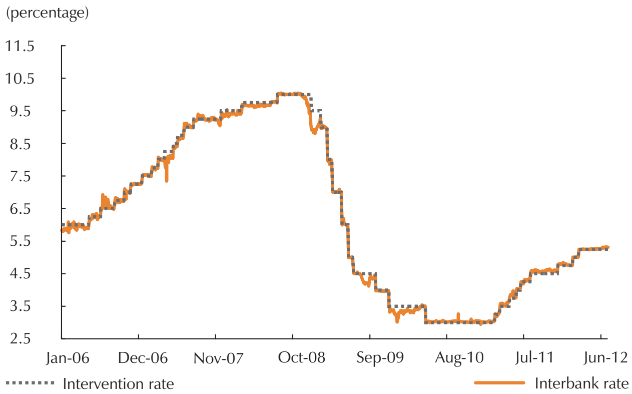
a. Market interest rates

In the first half of 2012 the Board made two incremental increases in the benchmark rate, raising it from 4.75% in December 2011 to 5.25% at the end of February and then leaving it unchanged for the rest of the first half. Over that period the one-day interbank rate followed the policy rate closely, to stand at 5.31% on June 29, 2012 (Graph 40).

The increases in the intervention rate have also been reflected in lending and deposit rates. From January to the end of June,[14] the DTF deposit rate

14 The interest-rate information provided here relates to the end of the monetary month (the last Friday of each month). Thus, December 2011 and June 2012 as comparison dates correspond, respectively, to Friday December 30, 2011, and Friday June 29, 2012.

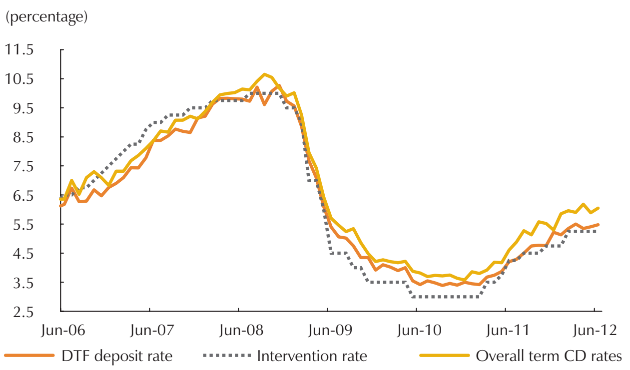
Graph 40
Banco de la República's intervention rate and the interbank interest rate
(2006-2012) [a/]



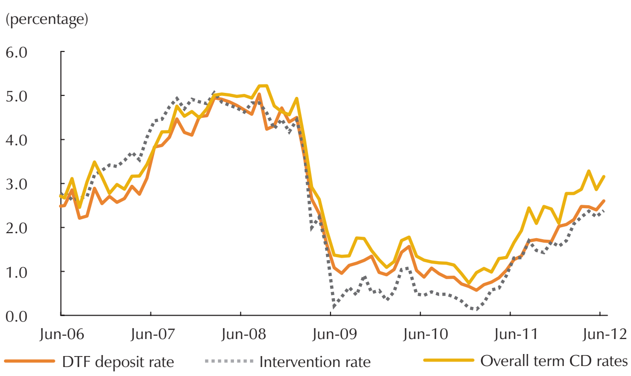
a/ Figures refer to working-day dates; the last date was June 29, 2012.
Sources: Financial Superintendency and Banco de la República.

Graph 41
Deposit rates and Banco de la República's intervention rate

A. Nominal rates [a/]



B. Real rates [b/]



a/ The information relates to end of the monetary month. The DTF rate is the rate calculated at the time of the deposit operation and comes into effect the following week.
b/ The information relates to end of the monetary month. Deflated by non-food CPI
Sources: Financial Superintendency and Banco de la República.

rose by 26bp, to stand at 5.48%,[15] while the average CD rate at all maturities went up by 75bp to 6.05%[16] (Graph 41).

Furthermore, lending rates for households rose on all types of loans. Specifically, interest on consumer loans went up by 34bp, from 18.52% in December 2011 to 18.86% at the end of June 2012, while over the same period the credit-card rate rose by 92bp, from 28.41% to 29.34% (Graph 42-A), and interest on housing loans edged up by 17bp, from 12.85% to 13.02% (Graph 42-B).

In the case of commercial loans, the interest rate rose by 24bp, from 10.41% in December 2011 to 10.65% in June 2012.[17] By type of loan, rates rose as follows: common loans by 30bp, from 11.84% to 12.13%; preferential loans by 27bp, from 9.20% to 9.47%; and treasury loans by 32bp, from 7.88% to 8.20% (Graph 43).

Interest on microcredit loans increased by 38bp from 35.25% in December 2011 to 35.63% at the end of June 2012 (Graph 44).

The weighted average interest rate on consumer and commercial loans, estimated by the Banco de la República, rose by 44bp, from 12.14% in December 2011 to 12.58% in June 2012 (Graph 45).[18]

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15 This is the level of the DTF deposit rate as calculated in a given week, to be in force for the following week. Specifically, the DTF is the 90-day deposit rate for Term Certificates of Deposit of banks, investment banks, and finance companies.

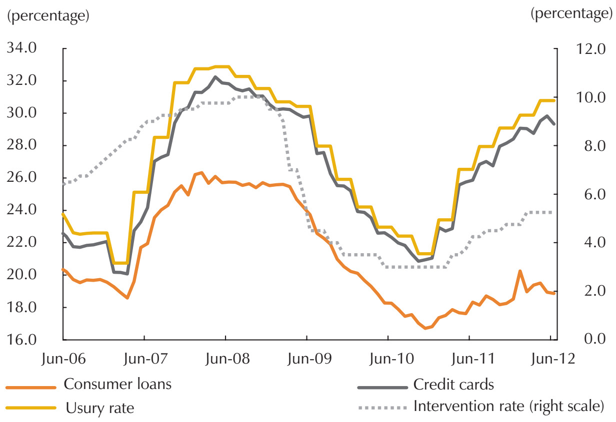
16 The rate for Term Certificates of Deposit is the all-maturities rate reported by all credit establishments to the Financial Superintendency.

17 Given the high rotation of treasury loans, a weighting of one-fifth of their disbursement was used in calculating the commercial-loan interest rate.

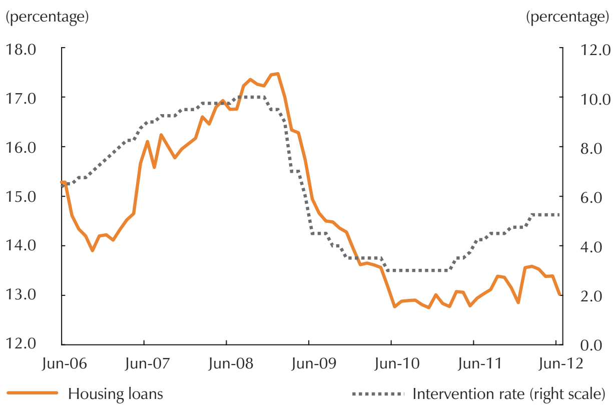
18 The weighting used by the Bank in calculating the lending rate is based on disbursements of consumer and commercial loans. The types of commercial loan considered are common, preferential and treasury loans. In the case of treasury loans, given their high rotation, a weighting of one-fifth of their disbursement was used.

Graph 42
Nominal interest rates on household borrowing, and Banco de la República's nominal intervention rate a/

A. Consumer loans

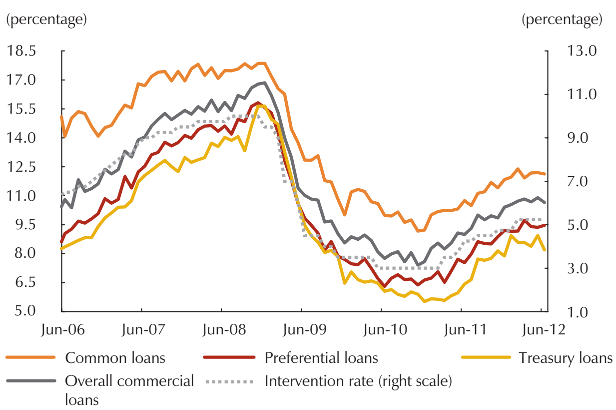


B. Housing loans



a/ Data relate to end of the monetary month.
Sources: Financial Superintendency and Banco de la República.

Graph 43
Nominal commercial-loan interest rates and Banco de la República nominal intervention rate a/



a/Data relate to end of the monetary month. Given the high rotation of treasury loans, a weighting of one-fifth of their disbursement was used in calculating the overall commercial-loan interest rate.
Sources: Financial Superintendency and Banco de la República.

b. Public-debt market

From January to June 29, 2012 peso-denominated Treasury securities, TES, gained in value. The rates on 0-2-year securities fell on average by 13bp, on 2-5-year securities by 63bp, and on 5-15-year securities by 64bp (Graph 46),[19] producing a leveling of the curve by some 52bp in the first half of the year.

Note that the slope of curve has decreased in Colombia since mid-2010, as in most economies of the region. In Colombia's case this period has coincided with a rising cycle of the benchmark rate, which has had a bearing on the increase in the curve's short-term rates and may have helped to reduce inflation expectations. Since February 25, 2011, when the benchmark rate's most recent rising cycle began, the zero-coupon curve has become flatter by 232bp, as a result of downward movements of 124bp and 174bp in the medium and long segments, respectively, and a 58bp rise at the short end (Graph 47).[20]

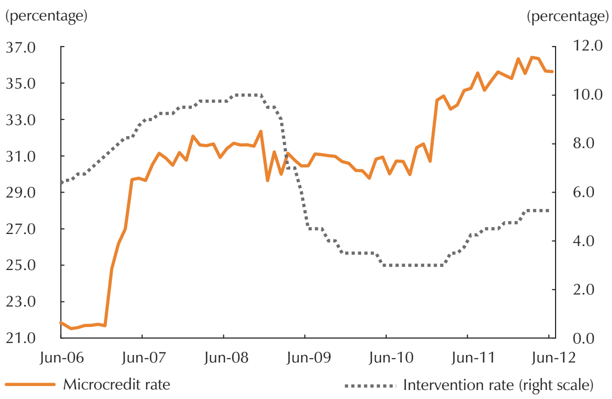
This year all TES rates decreased up until April. The impact on short-term rates of the Board's decision to raise the benchmark rate to 5.25% (by 25bp in January and another 25bp in February) was more than offset by the market's response to the Finance Minister's announcement of suspending short-term bond auctions.[21] Another offsetting factor was greater peso liquidity, resulting partly from TES maturities. Furthermore, the Board's unanimous decision in March to keep the rate

19 These figures are drawn from the zero-coupon curve of fixed-rate TES securities, calculated by the Bank using the method of Nelson and Siegel (1987).

20 The slopes are measured as the difference between 10-year zero-coupon rates and one-year zero-coupon rates. For Chile the difference is calculated with the 9-year zero-coupon rate.

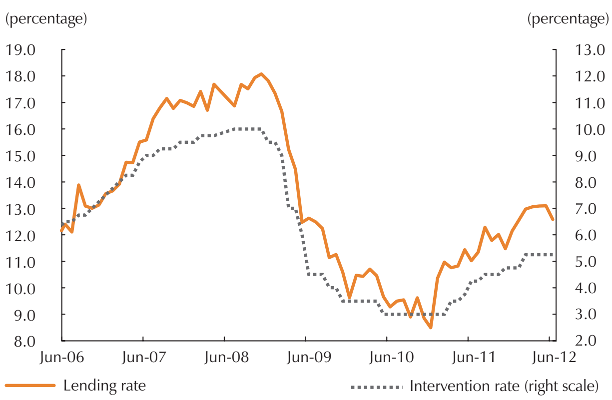
21 Short-term TES auctions were suspended until the last week of June, 2012, when liquidity needs for the second half of the year were to be revised.

Graph 44
Nominal microcredit interest rates and
Banco de la República's nominal intervention rate [a/]



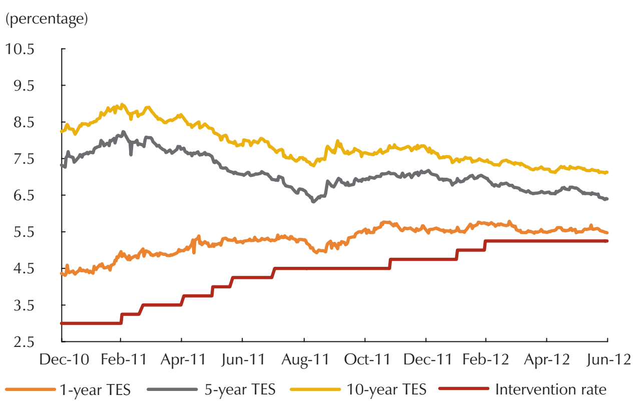
a/ Data relate to end of the monetary month.
Sources: Financial Superintendency and Banco de la República.

Graph 45
Banco de la República's intervention rate, and financial system's lending rate [a/]



a/ Data relate to end of the monetary month. The lending rate is the amount-weighted average of consumer, preferential, common and treasury loan rates. Given the high rotation of treasury loans, one-fifth of their disbursement was used in calculating their weight.
Source: Financial Superintendency. Calculations by Banco de la República.

Graph 46
Zero-coupon peso TES rate and Banco de la República's intervention rate

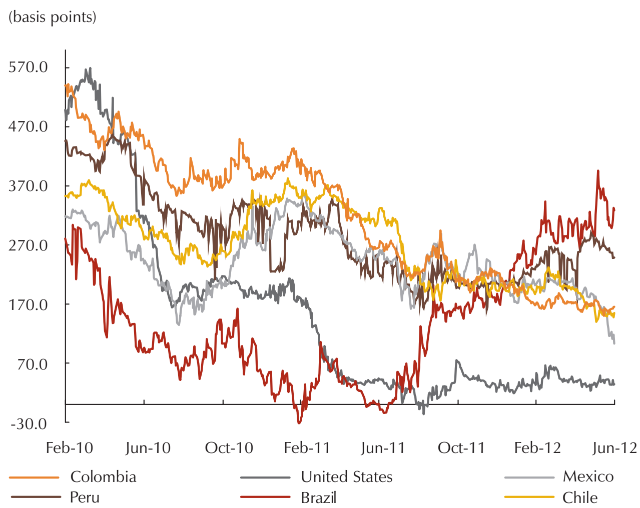


Sources: SEN (electronic trading system) and MEC (Colombian electronic market). Calculations by Banco de la República.

unchanged led to monetary-policy expectations being adjusted, to the effect that some agents, having before expected further increases in the benchmark rate, began to expect stability.

The behavior of medium- and long-term rates over the first four months of 2012 was connected with several factors, notably: i) lower inflation expectations, following the raising of the monetary-policy rate, and release of inflation data for February and March, which were lower than forecast by the market; ii) market participants' optimistic reaction to positive fiscal announcements[22] and the successful issuance of foreign-debt bonds;[23] and iii) higher expectations

Graph 47
Slopes of zero-coupon curves



Sources: Bloomberg, SEN (electronic trading system) and MEC (Colombian electronic market). Calculations by Banco de la República.

22 In early February the Ministry of Finance announced that, based on preliminary data, the 2011 consolidated public-sector deficit had been 2.2% of GDP, less than the 2.9% estimated in December, thanks to a better fiscal performance by the central government and the regions. The central-government deficit forecast for 2012 was therefore revised down from 3.0% to 2.8%. According to the Ministry, given a greater availability of cash on hand and a lower projected deficit, the need for liquidity from the Treasury was reduced at least for the first half of the year.

23 Bonds worth $1,500m were issued for 30 years at a rate lower than the rates for bonds previously auctioned for similar terms. The bonds mature in 2041, they were issued at a rate of 4.964%, and demand for them amounted to some $3,600m. The funds were used to buy back public-debt bonds maturing between 2013 and 2027, with the remainder to be used to finance 2012 budgetary needs in dollars.

The first half of 2012 saw TES securities at all maturities gaining in value thanks to fewer short-term auctions, lower inflation expectations, good fiscal news, good economic performance, and successful issuance of public bonds on the international market.

of Colombia's economic performance, based on some favorable data about the local environment. Internationally, in the first four months of this year, the central banks of England and Japan announced higher liquidity injections, the second aid package for Greece was approved, favorable global economic data were published, the ECB carried out a number of operations to provide liquidity, and the Fed announced that it was likely to keep the benchmark rate exceptionally low until the end of 2014, which helped in that period to reduce local agents' perception of risk.

Subsequently, TES rates rose in May, more strongly in the medium- and long-term segments but not enough to offset the rate falls of the four first months of the year. Specifically, valuation losses on short-term bonds were connected with expectations of sterilization by the Bank intervening in the foreign-exchange market with a higher supply of securities, and with speculation about the Bank issuing its own short-dated bonds, after the program of daily dollar purchases was extended.[24]

In May TES securities temporarily lost value because of a higher perception of risk caused by political instability in Greece and the poor performance of some major economies.

Valuation losses on medium- and long-term bonds were connected with a higher perception of international risk, in view of the uncertainty caused by political instability in Greece and poor performance by other economies. Note, however, that the announcement of a new strategy for issuing TES securities[25] had a positive impact, creating expectations of improvement in liquidity in all segments of the debt curve and the nation's debt profile in the coming years.

In June, despite the persistence of an unfavorable external context, TES rates resumed their downtrend, and the bonds gained in value, especially the medium- and long-term bonds. In some cases, TES rates fell to all-time lows. This behavior was connected with positive Colombian fiscal announcements,[26] and with a debt-management operation carried out by

24 After its April meeting the Board announced that the program of daily dollar purchases of at least $20m was to be extended at least up to November 2, 2012, and it published the regulations for open-market operations intended to regulate liquidity in the economy through the purchase or sale of public-debt securities or securities issued by the Bank.

25 The strategy announced by the Ministry of Finance consists of creating five-, ten- and fifteen-year, fixed-rate, peso benchmark bonds maturing in even years. Similarly, for bonds denominated in UVR [index based on real value of mortgages], the benchmarks would have terms of five, ten and twenty years and mature in odd years.

26 In the 2012 medium-term fiscal framework presented on June 14, fiscal-performance targets were revised down, in view of higher tax revenues, higher dividend income from Ecopetrol, and the fiscal reforms. The central-government deficit was estimated at 2.4% and the consolidated public-sector deficit at 1.2%, and non-financial public-sector debt was projected to be 26.4%. These figures are lower than those estimated in February 2012, which were, respectively: 2.8%, 1.8% and 27%. It was also announced that fewer securities would be placed through auctions. The government left unchanged the amount of TES to be issued but reduced by almost one trillion pesos the amount to be

In June calm returned to the TES market, thanks to Ministry of Finance announcements of improved fiscal conditions, and expectations of a change of stance in monetary policy.

the government.[27] Furthermore, the curve may be reflecting expectations of a monetary-policy adjustment, in view of the downward revision of the Colombian economy's growth forecasts, as a result of publication of local indicators less favorable than expected and uncertainty about the global economy's performance.

2. Monetary base, credit, and the financial system's sources of funding

a. *Monetary base: sources and uses*

i. *Sources of expansion of the base*

The economy's primary liquidity is provided by the Banco de la República through operations with the rest of agents, particularly financial entities. The Bank injects liquidity into the economy by increasing the Bank's assets or reducing its non-monetary liabilities, and vice versa.

As may be seen from Table 4, the balance of the monetary base decreased by 3,267 billion pesos over the first half of 2012. The main source of the liquidity contraction in pesos consisted of greater deposits (17,703bn pesos)[28] made in the Bank by the Finance Ministry's Public Credit and National Treasury Office. This was partly offset, notably, by the following operations:

1) Greater liquidity (10,602bn pesos) provided by the Bank to the financial sector. Specifically, the repo balance increased by 10,000bn pesos, and remunerated non-reserve deposits decreased by 602bn pesos.[29]

placed through auctions, at the same time as increasing the quantity to be placed through mandatory operations. The changes announced included also reduction of the external-debt target by $1,300m, cancellation of short-term TES, and postponement of sale of Ecopetrol stock to 2013.

27 In June the government decided on early redemption of domestic-debt securities worth 2 trillion pesos originally due to mature in August, thereby reducing the value of TES maturing on August 15, 2012 from 8.6tr pesos to 6.6tr pesos.

28 Under a new liquidity-provision scheme approved by the Board at a meeting on June 3, 2005, management of the government's entire liquidity surplus in pesos is entrusted to the Bank. The scheme is intended mainly to: improve liquidity distribution in the market, foster the development of the money and public-debt market, and reduce operational and credit risk by the Finance Ministry in investing at market rates. The new scheme came into full operation on June 22, 2005.

29 Remunerated non-reserve deposits are part of the Bank's tools for absorbing excess liquidity from the money market. They are used in particular for transitory withdrawal of surplus liquidity and may be effected by means of term auctions through the liquidity-tightening window.

2) Net foreign-exchange purchases by the Bank in the currency market, amounting to $1,960m, which in pesos represented an expansion of 3,493bn pesos.

Table 4
Sources of the monetary base
(billions of pesos)
(quarterly change)[a/]

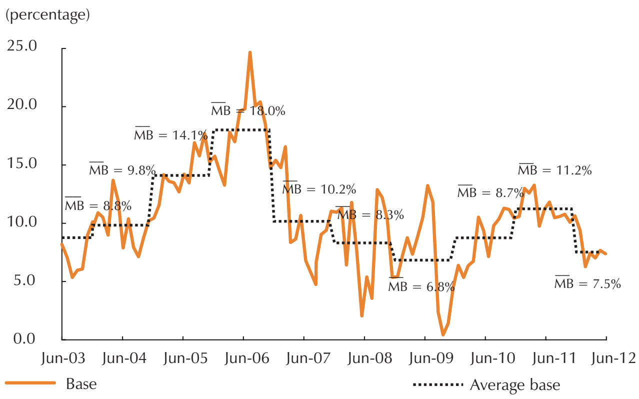
Item	2011					2012		
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Total
I, Government	**(8,782)**	**(2,795)**	**(3,229)**	**12,443**	**(2,363)**	**(4,835)**	**(12,869)**	**(17,703)**
Transfer of profits in pesos	0	0	0	0	0	0	0	0
Deposits at Banco de la República	(8,782)	(2,795)	(3,229)	12,443	(2,363)	(4,835)	(12,869)	(17,703)
II, Liquidity-regulating TES	**(5)**	**(258)**	**(27)**	**(36)**	**(325)**	**(10)**	**(151)**	**(161)**
Outright purchases	0	0	0	0	0	0	0	0
Outright sales	0	0	0	0	0	0	0	0
Maturities	(5)	(258)	(27)	(36)	(325)	(10)	(151)	(161)
III, Banco de la República liquidity operations	**2,995**	**2,108**	**64**	**(3,634)**	**1,534**	**(2,843)**	**13,445**	**10,602**
Expansion [b/]	2,160	2,014	78	(3,042)	1,210	(2,883)	12,883	10,000
Contraction	835	94	(14)	(592)	323	40	562	602
IV, Foreign-exchange operations [c/]	**2,329**	**2,193**	**2,267**	**0**	**6,790**	**1,383**	**2,109**	**3,493**
Direct-purchase auctions	2,329	2,193	2,267	0	6,790	1,383	2,109	3,493
V, Other [d/]	**202**	**196**	**150**	**280**	**828**	**160**	**342**	**502**
Total change in the base	**(3,261)**	**1,445**	**(774)**	**9,053**	**6,464**	**(6,144)**	**2,877**	**(3,267)**
Monetary-base balance	**41,614**	**43,060**	**42,286**	**51,339**	**51,339**	**45,195**	**48,072**	**48,072**

a/ Figures relate to the end of the calendar month
b/ Including one-day, overnight and medium-term repos,
c/ Excluding operations with international organizations,
d/ "Other" includes the monetary effect of Banco de la República's profit and loss statement, and the monetary effect of deposits from external borrowings and external portfolio investment,
Source: Banco de la República,

ii. Uses of the monetary base

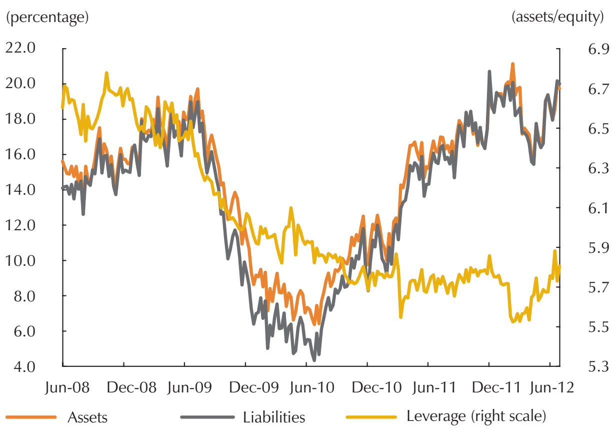
In January-June 2012, monetary-base demand increased at an average year-on-year rate of 11.2%, down by 4pp on the same period in 2011. In real terms, this was an average year-on-year increase of 7.5%, down by 4.2pp on the same period in 2011 (Graph 48).

Graph 48
Real monetary base
(annual % change in monthly averages)



Source: Banco de la República.

Graph 49
Annual percentage growth in credit establishments' assets and liabilities, and leverage level a/



a/ Liabilities include repos with the Bank and reservable liabilities. Assets are net of liabilities other than such repos and reservable liabilities. The leverage level is calculated as the ratio of assets to equity.
Source: Financial Superintendency. Calculations by Banco de la República.

Slower growth in the monetary base is explained by the behavior of cash in circulation, which expanded in January-June 2012 at an average year-on-year rate of 9.1% (5.5% in real terms), down by 6.8pp on the same period in 2011. First-half year-on-year growth in bank reserves was 15.0% (11.2% in real terms), up by 0.9pp on a year earlier.

b. Credit establishments' sources and uses

Analysis of credit establishments' balance sheets shows that loans and investments make up their main assets,[30] while reservable liabilities are their major obligations. The leverage level, measured as the ratio of assets to equity, fell from December 2011 to March 2012. This fall was associated with slower growth in both assets and liabilities of credit establishments (Chart49), but the trend reversed in the second quarter of the year.

i. Sources

Over the past twelve months reservable liabilities have been the chief source of funding for credit establishments (Table 5). Specifically, at the end of June 2012 the balance of reservable liabilities was up by 35,073bn pesos (17.3%) year on year. This growth is explained by an increase of 18,795bn pesos (31.0%) in the balance of term certificates of deposit, and an increase of 9,218bn pesos (10.4%) in the balance of savings accounts, year on year. The absolute rise was smaller in the balance of bonds: 3.246bn pesos (20.6%), and in the current-account balance: 2,560bn pesos (8.5%). Note that term deposits have grown at a faster pace this year than in 2011.

The behavior of reservable liabilities caused M3 to expand over the first half of 2012 at an average year-on-year rate of 17.9% (14.0% in real terms)

30 The present analysis takes into account, among credit establishments' liabilities, only repos with the Bank and reservable liabilities. Hence, assets are the net value between total assets and liability accounts other than such repos and reservable liabilities.

Table 5
Credit establishments´ main balance-sheet accounts
(billions of pesos)

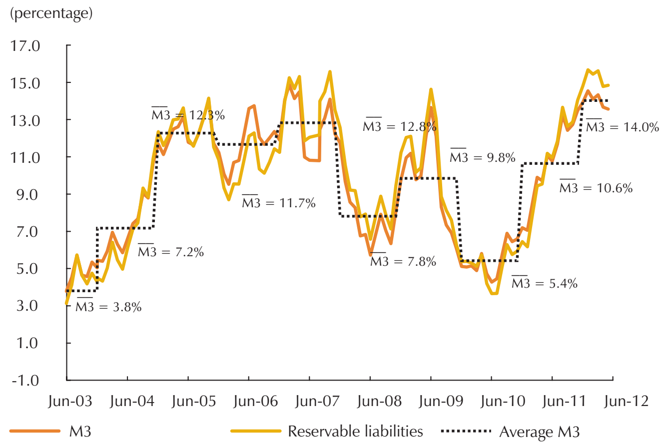
	End of month balance a/			Absolute annual change		Annual % change	
	Jun-10	Jun-11	Jun-12	Jun-11	Jun-12	Jun-11	Jun-12
Assets							
Own cash position b/	412	1,318	4,730	975	3,475	(236.4)	263.7
Bank reserves	13,465	15,782	18,829	2,317	3,047	17.2	19.3
Banco de la República OMO liabilities & remunerated non-reserve deposits	708	3	2	(705)	(1)	(99.6)	(25.9)
Total local-currency loans incl. leasing c/	151,031	180,159	213,912	29,128	33,753	19.3	18.7
Investments	53,651	57,608	63,214	3,957	5,606	7.4	9.7
Other net assets d/	(914)	(1,309)	2,927	(464)	4,173	43.2	(323.6)
Total assets	**218,353**	**253,561**	**303,614**	**35,208**	**50,053**	**16.1**	**19.7**
Liabilities							
Repos with Banco de la República	3,709	6,615	13,450	2,905	6,835	78.3	103.3
Reservable liabilities	177,604	202,789	237,862	25,185	35,073	14.2	17.3
Checking accounts	25,526	30,092	32,652	4,566	2,560	17.9	8.5
Savings accounts	71,857	88,317	97,535	16,461	9,218	22.9	10.4
Term CDs	59,077	60,632	79,428	1,555	18,795	2.6	31.0
Bonds	12,950	15,778	19,025	2,829	3,246	21.8	20.6
Fiduciary deposits	5,151	4,686	5,135	(465)	449	(9.0)	9.6
Sight deposits	2,747	3,281	4,087	534	806	19.4	24.6
Repos with the real sector	296	2	0	(294)	(2)	(99.3)	(100.0)
Equity	**37,039**	**44,157**	**52,302**	**7,117**	**8,145**	**19.2**	**18.4**
Total liabilities plus equity	**218,353**	**253,561**	**303,614**	**35,208**	**50,053**	**16.1**	**19.7**

a/ Information relates to monetary-closing balances in each year, which may differ from balances at calendar closings.
b/ Excluding stockbrokers. Absolute change relates to changes in US dollars multiplied by the average exchange rate for the period.
c/ Excluding mortgage-loan securitizations. Part of these is recorded as investment.
d/ Change in other net assets captures: changes in asset and liability accounts not specified in this Table; and changes in own cash position not explained by change in the account balance.
Source: Banco de la República.

(Graph 50). Breakdown of M3 by sector shows that in May 2012 nominal year-on-year growth in public M3 was 14.8%, while in private M3 it was 17.5% (Table 6).

ii. Uses

Graph 50
Real broad M3 aggregate
(annual % change in monthly averages)



Source: Banco de la República.

Since 2010 credit establishments have been placing their funds more in loans than in investments (Table 5 and Graph 51). In June 2012 credit establishments' gross-local currency lending had grown by 33,753bn pesos (18.7%) relative to a year earlier, while the balance of their local-currency investments had expanded by 5,606bn pesos (9.7%). Inclusion of securitizations gives a loan balance of 220,147bn pesos in June 2012, up by 33,520bn pesos (18,0%) on a year earlier (Table 7).

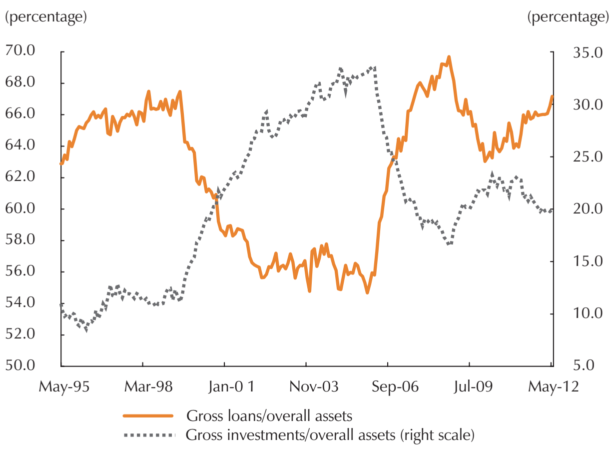
At the end of the first half of 2012, nominal year-on-year growth in the different types of local-currency lending was smaller than a year earlier: in commercial loans it was 16.6%, down from 17.4% in 20111, and in consumer loans 21.2%, down from 24.8%. At

Table 6
Broad money supply: public and private M3
(billions of pesos)

	Balance at May		Annual growth
	2011	2012	(percentage)
Private M3	**188,149**	**221,108**	**17.5**
Cash	26,165	28,228	7.9
Reservable liabilities	161,984	192,880	19.1
Checking accounts	21,085	23,495	11.4
Term CDs	55,432	73,433	32.5
Savings	67,867	74,902	10.4
Other	17,601	21,056	19.6
Public M3	**37,490**	**43,040**	**14.8**
Checking accounts	7,579	7,776	2.6
Term CDs	3,802	4,679	23.1
Savings	19,612	24,182	23.3
Other	6,496	6,398	(1.5)
Total M3	**225,639**	**264,147**	**17.1**
Cash	26,165	28,228	7.9
Reservable liabilities	199,474	235,920	18.3
Checking accounts	28,664	31,271	9.1
Term CDs	59,234	78,112	31.9
Savings	87,479	99,084	13.3
Other	24,097	27,453	13.9

Source: Banco de la República and Financial Superintendency.

Graph 51
Gross loans and investments as ratios of overall assets a/



a/ Excluding special financial entities
Source: Banco de la República.

the same date, growth in the mortgage portfolio adjusted for securitizations was 15.9%.

Real growth in the adjusted local-currency loan portfolio[31] has also been moderating. After recovering strongly from early 2010 to August 2011, the year-on-year growth rate fell from 18% in August 2011 to 14.7% in June 2012 (Graph 52). By type of loan, real year-on-year growth at the end of June 2012 in commercial-plus-microcredit loans was 13.6%, and in consumer loans 17.9%.

3. Some measures of financial-system risk

Table 7
Financial system's gross loan portfolio a/

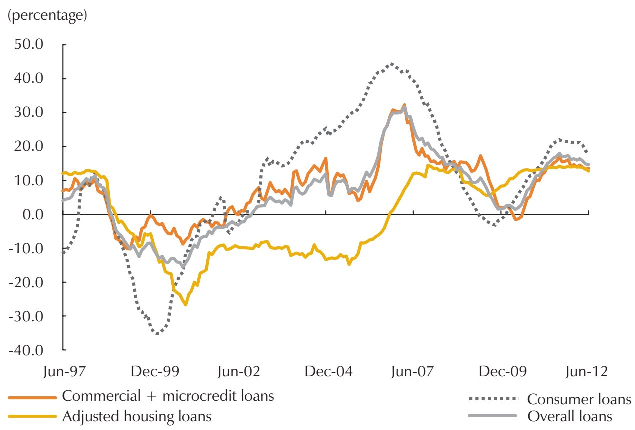
	Balance in billions of pesos end of June			Annual % growth end of June		
	2010	2011	2012	2010	2011	2012
A. Local-currency loans	**155,741**	**186,627**	**220,147**	**5.1**	**19.8**	**18.0**
Commercial loans b/	91,552	107,463	125,267	1.5	17.4	16.6
Consumer loans c/	43,151	53,838	65,241	8.9	24.8	21.2
Adjusted mortgage loans d/	17,111	20,039	23,234	14.9	17.1	15.9
Microcredit e/	3,927	5,286	6,405	11.7	34.6	21.2
B. Foreign-currency loans	**5,657**	**11,848**	**12,433**	**20.7**	**109.4**	**4.9**
Total adjusted loan portfolio (A + B)	**161,399**	**198,474**	**232,579**	**5.5**	**23.0**	**17.2**
Memo item						
Mortgage loans f/	12,401	13,572	17,000	22.2	9.4	25.3

a/ Excluding FEN (development funding agency), and entities in liquidation. Data at closing of monetary month.
b/ Loans other than the housing, consumer and microcredit loans defined in notes c/, d/, e/ and f/.
c/ Loans extended to individuals to purchase consumer goods or pay for services for non-commercial or non-business purposes, regardless of the amount.
d/ Housing loans, regardless of the amount, extended to individuals to purchase new or used housing or to build individual housing. The item relates to credit entities' mortgage-loan accounts, as adjusted by securitizations,
e/ Loans extended to micro-enterprises whose outstanding debt to the respective entity does not exceed one hundred and twenty (120) times the prevailing legal monthly minimum wage (Decree 919 of 2008).
f/ Housing loans, regardless of the amount, extended to individuals to purchase new or used housing or to build individual housing. The item relates to credit entities' mortgage-loan accounts.
Source: Financial Superintendency's Weekly Form 281. Calculations by Banco de la República.

This section evaluates the major financial intermediaries' exposure to credit, market and liquidity risk, using a number of indicators on information to May 2012. It also presents the main findings of the survey carried out in June this year on the credit situation.

31 Using non-food CPI.

Graph 52
Percentage change in real gross peso loans [a/]



Note: Non-food CPI was used.
a/ Including FEN, now called Financiera de Desarrollo Nacional.
Source: Financial Superintendency, Titularizadora Colombia.
Calculations by Banco de la República.

Credit risk has increased to a certain extent in some types of loan, through higher growth in overdue and risky loans than in the corresponding overall balances. Exposure to market risk has also increased, owing to the longer duration of the entities' portfolios. Lastly, the financial entities' liquidity levels remained relatively stable over the first half of the year. Moreover, stress testing indicates that the different intermediaries' liquidity positions should allow them to withstand considerable withdrawals of deposits for up to four weeks.

The degree of credit risk is obtained from the default indicator, defined as the ratio of non-performing loans[32] to total loans, and from the loan-quality indicator, estimated as the proportion of risky loans[33] in total loans. Another indicator taken into account is the coverage available from provisions.

Over the first five months of 2012 growth rates for the different types of loan were lower than in 2011; the opposite occurred with the overdue and risky portions of some loan types, worsening their respective credit-risk indicators.

Market-risk behavior is based on movements in the overall balance of TES holdings owned or managed by financial entities. Sensitivity testing is also performed, to quantify the valuation losses that the financial entities would incur on the portfolio as a result of an adverse change in market conditions. As discussed further below, on available information to June 2012 sensitivity testing shows that the market-risk exposure of commercial banks, pension fund managers and trust fund managers continues to increase, because of the duration of their TES portfolios.

Lastly, exposure to funding liquidity risk is quantified by using the liquidity-risk indicator scaled by each entity's illiquid assets. The liquidity-risk indicator is constructed as a short-term liquidity gap, estimated for seven- and thirty-day horizons. A positive value of the indicator shows that the

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32 The Basic Accounting and Financial Circular, Chapter 2, defines non-performance as payment overdue for 150 days or more on commercial loans, for 90 days or more on consumer loans, for 180 days or more on housing loans, and for 30 days or more on microcredit loans.

33 Loans may be rated according to risk level as A, B, C, D or E. Risky loans are all loans with a rating other than A (least-risk rating).

Some loan types have deteriorated to a certain extent, owing to an increase in overdue and risky loans. The financial system's market-risk exposure has also increased, because of the longer duration of portfolios.

entities have enough funds to meet their short-term liquidity needs, while a negative value suggests the opposite. Sensitivity testing that assumes an unexpected withdrawal of deposits is also performed, to analyze the behavior of the scaled liquidity risk indicator in such a situation. Over the first half of 2012 the behavior of this indicator was stable for the different groups of entities, which continued to be in a comfortable position to withstand considerable deposit shocks.

a. Credit risk

The first five months of 2012 saw the financial intermediaries' loan portfolio growing more slowly, especially commercial loans. Furthermore, the risk indicators of all loan types are beginning to deteriorate slightly, but more strongly in the case of consumer loans (Graph 53).

To May 2012, the default indicator rose for the different types of loan. For the overall loan portfolio it stood at 3.3%, up from 2.8% in December 2011 (Table 8), largely because of greater deterioration in consumer loans: 5% default indicator in May, up from 4.2% in December. The quality indicator remained relatively stable, at around 6.8%.

Loan deterioration has been accompanied by a moderate increase in provisions, which are expected to continue expanding by virtue of the Financial Superintendency's new regulations (External Circular 26 of 2012) imposing additional provisions on default acceleration.

Default indicators rose because of stronger growth in overdue loans (16.1%) than in gross loans (14.3%). The same occurred in consumer loans, with overdue loans surging by 28.7% while the overall consumer balance expanded by 18.5%. Note that, although the quality indicator showed little change, growth in risky loans continued to pick up pace, rising from 2.2% in December 2011 to 5.5% by May 2012 (Graph 54).

Regarding credit-risk coverage, provisions grew at a moderately higher rate: 11.8% in May, up from 10% in December. Their growth was greater than the increase in risky loans but smaller than the rise in overdue loans. With the result that the coverage ratio for overdue loans decreased, from 163.4% in December to 141.2% in the following five months, while for risky loans it rose from 68.2% to 68.5%. However, the new regulations on consumer-loan provisions[34] can be expected to quicken the pace of growth in provisions in the coming months.

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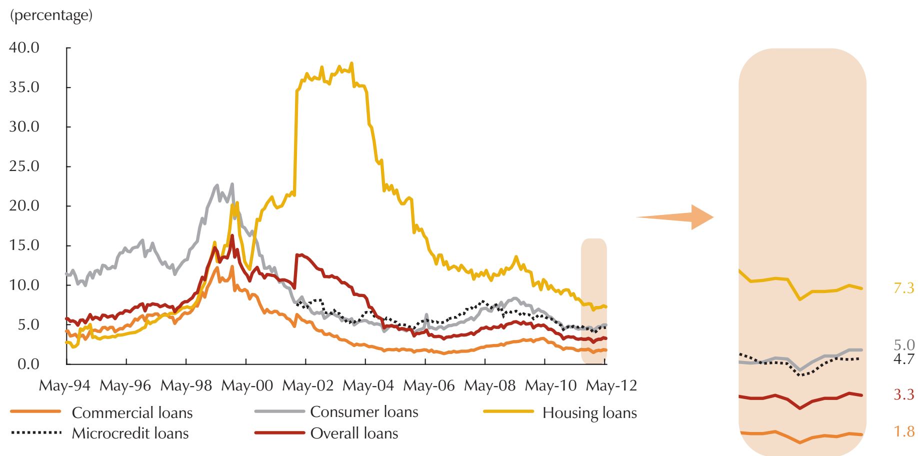
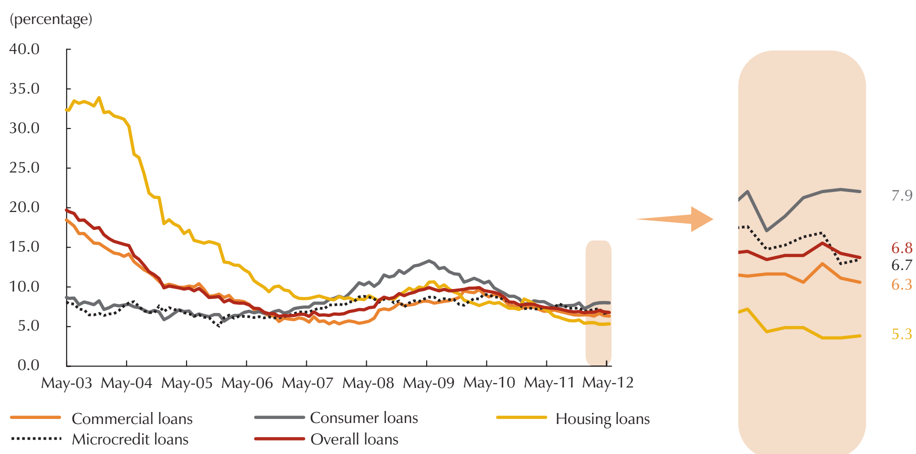
34 The Financial Superintendency's External Circular 26 of 2012 lays down regulations on making a temporary additional individual provision for consumer loans. The regulations are applicable to entities presenting consumer-loan balances on their balance sheets during the past 25 months, and the provision is to be made when growth in their overdue consumer loans accelerates. The additional provision cost to be borne by the entity is equal to 0.5% of the balance of its consumer loans, multiplied by the probability given default of these loans. Note that these new regulations came into effect from June 22, 2012, the date of publication, and the result must be reflected in financial statements at December 31, 2012.

Graph 53

A. Default indicator



B. Loan-quality indicator



Source: Financial Superintendency. Calculations by Banco de la República.

The findings of the survey on Colombia's current credit situation to June 2012 suggest that disbursements may be slowing down. Credit demand has continued to grow more slowly, with some entities even reporting negative changes in their consumer and commercial portfolios. Regarding credit supply, a higher percentage of financial intermediaries continue to increase their requirements or providing new loans. However, there is still a preference for providing consumer and commercial loans.

In conclusion, credit-risk indicators have slightly changed the downtrend exhibited during 2011, but they still remain below their average levels for the past six years. The greatest credit risk is posed by stronger growth in risky and overdue loans than in overall loans in some types of lending.

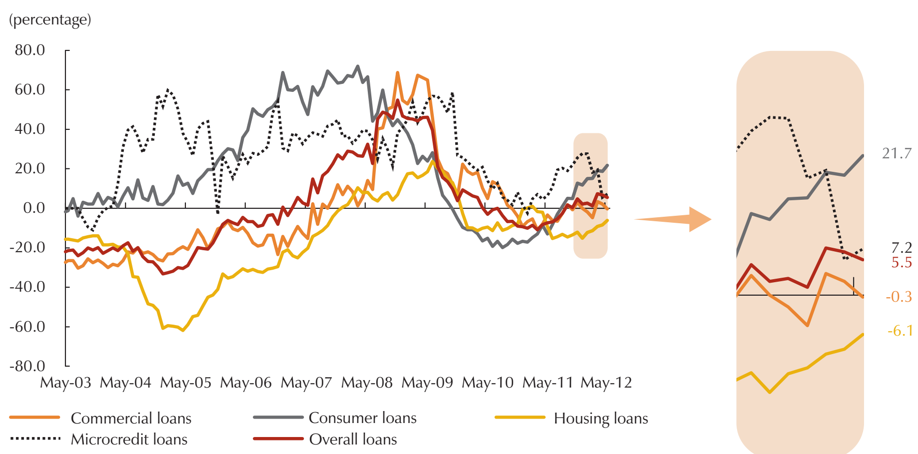
Table 8
Credit-risk indicators
(percentage)

Loan type	Default indicator			Quality indicator		
	Dec-11	May-12	Average Jan-06 – May-12	Dec-11	May-12	Average Jan-6 - May-12
Overall loans	2.8	3.3	4.1	6.7	6.8	7.8
Commercial loans	1.5	1.8	2.2	6.5	6.3	7.1
Consumer loans	4.2	5.0	5.8	7.2	8.0	9.1
Housing loans	6.9	7.3	11.1	5.4	5.3	8.5
Microcredit	4.0	4.7	5.8	6.9	6.7	7.6

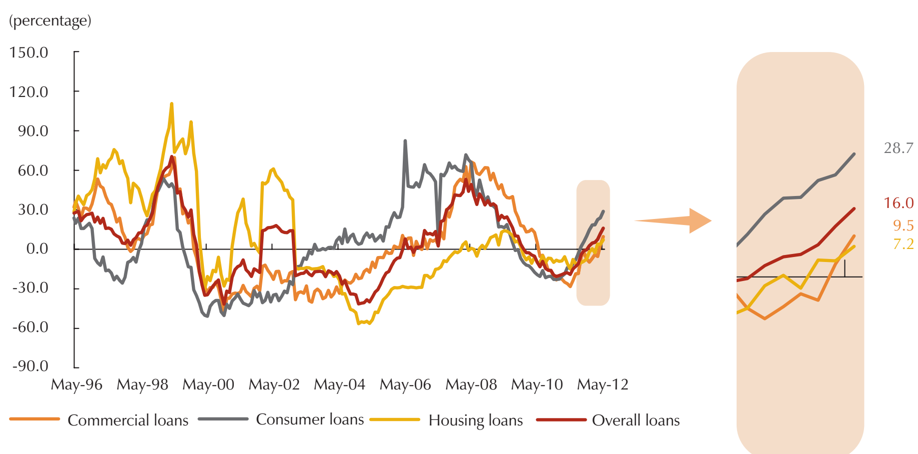
Source: Financial Superintendency. Calculations by Banco de la República.

Graph 54

A. Real annual growth in risky loans



B. Real annual growth in non-performing loans



Source: Financial Superintendency. Calculations by Banco de la República.

Regarding market risk, in an extreme and unlikely scenario of TES value loss, the financial system's losses at the end of June would be greater than estimated last February, moderately affecting their solvency.

Hence the need to continue monitoring credit risk to identify situations that may create greater vulnerability for the financial system.

b. Market risk

The largest portfolios of TES securities are those administered by pension fund managers, trust fund managers and commercial banks.[35] Table 9 shows the values of these entities' TES portfolios at June 2012 and the respective differences with the values at February 2012, in trillions of pesos: pension fund managers 40.6, up by 2.2; trust fund managers 31.8, up by 0.8; and commercial banks 30.1, down by 0.1. The insurance companies' TES portfolio decreased by 0.4tr pesos relative to February 2012, while the portfolio of stock-brokerage firms increased by 1tr pesos.

Commercial banks' investments, unlike those of pension fund managers and trust fund managers, are not all exposed to market-price changes. Thus, at June 2012 the exposed amount[36] of commercial banks' holdings stood at 20.7tr pesos, much the same level as in February of this year.

The exposure of financial-system entities to market risk was estimated by means of sensitivity testing that assumed a parallel increase of 200bp[37] in the zero-coupon TES curve. In this scenario the valuation losses that would be caused by this shock were calculated and compared with the entities' equity.

Table 9
TES portfolio balance

	TES portfolio (in billions of pesos)			TES portfolio (as percentage of equity)[c/]		
	Feb-12 [a/]	Jun-12[b/]	Difference	Feb-12 [a/]	Jun-12[b/]	Difference
Banks	30.2	30.1	(0.1)	75.0	70.7	(4.3)
Pension fund managers	38.4	40.6	2.2	31.0	31.0	(0.0)
Trust fund managers	31.0	31.8	0.8	19.3	18.6	(0.8)
Insurance companies	7.4	7.0	(0.4)	87.0	80.6	(6.4)
Stock-market brokerage firms	2.0	3.1	1.0	217.4	332.6	115.2

a/ Figures to February 10, 2012.
b/ Figures to June 8, 2012.
c/ For pension fund manages and trust fund managers the equity value is the value of the funds they manage for third parties.
Source: Banco de la República.

35 The analyzed TES portfolios of commercial banks, insurance companies and stock-brokerage firms are owned by them. In the case of pension fund managers and trust fund managers, both their own and those they administer for third parties are analyzed.

36 The exposed amount is defined as the TES balance that is subject to market-price changes. It is thus the sum of the negotiable securities and the securities available for sale.

37 This is an extreme and unlikely scenario. Note that if such shocks occur losses will not necessarily be incurred, because the entities may decide not to sell their securities until market conditions change, assuming their liquidity position allows this.

The sensitivity-testing results indicated that these financial intermediaries' losses would increase in the first half of 2012, owing mainly to their portfolios' longer duration (Tables 10 and 11). However, scaling losses as a percentage of equity indicated that, in the case of pension fund managers, the effect of the shock was less than estimated in February this year.

In view of the greater exposure to market risk, it is important to continue monitoring this risk closely, since a change in volatility, accompanied by higher securities holdings, might produce adverse profit results for the financial entities.

Table 10
TES portfolio duration
(in years)

	February 2012 [a/]	June 2012 [b/]	Difference
Banks	2.5	2.7	0.2
Pension fund managers	5.6	5.5	(0.1)
Trust fund managers	3.3	3.6	0.1
Insurance companies	4.1	4.2	0.0
Stock-market brokerage firms	2.1	2.7	0.5

a/ Figures to February 10, 2012.
b/ Figures to June 8, 2012.
Source: Banco de la República.

Table 11
Sensitivity exercise

	Losses from 200bp shock			Losses from 200bp shock (as percentage of equity)[c/]		
	Feb-12 [a/]	Jun-12[b/]	Difference (in billions of pesos)	Feb-12 [a/]	Jun-12[b/]	Difference
Banks	1,113	1,232	0.14	2.76	2.89	0.13
Pension fund managers	4,678	4,862	0.30	3.78	3.71	(0.07)
Trust fund managers	2,324	2,479	0.12	1.45	1.45	(0.00)
Insurance companies	426	440	14.33	5.00	5.09	0.09
Stock-market brokerage firms	176	191	15.32	18.92	20.82	1.90

a/ Figures to February 10, 2012.
b/ Figures to June 8, 2012.
c/ For pension fund manages and trust fund managers the equity value is the value of the funds they manage for third parties.
Source: Banco de la República.

c. *Liquidity risk*

The liquidity-risk indicator, which incorporates elements proposed by the Basle III Accord, shows a slight decrease in credit intermediaries' liquidity.

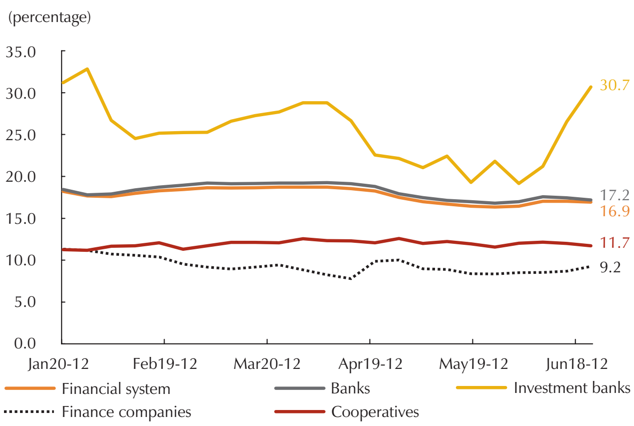
The Financial Superintendency has modified the scheme for measuring credit establishments' funding liquidity risk.[38] The new methodology incorporates some of the elements proposed by the Basle III Accord on calculating liquid assets, net liquidity requirements, and the horizon of measurement. New provisions are also included that may be applied by the control body with respect to entities whose liquidity indicators are below the threshold level.

An analysis follows of the liquidity-risk indicator, LRIM , which is constructed in the following manner:[39]

$$IRL_M = \textit{liquid assets - net liquidity requirements}$$

where liquid assets are valued at market price and net liquidity requirements consist of each entity's net expenditures over a given time horizon. Thus, if the indicator is less than zero, expenditures will be greater than the assets that the entity can effectively liquidate in the short term; and if the indicator is greater than zero that means the entity's liquidity position is adequate. In this exercise, the indicator scaled by illiquid assets (total assets - liquid assets) was estimated for seven- and thirty-day horizons, in order to make the indicator comparable among groups of establishments. Given this indicator's volatility, the analysis was performed on a weighted moving average for the previous four weeks. The results obtained from January 27 to June 22, 2012 are presented in the following paragraphs.

Graph 55
Scaled 7-day liquidity risk indicator, by group of entities



Source: Financial Superintendency. Calculations by Banco de la República.

Liquidity in the system as a whole decreased slightly, from 18.3% in the last week of January to 16.9% in late June. However, the indicator's behavior for a one-week horizon has been stable over the past two months for all groups of establishments except investment banks. The latter's indicator rose sharply because of greater holdings of debt securities and available assets (Graph 55). Note that investment banks' liquidity indicators tend to exhibit higher volatility because

38 External Circular 44 of November 2011.

39 The new methodology also proposes an indicator (LRI_R) built as the ratio of liquid assets (MLA) to net liquidity requirements. This indicator should be higher than 100% in the time horizons analyzed. This would imply that LRI_M must be positive.

of the type of business they engage in, which involves substantial changes in holdings of liquid assets.

The indicator for a thirty-day horizon shows a smaller excess of liquid assets than there would be with a seven-day horizon, particularly in the case of financial cooperatives, whose average indicator was 4.5% in June. Nevertheless, no entities would have any difficulty in meeting their obligations, based on information reported in the first six months of 2012.

Banks were also stress-tested using liquidity indicators over seven- and thirty-day horizons and assuming a 4% deposit-withdrawal shock.[40] The results show that banks can withstand the shock over both horizons without facing a high liquidity risk.

E. EXERNAL SECTOR

1. Exchange-rate movements

a. Nominal exchange rate

The nominal exchange rate reflects the price of a country's money (e.g. the peso) in terms of another (e.g. the dollar); its movements are therefore affected, among other things, by the profit differential between having an asset in the local currency and having it denominated in a foreign currency. Thus, some determinants of the nominal exchange rate are: domestic and foreign interest rates, country risk, international risk perception, and future exchange-rate expectations. The reason for this is that agents' decisions on portfolio recomposition, between foreign and domestic assets, depend on these factors. They thus affect the supply of foreign exchange in the economy and, thereby, the nominal exchange rate.

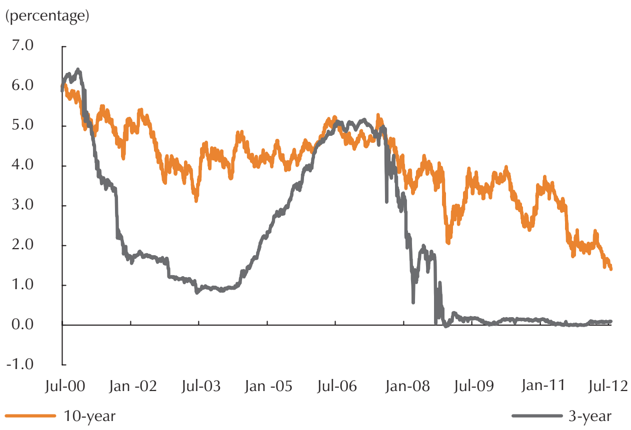
Graph 56
EMBI Colombia

Source: Bloomberg.

Colombia's debt-risk premium has been falling in recent years (Graph 56), while both short- and long-term external interest rates have remained relatively low (Graph 57). The outcome has been strong inflows of capital, particularly from foreign

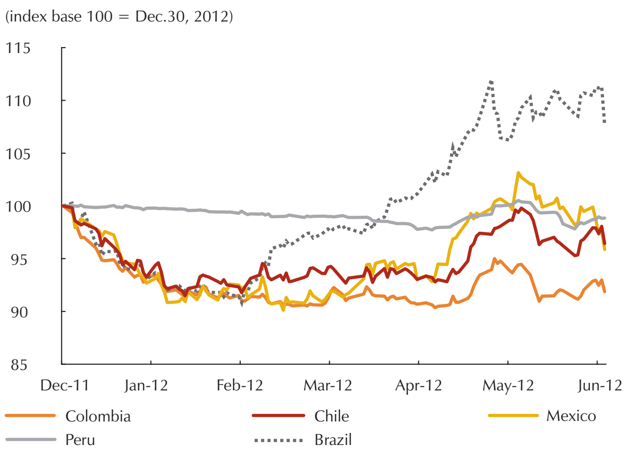
40 This was in addition to the shock included in calculating net non-contractual flows. The proportion by which deposits were reduced was an average of the maximum percentage of actual withdrawals historically recorded for each bank.

Graph 57
US Treasuries interest rates



Source: Bloomberg.

Graph 58
Latin-American countries: nominal exchange-rate indices



Sources: Bloomberg and Banco de la República.

investors, increasing the supply of dollars and thereby putting pressure on the peso to appreciate.

The peso appreciated by 3% in the first half of 2012 relative to the average for 2011, in a context in which the dollar strengthened against some currencies of the region and of developed countries, such as the euro and the yen. In January and February, in particular, the region's currencies strengthened, then remained relatively stable from March to June, with a temporary devaluation in May. Comparison of some Latin-American countries' average exchange rates so far this year with their 2011averages shows that the Brazilian real has depreciated by 11.2%, the Mexican peso by 6.5%, and the Chilean peso by 1.8%, while the Peruvian sol has appreciated by 2.9%. Comparison of the price at the end of June 2012 with the price in December 2011 shows the Brazilian real to have depreciated by 7.6%, while the Colombian peso appreciated by 8.1%, the Mexican peso by 4.1%, the Chilean peso by 3.6% and the Peruvian sol by 1.1% (Table 12 and Graph 58).

Recent movements in the nominal exchange rate fall into two periods. In the first period, January and February of this year, the Colombian peso tended to appreciate, as did other currencies of the region, in view of a lower perception of international risk (Graph 59). The reasons for this lower risk perception were: two auctions by the ECB to provide three-year liquidity; publication of positive data in the United States, the euro zone and China;[41] a Fed statement containing an indication that the benchmark rate was likely to be kept exceptionally low to the end of 2014; monetary stimuli provided by other central banks;[42]

41 Positive figures were released on US confidence, employment and economic-growth indices and on confidence indices in the euro area and Germany. China's fourth-quarter growth in 2011 was higher than expected.

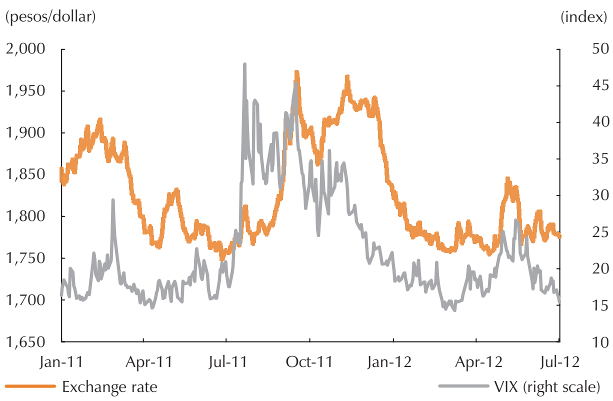
42 The central banks of England and Japan increased their asset-purchase programs by £50 billion and ¥10 trillion, respectively. The Reserve Bank of India cut its reserve-requirement rate by 50bp to inject some 320 billion rupees into the financial system. The Central Bank of China also reduced its reserve-requirements rates for banks by 50bp, down to 20% for large banks and 18% for small ones.

Table 12
Exchange rates against the dollar
(percentage change)

	Jan-2002 to Dec-2009	2010	2011	Average 2012 vs. Average 2011	1st half 2012 vs. 1st half 2011	January-June 2012
Colombia	(10,7)	(6,4)	1,5	(3,0)	(2,4)	(8,1)
Brazil	(24,7)	(4,7)	12,5	11,2	14,2	7,6
Mexico	42,5	(5,2)	12,4	6,5	11,5	(4,1)
Peru	(16,1)	(2,8)	(3,9)	(2,9)	(3,8)	(1,1)
Chile	(23,2)	(7,8)	11,0	1,8	3,6	(3,6)
Euro	(38,2)	7,9	2,5	7,2	8,2	2,3
Sterling	(9,7)	4,2	(0,7)	1,7	2,5	(1,0)
Yen	(29,5)	(11,8)	(5,7)	(0,0)	(2,7)	3,7

Sources: Bloomberg and Banco de la República

Graph 59
Exchange rate and VIX



Source: Bloomberg and Banco de la República.

and agreement among euro-zone leaders on the conditions for providing Greece with a second aid package.

The second period, from March to June, saw the Colombian peso remaining relatively stable. Despite mixed news on the global front in March and April,[43] no great changes occurred in the local currency. In May the peso depreciated because of a higher perception of international risk, based particularly on uncertainty over Greece's election results and its possible default on the commitments required to be met for obtaining the rescue package. The perception of risk was increased also by the fiscal situation of other European countries, the weakness of Spain's financial

43 In March-April mixed results were published on employment, the property sector and confidence indices in the US, and corporate results were generally better than expected by the market. China revised down its economic growth forecast (from 8% to 7.5%), the Central Bank of Japan expanded its asset-purchase program (by ¥5 trillion), and European-Union leaders increased by €200 billion the joint lending capacity of the Financial Stability Fund and the Permanent Financial Stability Mechanism. Moreover, fears arose about Spain's and Portugal's capacity to meet their commitment of reducing the public deficit.

The peso appreciated by 3% in the first half of 2012 relative to its average for 2011, in a context in which the dollar strengthened against some currencies of the region and of developed countries, such as the euro and the yen.

system, and by other news regarded as negative.[44] In June the previous month's depreciation was reversed owing to a lower perception of risk, thanks to the Greek election results allowing a coalition government to be formed and said government reiterating its commitment to the austerity measures called for by the European Union. Other factors that reduced the perception of risk included announcement of the decision to grant Spain a loan of up to €100bn for recapitalization of financial institutions and announcements of monetary stimuli by a number of central banks.[45]

Domestically, the exchange rate was influenced in the first half of the year by both depreciation and appreciation factors. Some of these factors had to do with: the Finance Ministry's announcement on January 30 regarding the non-monetization of $2,200m in 2012; the Bank's decision on February 3 to raise the level of international reserves through daily purchases of at least $20m, for at least three months starting from February 6; and subsequent decisions (on February 24 and April 30) to extend the reserve-accumulation program at least until November 2, 2012. Furthermore, Colombia's sovereign-debt outlook was raised from stable to positive by the rating agency DBRS in view of the country's good macroeconomic management and its capacity to deal with adverse shocks.

The foreign-exchange balance sheet shows currency movements in the spot market by currency-market intermediaries dealing with other agents in the economy, and transactions channeled through the Banco de la República. Figures from this balance sheet indicate that in the first half of 2012 the private sector's net foreign-currency balance from capital-account operations amounted to $498m and the public sector's to $7,658m. The private-sector inflows included, notably, foreign direct investment ($9,203m), particularly in the oil and mining sectors, net foreign borrowing ($1,323m), and net portfolio investment ($756m). Net outflows of current-account operations amounted to $4,144m, with the trade balance accounting for net payments of $3,558m (export receipts of $4,018m, and import payments of $7,576m) (Table 13).

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44 The US GDP growth originally estimated for the first quarter of 2012 was 2.2%, lower than expected by the market (2.5%), and it was subsequently revised down to 1.9%. China's first-quarter GDP grew by 8.1% year-on-year; this was lower than the expected rate of 8.4%, and it was also the slowest growth since June 2009. Unemployment continued to rise in the euro area, standing at 11% in April, up from 10.4% in December 2011. Fitch Ratings downgraded Japan's long-term local- and foreign-currency sovereign debt ratings from AA- and AA, respectively, to A+ with a negative outlook, on account of the country's high and rising public debt, which is forecast to end the year at 239% of GDP.

45 The Fed announced that it would renew, to the end of 2012 with an additional $267bn, the "Operation Twist" program that extends the average maturity of its securities holdings. The Central Bank of China cut its benchmark rate for deposits and one-year loans by 25bp. And the Bank of England announced a program by which it would lend to banks at lower-than-market rates for several years.

Furthermore, operations to overseas accounts generated outflows of \$10,783m, which almost entirely offset private-capital receipts. Note, however, that a high proportion of capital outflows to overseas accounts (71% of the January-April accumulated amount) consisted of payments connected with international-trade operations, so that the net value of private capital presented in this analysis may be affected by flows belonging to the current account. Relative to the first half of 2011, the major movements

Table 13
Foreign-exchange balance sheet a/
(millions of dollars)

	January-June 2011	January-June 2012	Absolute change
I. Net current-account foreign currency balance (1 + 2 + 3)	**(7,366)**	**(4,144)**	**3,222**
1. Return on international reserves	215	(25)	(240)
2. Interest on Finance Ministry debt	(1,124)	(1,009)	115
3. The rest (i + ii + iii)[b/]	(6,457)	(3,110)	3,347
i. Goods trade balance (a + b)	(6,679)	(3,558)	3,122
a. Goods exports [c/]	3,754	4,018	264
b. Goods imports	(10,433)	(7,576)	2,858
ii. Net financial services balance	(1,224)	(1,113)	111
iii. Net non-financial services balance	1,446	1,562	115
II. Net private-capital foreign-currency balance (1 + 2 + 3 + 4)	**6,739**	**498**	**(6,241)**
1. Loans[d/]	1,915	1,323	(593)
2. Direct investment (i + ii)	6,534	9,203	2,669
i. FDI in Colombia (a + b)	7,390	9,329	1,939
a. Oil and mining	6,299	7,684	1,385
b. Direct and supplementary, other sectors	1,091	1,645	554
ii. Colombian direct investment abroad	(856)	(126)	730
3. Portfolio investment (i + ii)	(233)	756	989
i. Foreign portfolio investment in Colombia	1,139	1,587	448
ii. Colombian portfolio investment abroad	(1,372)	(831)	541
4. Special operations [e//]	(1,477)	(10,783)	(9,306)
III. Net public-sector foreign-currency balance [f/]	**3,844**	**7,658**	**3,814**
IV. Other special operations [g/]	**(477)**	**(2,044)**	**(1,567)**
V. Change in gross international reserves (I + II + III + IV)	**2,740**	**1,969**	**(771)**

a/ It includes operations channeled through currency-market intermediaries and the Banco de la República. It does not include settlement accounts.
b/ It includes other current operations by the Bank and Finance Ministry, such as payment for non-financial services
c/ Including advances.
d/ Including disbursements for pre-financing of exports
e/ This item records currency movements in settlement accounts, purchase-sale of free-account balances in the domestic currency market, and currency movements in derivative operations.
f/ Most Finance Ministry operations are channeled through the Ministry's foreign-currency deposit accounts at the Banco de la República and do not therefore have any foreign-exchange impact.
g/ This includes Banco de la República liabilities, the purchase and sale of currency by the Bank in the currency market and with the Finance Ministry, the transfer of profits in dollars by the Bank to the Ministry, and accrual and active valuation of international reserves. It also includes the purchase-sale of currency between the real sector and currency-market intermediaries, purchase-sale of currency in the currency market to hedge against risk from exchange-rate fluctuations and statistical errors and omissions.
Source: Banco de la República.

Colombia's terms of trade have improved considerably in recent years, which may explain much of the peso's real appreciation.

were the increase in net public-sector inflows (from $3,844m to $7,658m), the decrease in net current-account outflows (from $7,366m to $4,144m), and the decrease in net private capital-account inflows (from $6,739m to $498m).

Note the contrast between the Colombian peso's recent behavior and the Brazilian real's depreciation trend since March. This trend may have been caused by capital outflows from Brazil in view of the country's economic weakening, as evidenced by falls in growth, consumption and confidence indicators, among others. Additional factors leading to the real's depreciation trend include lower interest rates and expectations of further cuts (in 2012 Brazil's central bank has reduced the monetary-policy rate by 250pp), measures by the government and the central bank to control the real's behavior,[46] and expectations of greater measures by these two authorities.

b. Real exchange-rate movements

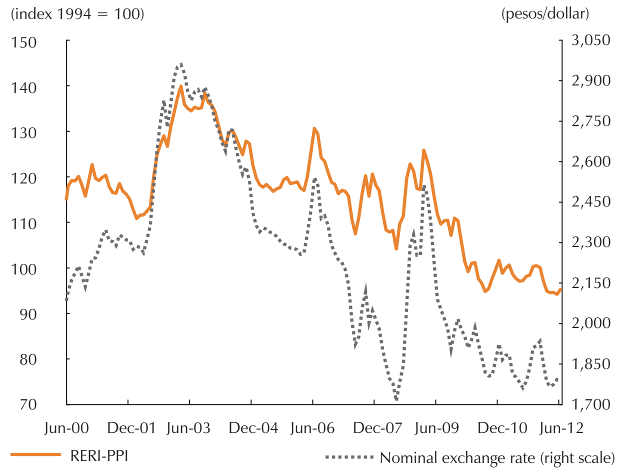
The peso-dollar nominal exchange rate plays a part in bilateral competitiveness with the United States by affecting the conversion of domestic production costs in the foreign currency. But it is an incomplete indicator of the country's competitiveness with respect to its trading partners. In the long run, trade with other markets than the US changes the dollar's parity against other currencies, and given the inflation differential among economies, the concept of nominal exchange rate loses its causal relationship with the country's competitiveness. For this reason, multilateral real exchange-rate indices (RERI) are used, measured with the CPI (RERI-CPI) or with the PPI (RERI-PPI), to analyze the competitiveness of export sectors relative to the rest of the world. Graph 60 shows that over time the behavior of nominal and real exchange rates differs as prices in both Colombia and the rest of the world change, affecting the country's competitiveness.

In the first half of 2012 the peso's real appreciation lowered the real exchange-rate index to below its historical average.

Hence, to understand what fundamental factors determine the behavior of the real exchange rate, recall that this is an indicator that measures movements in the prices (or costs) of a given basket of goods and services produced in the country, with respect to prices abroad expressed in the same currency. Specifically, the real exchange rate (RER) is defined as follows:

46 The Brazilian government stated on various occasions that faced with the strengthening of the real it might take measures, including using resources from the Sovereign Fund (currently with investments amounting to some $9bn) to buy dollars. Moreover, a number of capital controls were in place in Brazil, including the financial-transaction levy on borrowings (with terms of up to five years), fixed-rate investments, derivatives operations, an increase in the sale position in derivatives and credit-cart transactions abroad. And a regulation was in force requiring banks to make a 60% deposit on short dollar positions exceeding $1bn or the entity's capital. The Central Bank of Brazil, for its part, resumed the purchase of dollars in spot and derivatives markets.

Graph 60
Nominal and real exchange rates

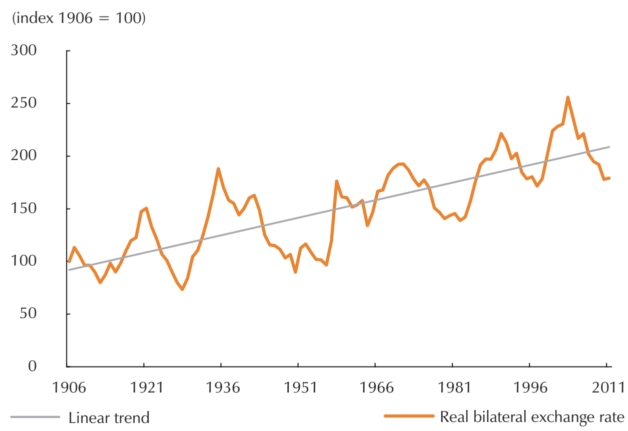


Source: Bloomberg.

RER = E x P* / P, where E is the nominal exchange rate, P* is the level of external prices, and P the level of domestic prices. Given that the real exchange rate takes into account changes in relative prices, these tend to be associated with variations in a country's competitive position. In particular, real appreciation in the local currency (other things being equal) makes domestically produced goods more costly, and hence less competitive. Thus, if nontradable and tradable goods are produced in both economies, then the real exchange rate will depend on the behavior of the relative prices of nontradables in comparison with tradables in each economy.

In the long term, the main factor determining the relative supply of nontradable goods (as against tradables) is productivity. Given a relative demand, if the productivity of a country's tradable sectors grows faster than the productivity of its nontradable sectors, the relative price of nontradable goods will rise (because nontradable supply will grow more slowly than tradable supply). Since the real exchange rate reflects the relative prices of nontradables in both countries, the effect of these changes on the real exchange rate will depend on whether the growth differential of tradable and nontradable productivities is greater in the country or abroad. If the differential is in favor of the external economy, the local currency will tend to depreciate in real terms. The reason for this is that the relative prices of nontradables abroad (q*) will rise faster in comparison with prices within the country (q), because productivity growth is usually faster in tradable sectors than in nontradable sectors (e.g. manufacturing vs. services).

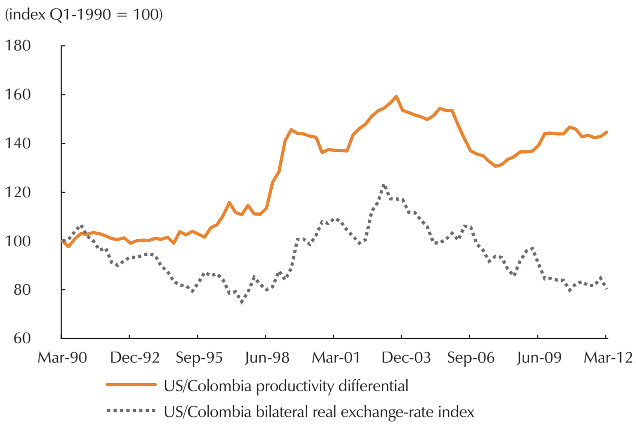
Graph 61
Real bilateral exchange rate with the US



Note: This is a dovetailing of annual growth rates between the statistical series from the Bank's Economic Studies Office (Technical and Economic Information Department), and information to 1950 from the Bank's Colombian Economic Growth Studies Group (GRECO).
Source: Banco de la República.

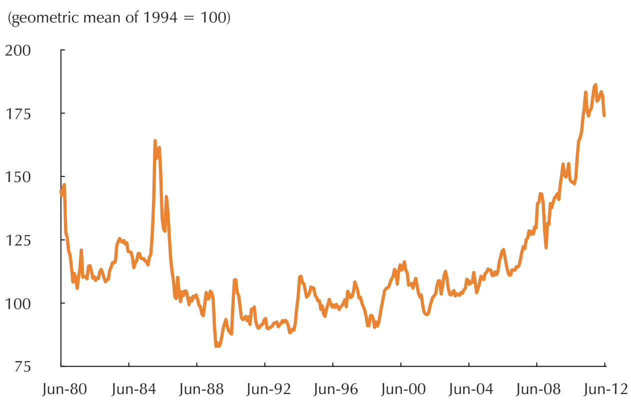
Graph 61 shows the rising trend (toward higher depreciation) of the bilateral real exchange rate between Colombia and the United States since 1906. This was because over that period relative productivity of the tradable sector with respect to the nontradable sector grew faster in the US than in Colombia. It may be seen from Graph 62 that for several decades industrial productivity by hour worked has grown less in Colombia than in the US, which explains the real depreciation trend. In recent years, however, relative growth

Graph 62
Industrial productivity differential vs. bilateral real exchange-rate index



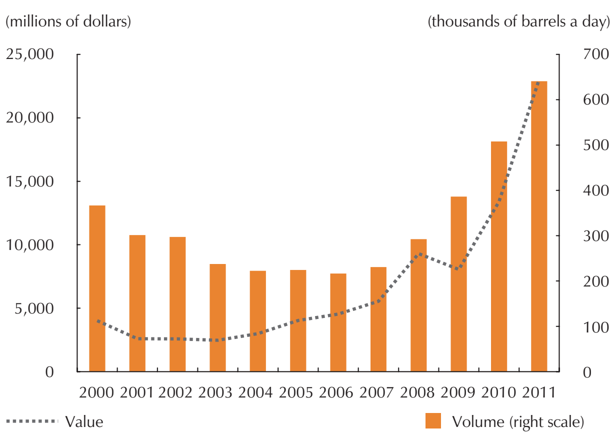
Sources: BLS, DANE and Banco de la República.

Graph 63
Terms of trade [a/]



a/ Based on the producer price index, and defined as the ratio of the price index of exported goods to the price index of imported goods
Source: Banco de la República.

Graph 64
Oil exports



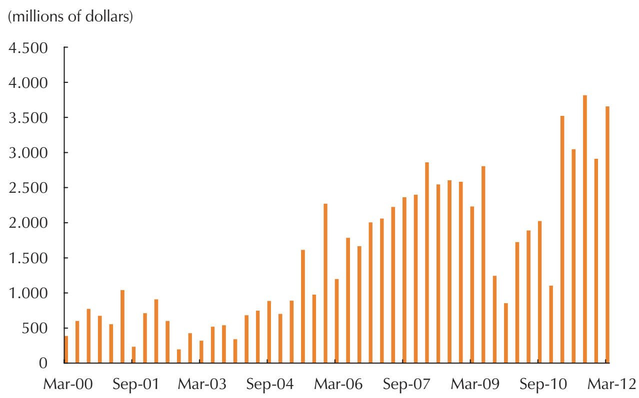
Sources: DANE and Banco de la República.

in tradable productivity has picked up pace in Colombia, which might explain, at least in part, the current trend toward appreciation.

Changes in demand for nontradable goods affect their relative price and hence the real exchange rate. Demand for nontradables depends largely on national income, the real interest rate, and exogenous shocks (e.g. in public spending). So, for example, the economy's income may rise owing to the discovery of an exportable natural resource, constant increases in workers' remittances from abroad, a shock in the terms of trade, or a decrease in net factor payments sent abroad. All these factors would cause the peso to appreciate in real terms, because they become reflected in greater spending by agents in the economy, leading to greater demand for both tradable and nontradable goods. But demand for tradables can be supplied from abroad at prices set abroad, whereas nontradable demand can be supplied only domestically. For this reason, the relative price of nontradables rises and puts upward pressure on real wages (in terms of tradables).

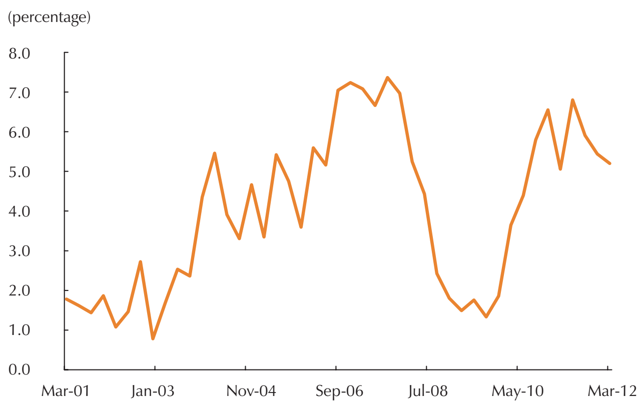
In this respect, Colombia's terms of trade have improved considerably in recent years (Graph 63), which may explain much of the peso's real appreciation. High oil prices and greater oil exploration have also increased the country's oil production and exports, thereby raising the national income (Graph 64). FDI inflows, for their part, may bring about real appreciation by generating demand for nontradable goods and services and so increasing their relative price. In effect, the country's economic situation, greater security and confidence, and improved medium-term outlook have attracted large inflows of funds, particularly of FDI, to both oil activity and other sectors of the economy. Thus, FDI inflows rose from an average figure of \$2,208m in 2000-2003 to \$8,343m in 2005-2011 (Graph 65).

Graph 65
Foreign direct investment flows to Colombia



Note: Excluding purchase of Bavaria for $4,502m in the fourth quarter of 2005.
Source: Banco de la República.

Graph 66
Annual growth in overall consumption



Source: DANE.

Generally speaking, greater inflows of external revenues both from current-account operations (thanks to good terms of trade and greater volumes of natural-resource exports) and from financial-account operations (in the form of FDI or external debt) may influence spending decisions in both the public and the private sector. Graph 66 shows that total consumption (driven mainly by household consumption) has been growing by more than 5% a year, thereby putting pressure on the real exchange rate to appreciate.

(Graphs 67, panels A and B) present the historical behavior of the CPI-based real exchange-rate index (RERI-CPI) and the PPI-based real exchange-rate index (RERI-PPI). These indicators give the average of bilateral indices weighted according to each country's trading importance with Colombia. In the first half of 2012 there was a drop in the real exchange-rate index, indicating an average real year-to-year appreciation of 3.9% according to the RERI-CPI, and 5.1% according to the RERI-PPI. The appreciation has lowered the two measures of the real exchange rate to below their historical averages. This recent behavior has resulted mainly from revaluation of our major trading partners' average nominal exchange rate, which has been partly offset by domestic inflation being lower than external inflation (Graphs 68 and 69).

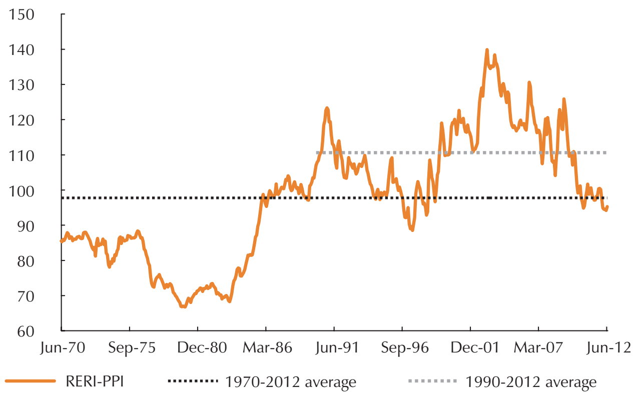
In recent years, the peso's real appreciation based on the CPI has been widespread with respect to the country's trading partners, whereas based on the PPI the peso has depreciated considerably in real terms against Brazil and Chile. In the first half of this year, the real exchange rate's bilateral indices, using the CPI or PPI as price measures, reveal that the Colombian peso has appreciated against the country's major trading partners. Over the same period it has depreciated, in terms of the PPI, against the Chilean peso, the Peruvian sol and the Venezuelan bolívar, and depreciated also in terms of the CPI against the currencies of Peru and Venezuela (Table 14).

The competitiveness indicator, RERI-C, is a multilateral real exchange rate with respect to countries competing with some of Colombia's major exports

Graph 67
Real exchange-rate index and its historical averages

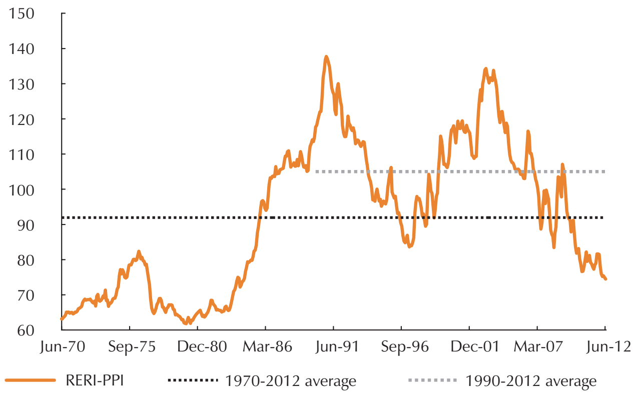
A. Multilateral RERI based on PPI, and its historical averages

(index 1994 = 100)



B. Multilateral RERI based on CPI, and its historical averages

(index 1994 = 100)



Source: Banco de la República.

(coffee, bananas, flowers and textiles) in the US market. Between January and June 2012 this indicator appreciated by 5.3% in average annual terms, reflecting a loss of competitiveness similar to the loss recorded by the measures referred to above (Graph 70).

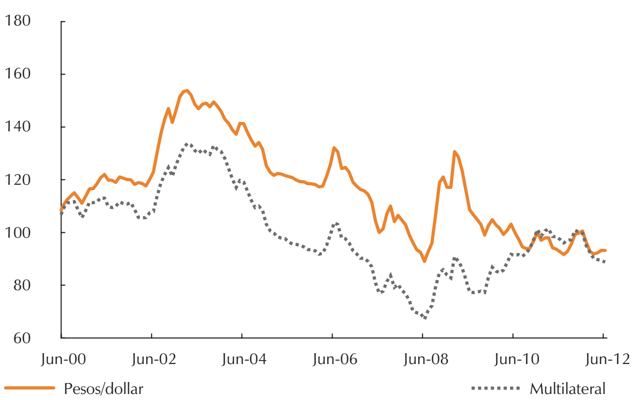
The different real exchange-rate measures show that there has been a real currency appreciation in Colombia, but this has also occurred in several of the country's trading partners (Graph 71). The behavior of real exchange rates worldwide has been influenced by: weakness of the global economy, greater confidence in emerging economies, favorable terms of trade and the resulting capital flows. Thus, the real appreciation trend in Colombia may be explained by the evolution of several fundamental determinants: productivity gains in tradable sectors, favorable terms of trade, discoveries of natural resources, and high levels of FDI.

2. Evolution of Colombia's balance of payments in the first quarter of 2012

The current-account deficit decreased in the first quarter of 2012 relative to the same period in 2011, owing especially to a higher trade surplus that offset increases in factor-income payments and in the

Graph 68
Nominal exchange-rate indices

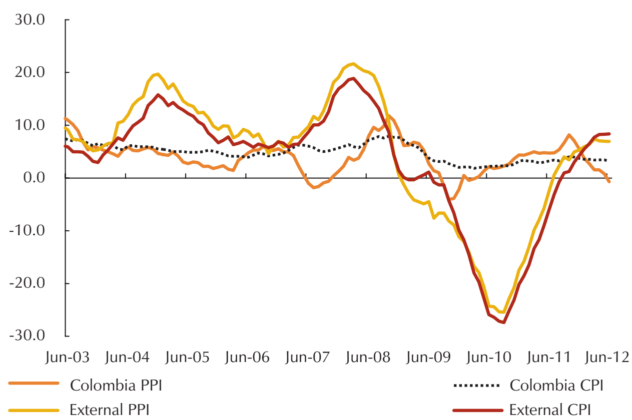
(index 2000 = 100)



Source: Banco de la República.

Graph 69
Annual inflation

(percentage)



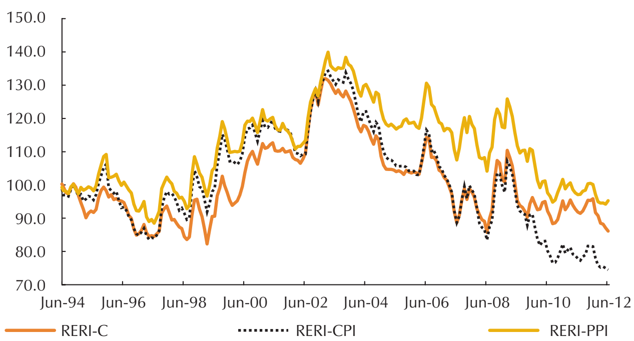
Source: Banco de la República.

Table 14
Bilateral real exchange-rate index
(average % change)

	First half 2012 vs. 2000		Full year 2011 vs. 2010		First half 2012 vs. 2011	
	PPI	CPI	PPI	CPI	PPI	CPI
Brazil	39.5	(2.1)	6.3	5.6	(11.3)	(11.5)
Mexico	(31.3)	(43.4)	(1.2)	(1.0)	(6.0)	(8.7)
Peru	(9.2)	(17.4)	1.0	(0.2)	0.9	0.1
Chile	9.5	(25.8)	2.9	2.4	1.6	(4.8)
Venezuela	(2.7)	(27.9)	5.1	11.6	4.3	6.3
US	(22.7)	(37.4)	0.4	(2.9)	(3.0)	(3.9)
Euro zone	(2.2)	(13.1)	2.4	1.7	(7.7)	(9.3)
UK	(30.5)	(35.6)	1.0	2.0	(2.9)	(5.0)
Japan	(29.6)	(37.9)	3.6	3.3	(3.6)	(5.2)

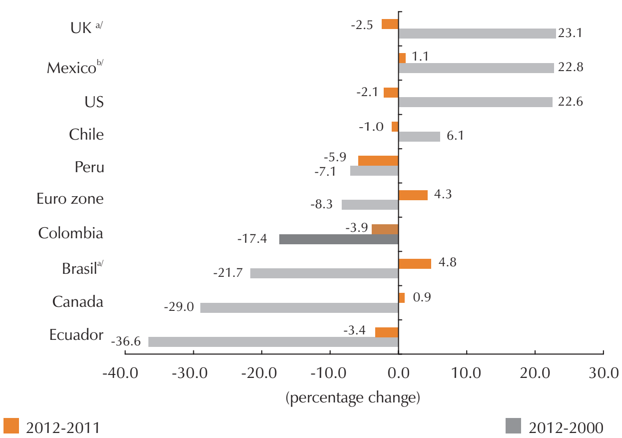
Source: Banco de la República.

Graph 70
Real exchange-rate indices



Source: Banco de la República.

Graph 71
Multilateral real exchange rates
(percentage change)



Note: Average of rates to June, except for Mexico, UK and Brazil.
a/ In 2012, data to May.
b/ In 2012, data to April.
Sources: Central banks.

service-trade deficit. The increase in factor-income payments came from remittances of higher first-quarter profits by foreign-capital firms established in Colombia and operating in the sectors of mining and energy, manufacturing and transport, warehousing and communications (Table 15).

The surplus on the trade balance stemmed from the first quarter's higher international prices for crude oil and its derivatives and, to a lesser extent, from their higher volumes shipped abroad. Another factor that helped to reduce the trade deficit was slower annual growth in the country's imports. Goods imports amounted to $13,068m in the first quarter of this year, higher than in the first quarter of 2011 by $1,427m (12.3%), while goods exports totaled $15,536m, up by $2,742m (21.4%).

Based on the country's balance-of-payment estimates, the main results for the first quarter of 2012 were: i) a current-account deficit of $1,761m (2.0% of the January-March quarterly GDP[47]), $98m lower than a year earlier, when it stood at $1,859 (2.4% of GDP); ii) a surplus on the capital and financial account of $2,237m (2.6% of GDP),

47 This is an estimate of quarterly GDP in current dollars made by the Bank based on preliminary information from DANE.

Table 15
Colombia's balance of payments
(millions of dollars)

	2011 (pr) (January-March)	2012 (pr) (January-March)	Absolute change
I. Current account (A + B + C)	**(1,859)**	**(1,761)**	**(98)**
Receipts	15,812	18,921	3,109
Payments	17,671	20,681	3,011
A. Nonfactor goods and services	254	1,328	1,074
Receipts	13,969	16,860	2,891
Payments	13,716	15,533	1,817
1. Goods	1,153	2,468	1,315
Receipts	12,794	15,536	2,742
Payments	11,641	13,068	1,427
2. Nonfactor services	(900)	(1,140)	241
Receipts	1,175	1,324	149
Payments	2,075	2,465	390
B. Factor income	(3,235)	(4,185)	950
Receipts	510	754	245
Payments	3,745	4,940	1,194
C. Transfers	1,123	1,097	(25)
Receipts	1,333	1,306	(26)
Workers' remittances	999	961	(38)
Other transfers	334	345	12
Payments	210	209	(1)
II. Capital and financial account (A + B)	**2,914**	**2,237**	**(676)**
A. Financial account (1 + 2)	2,914	2,237	(676)
1. Long-term financial flows (b + c - a)	**3,502**	**5,072**	**1,570**
a. Assets	**1,452**	**(57)**	**(1,508)**
i. Colombian investment abroad	1,452	(57)	(1,508)
Direct	1,452	(57)	(1,508)
Portfolio	0	0	0
ii. Loans	0	0	0
iii. Commercial credit	0	0	0
iv. Other assets	0	0	0
b. Liabilities	**4,953**	**5,025**	**72**
i. Colombian investment abroad	5,113	3,676	(1,437)
Direct	3,523	3,657	133
Portfolio	1,590	20	(1,570)
ii. Loans	(465)	1,374	1,839

Table 15 (continuation)
Colombia's balance of payments
(millions of dollars)

	2011 (pr) (January-March)	2012 (pr) (January-March)	Absolute change
iii. Commercial credit	(36)	(39)	3
iv. Leasing	342	15	(327)
v. Other liabilities	0	0	0
c. Other long-term financial movements	**0**	**(10)**	**(10)**
2. Short-term financial flows (b - a)	**(588)**	**(2,834)**	**2,246**
a. Assets	**3,088**	**3,349**	**261**
i. Portfolio investment	1,474	2,662	1,187
ii. Commercial credit	(93)	(71)	(23)
iii. Loans	705	132	(572)
iv. Other assets	1,002	626	(377)
b. Liabilities	**2,500**	**515**	**(1,985)**
i. Portfolio investment	951	1,260	308
ii. Commercial credit	96	86	(10)
iii. Loans	1,411	(864)	(2,275)
iv. Other liabilities	42	33	(9)
B. Special capital flows	0	0	
III. Net errors and omissions	161	357	
IV. Change in gross international reserves	1,216	834	
Memo items (millions of dollars):			
I. Gross international reserves	29,859	33,130	
II. Change in gross international reserves caused by balance-of-payment transactions	1,216	834	
III. Valuation gains/losses on international reserves	180	(7)	
IV. Change in gross international reserves (II + III)	1,395	827	

(pr): Provisional.
Source: Banco de la República.

The first quarter of 2012 saw a year-on-year decrease in the current-account deficit that resulted from an increase in the value of exports of crude oil and its derivatives, and from slower growth in imports.

$676m lower than a year earlier, when it amounted to $2,914m (3.7% of GDP); and iii) $834m accumulated in reserves, from balance-of-payment transactions.

a. *Current account*

The first quarter of 2012 saw the current-account deficit decrease by 0.4pp of GDP, year-on-year, thanks to a wider goods-trade surplus brought about by an increase in the value of exports of crude oil and its derivatives, and by slower growth in imports. This higher positive balance made it possible to offset higher net payments in respect of factor income and service trade.

By balance-of-payment component, the current deficit of $1,761m came mostly from deficits in factor income ($4,185m) and service trade ($1,140m), which were offset by surpluses on the goods account ($2,468m) and current transfers ($1,097m).

The country's current receipts amounted to $18,921m, with a year-on-year increase of $3,109m, and consisted mainly of goods exports ($15,536m, 82% of the total), non-factor service receipts ($1,324m, 7% of the total), and current transfers ($1,306m, 7% of the total). Current payments totaled $20,681m, having risen by $3,011. They were made up mostly of payments for goods imports ($13,068m, 63% of the total), factor income ($4,940m, 24% of the total), and services ($2,465m, 12% of the total).

b. *Capital and financial account*

In the first quarter of 2012 Colombia's economy posted a surplus of $2,237m on the capital and financial account, $676m smaller than in the same period in 2011 (Table 16). The surplus came from net receipts of FDI ($3,657m), foreign portfolio investment ($1,279m), and net foreign-loan disbursements ($604m), which were partly offset by outflows of Colombian capital ($3,302m).

Colombia's economy posted a capital-account surplus of $2,237m in the first quarter of 2012, $676m smaller than in the same period in 2011.

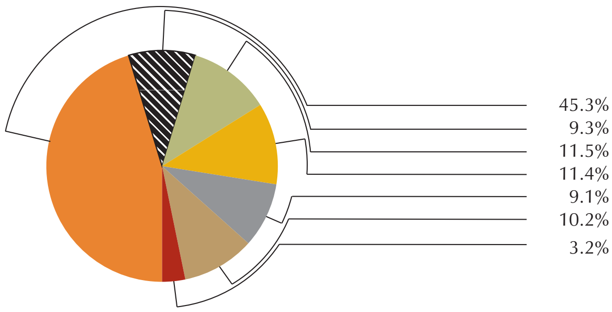
Between January and March 2012 Colombia received foreign direct investment amounting to $3,657m (4.2% of the quarterly GDP), a year-on-year increase of 4%. FDI represented 66% of total foreign capital received by the country's economy (Graph 72). The oil and mining sectors absorbed 45.3% ($1,657m) of the FDI funds, followed by the sectors of electricity ($419m), commerce ($417m), transport ($371m), manufacturing ($342m) and financial establishments ($333m).

Table 16
Colombia's balance-of-payment capital and financial account
(millions of dollars)

	2011 (pr) (January-March)	2012 (pr) (January-March)	Absolute change
Capital and financial account (I - II)	2,914	2,237	(676)
I. Foreign-capital inflows (liabilities) (A + B + C)	7,453	5,540	(1,914)
A. Foreign direct investment	3,523	3,657	133
B. Foreign portfolio investment (i + ii)	2,541	1,279	(1,262)
i. Public sector	1,181	202	(979)
Long term (bonds)	670	20	(650)
Short term (TES)	511	183	(329)
ii. Private sector	1,360	1,077	(283)
Long term	920	0	(920)
Short term	440	1,077	637
C. Loans and other external credit (i + ii)	1,389	604	(785)
i. Public sector:	(575)	1,029	1,603
Loans	(573)	1,030	1,603
Long term	(156)	1,189	1,344
Short term	(418)	(159)	(259)
Other	(1)	(1)	0
ii. Private sector:	1,964	(425)	(2,388)
Loans	1,520	(520)	(2,040)
Long term	(309)	185	495
Short term	1,829	(705)	(2,534)
Commercial credit	60	47	(13)
Other	384	49	(336)
II. Colombian capital outflows (assets) (A + B)	4,540	3,302	(1,237)
A. Direct investment abroad	1,452	(57)	(1,508)
B. Other investments abroad	3,088	3,359	271
i. Public sector:	663	1,962	1,299
Portfolio investment	275	1,914	1,638
Loans	403	23	(379)
Other	(15)	25	41
ii. Private sector:	2,425	1,397	(1,028)
Portfolio investment	1,199	748	(451)
Loans	302	109	(193)
Commercial credit	(93)	(71)	(23)
Other	1,018	610	(407)

(pr): Provisional.
Source: Banco de la República

Graph 72
Foreign direct investment in Colombia, by branch of activity
(January-March 2012)



Source: Banco de la República.

Colombia's net direct investment abroad was estimated at -$57, resulting from outflows of Colombian direct investment amounting to $411m and capital inflows of $468m, which were registered particularly in financial-sector companies, while investments were mostly made in the mining-energy sector.

The first quarter of 2012 saw the public sector receiving $183m in foreign portfolio investment, and a net amount of $20m from placement of long-term debt securities in international markets. External loans and other credit granted to the public sector came to $1,029m, resulting from net long-term loan disbursements of $1,189m and short-term debt repayments of $159m to multilateral banks.

The private sector received short-term foreign portfolio investment amounting to $1,077 from the sale of stock to foreign investors; this figure was $283m less than the amount received in the first quarter of 2011. Regarding Colombian private-sector debt, net payments amounted to $425m in the first quarter of 2012. Short-term debt repayments ($705m) offset net disbursements of long-term loans ($185m) and other credit ($96m).

Colombian financial assets abroad other than direct investment came to $3,359 in January-March 2012, a decrease of $271m relative to the first quarter of 2011. The outflows were mostly connected with purchases of portfolio investments abroad by public-sector companies that export mineral-energy products and by non-financial private-sector firms. There were also other investments and deposits made by real-sector companies engaged in commerce, communications and manufacture of products and beverages.

c. *International reserves*

Balance-of-payment transactions in January-March 2012 generated $834m in gross international reserves, the outcome of net currency purchases of $780m by currency intermediaries, net returns of $107m on international reserves, and net payments of $53m in other operations by the Banco de la República.

3. Balance-of-payment outlook for 2012

Based on the outlook for the external environment, the forecast for the balance of payments in 2012 assumes not only greater uncertainty in global growth as a result of the euro-zone crisis and its possible contagion to other economies, but also lower prices than in 2011 for Colombia's main export commodities.

Accordingly, the current-account forecast for 2012 assumes slower growth in the country's trading partners. This is consistent with the contraction outlook for the euro zone, given the persistence of negative results in the countries of the periphery and imminent contagion to the German economy. In addition, the US economy is forecast to grow by less than the historical average, and economic expansion in the emerging countries is expected to moderate, leading to a decrease in external demand that would curb the considerable rise in Colombian exports witnessed last year.

The price scenario for the country's main export products (crude oil and derivatives, coal, ferronickel and coffee) incorporates the price movements observed in the first half of 2012 and the market outlook regarding their evolution in the second half.[48] The foregoing implies a context of lower average prices for the whole of 2012, relative to last year's, reflecting the global economy's weak performance.

As a result, the assumption of slowdowns in Colombia's trading partners and expected falls in prices for the country's main exports together point to slower growth in both traditional and non-traditional exports. Imports, too, are projected to expand more slowly than in 2011, because domestic demand is expected to decrease in view of the outlook for the country's economy, as mentioned in the first section of this Chapter. In this respect, the behavior of imports should partly offset the projected slowdown in export growth.

The assumption of slowdowns in Colombia's trading partners and expected fall in prices for the country's main exports together point to slower growth in both traditional and non-traditional exports.

These estimated trade results should be attended by lower profit remittances, mainly from the oil sector, consistent with a scenario of lower average crude prices in 2012; and by lower net transfer receipts, given a scenario of contraction in Spain and moderation in US recovery, these countries being the main sources of workers' remittances for Colombia.

The current-account deficit for 2012 should continue to be financed chiefly from FDI inflows, which are estimated to continue at 2011 levels, thanks to the oil sector's dynamism, and the additional impetus observed in other sectors, especially in the financial sector and the hotel and tourism sector. Colombian investment abroad might register a smaller flow of funds for

48 In the case of oil, the Brent crude benchmark price was used for both 2011 and 2012.

Balance-of-payment projections show that the current-account deficit should be slightly higher in 2012 than it was in 2011.

acquiring assets abroad, given the uncertainty in external markets; there would accordingly be an increase in the net result of foreign investment in Colombia. Furthermore, the non-financial public sector is projected to receive a greater flow of funds from external borrowing, in connection with specific investment projects, chiefly in the hydrocarbon sector.[49]

Accordingly, balance-of-payment projections show that the current-account deficit should be slightly higher in 2012 than it was in 2011. Given this projection scenario and greater uncertainty on the global front, it should be pointed out that the risks associated with the evolution of the European crisis determine the range within which the country's current-account deficit might fall in 2012 and 2013.

4. External vulnerability indicators

The Banco de la República's strategy of accumulating international reserves recognizes the importance of having a sufficient level of international liquidity to deal with capital outflows that may be prompted by such factors as deterioration in the terms of trade, financial panic, or funding crisis in neighboring countries. In this context, keeping a sufficient level of international reserves serves not only to improve confidence in the country but also to deal adequately with a crisis in external markets.[50]

Keeping a sufficient level of international reserves serves not only to improve confidence in the country but also to deal adequately with a crisis in external markets.

Various vulnerability indicators are used to determine whether a country's international reserves are sufficient to forestall or deal with external shocks. The most important ones are the ratio of international reserves to monetary aggregates, and the ratio of reserves to foreign-debt payment in the following twelve months. Comparison of reserves with monetary aggregates such as M2 or M3 is intended to ascertain the economy's capacity to respond to capital outflows prompted by a speculative attack. The ratio of reserves to total external-debt repayments plus the current-account deficit indicates the country's capacity to meet its credit obligations with the rest of the world, in an extreme scenario in which access to international funding

49 Note that balance-of-payment forecasting reflects a variation in gross international reserves consistent with the Bank's intervention announcements (that is, minimum daily currency purchases of $20m, up to at least November 2, 2012) and the financial returns associated therewith.

50 In addition to the reserves-accumulation strategy, Colombia can rely on a contingency financing facility provided by the IMF to member states with good economic performance, prudent policies and a sound economic-policy framework. This facility was originally approved for Colombia on May 11, 2009 for one year, renewed for a further year on May 7, 2010, and renewed again on May 6, 2011, for two more years. On May 4, 2012 the IMF reconfirmed Colombia's access to contingency funds of approximately $5.98bn. Although Colombia's economic authorities do not expect to make use of these funds, they feel it is advisable to have access to them should external funding be suddenly cut off.

is completely closed. In general, international markets consider that low values of these rations may be warning signs of an economy's external vulnerability.

Table 17 shows movements in different indicators of Colombia's net international reserves from 2008 to 2012. The ratio of net reserves to M3 may be said to have remained stable in the pas three years. The ratios of net reserves to external debt and current-account deficit have values higher than 1, which is considered an adequate level by different analysts in international markets. Note that one of the most used measures is the quotient of net reserves and goods imports, which indicates the number of months of imports that an economy is capable of covering with its international reserves in the face of an abrupt change in the trade balance. For Colombia this indicator is estimate at 7.7 months for 2012.

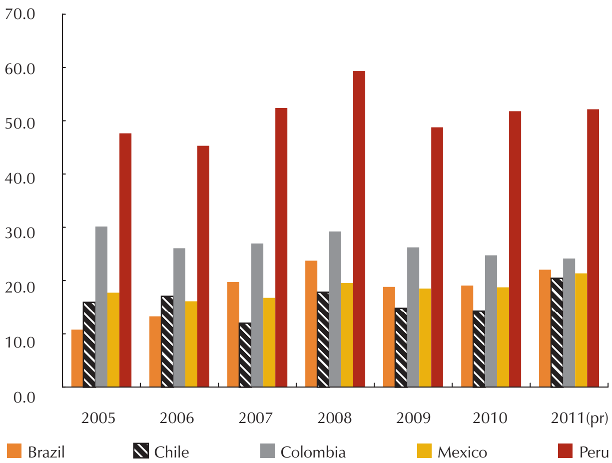
Table 17
Colombia's international-reserve indicators

	2008	2009	2010	2011	2012
Balance					
Net international reserves (NIR) (millions of dollars) [a/ b/]	24,030	25,356	28,452	32,300	36,193
Indicators					
A. Foreign-debt repayment indicator					
Foreign-debt repayments (millions of dollars)	10,369	11,418	10,308	14,418	20,239
Net reserves/current-year foreign-debt repayments	2.32	2.22	2.76	2.24	1.79
Net reserves//following-year foreign-debt repayments	2.10	2.46	1.97	1.60	1.68
B. Adequate external-liquidity position					
NIR/(current-year debt service)	1.76	1.75	2.08	1.78	1.43
NIR/(following-year debt service)	1.66	1.85	1.56	1.28	1.35
NIR/(current-yr. debt repayments + current-yr. currt.-acct. def.)	1.40	1.55	1.49	1.32	1.15
NIR/(following-yr. debt repayments + following-yr. currt.-acct. def.)	1.47	1.33	1.17	1.03	1.12
C. Other international-reserve indicators					
NIR as months of goods imports[c/]	7.7	9.7	8.8	7.4	7.7
NIR/M3 (percentage)[d/]	29.2	26.2	24.7	24.1	24.2
NIR/GDP[e/]	9.8	10.8	9.9	9.7	10.0

(pr) Preliminary.
(proj) Projected.
a/ This is the balance of net international reserves forecast for 2012, which takes into account the commitment of daily currency purchases of at least $20m from February 6 to November 4, 2012.
b/ The balance of net international reserves takes into account contributions to the Latin-American Reserve Fund.
c/ The value of goods imports for 2012 is a projection.
d/ The balance of broad M3 for 2012 is a projection
e/ Real GDP forecast for 2012 in dollars.
Source: Calculations by Banco de la República.

Graph 73
International reserves/M3

(percentage)

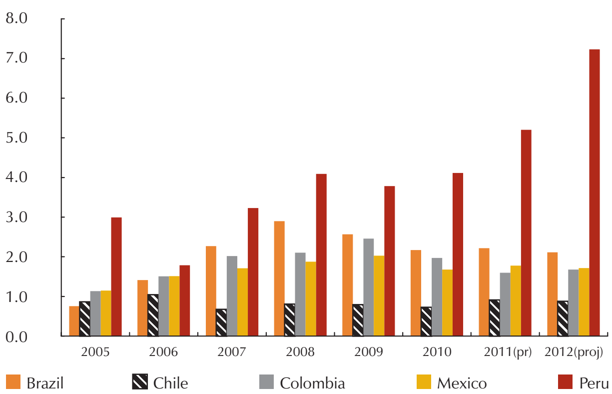


(pr): preliminary.
Sources: Each country's central bank, The Economist Intelligence Unit (latest update March 2012) and Banco de la República.

Graph 74

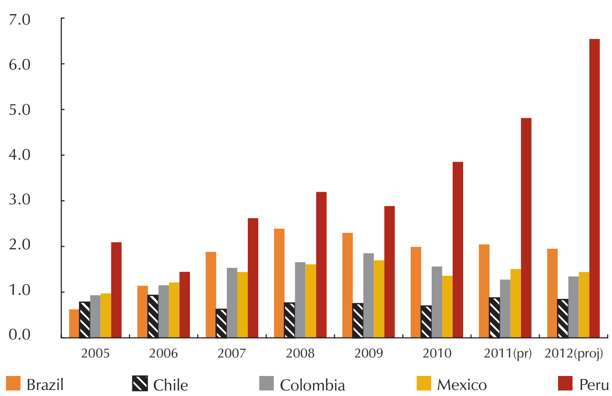
A. International reserves/ following-year principal payments

(times)



B. International reserves/following-year debt service

(times)



Comparison of Colombia's different international-liquidity indicators with those of other countries of the region shows Colombia's reserves/M3 ratio to be higher than Chile's, Mexico's and Brazil's, but lower than Peru's. The growth and level of Peru's reserves/M3 ratio are high because the local banks are allowed to take deposits in dollars, and the reserve requirement imposed on these deposits is accounted as reserves (Graph 73).

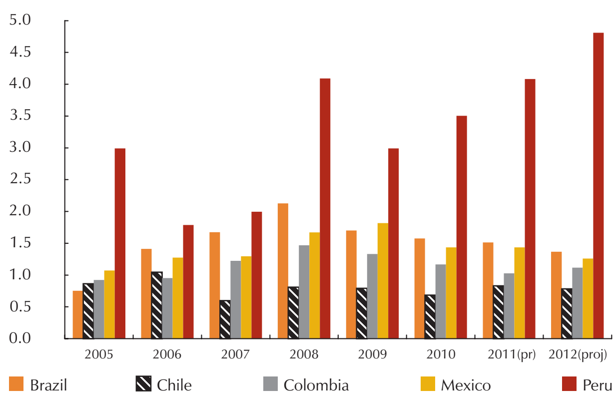
Colombia's ratios of international reserves to principal repayments, to debt servicing, and to current-account deficit plus principal repayments are higher than Chile's, but similar to or less than those of Mexico, Brazil and Peru (Graph 74).

The reserves/GDP ratio for Colombia is close to levels for Mexico but lower than for Chile, Brazil and Peru. Regarding reserves measured in months of goods imports, Colombia is in a relatively higher position that Chile and Mexico, but lower than Brazil and Peru (Graph 75).

Thus, external vulnerability, as measured by the above ratios of international reserves, shows Colombia to be in a position similar to those of other countries of the region.

C. International reserves/following-year (current-account deficit + principal payments)

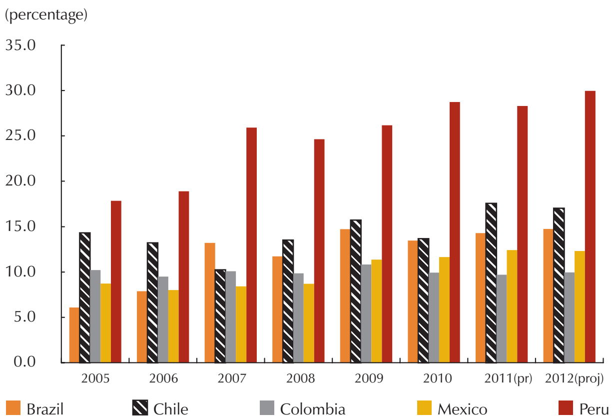
(times)



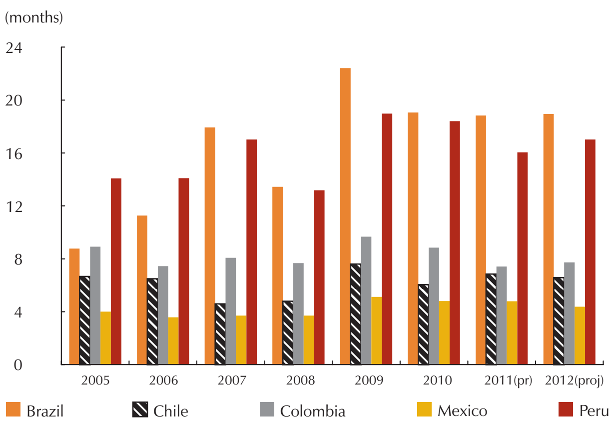
(pr): preliminary.
(proj): projected.
Sources: Each country's central bank, *The Economist Intelligence Unit* and Banco de la República.

Graph 75

A. International reserves/GDP



B. International reserves as months of goods imports



(pr): preliminary.
(proj): projected.
Sources: Each country's central bank, The Economist Intelligence Unit and Banco de la República.

F. COLOMBIAN ECONOMY'S BEHAVIOR BY REGION OF THE COUNTRY

This section describes the Colombian economy's performance in the different regions of the country, as classified by the Banco de la República for periodical monitoring of the main economic activities and variables in the regions (Map 1).[51]

Thus, using the latest information on the GDP of Departments (up to 2010) and the economic indicators available for 2011, the behavior of the different sectors of economic activity is analyzed for the following regions:[52] Bogotá; the Caribbean region (Departments of Bolívar, Atlántico, Magdalena, Cesar, Córdoba, Sucre, La Guajira, and San Andrés and Providencia); the north-west region (Departments of Antioquia and Chocó); the south-west region (Departments of Valle de Cauca, Nariño, Cauca and Putumayo); the north-east region (Departments of Santander, Norte de Santander, Boyacá and Arauca); the Central region (Departments of Tolima, Huila, Cundinamarca and Caquetá); the south-east region (the Eastern Plains and the Department of Amazonas); and the coffee-growing region (Departments of Caldas, Quindío and Risaralda).

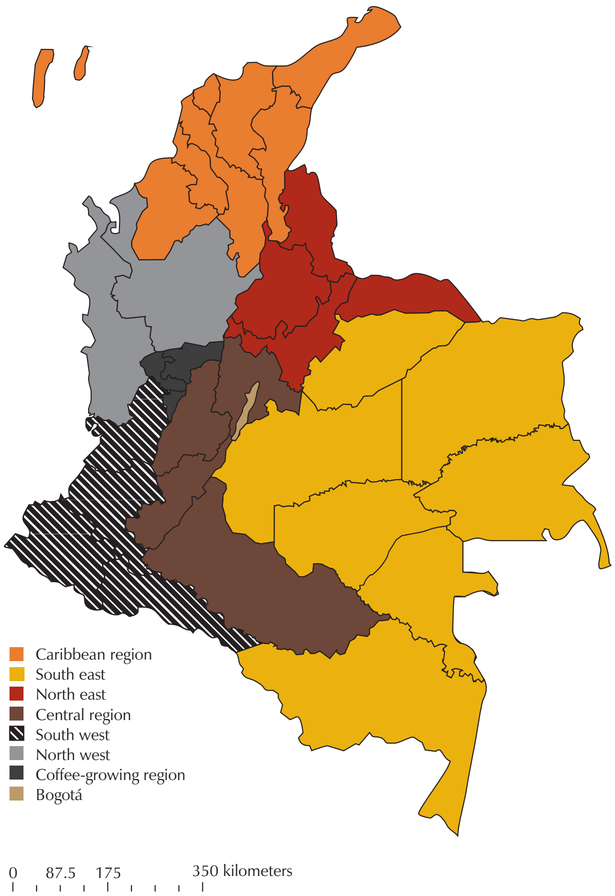
1. Regional distribution of Colombia's GDP, 200-2010

On the most recent information available on the GDP of Departments, in 2009 most regions slowed down, and some, such as the north-west and the coffee-growing region, even shrank. In 2010 most of the regions, except the Caribbean, north-east and center, returned to their path of growth, with

51 See the regional economic bulletins published on the Bank's website (www.banrep.gov.co/publicaciones/pub_ec_reg7.htm). Although no specific bulletin is currently being produced on the monitoring of economic activity in Bogotá, the capital is actually included in the present *Report to Congress*.

52 Note, however, that for some variables the analysis does not fully cover the regions defined, either because of arbitrary grouping from the source of information, or because no information was available for some Departments.

Map 1
Regions of Colombia [a/]



a/ As classified by the Bank for periodical monitoring of local economies.
Source: Banco de la República

rates similar to or higher than those recorded in 2008 (Table 18). Over the period analyzed (2008-1010), the south-east region stood out for having the highest annual growth rates in the country, over 10%, with a marked upward trend driven mainly by expansion in the mining sector (oil). The Caribbean region's growth over that period remained relatively stable, below 2%.

Regional share in the country's GDP was relatively stable in 2008- 2010 (Table 18). Thus, while a little over 25% of the national output was concentrated in Bogotá, 55% was generated in the Caribbean, north-west, south-west and north-east regions of the country, with each region providing a similar share. The center and the coffee-growing region produced 10% and 4%, respectively, of Colombia's GDP. The only region that has increased its share in the national GDP is the south-east, raising it from 5.2% in 2008 and 2009 to 6.2% in 2010, owing to its increasing pace of economic expansion, as mentioned earlier.

Sectoral breakdown of regional GDP shows that much of industry, commerce, construction, transport and services (financial and non-financial) is concentrated in Bogotá. Farming is mostly carried out in the central, Caribbean, north-east,

Table 18
Colombia's GDP, by region [a/]
Annual change Share of total regional GDP

Region	Annual change			Share		
	2008	2009	2010	2008	2009	2010
Bogotá	3.7	1.3	3.1	25.5	26.0	25.4
Caribbean region	1.8	1.9	1.6	15.5	15.5	15.1
North west	2.4	-0.1	4.0	13.8	13.8	13.7
South west	2.8	2.2	3.5	13.3	13.6	13.5
North east	5.3	0.0	4.2	13.0	12.3	12.6
Central region	4.3	0.8	3.6	9.7	9.7	9.6
South east	10.9	13.4	18.5	5.2	5.2	6.2
Coffee-growing region	1.9	-1.2	2.5	3.9	3.9	3.8
Nationwide total	**3.5**	**1.7**	**4.0**	**100.0**	**100.0**	**100.0**

a/ The latest information available from DANE. Adjusted data for 2008 and 2009, preliminary for 2010.
Source: DANE (preliminary 2010 Departmental accounts). Calculations by Banco de la República.

Table 19
Breakdown of GDP, by region and by economic activity in 2010 [a/]

Panel A											
Region	Farming[b/]	Mining and quarrying	Manufac-turing	Energy, gas and water	Cons-truction	Commerce and other [c/]	Transport and other[d/]	Financial services [e/]	Service activities [f/]	Duties and taxess	GDP
Bogotá	0.0	0.5	21.3	20.7	22.8	30.3	27.8	42.9	28.9	26.5	25.4
Caribbean region	17.4	22.7	14.0	18.7	14.1	14.3	16.4	9.9	16.4	15.5	15.1
North west	13.7	6.3	14.3	20.3	16.1	15.7	12.7	15.0	12.4	12.9	13.7
South west	14.5	3.7	15.8	12.8	11.9	13.5	14.0	15.7	14.3	13.9	13.5
North east	18.2	16.2	18.8	9.7	14.6	10.0	11.1	7.1	9.9	17.5	12.6
Central region	21.2	8.1	10.7	11.1	10.0	9.5	10.1	4.7	10.1	9.1	9.6
South east	7.7	42.0	1.3	1.9	5.7	2.7	3.8	1.3	3.5	1.4	6.2
Coffee-growing region	7.4	0.4	3.7	4.7	4.8	3.9	4.1	3.4	4.5	3.2	3.8
Nationwide total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Panel B											
Region	Farming[b/]	Mining and quarrying	Manufac-turing	Energy, gas and water	Cons-truction	Commerce and other [c/]	Transport and other[d/]	Financial services [e/]	Service activities [f/]	Duties and taxess	GDP
Bogotá	0.0	0.2	10.8	2.9	6.3	13.8	7.0	32.3	18.0	8.8	100.0
Caribbean region	7.5	13.0	12.0	4.4	6.6	11.1	6.9	12.6	17.3	8.7	100.0
North west	6.5	4.0	13.5	5.2	8.2	13.3	5.9	21.0	14.4	8.0	100.0
South west	7.0	2.4	15.1	3.4	6.2	11.6	6.6	22.3	16.8	8.7	100.0
North east	9.4	11.1	19.2	2.7	8.1	9.2	5.6	10.8	12.4	11.7	100.0
Central region	14.4	7.3	14.4	4.1	7.3	11.6	6.7	9.3	16.7	8.0	100.0
South east	8.0	58.1	2.7	1.1	6.4	5.0	3.9	4.1	8.8	1.9	100.0
Coffee-growing region	12.5	1.0	12.4	4.3	8.7	11.8	6.9	16.8	18.5	7.1	100.0
Nationwide total	**6.5**	**8.6**	**12.9**	**3.5**	**7.0**	**11.6**	**6.4**	**19.2**	**15.8**	**8.4**	**100.0**

a/ The latest information available from DANE. Preliminary data for 2010.
b/ Farming, ranching, hunting, forestry and fishing.
c/ Other: repairs, restaurants and hotels.
d/ Other: warehousing and communications.
e/ Financial entities, insurance, real-estate activity and services to businesses.
f/ Social, community and personal services
Source: DANE (preliminary 2010 Departmental accounts, at current prices). Calculations by Banco de la República.

south-west and north-west regions, while mining is chiefly located in the south-east, Caribbean and north-east regions of the country (Table 19).

Sectoral evolution in 2008-2010 shows that the behavior observed in most of the regions was associated with the results of industry, commerce, and the sector of transport and communications. The exception was the Caribbean region, where industry continued to fall in 2010, and the coffee-growing region, where the sector of transport and communications showed no recovery (Table 20).

Table 20
Regional GDP growth, by sector a/
(percentage change)

Region	Manufacturing			Commerce and other b/			Transport and other c/			Construction		
	2008	2009	2010	2008	2009	2010	2008	2009	2010	2008	2009	2010
Bogotá	(2.3)	(3.2)	2.4	3.1	(0.5)	6.8	5.5	(1.0)	5.9	21.4	0.1	(5.3)
Caribbean region	(3.6)	(5.1)	(3.1)	3.4	0.5	3.4	4.5	(0.9)	4.5	7.4	13.2	(4.6)
North west	(4.1)	(6.2)	7.9	3.7	(0.4)	6.5	1.7	(2.1)	4.9	11.7	1.9	(8.6)
South west	4.3	(1.1)	2.8	2.3	0.0	4.3	3.4	(4.4)	3.3	(0.3)	8.1	(2.6)
North east	3.5	(6.6)	3.4	4.3	(1.6)	3.3	4.5	(1.9)	5.5	4.5	9.0	8.8
Central region	9.5	0.3	4.3	2.7	0.6	3.7	7.0	1.1	4.5	7.3	3.5	8.6
South east	4.6	(7.2)	9.5	(0.1)	(1.1)	4.7	8.5	2.5	12.8	(3.5)	13.0	3.2
Coffee-growing region	2.5	(7.4)	1.7	3.6	(1.5)	3.8	4.3	(1.1)	(0.1)	(0.1)	0.1	(2.0)
Nationwide total	**0.5**	**(4.1)**	**2.9**	**3.1**	**(0.3)**	**5.1**	**4.6**	**(1.4)**	**5.0**	**8.8**	**5.3**	**(1.7)**

Región	Financial services d/			Service activities e/			Mining and quarrying			Farming f/		
	2008	2009	2010	2008	2009	2010	2008	2009	2010	2008	2009	2010
Bogotá	4.9	2.7	1.8	0.5	5.2	4.6	7.9	10.6	(14.3)	n.a.	n.a.	n.a.
Caribbean region	3.1	3.4	3.8	3.6	4.2	6.6	2.4	4.4	0.8	(1.3)	1.1	(5.8)
North west	4.9	3.0	4.8	2.0	5.1	3.7	17.8	13.8	6.1	(3.2)	(2.1)	1.7
South west	4.0	3.2	3.0	4.0	3.9	3.5	29.3	41.6	22.3	(9.3)	(1.9)	3.9
North east	5.1	5.1	3.9	5.6	3.2	5.2	13.3	4.8	1.0	8.4	(0.3)	1.7
Central region	3.2	2.5	2.9	3.0	4.3	5.8	5.2	(2.3)	(3.6)	(2.8)	(2.8)	2.6
South east	8.9	4.9	5.4	4.8	3.7	4.4	17.8	21.9	32.4	19.2	8.4	2.3
Coffee-growing region	4.1	3.4	2.5	0.7	2.3	4.3	(9.4)	6.6	(11.2)	(3.2)	(3.6)	4.1
Nationwide total	**4.5**	**3.1**	**2.9**	**2.6**	**4.4**	**4.8**	**9.7**	**11.1**	**12.3**	**(0.4)**	**(0.7)**	**1.0**

n.a. Not available.
a/ The latest information available from DANE. Adjusted data for 2008 and 2009, preliminary for 2010.
b/ Other: repairs, restaurants and hotels.
c/ Other: warehousing and communications
d/ Financial entities, insurance, real-estate activity and services to businesses
e/ Social, community and personal services.
f/ Farming, ranching, hunting, forestry and fishing.
Source: DANE (preliminary 2010 Departmental accounts). Calculations by Banco de la República.

The financial and service sectors continued to show positive rates of growth in the different regions of the country. Although the construction sector did not contract in 2009, it did so in 2010 in most regions. Thus, construction in Bogota, having grown by 21.4% in 2008, shrank by 5.3% in 2010, whereas construction in the north-east, center and south-east continued to expand. In 2010 mining contracted in the central region, as it had done in 2009; it also shrank in the coffee-growing region and Bogotá, but its share in these places is minimal. The farming sector began to recover in 2010, after shrinking since 2008 in the different regions except in the south-west, where it has continued to grow, albeit more slowly.

In conclusion, in Bogotá and in the north-west and south-west of the country the economy's slowdown in 2009 and its recovery in 2010 were tied especially to results in industry, commerce and transport. In the central region the behavior of construction and farming also had an impact. The north-east region saw a constant deceleration in its mining sector, and procyclical behavior in industry, commerce and transport. In the Caribbean region, downward impetus came from industry (which showed no recovery), and also from construction, farming and mining, which were weakened in 2010. In contrast, in the south-east, growth in mining accelerated over the three years, which was the opposite of what occurred in farming. In the coffee-growing region, both contraction and advance occurred notably, and mainly, in industry, commerce and farming, while construction showed no sign of recovery.

2. Behavior of Colombian regions in 2011

Although there are as yet no consolidated GDP figures for the Departments for 2011, available statistical information serves as a basis for analyzing economic behavior in the different areas of the country. The following paragraphs provide a summary of events by region; this is supplemented by pertinent information on a number of specific sectors within the regions, contained in the shaded pages …

In general, the available information indicates that most regions continued to perform well in 2011. Thus, in Bogotá industry continued to grow moderately, and commerce–the sale of vehicles–expanded further (as it did in the other regions), albeit at a slower pace than in previous years. Moreover, a pick-up is discernible in Bogotá in construction and financial-sector credit, in parallel with notable results for foreign trade, lower unemployment, and satisfactory inflation behavior.

The north-west region was characterized by significant advance in industry and foreign trade, at a higher rate than the national average. Similarly, domestic trade and financial activity presented good balances, while results for the farming sector were mixed. Regarding construction, the north-west presented the greatest growth in the area licensed for housing; it also exhibited lower unemployment in the metropolitan area of Medellín, and greater inflation than the national average.

Evidence for the Caribbean region points to recovery in industry, strong expansion in the area approved for housing, and considerable growth in commerce, particularly sale of vehicles. Farming, mining, foreign trade and the labor market became more dynamic, but with high inflation in several cities of the region.

The south-west showed considerable advance in industry, positive balances in commerce and construction, and moderate growth in financial credit and foreign trade, compared with other regions' results. The region was also characterized by achieving the lowest inflation figures, albeit with deterioration in its labor market for the Cali-Yumbo area.

The north-east performed well in farming and construction and showed favorable balances in commerce and the financial sector, and moderate growth in industry. On the other hand, the region exhibited little advance in mining, one of the lowest results in foreign trade, and the highest inflation in the country–specifically in Bucaramanga. The metropolitan area of Cúcuta stood out for its high unemployment rate, whereas unemployment in Tunja and Bucaramanga tended to decrease.

The central region provided evidence of significant improvement in farming and construction, and to a lesser extent in commerce, though vehicle sales continue to expand. The region was, however, the only one in which exports fell. Inflation was above the national total in Neiva and Ibagué, where unemployment rates remained high, albeit lower than in 2010.

The mining boom persisted in the south-east, driven above all by petroleum extraction, chiefly in the Department of Meta. Results for farming were mixed in the south-east, but there was advance in financial credit and construction and favorable change in employment.

Lastly, in the coffee-growing region, too, farming results were mixed, with a considerable decrease in coffee production; there was also a slowdown in commerce. In contrast, the region exhibited some recovery in industry, good performance in construction, moderate growth in exports, and satisfactory expansion in financial credit. Although the unemployment rate was higher than the total average for the 23 cities, it was lower than in 2010. And inflation was above the national average only in Manizales.

1. Farming sector[1]

In 2011 growth in farming was mixed across the different regions of the country. Production of permanent crops,[2] such as palm oil and kernel, expanded by over 40% in the eastern zone, and to a lesser extent in the north and central zones, as classified by Fedepalma.[3] Panela cane,[4] similarly distributed in five producing regions, increased by more than 70% in the southeast and the coffee-growing region, but decreased in the central region (34.4%), the north east (14.4%) and north west (13.1%). Production of sugar cane[5], according to Asocaña (cane-growers' association), was 12.1% higher than a year earlier, with the south-west region accounting for practically the whole year's production (79% in Valle del Cauca and 19% in Cauca).

Production of dry pergamino coffee contracted in the coffee-growing region (26.5%) and in the south west (18.6%) but increased in the central region (13.3%) and the north east (56.8%); the north east, however, accounts for the smallest share of the total. National production of green coffee also shrank (12.5%) according to figures from the National Federation of Coffee-Growers; the shrinkage was mainly attributed to an inclement rainy season and newly replanted areas.

Regarding transitory crops,[6] the central region stood out for its good performance, with production increases in rice (18.1%), corn (67.4%) and potatoes (24.8%); the Caribbean region, the biggest producer of corn, also achieved considerable expansion (34.4%), as did the south west (43.9%). The other regions, accounting for a smaller share of corn production exhibited positive behavior. Rise production in the south east (one of the two major rice-growing areas, the other being the central region) fell by 9.3%, owing to a downturn in the Department of Meta caused by rice-crop sterility.77 Potato crops grew by 31.9% in the north east of the country but declined by 8.8% in the south west.

Regarding livestock farming, according to the National Farming Survey conducted by DANE (statistics agency), the national cattle population decreased in 2011. The Caribbean region, accounting for one-third of this population, fell by 8.5%, while the south west, with the next biggest share, decreased by 18.8%, followed by the north east (-13%) and the coffee-growing region (-12.7%). There were slight increases in the north-west and central regions, and a rise of almost 15% in the south west.

2. Mining sector

In 2011 oil production in the south east, representing 64.8% of the national total, continued on the rising trend of recent years. In Meta and Casanare, the two biggest oil-mining areas, production grew at annual rates of 29.1% and 22.8%, respectively. In the north east, representing 18.4% of production, it went up slightly (1.4%), whereas in the central region it fell by 7.7% (Graph A).

Coal production expanded at an annual rate of 15.5% in 2011; it is mostly concentrated in the Caribbean-region Departments of Cesar (50.9%), La Guajira (38.9%) and Córdoba (0.4%). Precious metals, boosted by good international prices, expanded by over 50.0% relative

1 The analysis was based on information from DANE's national farming survey carried out in 22 Department with regard to crops of panela cane, pergamino coffee, and potatoes. In addition, provisional information was provided on the other products by the respective growers' associations: Asocaña (sugar/panela cane), Fedepalma (oil palm), Fedearroz (rice), National Federation of Coffee-Growers, and Fenalce (corn).

2 The main permanent crops are: African palm, coffee, bananas, panela cane, sugar cane, and fruit crops, among others. They are characterized by having long growth cycles, with maximum production capacity, generally after three years.

3 Eastern region (Departments of Casanare and Meta); northern region (Departments of Antioquia, Bolívar, Magdalena and part of Cesar); central region (Departments of Norte de Santander, Santander and the rest of Cesar).

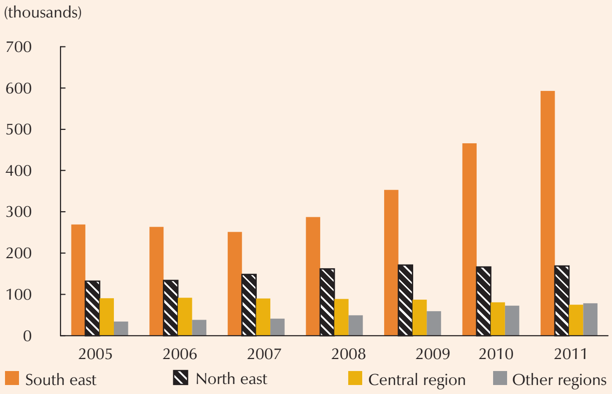
4 Equivalent to what is called "green cane".

5 The volume of crude sugar in metric tons.

6 The main transitory or short-cycle crops are: rice, corn, potatoes, yucca, sorghum, wheat, beans and cotton, among others (figures are provisional).

7 A disease that prevents the stalks from bearing the correct amount of grains, owing to difficulty factors such as climate, sowing period or cultivation management, which affect production and yields.

Graph A
Oil production, by region
(BPCD)[a/]



a/ Barrels produced per calendar day.
Source: Banco de la República.

to 2010 in the Caribbean region; and by 13.4% in the north west, which accounts for the biggest share (79.4%); followed by a 6.4% growth in the coffee-growing region. In contrast, the central and south-west regions reported decreases of 45.5% and 14.8%, respectively, but together they contribute only 2.5% of the total.

3. Industrial sector

In 2011 the predominantly industrial regions continued the recovery started the year before. According to DANE's indices of quarterly manufacturing samples for the regions of the country as delimited by DANE itself,[8] real industrial output expanded significantly: by 8.5% in the metropolitan area of Medellín, 7.3% on the Caribbean coast, and 7.1% in the area of Cali (Table A). Production and sales in the Medellín area were strongest in the manufacture of meat and meat products, vehicles and auto parts, textiles and clothing; in the Caribbean region in the manufacture of non-metallic mineral products, meats and fish, and chemical and plastic products; and in the area of Cali in the manufacture of machinery and electric devices, iron and steel, food products and clothing and, to a lesser extent, rubber and plastic products.

The Santander region posted a 5.6% rise, boosted by favorable production of meat and meat products, other manufactured goods, non-metallic minerals, machinery, footwear and leather articles. In Bogotá real output went up by 2.7%, compared with 2.4% the year before, and was concentrated in the manufacture of meat, oils and fats, publishing and printing products, milling and baking, vehicles and auto parts, iron and steel, and non-alcoholic beverages. Lastly, the coffee-growing region saw

8 Bogotá; the two Santander Departments; the coffee-growing region; Cali, Yumbo, Jamundí and Palmira; the metropolitan area of Medellín; Barranquilla, Soledad and Malambo; Cartagena and Santa Marta.

Table A
Real output growth, by region[a/]
(annual change in moving-quarter average)

Period	Bogotá	Medellín and its metropolitan area	Cali, Yumbo, Jamundí and Palmira	Barranquilla, Soledad, Malambo, Cartagena and Santa Marta	Coffee-growing	Santander Departments
Dec-08	(7.6)	(7.0)	(3.6)	(0.7)	(2.5)	2.7
Mar-09	(8.3)	(9.1)	(1.9)	(5.0)	(5.9)	0.4
Jun-09	(10.6)	(11.8)	(2.9)	(8.0)	(9.7)	(3.4)
Sep-09	(9.6)	(13.4)	(2.8)	(12.8)	(13.8)	(4.8)
Dec-09	(7.8)	(11.1)	(2.0)	(10.7)	(13.9)	(6.8)
Mar-10	(6.3)	(7.0)	(3.1)	(5.8)	(12.3)	(6.7)
Jun-10	(1.6)	(0.2)	(1.5)	(1.7)	(7.7)	(5.1)
Sep-10	0.6	5.1	(0.5)	3.9	(2.0)	(2.8)
Dec-10	2.4	8.9	0.2	4.7	0.1	0.9
Mar-11	3.5	10.8	2.5	4.3	0.3	4.3
Jun-11	1.9	9.8	3.6	5.6	(1.3)	5.7
Sep-11	2.9	10.5	5.0	5.6	0.2	6.1
Dec-11	2.7	8.5	7.1	7.3	3.2	5.6

a/ DANE's classification of regions.
Source: DANE's quarterly regional manufacturing sample. Calculations by Banco de la República.

industry expand by 3.2%, up from a slight rise of 0.1% in 2010, thanks basically to a boom in the production of motorcycle, food products other than coffee, clothing and metal goods.

4. Commercial sector

According to information from DANE on real sales in the sector of commerce,[9] and the findings of the Banco de la República's monthly economic expectations surveys, all regions recorded a positive balance at the end of 2011.[10] The highest levels were achieved in Antioquia, the south-west and Caribbean regions, followed by the central region, the north east, the south east and the coffee-growing region (Graph B).

5. Construction sector

The construction sector performed well in 2011 according to expansion in the area approved for housing, which rose considerably in the north west (66.1%), the Caribbean region (62.9%), the central region (57.6%) and the north east (44.7%), these regions together accounting for 51.7% of the approved area (Table B).

6. Financial sector

Gross lending (including provisions) improved for all regions in 2011, rising faster than the year before, except in the Caribbean region, where the pace was slower (Table C). Commercial loans, the main component of the loan portfolio, stood out: in the north west by reason of representation (72.7%) and variation (38.1%); and in the north east, with a weighting of 49.2% and the second highest variation, 32.0%. The smallest increases (9.0%-16.0%) occurred in the Caribbean and coffee-growing regions, Bogotá and the south west.

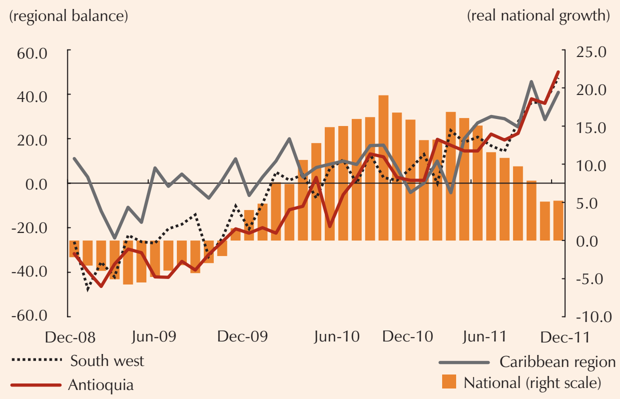
Consumer loans, the portfolio's second biggest component, expanded in 2011 in the different regions. The south west showed a 19.5% growth in consumer loans, up from 3.2% in 2010 but still the smallest annual growth among the

9 Excluding fuel. Based on DANE's monthly retail-trade sample, with monthly series smoothed by the moving-quarter average of indices.

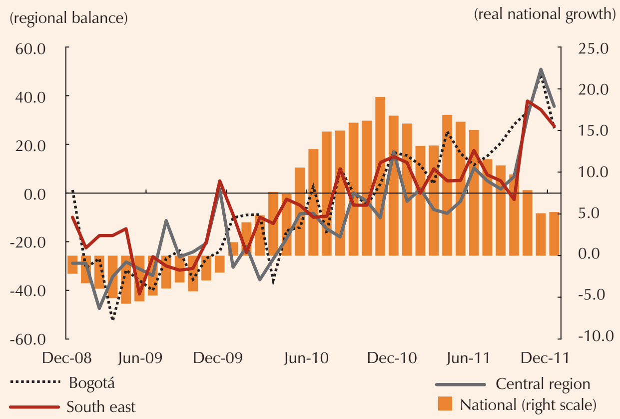
10 In the case of the regions, the information included sales in commerce, industry, construction, transport and communications, and services.

Graph B
Regional sales balance[a/] vs. real national retail growth [b/]

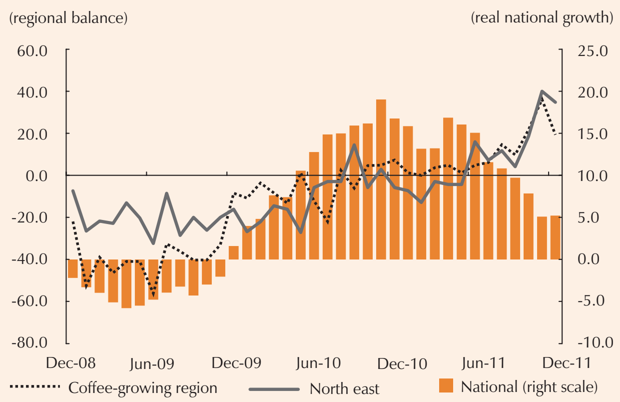
1.



2.



3.



a/ Based on the Bank's monthly economic expectations survey. Sales balance: difference between the percentage of responses of opinion about annual sales increase in commerce, industry and services, and annual sales decrease in those sectors, for the month in question. See http://www.banrep.gov.co/informes-económicos.
b/ Based on DANE's monthly retail-trade sample
Sources: Banco de la República and DANE.

Table B
Area licensed for construction (housing and total), by region
(thousands of square meters)

Region	2010		2011		Percentage share		Annual change (%)	
	Housing	Total	Housing	Total	Housing	Total	Housing	Total
Bogotá	4,326	5,358	5,245	6,398	28.0	26.9	21.2	19.4
North west	1,814	2,381	3,014	3,634	16.1	15.3	66.1	52.6
Central region	1,798	2,134	2,834	3,327	15.1	14.0	57.6	55.9
South west	2,006	2,623	2,446	3,033	13.0	12.8	21.9	15.6
North east	1,492	2,141	2,159	2,954	11.5	12.4	44.7	38.0
Caribbean region	1,041	1,732	1,697	2,508	9.0	10.6	62.9	44.8
Coffee-growing region	718	951	960	1,302	5.1	5.5	33.6	36.9
South east	339	413	396	592	2.1	2.5	16.7	43.4

Source: DANE. Calculations by Banco de la República.

Table C
Annual growth in gross loans, a/ by loan type and by region
(percentage)

Region	Gross loans								
	Total			Gross consumer		Gross commercial		Gross microcredit	
	2010	2011	2011 share	2010	2011	2010	2011	2010	2011
Bogotá	15.8	18.6	44.4	19.5	27.4	17.3	13.0	(2.3)	25.8
North west	24.7	34.9	18.9	16.2	24.4	30.5	38.1	7.9	22.9
South west	5.8	16.6	10.7	3.2	19.5	6.9	9.9	10.6	82.0
Caribbean region	20.9	19.1	10.7	16.3	20.9	23.8	15.8	29.0	57.0
North east	19.5	30.4	6.1	21.0	25.7	20.3	32.0	20.4	25.1
Central region	14.5	26.7	4.4	19.1	26.3	9.9	23.1	10.7	26.4
Coffee-growing region	10.0	19.0	3.2	11.9	20.7	8.6	14.3	14.4	53.0
South east	13.9	30.9	1.6	25.9	35.7	5.0	23.4	17.7	38.1

a/ Excluding lending by second-tier banks and upper-grade cooperatives and securitized loans.
Source: Financial Superintendency. Calculations by Banco de la República.

different regions for the second year running. The south east stood out with the strongest increase (35.7%).

7. External sector

Regarding non-traditional exports,[11] the different regions of the country performed relatively well in 2011, led by the north west, which recorded a 26.8% rise relative to 2010 and accounted for a third of all such exports. Note that 42.9% of the north west's non-traditional exports consisted of gold, followed by bananas and electric energy, as the most representative products. The Caribbean region was in second [?] place in this export market, with a share of 18.0%, and stood out for significant expansion in shipments of chemicals, palm oil and fertilizers, among other things. Bogotá's share of the market came to 19.5%, with a 24.8% increase in non-traditional exports; flowers continued to be the strong item, but there was also a boom in aircraft, shipment of medicines, personal hygiene products and food products. The south west expanded its external sales by 14.4% relative to 2010; they consisted mostly of sugar, food products, electrical machinery and paper. These four regions together accounted for 85.7% of the country's non-traditional exports (Table D).

Breakdown of exports by destination shows the north west and the Caribbean region increasing their sales to the three major trading partners: the United States,

11 In the case of the regions, the information included sales in commerce, industry, construction, transport and communications, and services.

Ecuador and Venezuela. The north west accounted for over 50% of exports to the US, offsetting to a great extent the decrease in sales from the south west, the central region and the north east. Exports to Ecuador were higher for all regions except Bogota, which recorded a decrease. Exports to Venezuela increased in the north east, the north west, the Caribbean region and the south west, which contribute the most. Yet, despite the recovery in trade with Venezuela, sales were still not up to pre-2009 levels.

Imports, in general, continued on the growth path resumed after 2009. The central region, Bogotá and the north west stood out in 2011 with almost 40% increases in imports, particularly of chemical and pharmaceutical products, transportation equipment and industrial machinery, among other things. Import growth in most of the other regions ranged between 17% and 25% (Table D).

8. Inflation

In 2011 annual price changes were less than headline CPI (3.7%) in the south west (Cali, Paso and Popayán), in three Caribbean cities (Riohacha, San Andrés and Sincelejo), and in Armenia, Quibdó, Florencia and Bogotá. By contrast, inflation was equal to or above the national average in 14 of the 24 cities reviewed, including Pereira (3.7%), and Bucaramanga (5.8%, the highest rate). In recent years, inflation in Pereira has been equal to or lower than the national average, whereas in Bucaramanga it has been running higher (Table E).

9. Labor market

Labor-market results were good in 2011 in the different regions of Colombia. DANE's statistics show that there was growth both in labor supply, as measured by the overall participation rate, and in job creation (employment rate). With the result that unemployment decreased everywhere except in the south west, where it ran high. Bogotá continued to perform best nationally, achieving the highest employment rate (64.2%) among the 23 major cities of DANE's sample, and one of the lowest unemployment rates (9.5%). Barranquilla and Cartagena, in the Caribbean region, also performed well, with unemployment rates of 8.2% and 10.4%, respectively, 1pp lower than the year before in each case.

In the Central region, Ibagué recorded the highest jobless rate (17.1%), whereas in the north west unemployment fell significantly in the metropolitan area of Medellín, from 13.9% in 2010 to 12.2% in 2011. There was also a break in the rising trend of unemployment in the three major cities of the coffee-growing region, with unemployment falling there in 2011, mainly in Pereira (4pp).

In contrast, some major cities in the north east and the south west saw their labor markets deteriorate in 2011. In

Table D
Non-tradition exports [a/] and imports, by region
(millions of dollars)[b/]

Región	Non-tradition exports				Imports			
	2010	2011	Annual change) (%)	2011 share (%)	2010	2011	Annual change) (%)	2011 share (%)
North west	4,513	5,722	26.8	33.3	4,845	6,725	38.8	12.3
Caribbean region	2,613	3,089	18.2	18.0	7,265	9,079	25.0	16.6
Bogotá	2,677	3,343	24.8	19.5	18,085	25,166	39.2	46.0
South west	2,233	2,554	14.4	14.9	4,915	6,152	25.2	11.3
Central region	1,562	1,515	(3.0)	8.8	3,791	5,310	40.1	9.7
Coffee-growing region	519	563	8.6	3.3	609	747	22.6	1.4
North east	350	370	5.7	2.2	941	1.103	17.2	2.0
South east	2	12	*	0.1	231	392	70.1	0.7

a/ Excluding coal, ferronickel, oil and its derivatives, and coffee.
b/ Exports in FOB values, imports in CIF values.
* Very great change.
Source: DANE and DIAN (tax and customs administration). Calculations by Banco de la República.

Table E
2011 Annual inflation, by city
(percentage)

Region/city	Food	Housing	Clothing	Health	Education	Enter-tainment	Transport	Commu-nications	Other spending	Total
North east										
Bucaramanga	7.7	5.0	1.1	3.0	4.1	0.1	6.7	6.4	3.6	5.8
Cúcuta	6.1	6.7	6.3	2.9	3.7	(2.0)	0.1	0.8	3.7	5.0
Tunja	6.4	3.7	1.1	3.7	5.3	(0.3)	4.3	0.6	2.9	4.3
South west										
Popayán	5.8	3.3	2.4	1.8	2.1	(0.5)	3.7	(0.5)	1.8	3.6
Cali	6.0	3.7	(2.9)	1.8	4.3	(0.8)	2.0	(1.1)	1.5	3.2
Pasto	5.2	3.0	1.1	2.3	3.0	1.0	(5.0)	1.3	3.5	2.4
Central region										
Neiva	6.7	7.0	1.5	3.6	7.7	0.3	2.6	2.7	2.6	5.4
Ibagué	6.3	4.1	2.2	3.0	2.9	0.0	5.1	0.6	3.1	4.4
Florencia	6.5	2.6	1.6	1.8	3.6	(0.2)	(2.1)	0.2	3.2	3.2
Coffee-growing region										
Manizales	5.3	5.2	1.7	4.9	3.1	(3.2)	6.4	2.1	4.0	4.7
Pereira	5.0	4.2	1.7	3.4	3.9	0.1	2.8	2.1	2.0	3.7
Armenia	4.9	3.3	(0.5)	2.4	2.2	(1.1)	2.9	0.7	3.1	3.0
Caribbean region										
Valledupar	5.9	5.8	2.6	1.5	2.8	(0.4)	5.2	0.5	3.6	5.1
Barranquilla	5.3	5.8	0.6	3.4	4.5	1.0	5.2	2.0	1.0	4.6
Montería	6.0	4.7	1.1	3.6	4.3	1.0	3.7	1.4	3.8	4.5
Cartagena	5.3	4.9	2.6	5.2	3.7	0.5	2.7	1.8	2.1	4.2
Santa Marta	5.7	3.9	1.6	3.7	2.9	0.1	2.8	1.0	2.0	3.9
Sincelejo	4.4	4.5	2.0	1.6	3.3	1.2	0.8	(1.1)	3.8	3.4
San Andrés	2.6	3.1	(1.5)	3.5	3.3	1.9	1.7	0.9	2.2	2.7
Riohacha	5.9	3.6	0.3	1.5	3.5	2.2	(18.2)	(1.1)	2.0	2.6
North west										
Medellín	4.7	3.9	1.4	2.7	4.3	0.0	4.0	12.1	3.2	4.1
Quibdó	4.6	2.6	(0.9)	3.3	3.5	(0.4)	3.7	0.7	2.6	3.1
South east										
Villavicencio	7.6	4.3	0.0	2.7	4.6	(0.9)	1.3	(0.2)	3.6	4.4
Bogotá, D. C.	**4.7**	**2.9**	**0.2**	**4.5**	**5.0**	**(0.3)**	**2.8**	**2.5**	**1.2**	**3.2**
National	**5.3**	**3.8**	**0.5**	**3.6**	**4.6**	**(0.3)**	**3.1**	**3.3**	**2.1**	**3.7**

Source: DANE.

the north-eastern city of Cúcuta, unemployment rose by 1 pp, from 14.4% to 15.4%; in the south west, the area of Cali-Yumbo recorded the highest jobless rate among the country's most populous cities (Table F).

Regarding labor demand, Bogotá recorded an increase of some 239,000 jobs in 2011, followed by the north west with about 62,000 new jobs in Medellín, and the Caribbean region with 55,000 jobs created in Barranquilla and Cartagena, in all cases in commercial activity. In contrast, Cali-Yumbo in the south west was the only metropolitan area where the number of workers decreased, by 45,000, reducing the employment rate by 3.3pp. All other regions exhibited positive labor-demand results.

Table F
Annual average labor-market statistics, by region.
(% and thousands of persons)

Region (23 cities)	Unemployment rate				Overall participation rate a/	Employment rate b/	Total population c/	Working-age population d/	Economically active population e/	No. of people with jobs c/	No. of jobless c/	Informal workers (%)
	2008	2009	2010	2011								
Bogotá D. C.												
Bogotá	10.0	11.5	10.7	9.5	70.9	64.2	7,452	6,018	4,269	3,862	407	45.6
Caribbean region												
Barranquilla	10.9	10.5	9.2	8.2	59.4	54.5	1,740	1,364	810	744	66	58.9
Cartagena	12.0	13.1	11.5	10.4	58.1	52.1	911	714	415	372	43	59.1
Santa Marta	13.7	10.5	9.3	10.2	60.2	54.1	434	324	195	175	20	
Valledupar	13.1	11.3	12.2	11.6	60.8	53.8	351	264	160	142	19	
Montería	12.9	15.8	15.4	13.4	69.3	60.0	319	248	172	149	23	65.2
Sincelejo	11.4	11.6	11.4	13.0	62.8	54.6	242	188	118	103	15	
Riohacha	17.9	14.4	12.2	10.8	65.3	58.2	187	128	84	75	9	
Central region												
Ibagué	19.4	17.1	17.6	17.1	70.5	58.4	502	399	281	233	48	61.5
Neiva	13.9	14.4	13.0	11.8	65.9	58.1	313	250	165	145	19	
Florencia	12.7	12.9	13.3	13.7	59.4	51.2	139	105	62	54	9	
Coffee-growing region												
Pereira	13.8	20.4	20.6	16.8	66.3	55.1	600	489	324	270	55	52.8
Manizales	14.5	15.3	16.4	13.3	59.2	51.3	405	337	199	173	27	45.6
Armenia	15.6	17.7	17.7	17.3	61.9	51.2	283	229	142	117	24	
North west												
Medellín	13.6	15.7	13.9	12.2	64.2	56.3	3,413	2,849	1,829	1,606	224	46.8
Quibdó	22.9	19.2	17.5	18.7	62.2	50.6	105	72	45	37	8	
North east												
Bucaramanga	9.5	9.3	11.0	9.6	70.0	63.3	1,024	834	584	528	56	58.2
Cúcuta	9.3	11.9	14.4	15.4	65.6	55.5	773	599	393	333	60	69.2
Tunja	12.3	13.3	13.2	11.9	62.1	54.7	167	132	82	72	10	
South west												
Cali - Yumbo	12.0	13.6	13.8	15.4	64.9	54.9	2,327	1,885	1,223	1,035	188	52.0
Pasto	14.1	16.9	16.0	13.5	66.7	57.7	344	278	185	160	25	64.5
Popayán	22.1	19.7	18.3	17.4	58.6	48.4	238	196	115	95	20	
South east												
Villavicencio	11.0	11.3	11.9	11.6	66.1	58.4	418	326	215	190	25	63.1
Total												
Total 13 metropolitan areas	11.5	13.0	12.4	11.4	66.7	59.1	20,227	16,341	10,902	9,655	1,247	51.1
Total 23 cities	11.9	13.1	12.5	11.6	66.2	58.5	22,686	18,229	12,069	10,669	1,401	

a/ Working-age population / total population.
b/ Number of people with jobs / working-age population.
c/ In thousands.
d/ Number of people aged 12 or over. In thousands..
e/ Number of people available for work, who are currently working or looking for work. In thousands.
Source: DANE

Box 2
MONETARY-POLICY RESPONSE TO A NEGATIVE EXTERNAL SHOCK: 2008-2009 GLOBAL FINANCIAL CRISIS

The economic cycle of emerging countries has the particularity of being quite sensitive to external shocks. During the 2008-2009 global financial crisis Colombia's economy was faced with deteriorating terms of trade (export prices plunged), weakening demand for the country's exports, and lower remittances from overseas workers. In addition to these adverse effects on the national income and on external demand, business and household expectations fell sharply.

Furthermore, fears about the impact of the global crisis and higher cost of external funding were evidenced by higher interest rates on bank lending. The Colombian peso, for its part, depreciated strongly between September and November 2008, as a result of higher global risk aversion, lower external receipts, and worsening external conditions.

The external shocks caused the country' economic activity to slow down significantly in 2008 and 2009. This fact led the Banco de la República to take a series of policy measures designed to attenuate the harmful impact of the shocks on domestic real activity without altering inflation expectations, and intended also to minimize risks to the local financial system.

First, the Bank's Board of Directors reduced intervention interest rates very quickly and significantly: from 10% in December 2008 to 3% in May 2010. These decisions were made possible by inflation expectations being moderate, by inflation dropping toward targets, and by slowing GDP growth.

Second, in view of the retightening of domestic credit conditions, caused by higher risk perception after the Lehmann Brothers' bankruptcy in September 2008, the Board reduced the ordinary reserve requirement[1] on bank deposits by 1pp, on average. The aim was to dissipate fears of a liquidity crunch and mitigate the rise in risk premiums by reducing the cost of financial intermediation. This measure benefited financial stability without compromising price stability, for inflation expectations were contained by interest-rate increases that were initiated some months earlier when strong domestic demand was being reflected in inflationary pressure.

Third, in October 2008 the Board cut to zero the deposit requirement on foreign borrowing, which had been reactivated in 2007 to limit short-term foreign borrowing by the real sector.[2] The measure was taken at a time when external funding had become significantly costly because of the global crisis.

A fourth component of the Bank's reaction consisted of keeping the floating exchange rate, without defending a specific exchange-rate level. In the past, exchange-rate pressure caused by external shocks used to be largely contained by selling reserves and restricting domestic credit. In contrast, this time the exchange rate underwent substantial adjustment. Besides avoiding greater credit restriction, this exchange-rate adjustment can move spending toward local production and offset the impact of external shocks on the income of exporters and transfer receivers, thereby moderating the shock to aggregate demand. As stated before, this was possible because inflation expectations remained anchored around the targets, despite the peso's depreciation, and also because there were no agents with dangerously high exchange-rate exposure.

The Bank's policy response to the global crisis was consistent with its strategy and objectives. The policy measures put in place allowed inflation to remain stable, and prevented the 2008 adverse external shock from causing output to contract in annual terms, as it did cause in many emerging and developed economies. Moreover, the financial system's stability was not put at risk.

Note that the monetary and exchange-rate policies implemented during the boom that preceded the global financial crisis made Colombia's economy less vulnerable to the 2008 external shock than it would otherwise have been.

1 The ordinary reserve is a percentage of deposits to be kept by financial establishments as a reserve for meeting possible withdrawals of savings.

2 The currency regime regulates foreign borrowing by financial intermediaries. Active operations (placing of loans) must have a maturity equal to or less than [that of] passive operations (external borrowing). Moreover, currency exposure or the difference between active and passive positions (currency mismatch) is limited, so as to reduce the entities' vulnerability to sudden exchange-rate fluctuations.

Monetary policy had the necessary credibility to anchor inflation expectations around the target in the face of the peso's strong depreciation at the time. Control of inflation expectations allowed the Bank to reduce its policy rate without compromising future price stability.

Setting a marginal reserve requirement[3] and reactivating the deposit requirement on foreign loans in 2007 accelerated and reinforced transmission of the policy rate to market interest rates, thereby containing rapid growth in spending.

Exchange-rate flexibility served to discourage residents from taking excessive risks and led to international reserves being considerably increased. These reserves make it possible to deal with situations in which access to external funding becomes subject to stringent conditions. They also serve as a tool for reducing the likelihood of speculative attacks against the local currency and facilitating orderly exchange-rate adjustments.

Furthermore, exposure to exchange-rate risk was limited for households and businesses and also for the financial sector. In 2007 during the period of boom and large capital inflows, to supplement the existing rules limiting foreign-currency and maturity mismatches by financial intermediaries, measures were taken to protect the financial system from exchange-rate risk and counterparty risk in exchange-rate derivatives markets.

The financial system was in a sound position, thanks in part to the fact that the Financial Superintendency had established credit-risk management systems and raised the level of bank provisions. Similarly, in 2009 under suggestion by the Superintendency, banks and other financial entities strengthened their solvency by making a capital reserve with part of their 2009 profits.

The outcome of this set of monetary and macroprudential measures was to contain excessive growth in spending and borrowing, control inflation expectations, limit currency and maturity mismatches, and strengthen the financial system. All these elements, besides making the Colombian economy immune to the external shock, allowed the Banco de la República to carry out a counter-cyclical policy designed to offset the external shock, without compromising financial and price stability.

3 The currency regime regulates foreign borrowing by financial intermediaries. Active operations (placing of loans) must have a maturity equal to or less than [that of] passive operations (external borrowing). Moreover, currency exposure or the difference between active and passive positions (currency mismatch) is limited, so as to reduce the entities' vulnerability to sudden exchange-rate fluctuations.

Box 3
TARGET RANGE: ADVANTAGES, DRAWBACKS AND INTERPRETATION

According to a recent Bank of England report (Hammond, 2012), inflation targeting has become common practice. Of the 27 countries that have fully adopted inflation targeting (described as 'fully-fledged inflation targeters'), 22 express their inflation target either as a range around a specific point or as a range without any particular point.[1] Colombia is one of those 22 countries; its inflation-target range for 2012 is 2% to 4%.

Monetary-policy literature has studied the advantages and drawbacks of specifying the inflation target as a range or as a specific value. Bernanke et al. (1999, Chapter II) and Mishkin (2007) conclude that the main advantage of a range comes from helping to communicate to the public that the inflation process involves uncertainty and that controlling it is an imperfect exercise. A better understanding of this fact allows the central bank to maintain flexibility in monetary-policy management, without such flexibility signifying loss of credibility. In other words, the central bank needs that inflation be able to move within a range, in order to be capable of responding to temporary economic shocks. At the same time the public should understand that such temporary fluctuations do not imply a lack of commitment by the central bank to the aim of maintaining price stability.

On the other hand, the range may have drawbacks if the public only focuses on whether or not inflation falls within the target range, without attaching any importance to the size of the deviation from the mid-point. In this case, one of the extreme values of the range may end up becoming the final anchor of expectations, hindering the process of inflation control. Similarly, misinterpretation may lead public opinion to suggest to the central bank not to take any policy action while inflation stands within the set range. For example, if inflation does stand within the range but is close to its upper limit the central bank may be requested not to raise the policy rate.

The following is a list of important elements, drawn from the literature on this subject, that are relevant to interpreting the target range and monetary-policy actions:

1. Ranges are a useful means of communication with the public because, as stated before, it is important for the public to understand that inflation control is an imperfect and unpredictable exercise. This is particularly true, as pointed out by Clavijo (2002), for countries where inflation is low and close to the long-term target, because uncertainty (about the level of inflation) is high. Similarly, monetary policy needs to be more flexible in countries where weather conditions make it necessary to accommodate exogenous price shocks of significant size.

2. The 'ideal' width of the range depends on specific factors. Greater uncertainty or greater volatility in supply shocks requires a wider range. But too wide a range may be interpreted as a bad sign regarding the central bank's commitment to controlling inflation and may be counterproductive for anchoring inflation expectations to the mid-point. Some works (e.g. Mishkin, 2001 and Hammond, 2012) suggest that where shock volatility is very high, it may be a better strategy to use just a single point target and explain the reasons for deviations from it.

3. On the other hand, the drawbacks of using a range may be resolved, as Mishkin (2007) recommends, by means of a clear statement about the inflation target emphasizing the mid-point of the rang.[2] That is to say, by making the public aware that the central bank aims at a specific value and that the range is mainly connected with the degree of uncertainty and imperfections in controlling inflation. Hence, as explained by Freedman and Laxton (2009), the range should be regarded as a range of uncertainty, not of indifference. It should therefore be made clear to the public that where the target is, say, 2% with a range of ±1%, the central bank's aim is to reach an inflation of 2%, not an inflation close to the limits of the range (1% or 3%).

4. The range does not imply inaction in terms of monetary policy. Medina and Valdés (2002) show that even if the target range were a range of

1 The other five countries (Hungary, Iceland, Norway, United Kingdom and Sweden) define a specific inflation rate as the target. In the UK whenever inflation deviates from the target (2%) by more than 1% in either direction, the central bank is required to provide an explanation in a public letter to the of Chancellor of the Exchequer. However, this is a measure of accountability and not a way of defining the target.

2 Using inflation forecasting data, Levin et al. (2004) show that long-term expectations are better anchored in countries where the emphasis is on a point target (e.g. Canada, New Zealand, Sweden) than in countries where, despite a clear wish to keep inflation low, there is no emphasis on a specific rate (US and the euro zone).

indifference (which would be a misinterpretation, as explained above), there would be different reasons precluding inaction when inflation is within the range. The main reason is the need to keep inflation away from the limits of the range and close to its mid-point, so that it will not be pushed beyond the target range by small but unexpected economic shocks to the price level.

Based on the above elements, it is pointed out in conclusion that Colombia's inflation target range for 2012 is 2%-4%, and that the Board's policy decisions are taken with the main objective of reaching the mid-point of this range, that is, an inflation of 3%.

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III. INTERNATIONAL RESERVES

At June 2012 net international reserves amounted to $34,265.5m, with a net return of $16.8m over the first half of the year. The return on reserves was poor owing to: very low international interest rates, the Bank's decision to hold a portfolio with a conservative risk profile, and the dollar's appreciation against the currencies of other developed countries.

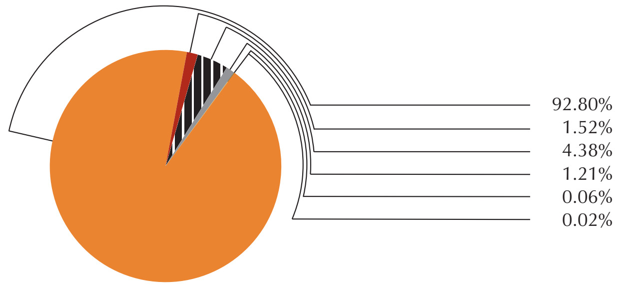
In balancing risk against return, the Bank has opted in recent years to reduce risk to reserve investments, thereby affecting their profitability. Since 2008 this line of action has kept the reserves at a high level of security and liquidity amid the international crisis, but it has also meant lower profitability, since the safest investments provide the lowest returns. Besides, the return on reserves has also been affected by low interest rates in developed countries, where central banks have maintained an expansionary monetary policy in response to the crisis.

In balancing risk against return, the Bank has opted in recent years to reduce risk to reserve investments, thereby affecting their profitability.

At June 2912 the country's international reserves amounted to $34,265.5m, up by $1,965.09m on the balance at December 2011.[53] The main component of the reserves is the investment portfolio, consisting of investments in international-market financial instruments and representing 92.80% ($31,805.3m) of total gross reserves. The remaining balance is distributed

53 Net international reserves are equal to total or gross international reserves, less the Bank's short-term external liabilities consisting of foreign-currency sight obligations to non-resident agents. Values are rounded to the first decimal place. Gross international reserves amounted to $34,271.95m and short-term external liabilities to $6.42m.

Graph 76
Composition of reserves
(information to June 30, 2012)



Source: Banco de la República.

as follows: i) Colombia's IMF position and special drawing rights (SDRs) ($1,501.1m); ii) contributions to the Latin-American Reserve Fund (FLAR, $414.87m); iii) gold investments ($522.4m); iv) contributions to the international convention with the Latin-American Integration Association (ALADI), $20.09m; and v) other ($7.19m).[54] Graph 76 presents the composition of the international reserves.

This Chapter explains the main policies for management of Colombia's international reserves, and the current composition of the reserves.

A. INVESTMENT-PORTFOLIO MANAGEMENT POLICIES

The investment portfolio of the reserves, representing 92.80% of the total, is divided into two components: working capital, and investment tranche.

- The working capital is intended to cover the reserves' immediate liquidity needs. Funds obtained from intervention in the exchange market go into this portfolio, and its investments are concentrated in very short-term dollar-denominated assets. Given that the working capital is meant to provide immediate liquidity for purposes of intervention in the exchange market, it is concentrated in deposits and investments that can be liquidated in a day, at very little cost. The working capital may range between $390m and $2,000m; at June 2012 it stood at $881.5m.

- The investment tranche is executed with a longer term and a higher expected-return profile than the working capital's. This tranche is invested in a greater number of instruments with greater maturities than is the case with the working capital. At June 2012 the value of the investment tranche amounted to $30,923.8m.

The investment portfolio of the reserves, representing 92.80% of the total, is divided into two components: working capital, and investment tranche.

The investment portfolio's securities are deposited in financial entities known as custodians. The chief custodians of Colombia's international-reserve securities are the Federal Reserve Bank of New York, Euroclear and JP Morgan Chase.

54 The item 'other' includes cash on hand and call deposits.

1. Benchmark index and portfolio management

The Banco de la República, like the great majority of central banks in the world, defines a theoretical portfolio or benchmark index for the investment tranche of the reserves.[55] This index serves as a framework of reference for measuring the management of each portfolio.

The first step in building the benchmark index is to define its foreign-currency composition. At June 30, 2012 the investment tranche's target currency composition was: 86% US dollars, 4% euros, 4% sterling, 3% Canadian dollars, and 3% Australian dollars. The currency composition of Colombia's international reserves is designed to replicate the behavior of payments in the country's balance of payments. In this way, the reserves try to hedge against exchange-rate volatility in the country's overseas payments.[56]

The benchmark index is a theoretical portfolio that meets the target currency composition and maximizes expected return on the investment tranche of reserves. Another criterion in estimating this portfolio is that it should produce no negative returns in a 12-month horizon with 95% confidence, excluding the exchange effect. The outcome is a highly conservative portfolio, which is presented in Table 21.

Table 21
Composition of the investment-tranche benchmark index
(information to June 30, 2012)

Currency	Type of assets	Associated index	Share (percentage)
US dollars	US government debt	0 to 1 year securities	82.8
		Inflation indexed securities	1.7
	Agency debt backed by US government	Agency mortgages backed by US government	1.5
Euros	German government debt	0 to 3 year securities	4.0
Canadian dollars	Canadian government debt	0 to 1 year securities	3.0
Sterling	UK government debt	0 to 1 year securities	4.0
Australian dollars	Australian government debt	0 to 3 year securities	3.0

Source: Banco de la República.

55 In capital markets, a benchmark index is a basket of assets with weights pre-determined by rules defining the basket's composition. An index is usually designed to replicate broadly the behavior of a market of financial assets, and it serves as a measure of other investment portfolios' performance in that same market. For example, in Colombia there is the IGBC (general stock-market index), and in the US the better-known stock-market indices are the S&P500 and the Dow Jones. The Bank uses only fixed-income market indices.

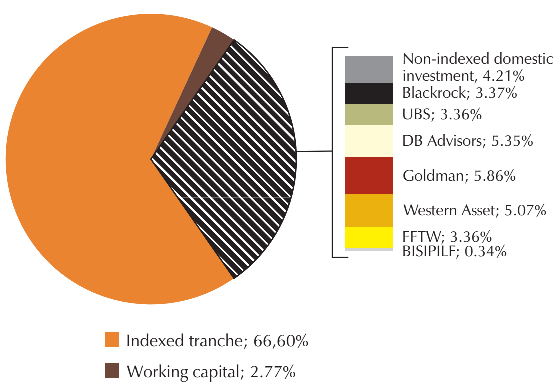
56 For a detailed description of the reserves' currency-composition methodology, see Box 5 "International-reserve portfolio's new currency composition" in the March 2012 *Report to Congress*, pp. 127-130.

As stated earlier, in view of the different purposes served by the reserves, the investment portfolio is divided into working capital and an investment tranche. The investment tranche is in turn divided into two components: an indexed tranche and a non-indexed tranche.

- *The indexed tranche* is designed to replicate the composition of the benchmark index. The investments of this tranche are made in securities issued by the governments of the United States, Germany, Canada, the United Kingdom and Australia. The indexed tranche is the most liquid portfolio after the working capital and is intended, among other things, to meet high liquidity needs. It is managed within strict guidelines designed to make both its asset-share composition and currency composition very similar to the benchmark index's. At June 201 the value of the indexed tranche amounted to $21,182.9m (66.6% of the investment portfolio).

- *The non-indexed* or active tranche is managed with the aim of obtaining a higher return than the benchmark index's. To this end, the portfolios of this tranche differ in composition from the index. Within a framework of controlled risk, the managers of this tranche apply their experience and resources to designing strategies that will increase the return on reserves in the long run. The investment guidelines for this tranche allow portfolios to deviate from the index to a specified extent in respect of currency composition, share of instruments, and issuers and types of asset.[57] At June 2012 the non-indexed tranche had a value of $9,740.9m (30.63% of the investment portfolio).

Graph 77
Composition of the investment portfolio
(information to June 30, 2012)



Source: Banco de la República.

Graph 77 presents the investment portfolio's composition in June 2012. The Markets Subdivision of the Bank's International Reserves Department manages the working capital, the indexed tranche, and one of the non-indexed portfolios, together amounting to $23,402.5m (73.58% of the investment portfolio). Since May 2011 the Bank has been investing reserves in the inflation-indexed fund managed by the Bank for International Settlements (BIS Investment Pool Series ILF1, BISIPILF); these investments amount

57 In the non-indexed tranche, investments are permitted to be made in low credit-risk entities such as governments, quasi-governments and mortgage agencies, and in mortgage-backed securities guaranteed by US agencies.

Since May 2011 the Bank has been investing reserves in the inflation-indexed fund managed by BIS; these investments amount to $106.8m.

to $106.8m.[58] All other reserves are managed under the external management program put in place in 1994 by the International Reserves Committee. The program is described in the following section.

2. External-management program

Many central banks employ external portfolio managers to handle their reserves. They do it in part because of limited resources, but also for other reasons: to have access to the experience and tools employed by external managers; to obtain training for staff engaged in the management of international reserves; and to have a basis for comparison.

The managers of the non-indexed tranche are authorized to invest in different assets and in different proportions from those of the benchmark index, in accordance with policies and limits set by the Reserves Committee.

The use of external managers is intended to generate added value to the investment portfolio of reserves, by relying on such managers' greater capacity for analysis and more sophisticated infrastructure in defining investment strategies. The selected firms possess both these characteristics, besides having access to many sources of information. The funds handled by external managers are held in accounts administered by the Banco de la República, and the agreements may be cancelled when deemed necessary.

The use of external managers is intended to generate added value to the investment portfolio of reserves, by relying on such managers' greater capacity for analysis and more sophisticated infrastructure in defining investment strategies.

The external-management program has benefited the Bank in the following ways:

- Since the program's inception, the net return (after fees) has been higher than the benchmark index's by an average of 7bp a year.
- The external managers' capacity for analysis has allowed them to choose investments with a good risk/return profile within the permitted limits of the investment guidelines
- External managers have trained Bank staff and thus helped to develop skilled personnel. In addition, their advisory services have helped to improve the Reserves Department's processes of investment and risk analysis.
- The Reserves Department receives information and analyses from specialists in the financial markets where reserves are invested.

58 This BIS investment fund is available only to central banks and multilateral organizations. It is designed to obtain a return equal to or higher than US Treasury inflation-indexed securities. The fund's investment policies are applicable equally to all investors. Reserve investments in this fund are part of the non-indexed tranche.

At June 2012 almost 97% of the investment portfolio was invested in paper issued by governments or quasi-governments and in repurchase agreements with the Federal Reserve.

Moreover, the firms participating in the program each have a solid team of credit analysts, allowing them to complement and improve on the rating agencies' analysis of issuers.

External managers may deviate from the benchmark index in their interest-rate and exchange-rate strategies and by investing in debt issued by entities representing low credit risk, such as governments and quasi-governments[59]. The Bank monitors the portfolios on a daily basis to ensure that external managers comply with the set limits.

The firms currently participating in the external-management program are: Blackrock Institutional Trust, DB Advisors (owned by Deutsche Bank), Fisher Francis Trees & Watts (owned by BNP Paribas), Goldman Sachs Asset Management, UBS Global Asset Management, and Western Asset Management (Table 22).

Table 22
External managers of reserves
(information to June 30, 2012)

Firm	Amount under management (millions of dollars)
BlackRock Institutional Trust	1,072.8
DB Advisors (propiedad de Deutsche Bank)	1,605.8
Fisher Francis Trees & Watts (propiedad de BNP Paribas)	1,070.1
Goldman Sachs Asset Management	1,863.4
UBS Global Asset Management	1,070.1
Western Asset Management	1,613.8
Total	**8,296**

Source: Banco de la República

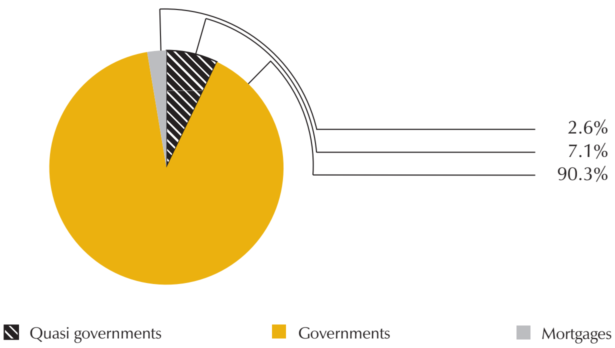
The Bank defines parameters for evaluating the management firms' performance and, depending on the success of their performance, may decide to alter the amount under management or cancel the agreement.

B. COMPOSITION OF THE INVESTMENT PORTFOLIO

At June 2012 almost 97% of the investment portfolio was invested in paper issued by governments or quasi-governments and in repurchase agreements with the Federal Reserve (Graph 78).

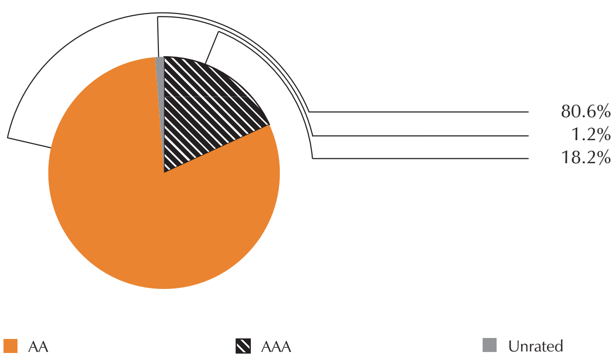
59 The securities in question are such as are issued by entities backed or sponsored by governments (e.g. Fannie Mae and Freddie Mac), supranational organizations (e.g. World Bank, Inter-American Development Bank), and local authorities (e.g. cities and States), among others.

Graph 78
Composition of the investment portfolio, by sector
(information to June 30, 2012)



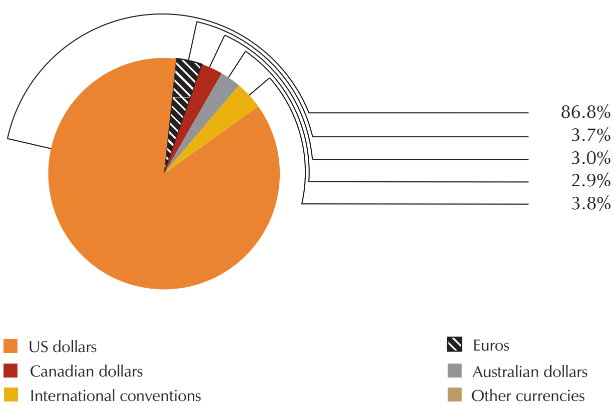
Source: Banco de la República.

Graph 79
Breakdown of investments by credit rating
(information to June 30, 2012)



Note: Excluding accounts receivable, foreign-exchange operations, current-account deposits, cash, and futures margin.
Source: Banco de la República.

Graph 80
Currency composition of the investment portfolio
(information to June 30, 2012)



Note: The aggregate does not add up to 100% because the item 'other currencies' relates to short positions equivalent to -0.2%
Source: Banco de la República.

Graph 79 depicts the investment portfolio's credit quality. During 2012 the Banco de la República has maintained its policy of investing only in issues having the highest ratings assigned by the major rating agencies (S&P, Moody's and Fitch Ratings). The Bank uses as a benchmark the lowest ranking given by at least two of these agencies. The Graph shows that 18.2% of investments are rated AAA, the highest rating, and 80.6% are rated AA. The high share of AA securities is explained by the portfolio's concentration in US government debt, which was downgraded from AAA to AA+ by S&P on August 5, 2011. Investments having no credit rating (1.2%) are with the Bank for International Settlement and the Federal Reserve Bank of New York, which are the safest investment alternatives for reserves. The above figures are evidence of the high quality of the investment portfolio's assets.

Lastly, Graph 80 shows the investment portfolio's currency composition at December 30, 2012. The currency composition of the portfolio differs slightly from the target because of inclusion of the working capital, which is invested only in dollars. Moreover, it is permissible, within strict limits, for the active portfolio to exhibit slight deviations and for investments to be made in other developed-country currencies, such as the yen, Swedish and Norwegian crowns, Swiss francs and New Zealand dollars.

As a preventive measure in case of a possible interest-rate rise in developed economies, the investment tranche had a low effective duration[60] (0.70) in June 2012.

60 Effective duration is defined as the percentage decrease (increase) produced in a portfolio's value by a 1% increase (decrease) in all interest rates. The possible effect of the change in expected cash flows is considered to result from changes in interest rates.

C. INVESTMENT PERFORMANCE

In the first half of 2012 the return on international reserves was $16.8m. Valuation gains on investments and accrued interest amounted to $79.4m, and there was a foreign-exchange differential loss (other currencies' depreciation against the dollar) of $62.5m. Three factors explain the low rate of return on reserves:

- Interest rates remained very low in the major developed economies. Graph 81 presents the historical series of rates on three-month and two-year US government securities. It shows that rates since the end of 2008 have been the lowest in the past three decades.

- The decision to have a portfolio with a conservative risk profile, as illustrated in Graphs 78 and 79, has meant receiving low returns.

- The US dollar has strengthened against all the developed-country currencies included in the benchmark index, except sterling.

Graph 81
US Treasuries interest rates

Source: Bloomberg.

D. STATUS OF CLAIMS ARISING FROM 2008 CREDIT EVENTS

As reported in previous Reports to Congress, at the end of 2008 two credit situations involved Colombia's international reserves: i) a security worth $2.7m from Lehman Brothers Holding Inc. (hereinafter Lehman) purchased by BlackRock Financial Management Inc. under an external-management agreement; and ii) a security worth $20m from Sigma Finance Inc., unconditionally and irrevocably guaranteed by Sigma Finance Corporation (hereinafter Sigma), acquired under a securities-lending program managed by Bank of New York Mellon Asset Services, B.V. The current status of the Bank's claims is described in the following sections.

1. Restructuring process of Lehman Brothers Holdings, Inc.

As reported in previous Reports to Congress, the Banco de la República, represented by the law firm of Morrison & Foerster LLP, filed a claim at the Bankruptcy Court of New York on August 25, 2009, which was supplemented

In the first half of 2012 the return on international reserves was $16.8m.

on September 9, 2009, to be recognized as a creditor in the restructuring process of Lehman under Chapter 11 of the US Bankruptcy Code.

During the process the Bankruptcy Court granted Lehman multiple extensions to submit its Restructuring Plan, and finally the Plan submitted on August 31, 2011 was approved by the majority of recognized creditors having voting rights and confirmed by the judge at a hearing held on December 6, 2011. According to that Plan, the Bank will receive a distribution percentage estimated at 21.1% of the amount owed to it. The Bank's claim represents 0.0009% of overall claims against Lehman Brothers Holdings, Inc.

The initial distribution phase of the Plan started on April 17, 2012. In this first distribution the Bank received a sum of $162,770.15. The next distribution for class-3 creditors, including the Bank, will be on September 30, 2012, and the following distributions are to be held on March 30 and September 30 of every year.

2. Banco de la República's claim against BNYM

Regarding progress on the lawsuit brought by the Banco de la República, represented by the law firm of Cromwell & Moring LLP, against Bank of New York Mellon Corporation, Bank of New York Mellon N.A. and Bank of New York Mellon Asset Services B.V. (hereinafter BNYM), the following is reported:

As previously reported to Congress, the Bank filed a claim against BNYM at the New York State Supreme Court on April 21, 2009. After the complaint and the answer thereto were filed and other pertinent procedures were carried out, the case was transferred to the New York Southern Federal District Court at the end of January 2010, and, at the judge's request, the Bank refiled the suit to adapt it to the federal jurisdiction.

Once the complaint was answered and other normal procedures were carried out, the federal judge at a hearing on December 1, 2010 heard pleadings by the parties and determined the claims forming the subject of the suit. In particular, the judge decided that the complaint had merit in view of the investment in Sigma constituting a possible breach of the securities-lending agreement and in view of possible tort-liability charges.

The decision to have a portfolio with a conservative risk profile has meant receiving low returns.

At a hearing on January 28, 2011 the parties submitted a joint case-management plan, which was approved by the judge. Notably, it was established that the suit was not to be decided by a jury, but rather that it would be resolved by the judge, and a discovery schedule was drawn up.

Subsequently, in August 2011, the Banco de la República filed a motion for summary judgment, requesting the judge to pronounce on claims and facts of the complaint that, by reason of being points of law, could be resolved directly by him, without the need to complete discovery or to go to trial. In particular, the Bank requested the judge to find for the Bank regarding BNYM's breach of the securities-lending agreement by investing in Sigma. Discovery was suspended while the question of summary judgment was being processed.

At a hearing on February 23, 2012 the judge decided that he could not grant the motion for summary judgment without discovery being carried and without BNYM being given the chance to present evidence in its defense. The judge therefore authorized initiation of discovery and set a hearing for August 17, 2012, by which time the parties were to have presented all the evidence.

The Banco de la República, in addition to having filed a lawsuit against BNYM to recover the investment, became a party to Sigma's liquidation proceedings and on November 17, 2010 received approximately $1.0m, or 5 cents per dollar, according to the method approved by the liquidator for ranking creditors' claims and distributing the available assets.

BANCO DE LA REPÚBLICA'S MEMBERSHIP OF THE BANK FOR INTERNATIONAL SETTLEMENTS

The Banco de la República was authorized by Congress to join the International Bank for Settlements as a shareholder by Law 1484 dated December 2011. As authorized, the Banco subscribed 3,000 shares of BIS for the value of 65,712,000 special drawing rights (SDR), equivalent to $100,978,710. The shares are recorded at their acquisition cost in SDR under the item "contributions to international organizations and entities". As a shareholder of BIS the Bank is entitled to receive an annual dividend, which for BIS's 2011/2012 fiscal year (April 2011 to March 2012) was prorated from the date of payment of the subscription. The dividend received amounted to SDR 260,000 ($393,604), equivalent to an annual return of 1.4%.[1]

1 This is the ratio of dividend received to price of subscription (SDR 305 / SDR 21,904, per share).

The Bank's membership of BIS allowed it to sit on the Consultative Council for the Americas (CCA),[2] which advises BIS's Administrative Council on matters of interest to the region. The CCA currently sponsors cooperation between central-bank members on economic studies, including notably the research project on "The effects of foreign-exchange market operations in the Americas", with participation by the central banks of Brazil, Chile, Colombia, Mexico and Peru. The purpose of the study is to analyze the effectiveness of the different instruments of foreign-exchange intervention, in order to strengthen formulation of economic-policies and understanding

2 The CCA is made up of the governors general of the eight central banks of the region that are members of BIS: Colombia, Peru, Argentina, Brazil, Canada, Chile, the US, and Mexico.

of their possible effects. Furthermore, since August 2011, the Colombia's Financial Superintendent has been a member of the Financial Stability Council for the Americas, a regional advisory body that coordinates the work of national financial authorities and international regulatory organizations in developing policies to improve financial stability.

As a member of BIS, the Bank has taken part in events and conferences organized by BIS at which recent economic events as well as global and regional economic and financial outlooks have been analyzed, and there has been discussion of adopting economic-policy measures in a coordinated manner, for the purpose of strengthening financial systems and reducing systemic risk. The Banco de la República made a notable contribution at the CCA conference on "Financial stability, financial regulation and monetary policy", by presenting a study on the behavior of bank capital in Colombian banks throughout the economic cycle.[3] The Bank has also participated in seminars organized by BIS to strengthen international-reserve management as regards portfolio administration and analysis.[4] Lastly, it should be mentioned that the Governor General of the Bank took part and exercised his vote at the Annual General Meeting of BIS in June 2012, at which the entity's annual report was approved and decisions were taken on the distribution of dividends.

3 "The Cyclical Behavior of Bank Capital Buffers in an Emerging Economy: Size Does Matter", which is available on the BIS website.

4 The Bank has attended the Asset Management Workshop, Reserve Management Workshop, and Portfolio Analytics courses.

IV. Banco de la República's financial position

A negative operating result of 665.0bn is estimated for 2012, the outcome of income of some 983.6bn pesos and expenditures of some 1,648.7bn pesos. The low level of income is mainly attributable to moderate returns on international reserves, owing to low interest rates in external markets.

A. BANCO DE LA REPUBLICA'S FINANCIAL STRUCTURE

As stated in the March 2009 Report to Congress, the structure of the Bank's financial statements reflects the objectives and functions laid down for it in the Colombian Constitution, in Law 31 of 1992 and in the Bank's statutes. In particular, the Bank's accounting is governed by the provisions of Law 31 of 1992, Decree 2520 of 1993 (statutes of the Bank), regulations issued by the Financial Superintendency, and Decree 2649 of 1993 (accounting principles or standards generally accepted in Colombia).

International reserves constitute the biggest share of the Bank's assets, and the monetary base its main liabilities.

As shown in the Bank's balance sheet, international reserves make up the biggest share of the Bank's assets, and the monetary base its main liabilities. The equity accounts of greatest weight are the surplus[61] and reserves accounts. The following sections explain the changes in the main items of the Bank's assets, liabilities and equity at June 30, 2012, relative to balances at December 31, 2011 (Table 23).

61 The surplus account contains mainly the exchange adjustment. It records the accumulated result of changes in the peso balance of international reserves caused by movements in the peso-dollar exchange rate.

Table 23
Banco de la República's balance sheet, by economic criteria
(December 2011 to June 2012)
(billions of pesos)

Accounts	December 2011		June 2012		Change	
	Balance	% share	Balance	% share	Absolute	Percentage
Assets	**73,825**	**100.0**	**82,067**	**100.0**	**8,242**	**11.2**
Gross international reserves	62,755	85.0	61,162	74.5	(1,593)	(2.5)
Contributions at international organizations	2,759	3.7	2,547	3.1	(212)	(7.7)
Investments	1,161	1.6	1,038	1.3	(123)	(10.6)
Public sector: consolidated debt	0	0.0	0	0.0	0	0.0
Public sector: monetary control	1,154	1.6	1,038	1.3	(116)	(10.1)
Bonds: capitalization of public banks & other	7	0.0	0	0.0	(7)	(100.0)
Loan portfolio	1	0.0	0	0.0	(0)	(29.6)
Other credit	2	0.0	1	0.0	(0)	(10.3)
Provisions	(1)	(0.0)	(1)	(0.0)	0	(7.2)
Resale agreements (transitory liquidity support)	3,749	5.1	13,749	16.8	10,000	266.7
Accounts receivable	58	0.1	69	0.1	11	18.9
Other net assets	3,343	4.5	3,502	4.3	159	4.8
Liabilities and equity	**73,825**	**100.0**	**82,067**	**100.0**	**8,242**	**11.2**
Liabilities	**62,287**	**84.4**	**75,853**	**92.4**	**13,566**	**21.8**
Foreign-currency liabilities affecting international reserves	5	0.0	11	0.0	7	136.9
Monetary base	51,339	69.5	48,072	58.6	(3,267)	(6.4)
Cash	33,399	45.2	29,243	35.6	(4,156)	(12.4)
Reserve	17,940	24.3	18,829	22.9	889	5.0
Remunerated deposits not constituting reserve requirements	612	0.8	9	0.0	(602)	(98.5)
Deposits from external borrowing and foreign-capital portfolio investment	0	0.0	0	0.0	0	0.0
Other deposits	74	0.1	80	0.1	6	8.3
Government (Finance Ministry, local currency)	5,482	7.4	23,162	28.2	17,680	322.5
Government (Finance Ministry, foreign currency)	291	0.4	156	0.2	(135)	(46.3)
Obligations to international organizations	3,880	5.3	3,549	4.3	(331)	(8.5)
Accounts payable	36	0.0	243	0.3	207	566.6
Other liabilities	569	0.8	571	0.7	2	0.3
Total equity	**11,538**	**15.6**	**6,214**	**7.6**	**(5,324)**	**(46.1)**
Capital	13	0.0	13	0.0	0	0.0
Reserves	2,746	3.7	2,384	2.9	(362)	(13.2)
Capital surplus	9,135	12.4	4,211	5.1	(4,924)	(53.9)
Special foreign-exchange account settlement	453	0.6	453	0.6	0	0.0
Foreign-exchange adjustment from 1993 on and surplus	7,358	10.0	2,428	3.0	(4,930)	(67.0)
Other	137	0.2	143	0.2	6	4.1
Valuation gains on property, and donations	1,187	1.6	1,187	1.4	0	0.0
Results	(356)	(0.5)	(394)	(0.5)	(38)	10.7
Profit/loss from previous years	0	0.0	0	0.0	0	0.0
Profit/loss for the year	(356)	(0.5)	(394)	(0.5)	(38)	10.7

Source: Banco de la República.

The Bank's assets amounted to 82,067bn pesos at the end of June 2012.

1. Assets

The Bank's assets registered a balance of 82,067bn pesos at the end of June 2012, up by 8,242bn pesos (11.2%) on the December 2011 balance of 73,825bn pesos. The main changes in this account are attributable to:

- *International reserves*: At the end of June 2012, the market value of gross international reserves was 61,162bn pesos ($34,272m), down by 1,593bn pesos (-2.5%) on the figure at December 31, 2011. This change was mainly caused by: i) exchange-rate adjustment, resulting from the peso's appreciation against the dollar, which reduced the gross international reserves balance in pesos by 4,930bn pesos; ii) a reduction of 135bn pesos in the Finance Ministry's foreign-currency deposits at the Bank; iii) currency purchases by the Bank, which raised the international reserves' value in pesos by 3,493bn pesos ($1,959.9m); and iv) interest returns, market-price valuation gains and the exchange-rate differential, which raised the reserves by 40bn pesos.

- *Local-currency investment portfolio*: The balance, valued at market prices, stood at 1,038bn pesos in June 2012, down by 123bn pesos relative to the end of last year. This decrease resulted mainly from maturities of TES securities in the amount of 161bn pesos, and valuation gains of 44bn pesos on the Bank's TES portfolio.

- *Repo operations used to provide transitory liquidity*: The balance of these operations amounted to 13,749bn pesos at the end of June 2012, an increase of 10,000bn pesos relative to the end of 2011.

2. Liabilities

At June 30, 2012 the balance of liabilities stood at 75,853bn pesos, up by 13,566bn pesos (21.8%) on the balance at year-end 2011. The chief sources of variation were the following:

- *Monetary base*: At June 30, 2012 the monetary base amounted to 48,072bn pesos, lower by 3,267bn pesos (-6.4%) than at year-end 2011.

Liabilities stood at 75,853bn pesos, up by 13,566bn pesos (21.8%) on the balance at the end of 2011.

- *Government deposits*: The balance of government deposits at the Bank, made through the Finance Ministry's National Treasury and Public Credit Office, was 23,162bn pesos at the end of June 2012, higher by 17,680bn pesos (322.5%) than in December 2011.

The Bank's equity stood at 6,214bn pesos in June 2012, presenting a decrease of 5,324bn pesos (-46.1%) relative to December 2011.

- *Remunerated non-reserve deposits*: The balance at the end of June 2012 (9bn pesos) was lower than at the end of 2011 by 602bn pesos.

- *Obligations to international organizations*: The balance of this item was 3,549bn pesos at the end of June 2012, lower by 331bn pesos (-8.5%) than at December 31, 2011.

3. Equity

The Bank's equity stood at 6,214bn pesos in June 2012, presenting a decrease of 5,324bn pesos (-46.1%) relative to December 2011. This decrease resulted mainly from: i) a fall of 4,930bn pesos (-67.0%) in the exchange-adjustment account, owing to the peso's appreciation against the dollar; and ii) a decline of 362bn in reserves.

B. THE BANK'S INCOME STATEMENT AT JUNE 2012

The Bank posted a negative operating result of 394.0bn pesos for the first half of 2012, the outcome of income of 331.1bn pesos and expenditures of 725.1bn pesos (Table 24).

The operating result, relative to the first half of 2011, was determined by lower income from return on international reserves, owing to an exchange differential loss that stemmed in particular from fluctuations in reserve currencies against the dollar.[62] Lower income from return on reserves was offset by other operations such as: interest received on transitory liquidity operations (repos); valuation gains on investments in public-debt securities; fees for banking services and fiduciary operations; and income generated by putting more coins into circulation.

The operating result, relative to the first half of 2011, was determined by lower income from return on international reserves.

The major items of operating income in the first half of 2012 were the following:

- International reserves provided a net income of 39.7bn pesos, down by 603.1bn pesos relative to the first half of 2011, mainly because of a negative exchange-differential result of 108.7bn pesos, representing a decrease of 590.7bn pesos, brought about by fluctuations in reserve currencies against the dollar.

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62 At June 2012 the euro depreciated by 2.24% against the US dollar and by 0.12% against the Canadian dollar.

Table 24
Banco de la República's income statement (January to June 2012)
(billions of pesos)

	Executed		
	2011	to June 2011	to June 2012
1. Income	**884.2**	**919.6**	**331.1**
A. Monetary income	**712.1**	**840.9**	**270.3**
1. Interest and returns	565.1	769.2	197.8
International reserves	250.0	642.8	39.7
Returns	399.6	160.7	148.4
Exchange-rate differential	(149.6)	482.1	(108.7)
Liquidity operations	241.2	87.8	113.5
TES valuation gains/losses	71.9	38.3	44.5
Other interest	2.0	0.3	0.2
2. Exchange differences	31.5	29.9	44.6
3. Coins	87.0	16.5	26.1
4. Other	28.5	25.3	1.7
B. Corporate income	**172.1**	**78.7**	**60.8**
1. Fees	107.1	49.7	52.4
Banking services	51.6	22.5	23.7
Fiduciary operations	55.5	27.2	28.6
2. Non-monetary gold	44.4	21.0	0.1
3. Other	20.7	8.0	8.4
2. Expenditures	**1,240.3**	**580.9**	**725.1**
A. Monetary expenditures	**792.3**	**366.8**	**513.1**
1. Interest and returns	585.8	218.7	353.8
Remuneration on Finance Ministry accounts	547.8	200.0	320.7
IMF flexible commitment fee	22.0	8.7	13.0
International-reserve management expenses	8.2	5.4	16.4
Monetary-contraction operating expenses	7.8	4.7	3.8
2. Exchange differences	59.3	109.6	111.6
3. Cost of issuing and distributing bills & coins	147.0	38.3	47.7
4. Other	0.2	0.2	0.1
B. Corporate expenditures	**343.5**	**166.8**	**186.0**
1. Personnel costs	221.9	109.6	119.3
2. Overhead	51.2	22.8	24.9
3. Recovery of deductible VAT (CR)	(1.6)	(0.7)	(0.9)
4. Taxes	6.8	3.5	4.7
5. Insurance	6.1	3.0	2.7
6. Contributions and membership dues	3.0	1.7	3.1
7. Cultural expenditures	9.0	3.7	3.7
8. Depreciation, provisions, debt repayments & other expenditures (including deferred software costs)	47.2	23.2	28.4
C. Pensioners' expenses	**104.5**	**47.4**	**26.0**
3. Operating result (1 - 2)	**(356.1)**	**338.7**	**(394.0)**

Source: Banco de la República.

The Bank's total income in the first half of 2012 amounted to 331.1bn pesos.

- Repo liquidity operations generated income of 113.5bn pesos, up by 25.7bn pesos (29.3%) on a year earlier, as a result of the increase in the intervention rate.[63]

- Income from valuation gains on public-debt securities (TES) held by the Bank came to 44.5bn pesos, higher by 6.2bn pesos (16.2%) than at June 2011, owing to the behavior of the market's benchmark trading rates.

- Fees received by the Bank for banking services and fiduciary operations amounted to 52.4bn pesos, up by 2.7bn pesos (5.4%) on June 2011. The fees were chiefly connected with management of higher TES balances and providing services through the Electronic Trading System (SEN).

- Putting more coins into circulation generated an income of 26.1bn pesos at face value, up by 58.2% relative to a year earlier, owing to greater demand for coins.

The Bank's total expenditures in the first half of 2012 amounted to 725.1bn pesos and were mainly connected with the following:

- Remuneration on deposits kept at the Bank by the Finance Ministry's National Treasury and Public Credit Office came to 320.7bn pesos, chiefly as a result of the higher average daily balance of these deposits. Payments to the government in this respect increased by 120.7bn pesos (60.3%) relative to June 2011 and accounted for most of the increase in the Bank's expenditures over the period under analysis.

- The net result of income and expenditures generated by peso/dollar exchange-rate variations on foreign-currency asset and liability accounts, other than international reserves, was -67.0bn pesos. Such accounts, included contributions to international organizations, foreign-currency deposit accounts, and other foreign-currency assets and liabilities.

The Bank's total expenditures in the first half of 2012 amounted to 725.1bn pesos.

- The cost of issuing and distributing monetary species totaled 47.7bn pesos.

- Corporate expenditures rose by 8.1% to 186.0bn pesos. They included personnel costs (119.3bn pesos), overhead (24.9bn pesos) and other corporate costs (41.8bn pesos).

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63 The intervention interest rate rose from 4.75% in December 2011 to 5.25% in June 2012.

External interest rates are expected to remain at all-time lows in 2012, which means that income from returns on international reserves will continue to be moderate, affecting the Bank's income statement

- Personnel costs are associated with salaries, social benefits, social-security contributions, family benefit funds, and assistance to personnel. The 5.5% real increase in personnel costs stemmed from: i) a 5.0% wage increase under the collective bargaining agreement in force; ii) the statistical effect of replacing the employees who took retirement under the Constitutional Amendment 1 of 2005, which was concentrated in the second half of 2011; hence the full effect of the payments involved will materialize in 2012; and iii) an increase in the number of staff, to attend to new needs such as administrative and infrastructure modernization.

- Overhead totaled 24.9bn pesos, with a real increase 6.1% resulting from: i) the high share of agreements that were adjusted by the minimum-wage increase and the previous year's inflation; and ii) maintenance and remodeling of Bank properties, which are in a state of great disrepair and were further affected by last year's rainstorms.

- Other corporate expenses not under the Bank's direct control, such as taxes, insurance, contributions, membership dues, depreciation, provisions, debt repayments and other operating and non-operating expenses together amounted to 38.9bn pesos.

- Lastly, net pensioner costs stood at 26.0bn pesos, the result mainly of pension-related expenses, less income from the return on the portfolio built with pension-liability funds, and interest on housing loans. That figure represented a decrease of 45.2% in net pensioner costs relative to the first half of 2011, thanks to the behavior of TES trading rates, which produced higher returns on the portfolio: TES securities make up about 85.2% of the portfolio.

C. INCOME AND EXPENDITURE FORECASTS FOR 2012

Returns on international reserves may be affected if the reserve currencies depreciate or appreciate against the dollar, or the price of gold alters relative to the projected values.

A negative operating result of 665.0bn pesos is forecast for 2012, with income projected at 938.6bn pesos and expenditures at 1,648.7bn pesos (Table 25).

External interest rates are expected to remain at all-time lows in 2012, which means that income from returns on international reserves will continue to be moderate, affecting the Bank's income statement, as explained above.

Income is forecast to grow by 99.4 pesos (11.2%) over the year, to 983.6bn pesos. The main income items are:

Table 25
Banco de la República's projected income statement for 2012
(billions of pesos)

	Executed	Projected	Annual change	
	2011	2012	Percentage	Absolute
1. Income	**884.2**	**983.6**	**11.2**	**99.4**
A. Monetary income	**712.1**	**858.9**	**20.6**	**146.8**
1. Interest and returns	565.1	614.7	8.8	49.6
International reserves	250.0	271.4	8.6	21.4
Returns	399.6	283.5	(29.1)	(116.1)
Exchange-rate differential	(149.6)	(12.1)	(91.9)	137.5
Liquidity operations	241.2	273.2	13.3	32.1
TES valuation gains/losses	71.9	69.7	(3.0)	(2.2)
Other interest	2.0	0.3	(85.4)	(1.7)
2. Exchange differences	31.5	87.1	176.8	55.6
3. Coins	87.0	131.2	50.8	44.2
4. Other	28.5	25.9	(9.3)	(2.7)
B. Corporate income	**172.1**	**124.8**	**(27.5)**	**(47.4)**
1. Fees	107.1	109.1	1.9	2.1
Banking services	51.6	50.0	(3.2)	(1.7)
Fiduciary operations	55.5	59.2	6.7	3.7
2. Non-monetary gold	44.4	0.1	(99.8)	(44.3)
3. Other	20.7	15.6	(24.7)	(5.1)
2. Expenditures	**1,240.3**	**1,648.7**	**32.9**	**408.4**
A. Monetary expenditures	**792.3**	**1,133.7**	**43.1**	**341.5**
1. Interest and returns	585.8	813.5	38.9	227.7
Remuneration on Finance Ministry accounts	547.8	763.2	39.3	215.4
IMF flexible commitment fee	22.0	21.8	(1.0)	(0.2)
International-reserve management expenses	8.2	24.7	201.2	16.5
Monetary-contraction operating expenses	7.8	3.8	(51.0)	(4.0)
2. Exchange differences	59.3	149.2	151.7	89.9
3. Cost of issuing and distributing bills & coins	147.0	170.9	16.2	23.8
4. Other	0.2	0.2	16.3	0.0
B. Corporate expenditures	**343.5**	**382.4**	**11.3**	**38.9**
1. Personnel costs	221.9	241.0	8.6	19.2
2. Overhead	51.2	56.6	10.5	5.4
3. Recovery of deductible VAT (CR)	(1.6)	(1.3)	(19.9)	0.3
4. Taxes	6.8	7.3	7.1	0.5
5. Insurance	6.1	6.5	7.0	0.4
6. Contributions and membership dues	3.0	6.0	98.7	3.0
7. Cultural expenditures	9.0	9.3	3.9	0.3
8. Depreciation, provisions, debt repayments & other expenditures (including deferred software costs)	47.2	57.0	20.8	9.8
C. Pensioners' expenses	**104.5**	**132.6**	**26.8**	**28.0**
3. Operating result (1 - 2)	**(356.1)**	**(665.0)**	**86.8**	**(309.0)**

Source: Banco de la República.

The rate of return on international reserves in 2012 will be slightly higher than last year's average.

- Returns on international reserves are projected at 271.4bn pesos, with a return rate of 0.38%, slightly higher than last year's 0.34% average. The exchange rates of the currencies in which reserves are invested are assumed to stay at the average levels observed between January 1 and June 30, 2012.[64] Note that returns on the portfolio may be affected if the reserve currencies depreciate or appreciate against the dollar, or the price of gold alters relative to the projected values.

- Income from repo liquidity operations is estimated at 273bn pesos, up by 32.1bn pesos (13.3%) relative to 2011, as a result of the higher interest rate.

- The estimated greater circulation of coins will generate income, at face value, of 131.2bn pesos, up by 50.8%. This growth is mainly associated with putting into circulation new 1,000-peso coins in the second half of 2012.

- Fees received by the Bank, mainly for management of TES securities and operations through the Electronic Trading System and the Central Securities Depository, will come to 109.1bn pesos, growing by 1.9% over the year.

- Income from valuation gains on public-debt securities (TES) held by the Bank is estimated at 69.7bn pesos, a decrease of 3.0%.

Expenditures for 2012 are projected at 1,648.7bn pesos, with a growth of 408.4bn pesos (32.9%), and consist mainly of the following items:

Expenditures for 2012 are projected at 1,648.7bn pesos, with a growth of 408.4bn pesos (32.9%).

- Remuneration on deposits of the Finance Ministry's National Treasury and Public Credit Office held at the Bank will increase by 39.3% to 763.2bn pesos, as a result of an expected increase in the average balance of the deposits and a higher rate of interest.

- The cost of issuing and distributing monetary species is estimated at 170.9bn pesos, 16.2% higher than in 2011, resulting from execution of the monetary-species issuing program.

- The net result of income and expenditures relating to currency differentials is projected at -62.1bn pesos based on the exchange rate observed between January 1 and June 30, 2012. Differentials affect

64 Depreciation of the euro (-0.1%) and the Canadian dollar (-2.%); appreciation of sterling (1.5%) and the Australian dollar (0.8%).

exchange adjustment to foreign-currency assets and liabilities other than international reserves.

- Corporate expenditures are forecast to total 382.4bn pesos, with 241.0bn pesos of this amount representing personnel costs and 56.6bn pesos overhead.

- Personnel costs are estimated to grow by 5.5% in real terms, as explained in the results to June 2012.

- Overhead is projected to rise by 5.4bn pesos (7.3% in real terms) to 56.6bn pesos, for the reasons already described.

- Other corporate expenditures not under the Bank's direct control are estimated at 76.7bn pesos and include taxes, insurance, depreciation, provisions, debt repayments, contributions and membership dues.

- Lastly, net pension expenditure is estimated to rise by 28.0bn pesos, to 132.6bn pesos, as a result of last year's inflation and lower projected income from return on the portfolio built with pension-liability funds.

Box 4
RETURN ON RESERVES AND COST OF CURRENCY-MARKET INTERVENTION BY THE BANCO DE LA REPÚBLIC

As may be seen from Table B4.1 international reserves are the main component of the Bank's assets. In 2011 they represented 85% of its assets, an 8pp increase since 2004, when their share was 77%.

The increase has come mostly from net currency purchases by the Bank in the foreign-exchange market, which amounted in all to $17,460m between 2004 and 2011 (Table B4.2). Over that period the balance in pesos of overall international reserves rose by 30,398bn pesos, which represented the main source of the increase of 31,979bn pesos in the Bank's assets.

The effect in pesos of the Bank's 2004-2011 currency purchases (some 36,034bn pesos) and of the return on international reserves was not fully reflected in the reserves' increase, owing to the peso/dollar exchange-rate behavior. As shown by Graph B4.1, from January 2004 to December 2011 the exchange rate fell from 2,778 pesos/dollar to 1,943 pesos/dollar, signifying a decrease in the balance of the international reserves in pesos that partly offset the effect of currency purchases and return on reserves.

Exchange-rate behavior was the main cause of what occurred to the Bank's equity. In this case, in contrast to what is required by traditional accounting standards, Law 31 of 1992[1] provides that changes in the balance of international reserves caused by peso/dollar exchange-rate movements shall not be recorded in the Bank's income statement but in a "currency adjustment" account under equity surplus. For this reasons, as a result of the peso's appreciation in 2004-2011, the equity balance fell by 6,484bn pesos over that period, owing to a decrease of 6,754bn pesos in the value of the "currency adjustment" account. As a result, equity as a percentage of assets decreased by 27pp, from 43% in 2004 to 16% in 2011.

The foregoing signified that liabilities as a percentage of assets rose from 57% in 2004 to 84% in 2011. Specifically, the balance of liabilities rose by 38,464bn pesos over that period, mainly as a result of the monetary base increasing by 32,079bn pesos: from 19,260bn pesos in 2004 to 51,330bn pesos in 2011.

Thus, from 2004 to 2011 the monetary base's expansion (32,079bn pesos) came mostly from an increase in international reserves (30,398bn pesos), and to a lesser from an increase in liquidity operations (1,237bn pesos).

In general, financial assets generate income that is entered in an entity's income statement. In the Bank's specific case, since international reserves are its main asset, return on the reserves is the main source of income in the income statement. As shown by Graph B4.2 and Table B4.3, the Bank's results depend in good measure on return on international reserves: when the return on reserves increases, so do the Bank's results.

The following three factors determine income from international reserves:

- External interest rates: When external interest rates decrease, returns on the portfolio tranche of reserves improve in the short term from the effect of valuation at market prices (price effect). But if the rates remain low, results begin to be negatively effected by lower return on new investments of reserves at lower rates (causation effect).
- Exchange rate of the dollar to other currencies: In this case, when the dollar depreciates against other currencies in which international reserves are investment, returns on the reserves increase because their balance in dollars increases (exchange-rate differential).
- Price of gold: Since a small part of the international reserves is invested in gold, an increase in the price of gold increases the return on the reserves, owing to their valuation at market prices (price effect).

Graph B4.3 shows overall return on international reserves (left panel) and the components of this return by causation, price and exchange-rate differential (right panel). As may be seen, in 2004 and 2005 the price component provided a negative return on reserves. In effect, international interest rates rose from the second quarter of 2004 to the first quarter of 2006, causing at first a loss of value

1 Law 31 of 1992 lays down the provisions governing the Banco de la República's performance of its functions.

Table B4.1
Banco de la República: general balance sheet, by economic criteria

	(billions of pesos)							
	2004	2005	2006	2007	2008	2009	2010	2011
Assets	41,846	46,617	49,567	54,749	62,508	62,385	64,800	73,825
Gross international reserves	32,357	34,164	34,568	42,219	53,938	51,852	54,479	62,755
Liquidity operations	2,512	4,050	6,636	5,403	1,547	460	2,539	3,749
Investments	984	2,604	2,473	1,364	900	3,597	1,334	1,161
Other assets	5,993	5,799	5,890	5,762	6,123	6,476	6,448	6,160
Liabilities	23,824	30,197	32,921	41,532	43,460	48,545	54,186	62,287
Monetary base	19,260	22,804	27,032	32,415	36,194	39,545	44,875	51,339
Government deposits	1,170	4,128	2,722	4,835	2,638	2,960	3,410	5,773
Other deposits	26	105	53	1,392	1,748	892	1,036	685
Other liabilities	3,367	3,160	3,114	2,890	2,880	5,148	4,865	4,490
Equity	18,022	16,419	16,647	13,217	19,049	13,840	10,614	11,538
Capital	13	13	13	13	13	13	13	13
Surplus (exchange adjustment of international reserves)	14,112	12,679	12,023	7,798	13,623	9,099	6,085	7,358
Reserves	1,524	1,868	1,398	1,832	2,393	2,867	3,019	2,746
Fiscal-year result	828	323	1,624	1,985	1,322	155	(272)	(356)
Other equity accounts[a/]	1,546	1,537	1,590	1,590	1,698	1,706	1,769	1,778
	(percentage share of total assets)							
	2004	2005	2006	2007	2008	2009	2010	2011
Assets	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gross international reserves	77.3	73.3	69.7	77.1	86.3	83.1	84.1	85.0
Liquidity operations	6.0	8.7	13.4	9.9	2.5	0.7	3.9	5.1
Investments	2.4	5.6	5.0	2.5	1.4	5.8	2.1	1.6
Other assets	14.3	12.4	11.9	10.5	9.8	10.4	10.0	8.3
Liabilities	56.9	64.8	66.4	75.9	69.5	77.8	83.6	84.4
Monetary base	46.0	48.9	54.5	59.2	57.9	63.4	69.3	69.5
Government deposits	2.8	8.9	5.5	8.8	4.2	4.7	5.3	7.8
Other deposits	0.1	0.2	0.1	2.5	2.8	1.4	1.6	0.9
Other liabilities	8.0	6.8	6.3	5.3	4.6	8.3	7.5	6.1
Equity	43.1	35.2	33.6	24.1	30.5	22.2	16.4	15.6
Capital	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Surplus (exchange adjustment of international reserves)	33.7	27.2	24.3	14.2	21.8	14.6	9.4	10.0
Reserves	3.6	4.0	2.8	3.3	3.8	4.6	4.7	3.7
Fiscal-year result	2.0	0.7	3.3	3.6	2.1	0.2	(0.4)	(0.5)
Other equity accounts[a/]	3.7	3.3	3.2	2.9	2.7	2.7	2.7	2.4

a/ Includes the following surplus accounts: special exchange accounts settlement, donations, valuation gains and investment in assets for cultural activity
Source: Banco de la República.

Table B4.2
Banco de la República: currency purchase and sale operations
(millions of dollars)

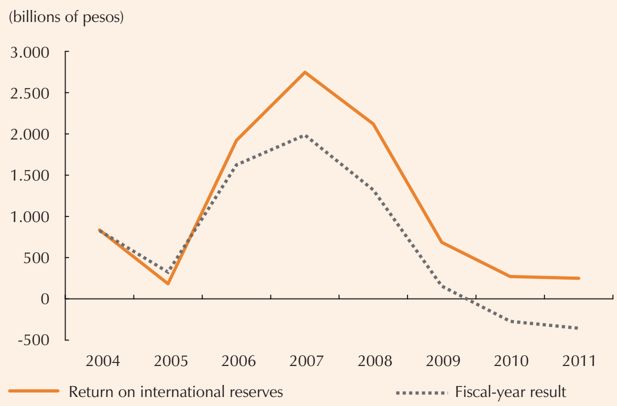
	2004	2005	2006	2007	2008	2009	2010	2011
Purchases	2,905	4,658	1,781	5,082	2,381	539	3,060	3,720
Put options	1,580	0	584	555	965	539	0	0
For accumulation of international reserves	1,400	0	0	0	450	0	0	0
For volatility control	180	0	584	555	515	539	0	0
Direct purchase auctions	0	0	0	0	1,416	0	3,060	3,720
Discretionary intervention	1,325	4,658	1,197	4,527	0	0	0	0
Sales	500	3,250	1,944	369	235	369	0	0
Call options	0	0	944	369	235	369	0	0
For deaccumulation of international reserves								
For volatility control		0	944	369	235	369	0	0
National government	500	3,250	1,000	0	0	0	0	0
Net purchases	2,405	1,408	(164)	4,713	2,147	171	3,060	3,720

Source: Banco de la República.

Graph B4.1
Exchange rate
(daily information from January 2004 to December 2011)

Source: Financial Superintendency.

Graph B4.2
Banco de la República: return on international reserves and fiscal-year results [a/]



a/ Information from the Bank's income statement
Source: Banco de la República.

in the balance of reserves referred to above (Graph B4.4). However, this was offset by the causation effect, precisely because of the higher level of external interest rates. In 2005 return on reserves was partly offset by depreciation of the euro and the yen against the dollar, which generated losses through the exchange-rate differential (Graph B4.5). Subsequently, from 2007 to 2008, the return on reserves rose again, owing to a causation effect, insofar as reserves were invested at the higher external rates observed up to that time, and owing also to a price effect, since external interest rates began to fall sharply, mainly as a result of the economic slowdown in the US. In recent years, however, lower external rates have significantly affected the return on reserves, with this effect being reinforced by the euro's depreciation against the dollar in 2010 and 2011.

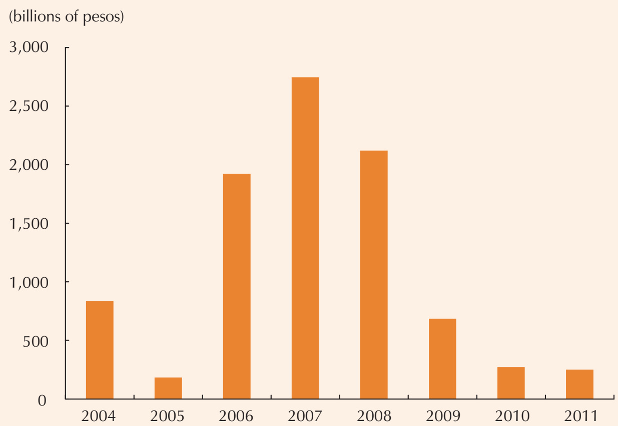
Table B4.3
Banco de la República: income statement
(millions of dollars)

	2004	2005	2006	2007	2008	2009	2010	2011
Total income	**1,756**	**1,406**	**2,806**	**3,563**	**3,120**	**1,529**	**900**	**997**
Interest and returns	1,303	912	2,419	3,154	2,520	1,053	530	609
International reserves	835	184	1,922	2,746	2,120	685	272	250
Valuation gains on TES for monetary expansion operations	322	593	172	67	66	86	75	72
Liquidity operations (repos and transitory liquidity support)	131	115	304	305	312	193	106	241
Other operations[a/]	15	20	21	35	23	89	77	46
Other operating and non-operating income[b/]	453	493	387	409	600	476	370	388
Total expenditures	**928**	**1,080**	**1,182**	**1,578**	**1,798**	**1,374**	**1,172**	**1,353**
Interest and returns	225	446	430	759	956	602	349	586
Remuneration on deposit accounts (Finance Ministry)	86	308	296	535	708	393	271	548
Monetary contraction deposits	0	0	0	86	68	75	28	8
Deposit-account reserve requirements	99	110	117	120	163	69	0	0
Other operations[c/]	41	28	17	18	16	65	50	30
Other operating and non-operating expenditures[d/]	703	634	752	819	842	772	823	767
Fiscal-year result	**828**	**325**	**1,624**	**1,985**	**1,322**	**155**	**(272)**	**(356)**

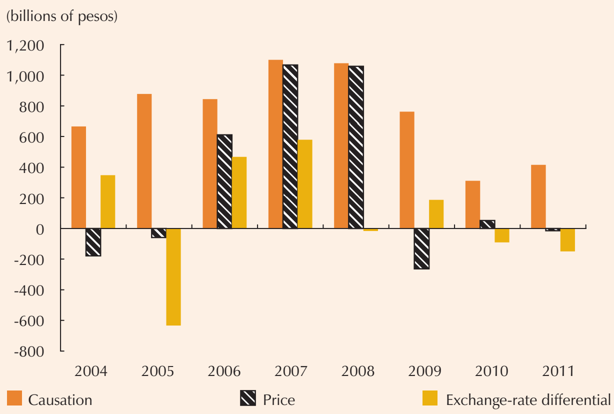
a/ Including, among other things, valuation gains on non-monetary gold and on Law 546 TES.
b/ Mainly fee income, exchange differences, coins issued, and returns on pension-fund resources.
c/ Mainly expenses of international-reserve management.
d/ Including, among other things, commissions and fees, exchange differences, cost of issuing monetary species, and personnel, pensioners' and running expenditures.
Source: Banco de la República.

Graph B4.3

A. Return on international reserves

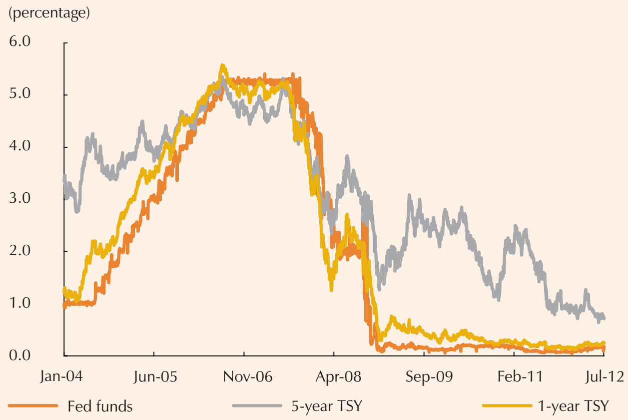


B. Return on international reserves, by component



Source: Banco de la República.

Graph B4.4
US interest rate
(daily information since 2004)



Source: Bloomberg.

Graph B4.5
Euro and yen exchange rates against the dollar

Source: Bloomberg.

1. Cost of currency-market intervention by the Bank in 2004-2012

As mentioned earlier, the monetary base is the Bank's main liability. The monetary base may increase through an increase in international reserves brought about by currency purchases by the Bank in the foreign-exchange market, and/or through the transitory purchase (repo) or permanent purchase of Treasury securities, TES. In any case, the assets earn a return, which constitutes income in the Bank's income statement.

As stated earlier, from 2004 to 2011 the main source of expansion in the monetary base was the purchase of foreign currency. To calculate the effect on the Bank's income statement of its intervention in the foreign-currency market, an exercise is performed in which the income from the reserves purchased through intervention is calculated and compared with the income that would have been earned if that greater liquidity had been spent on the temporary purchase of TES, which are active repos of the Bank and earn a return equal to the policy rate of interest. Specifically, the following calculation was made in dollars:

$$DR_t = \left(\sum_{t=01/01/2004}^{t} CND_t^{US\$} \right) \times i_t^{*RI} - \left[\frac{\left(\sum_{t=01/01/2004}^{t} CND_t^{US\$} \times tc_t \right) \times i_t^P}{tc_t} \right]$$

where:

DR_t = return differential on day t
i_t^{*RI} = daily rate of return on international reserves on day t
i_t^P = daily policy or benchmark rate of interest on day t
tc_t = market exchange rate on day t

$\sum_{t=01/01/2004}^{t} CND_t^{US\$}$ = the accumulated value in dollars of currency purchases by the Bank from January 1, 2004 to day t.

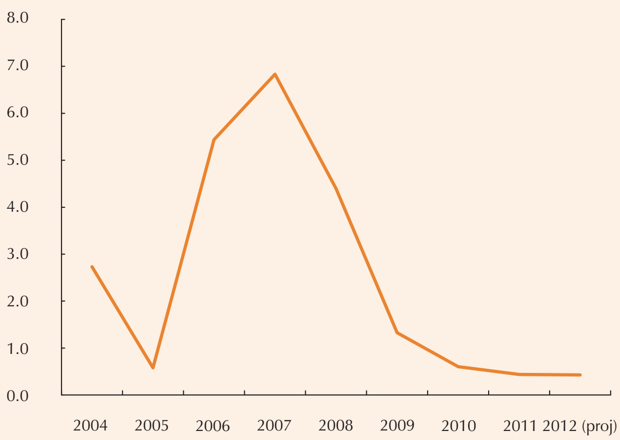
For purposes of the exercise, the calculation was made for every day of the period running from January 1, 2004 to December 31, 2012.[2]

Where there is a positive difference between the domestic interest rate and the implicit rate of return in pesos on international reserves, the effect on the Bank's income statement is negative. The reason is that the return on the international reserves, resulting from greater liquidity provided to the market through currency purchases, is less than the return that would have been earned by the Bank on active repos. In this case the DR_t is negative. The opposite occurs where the rate difference is negative: the income statement receives a positive impact, because the return on international reserves is greater than the income from repos, and so the DR_t is positive. Graph R4.6 shows that the rate difference was positive during the period 2004-2011, for the benchmark rate of interest was

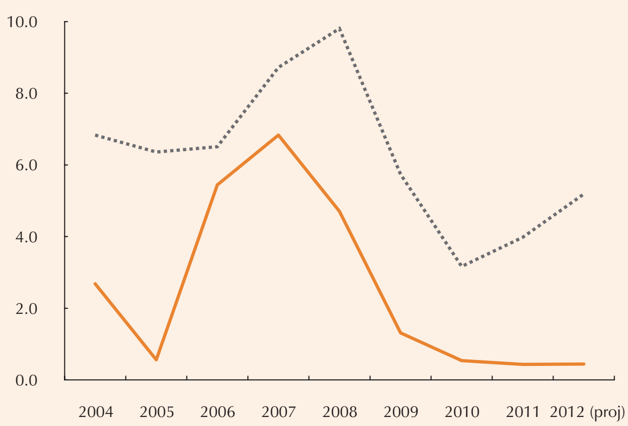
2 In 2012 currency-market interventions by the Bank as announced by the Board were taken into account: minimum daily amounts of $20m up to at least November 2. An interest rate of 5.25% was assumed for all of 2012; it was the rate in force at the time the exercise was performed.

Graph B4.6

A. Annual dollar rate of return on international reserves a/



B. Annual peso rate of return on international reserves, and Colombia's annual benchmark rate of interest a/



(proj): projected
a/ The implicit return calculated as the ratio of the dollar value of return on reserves to the average balance of gross international reserves
Source: Banco de la República.

higher than the implicit rate of return in pesos on international reserves.

The calculation results are presented in Table B4.4. The cost of intervention each year was calculated as the sum of the daily DR_t figures for the year in question. It may be seen that in the periods in which the rate difference increases, the cost of intervention increases. Furthermore, the cost of intervention has been higher in recent years because, as mentioned earlier, the calculation for each year takes into account

Table B4.4
Net cost of intervention, 2004-2012
(millions of dollars)a/

	Interest-rate difference b/ (percentage)	Cost (millions of dollars)	As a percentage of balance of reserves	As a percentage of GDP
2004	4.0	(24)	(0.20)	(0.02)
2005	5.8	(183)	(1.30)	(0.12)
2006	1.0	(40)	(0.27)	(0.02)
2007	1.8	(201)	(1.03)	(0.10)
2008	4.9	(614)	(2.69)	(0.25)
2009	4.4	(445)	(1.84)	(0.19)
2010	2.6	(345)	(1.30)	(0.12)
2011	3.5	(659)	(2.12)	(0.20)
2012	4.7	(1.052)	(3.08)	(0.28)

a/ A figure less than zero implies a negative effect on the Bank's income statement
b/ Calculated as the difference between Colombia's policy interest rate and the implicit rate of return in pesos on gross international reserves.
Source: Calculations by Banco de la República.

the accumulated overall purchase of international reserves since January 2004.

According to this information, given the domestic and external rates of interest and the rates of exchange in 2004-2011 and the forecasts for 2012,[3] the cost in 2012 of currency-market interventions since 2004 is estimated at $1,052m, approximately 1,872bn pesos, equivalent to 3.1% of the balance of international reserves and 0.28% of GDP.

If this same exercise is performed only for currency-market interventions since 2008, when the mechanism of direct purchase auctions was introduced, the results for the cost of intervention would be those presented in Table B4.5. In this case, the cost of currency-market intervention in 2012 is estimated at $536m, approximately 953bn pesos.

Note that the cost of intervention would be even higher if in this exercise the source of monetary expansion were taken to be the permanent purchase of TES

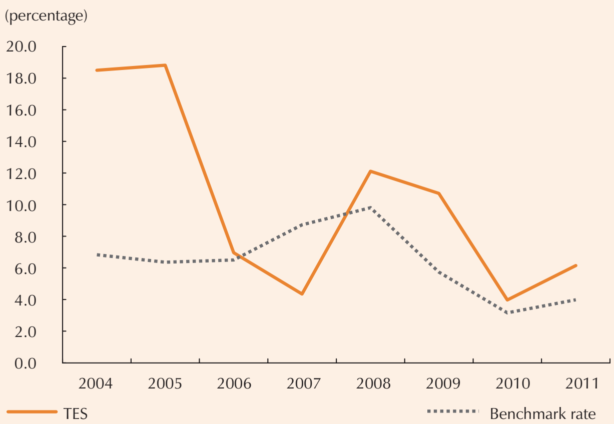
3 As mentioned earlier, the Bank's currency-purchasing program as announced by the Board was taken into account: minimum daily amounts of $20m up to at least November 2. The Bank's intervention rate of 5.25%, in force at the time the exercise was being performed, was assumed for the rest of the year. Lastly, annual return in dollars on international reserves was assumed at 0.38%.

Table B4.5
Net cost of intervention, 2008-2012
(millions of dollars)[a/]

	Interest-rate difference[b/] (percentage)	Cost (millions of dollars)	As a percentage of balance of reserves	As a percentage of GDP
2008	4.9	(57)	(0.25)	(0.02)
2009	4.4	(68)	(0.28)	(0.03)
2010	2.6	(74)	(0.28)	(0.03)
2011	3.5	(295)	(0.95)	(0.09)
2012	4.7	(536)	(1.57)	(0.14)

a/ A figure less than zero implies a negative effect on the Bank's income statement
b/ Calculated as the difference between Colombia's policy interest rate and the implicit rate of return in pesos on gross international reserves.
Source: Calculations by Banco de la República.

Graph B4.7
Implicit annual rate of return on TES securities held by the Bank, and the annual benchmark interest rate [a/]



a/ The daily average of benchmark data, in annual terms.
Source: Banco de la República.

securities by the Bank. In fact, permanent expansion of the monetary base is effected by the Bank making such purchases or buying currencies in the foreign-exchange market instead of relying on active repos. Graph B4.7 shows that the difference between the implicit return on TES securities held by the Bank and the benchmark rate of interest was positive from 2004 to 2011, except in 2007.

It should be pointed out that, although the accumulation of reserves by the Bank has had a negative impact on the amounts presented in its income statement, the accumulation has been needed to mitigate external vulnerabilities. In particular, as stated in Chapter II, Colombia's international-reserve indicators are not greatly different from those of other Latin-American countries', and in some cases they are even better. Moreover, a number of factors have made it necessary to increase the balance of international reserves; they include: a widening current-account deficit, higher foreign-debt servicing, and uncertainty over the situation of the global economy.

2. Cost of intervention in 2012

In this section an estimate is made of the cost, only in 2012, of intervention by the Bank in the foreign-exchange market. The Board has announced for this year a program for buying foreign exchange by means of direct-purchase auctions in minimum daily amounts of $20m, starting from February 6 and up to at least November 2. Accordingly, currency purchases by the Bank in 2012 will amount to $3,660m. Inclusion of these purchases brings the Bank's projected losses in 2012 to 665bn pesos, higher by 167bn pesos than in a scenario with no intervention by the Bank. Over a horizon of a full year, the losses would be higher by some 309bn pesos. This means that for every $100m of purchases by the Bank, the profit and loss statement would be reduced by about 8.4bn pesos.[4]

4 This calculation was made before the Board's decision of July 27, 2012 to reduce the rate to 5%. The intervention rate used, therefore, was 5.25%. As this rate is raised (lowered), the Bank's losses will increase (decrease).

Box 5
NEW FAMILY OF COINS

On June 13, 2012 the Banco de la República put into circulation a new family of coins comprising denominations of 50, 100, 200, 500 and 1,000 pesos. The aim was to reduce production costs, which have been affected in recent years by higher metal prices on international markets. The Bank studied international experience in minting coins, particularly with regard to their alloys, dimensions, shapes and designs, and relied on the advisory services of the United Kingdom's Royal Mint. As a result of the study, it was decided to reduce the size of the coins and modify their alloys.

It was also decided to reintroduce the 1,000 peso coin, which would help to reduce production costs of monetary species in the medium term. For the thousand-peso note deteriorates quickly because of its high rate of circulation and needs to be replaced frequently, whereas the useful life of the coin is in the range of 15 to 20 years. Thousand-peso notes will continue to be produced up to the end of 2012 and will remain in circulation during their useful life, estimated to be about one year.

The annual cost of minting new coins will be reduced by some 15bn pesos,[1] representing a saving of 33% relative to the current cost of production. It is planned to mint 306 million coins of the new family in 2012, with a face value of around 99m pesos.

The new coins incorporate new security features, such as fine details in high relief, texts in micro-lettering, and high-quality engraving. The 1,000- and 500-peso coins are bimetallic, and part of the engraving on both the core and the ring is in high relief. They also have a double rim, a circular one and a polygonal one. Moreover, the 1,000-peso coin has a latent image that changes from the acronym BRC[2] to the word MIL, depending on the angle it is viewed from.[3]

The new coins began to circulate from June 13 this year, but only the 50- and 500-peso pieces did so massively; the 100- and 200-peso coins will do so in July and the 1,000-peso coins in August. The existing coins and thousand-peso notes will circulate simultaneously and indefinitely with the news coins, and both groups will be serve as a medium of payment.

1 This estimate was based on the annual average number of coins minted in the past five years. The amount could vary depending on the price of metals in international markets, and the need for coins in the economy, among other factors.

2 BRC stands for Banco de la República of Colombia.

3 A more detailed description of the security features of all the new coins is to be found on the Bank's website (www.banrep.gov.co).

The new coins were designed around the concept of biodiversity, with special reference to water. The designs were the work of Colombian artists José Antonio Suárez and Johana Calle. Their art proposals were reviewed by biologists, who confirmed that the selected species were a representative part of the country's biodiversity.

The new coins' designs include the loggerhead turtle (1,000 pesos), the glass frog (500 pesos), the scarlet macaw (200 pesos), and the spectacled bear (50 pesos), animals representative of the diversity of Colombian fauna. The frailejón, a characteristic plant of the higher reaches of the Andes, is depicted on the 100-peso coin. Undulating lines representing moving water are the common motif on the reverse of the coins and the central theme that characterizes the new coinage. The obverse bears the common name of the respective species of fauna or flora depicted there, and also the scientific name in micro-lettering.

The issuance of this new coinage is an important strategy for reducing production costs, while introducing new security features. And the concept of a family of coins is strengthened by being centered around a theme: biodiversity. The Bank thereby reaffirms its commitment to sustainability and its interest in fostering and conserving the country's natural resources.

This Report was coordinated, edited and diagrammed by the Publications Section of the Bank's Economic and Financial Education Department, in 10.5-point Times New Roman characters.

Translated by Fereshteh Ebrahimzadeh