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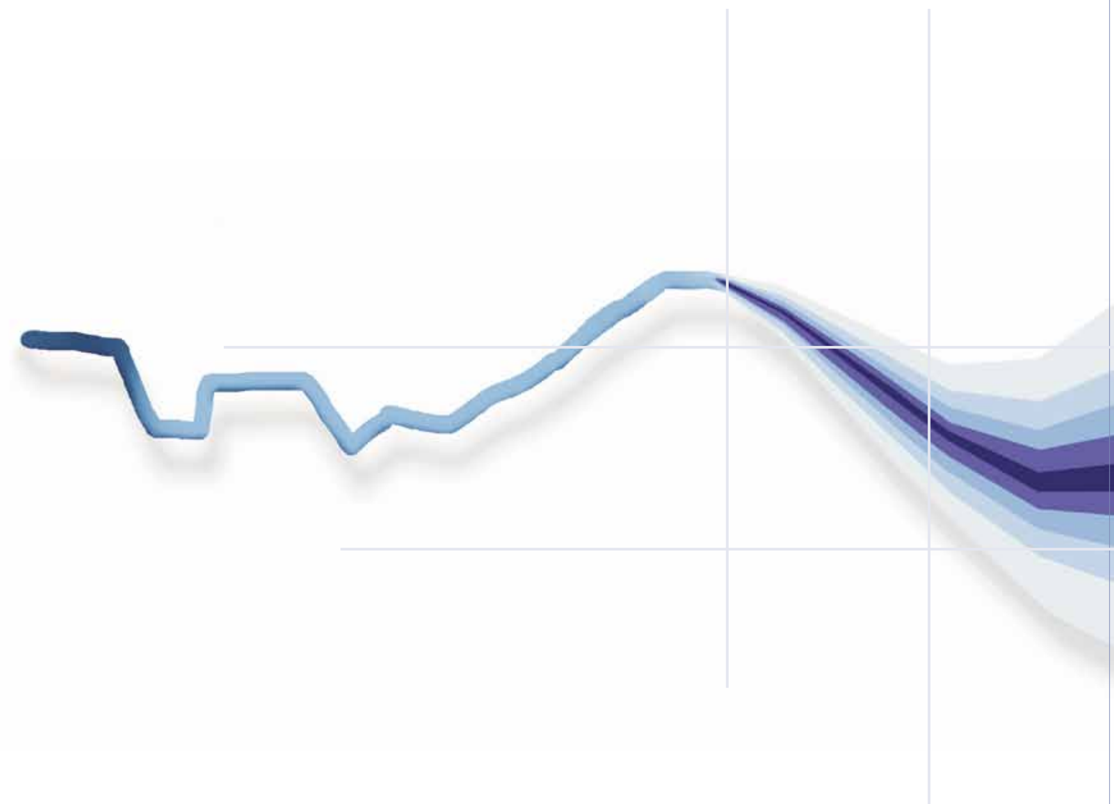
DECEMBER

# Monetary Policy Report



BANCO CENTRAL DE CHILE

# Monetary Policy Report*

DECEMBER 2011

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DE CHILE

*/ This is a translation of a document originally written in Spanish. In case of discrepancy or difference in interpretation the Spanish original prevails. Both versions are available at www.bcentral.cl.

# Contents*/



*/ The statistical closing date of this *Monetary Policy Report* was 13 December 2011.

# Preface

The main objective of the Central Bank of Chile's monetary policy is to keep inflation low, stable, and sustainable over time. Its explicit commitment is to keep annual CPI inflation at around 3% most of the time, within a tolerance range of plus or minus one percentage point. To meet this target, the Bank focuses its monetary policy on keeping projected inflation at 3% annually over a policy horizon of around two years. Controlling inflation is the means through which monetary policy contributes to the population's welfare. Low, stable inflation favors a better functioning of the economy and economic growth, while preventing the erosion of personal income. Moreover, focusing monetary policy on achieving the inflation target helps to moderate fluctuations in national employment and output.

The *Monetary Policy Report* serves the following main objectives: (i) to inform and explain to the Senate, the Government, and the general public the Central Bank Board's views on recent and expected inflation trends and their consequences for the conduct of monetary policy; (ii) to publicize the Board's medium-term analytical framework used to formulate monetary policy; and (iii) to provide information that can help shape market players' expectations on future inflation and output trends. In accordance with Section 80 of the Bank's Basic Constitutional Act, the Board is required to submit this *Report* to the Senate and the Minister of Finance.

The *Monetary Policy Report* is published four times a year, in March, June, September and December. It analyzes the main factors influencing inflation, which include the international environment, financial conditions, the outlook for aggregate demand, output, and employment, and recent price and cost developments. The last chapter summarizes the results of this analysis in terms of the prospects and risks affecting inflation and economic growth over the next eight quarters. A number of boxes are included to provide more detail on issues that are relevant for evaluating inflation and monetary policy.

This *Report* was approved at the Board's session of 14 December 2011 for presentation before the Senate's Finance Committee on 20 December 2011.

**The Board**

# Summary

During the past few months, economic and financial news have been dominated by developments abroad. The Eurozone crisis has propagated and deepened with the growing distrust in the countries' fiscal, banking, and economic situation. This has reflected in high volatility in world markets, increased risk and liquidity spreads, reduced prices of financial assets and commodities, and a deteriorated outlook for world growth. In Chile, the effects of these events have been bounded. Economic activity has evolved somewhat below projections, while domestic demand is still strong, with inflation still within the tolerance range. Financial market conditions are somewhat more constrained, reflecting the situation in global markets, which is also mirrored in other emerging economies. The Board has kept the monetary policy interest rate at 5.25% since last September. However, the worsened external scenario will likely have consequences on growth and inflation in Chile, as well as for the orientation of monetary policy.

Concerns about the Eurozone have escalated, significantly increasing public funding costs in systemically-important economies such as Italy and Spain and, to a lesser extent, France, Germany and other countries in the region. The problem has evolved into a vicious circle: greater uncertainty raises the governments' financing costs, which jeopardizes sovereign debt sustainability, raising doubts about the situation of banks—the largest holders of that debt—, tightening credit and liquidity conditions, hurting growth and eroding tax revenues. The lack of an exchange rate adjustment inside the Eurozone only aggravates the problem. Hence, the measures required to turn the situation around are ever more costly and more difficult to implement.

In the U.S., recent output indicators have been slightly better than expected. Still, this economy is forecast to go through a long period of slow growth, but without falling into a new recession. However, the political difficulties to agree on a gradual fiscal adjustment program have increased uncertainty regarding the U.S. economy. In the short term, there is the risk of a sharp fiscal adjustment, while in the medium term the risk is that the adjustment proves insufficient to drive the debt to a sustainable trajectory.

This combination of facts has triggered an increase in uncertainty at the global level, increasing risk and liquidity spreads, significant reductions in

International baseline scenario assumptions

| | 2009 | 2010 | 2011 (f) | 2012 (f) | 2013 (f) |
|---|---|---|---|---|---|
| | | | (annual change) | | |
| Terms of trade | 4.6 | 23.8 | -2.9 | -6.7 | -3.5 |
| Trading partners' GDP (*) | -0.4 | 6.1 | 4.2 | 3.8 | 4.2 |
| World GDP at PPP (*) | -0.7 | 5.0 | 3.8 | 3.5 | 4.1 |
| World GDP at market exchage rates (*) | -2.3 | 3.9 | 2.8 | 2.7 | 3.2 |
| External prices (in US$) | -6.2 | 5.8 | 9.8 | 1.3 | 2.1 |
| | | | (levels) | | |
| LME copper price (US¢/lb) | 234 | 342 | 401 | 350 | 340 |
| WTI oil price (US$/barrel) | 62 | 79 | 95 | 100 | 96 |
| Gasoline parity price (US$/m³) (*) | 471 | 598 | 804 | 784 | 748 |
| Libor US$ (nominal, 90 days) | 0.7 | 0.3 | 0.3 | 0.3 | 0.3 |

(*) For definition, see glossary.
(f) Forecast.

Source: Central Bank of Chile.

Economic growth and current account

| | 2009 | 2010 | 2011 (f) | 2012 (f) |
|---|---|---|---|---|
| | | (annual change, percent) | | |
| GDP | -1.7 | 5.2 | 6.2 | 3.75-4.75 |
| National income | -1.9 | 15.7 | 6.5 | 2.5 |
| Domestic demand | -5.9 | 16.4 | 9.5 | 3.7 |
| Domestic demand (w/o change in inventories) | -2.9 | 11.5 | 10.2 | 4.8 |
| Gross fixed capital formation | -15.9 | 18.8 | 16.9 | 5.8 |
| Total consumption | 1.9 | 9.3 | 8.1 | 4.5 |
| Goods and services exports | -6.4 | 1.9 | 7.4 | 3.7 |
| Goods and services imports | -14.6 | 29.5 | 14.3 | 3.0 |
| Current account (% of GDP) | 1.6 | 1.9 | -1.5 | -3.3 |
| | | (US$ million) | | |
| Current account | 2,570 | 3,802 | -3,700 | -7,700 |
| Trade balance | 14,117 | 15,855 | 10,400 | 4,800 |
| Exports | 54,004 | 71,028 | 80,900 | 78,800 |
| Imports | -39,888 | -55,174 | -70,500 | -74,000 |
| Services | -1,444 | -1,019 | -900 | -400 |
| Rent | -11,666 | -15,424 | -15,400 | -13,900 |
| Current transfers | 1,563 | 4,390 | 2,200 | 1,800 |

(f) Forecast.

Source: Central Bank of Chile.

financial asset prices and an appreciation of the dollar in world markets, also vis-a-vis the Chilean peso. With high volatility, at the statistical cutoff date for this *Monetary Policy Report*, the peso/dollar parity is 10% above that of the previous *Report*. The real exchange rate has also risen in recent months, to figures within the range believed to be consistent with its long-term fundamentals.

So far, the transmission of international developments to the emerging world has proceeded through the financial channel—via increased credit spreads and net capital outflows—, lower commodity prices—especially metals and agricultural products— and reduced manufacturing exports. For the time being, the signs of economic slowdown in the emerging economies are moderate and consistent with September forecasts. Some economies show falling manufacturing output and confidence indicators have deteriorated. Worth noting is the deceleration in Brazil and, to a lesser extent, China. Considering the prospects of global slowdown and its effects on the inflationary outlook, several central banks of developed and emerging economies have begun increasing the monetary stimulus.

In Chile, economic activity slowed during the third quarter, in line with expectations. In October, the monthly index of economic activity (Imacec) weakened further, but partial indicators suggest that the dynamism of domestic demand has not faded, partly driven by the labor market, which is still tight. Evidence from recent months shows a depletion of inventories in some sectors (e.g. retail and manufacturing), facing the increased external uncertainty. Surveys to enterprises back this hypothesis.

CPI inflation has been above 3% and is expected to end the year at 3.9% y-o-y. Core measures remain contained. The latest CPI data has been somewhat higher than foreseen in September, due to the prices of specific items such as beef, and the effect of the exchange rate depreciation.

The baseline scenario assumes that financial tensions will persist, because the Eurozone situation will take time to be resolved. This region will suffer a recession in 2012, and the other developed economies will undergo a lengthy period of slow growth. This will result in a reduced expansion in the rest of the world, leading global growth projections for 2012 and 2013 to be revised down from September, by 0.5 and 0.4 percentage point, respectively. The terms of trade will also be lower than in 2011. These projections assume average prices for copper of US$3.5 in 2012 and US$3.4 in 2013. The prices of oil and fuel will follow a downward path.

In the baseline scenario, the foreseen reduction in the external impulse will result in the Chilean economy growing less than forecast in September. The main reasons for this correction are the effects on domestic output of the weakened external demand, tighter international financial conditions and lower terms of trade. In 2012, GDP growth will be in the 3.75%-4.75% range, after having grown 6.2% this year. In this scenario, CPI inflation

Inflation

| | 2009 | 2010 | 2011 (f) | 2012 (f) | 2013 (f) |
|---|---|---|---|---|---|
| | (annual change, percent) | | | | |
| Average CPI inflation | 1.6 | 1.4 | 3.3 | 3.2 | 2.9 |
| December CPI inflation | -1.4 | 3.0 | 3.9 | 2.7 | 3.0 |
| CPI inflation in around 2 years (*) | | | | | 3.0 |
| Average CPIX inflation | 2.8 | 0,5 | 2.4 | 2.7 | 3.2 |
| December CPIX inflation | -1.8 | 2.5 | 2.9 | 2.6 | 3.3 |
| CPIX inflation in around 2 years (*) | | | | | 3.3 |
| Average CPIX1 inflation | 2.7 | -0.7 | 1.2 | 2.5 | 3.0 |
| December CPIX1 inflation | -1.1 | 0.1 | 2.1 | 2.7 | 3.1 |
| CPIX1 inflation in around 2 years (*) | | | | | 3.1 |

(f) Forecast.
(*) Inflation forecast at the fourth quarter of 2013.

Source: Central Bank of Chile.

will decline to nearly 3% in the first half of 2012, and will hover around that figure until the end of the projection horizon, now the fourth quarter of 2013. This forecast is based on the working assumption that the real exchange rate will stay fairly constant over the next two years, in line with the evaluation of its present level. As regards monetary policy, within a baseline scenario where the effects of external uncertainty over the Chilean economy are bounded, the working assumption that is used is that, in the short-term, the monetary policy interest rate will follow a path comparable to what can be derived from the various expectations surveys.

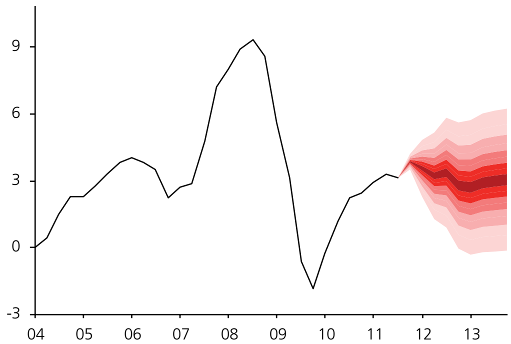
The baseline scenario reflects the events estimated to have the highest probabilities of occurrence with the information at hand at the *Report's* statistical cutoff date. The Board estimates that, on this occasion, this probability is less than usual. There is a wide range of risks that could significantly deviate the international economy's performance from the baseline scenario. The repercussions on Chile's macroeconomic outlook of different scenarios than the one described are varied and, in some cases, difficult to estimate. On this occasion, after assessing the probabilities of alternative conditions, the Board estimates that the balance of risks is downward biased for output, and unbiased for inflation.

The main risks have to do with the way the situation in the Eurozone will unfold, especially because of possible scenarios whose implications for the Chilean economy could be more negative than in the baseline scenario. In a worst-case scenario, there could be credit events in an economy of systemic size, or a disorderly fragmentation of the euro. Such a situation, while unlikely, could have very severe consequences on the world economy.

There are intermediate scenarios, such as, for instance, a deeper contraction of credit from Eurozone banks, which aside from aggravating the recession in that region, could further tighten lending conditions and liquidity in the rest of the world. It is also possible that growth in emerging economies is hurt more than expected, causing deeper or longer-lasting effects on world growth and commodity prices. Meanwhile, a weakening of the U.S. economy cannot be ruled out, as it depends on the trajectory that will ultimately be followed by fiscal policy.

Should any of these scenarios materialize, it would have an impact in Chile, the magnitude of which depending on how its effects would be passed through the different transmission channels, namely foreign trade, external credit and terms of trade. A slight tightening of international financial conditions could have limited effects, considering that Chile's aggregate solvency has been stable and above historic standards, and that the Central Bank has the necessary mechanisms in place to allow the normal functioning of internal markets. A foreign crisis entailing further terms of trade adjustments could have larger effects, through its impact on the current account deficit. Overall, a combination of tightened external

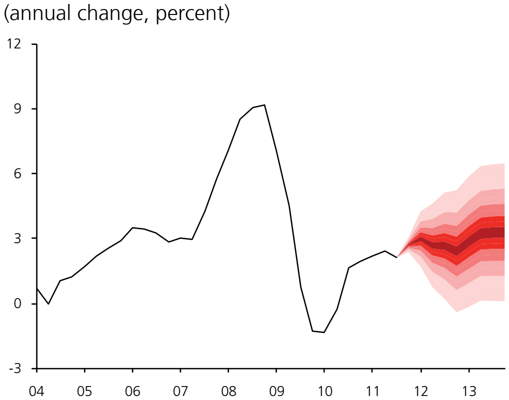
CPI inflation forecast (*)
(annual change, percent)




(*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% around the baseline scenario are included. These intervals summarize the risk on inflation as assessed by the Board. The baseline scenario uses as a working assumption that, in the short term, the MPR will follow a path comparable to what can be derived from the various expectations surveys.

Source: Central Bank of Chile.

CPIX inflation forecast (*)
(annual change, percent)




(*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% around the baseline scenario are included. These intervals summarize the risk on inflation as assessed by the Board. The baseline scenario uses as a working assumption that, in the short term, the MPR will follow a path comparable to what can be derived from the various expectations surveys.

Source: Central Bank of Chile.

financial conditions, a drop in the terms of trade, and slower growth of trading partners could have more negative effects in the evolution of Chile's economic growth over the projection horizon. However, its effects can be attenuated through monetary, fiscal, and financial policy actions.

Although the more negative scenarios dominate, there is always the possibility that the Eurozone authorities succeed in building a set of measures and reforms that restore market confidence. The European Union's announcements of early December point in that direction. Still, in such a setting, given the required fiscal adjustments, the developed economies will see a long period of slow growth and maintain their lax monetary policies for a long time. This would accentuate the dichotomy between growth in advanced versus emerging economies. In this context, a rebound in capital inflows to emerging economies may possibly complicate the application of macroeconomic policies.

Domestically, stronger effects of the higher external uncertainty cannot be ruled out. On one hand, in the past few weeks the global situation has generated somewhat more stringent conditions in the local financial market, a development that is shared with other emerging economies. An intensification of these frictions would significantly affect output, demand, and inflation. For the time being, no major changes are visible in lending rates or credit growth. On the other hand, it is also possible that the increased global uncertainty has a greater incidence on market confidence and consumption and investment decisions.

The more adverse external outlook considered in the baseline scenario will have consequences for growth and inflation in Chile, as well as for the orientation of monetary policy. A working assumption is that, in the short term, the monetary policy interest rate will follow a path comparable to what can be derived from the various expectations surveys. However, the true magnitude of the external deterioration and its impact in the Chilean economy is yet to be seen. Conditions in the Eurozone are severe and there are major risks at play in other developed economies. If some of the risk scenarios described materialize, the country can rely on its robust economic policy framework, which is capable of mitigating the negative effects of the situation abroad, as is confirmed by the experience of 2008-2009. The Board reiterates its commitment to conduct monetary policy in order for projected inflation to stand at 3% over the policy horizon.

# Monetary policy decisions in the past three months

## Background: September 2011´s *Monetary Policy Report*

News of the third quarter focused on the external scenario, with the materialization of some of the risks considered in the previous quarters. In particular, doubts had increased about the way the high debt—public and private—of some Eurozone countries would be resolved, plus the problems of public finance consolidation in the U.S. The financial tensions in Europe had hit the global financial markets hard, resulting in high volatility, increased risk premiums and marked uncertainty regarding the future performance of the global economy. Growth prospects in developed economies had weakened, particularly in the U.S. and the Eurozone. The world growth projection two years on had been revised down since the latest *Monetary Policy Report* (June). It was foreseen that the weakening of the developed world would affect economic activity in emerging economies, which, at any rate, would continue to outperform their developed counterparts. The dollar had appreciated against some currencies. Commodity prices posted sharp declines, with the exceptions of agricultural goods and gold. Because of this and some monetary policy adjustments implemented in several economies, concerns about a potential overheating in the emerging world and its implications on inflation had declined.

Domestically, the dynamism of output and demand had moderated further in the second quarter, although less than had been foreseen in June's *Report*. Consumption had slowed down from its previously strong expansion, but not as much as projected. Meanwhile, the labor market continued to give signs of being tight, and financial conditions had remained favorable. Facing a scenario of less external impulse, the Chilean economy was forecast to grow in the range of 6.25%–6.75% in 2011. The strongest impact of the modified external scenario would be apparent in 2012's GDP growth, estimated between 4.25% and 5.25%. Aside from the effects from abroad, the reduced growth in 2012 with respect to 2011 was justified by the necessary convergence to trend-consistent growth figures. The changed external scenario also triggered significant modifications in the domestic inflation outlook, especially for the short term. Private inflation expectations were revised down, pointing at a CPI inflation rate slightly above 3% for the end of the year. In the September *Report's* baseline scenario, the increase in y-o-y CPI inflation foreseen for end-of 2011 was less than had been assumed in June. This, mainly because of the effects of the drop in fuel prices. Going forward, inflation would stay near the target and would stand at 3% at the end of the projection horizon.

The risk balance was biased downward for output, and unbiased for inflation. The main risks had to do with the complex global economic outlook. A repetition or intensification of stressful episodes was a possibility, with the associated effects on the financial sectors and agents' confidence. This, because the true problems of public and private borrowing in developed economies had not yet been resolved. Another portion of the external risks originated in developed economies' growth and doubts about the strength of their recovery process. In this sense, a scenario where the postponement of monetary policy interest rate increases in developed economies and their lack of dynamism leading to a resurgence of capital inflows to emerging economies could not be ruled out, which could complicate macroeconomic policy making. Domestically, there was the risk of the economy growing above the trend, which could entail inflationary pressures incompatible with the inflation target.

Regarding monetary policy, the Board estimated that, in the most likely scenario, any future changes in the MPR would depend on the implications of domestic and external macroeconomic conditions on the inflation outlook. The baseline scenario of September's *Report* assumed that, in the short term, the MPR would be similar to its level at the time.

## Meetings between September and November

For the September meeting, news suggested that the slowdown of developed economies would persist over the second half of 2011 and into 2012. In addition, it could not be ruled out that financial turbulences would continue or aggravate, further deteriorating global confidence and world growth prospects. Domestically, no effects from external developments were apparent in domestic economic indicators. Figures for retailing, new home sales and capital imports were still facing a strong demand, especially from fixed investment. Other sectors (e.g., manufacturing) showed a sharper deceleration. However, local expectations indicators already reflected some moderation. As for inflation, the latest figures did not change significantly the forecasts outlined in the September *Report*. Accordingly, the information gathered in the last month led to propose as a relevant option to maintain the MPR unchanged at 5.25% annually, with no bias added. Internationally, the attention was still focused on the financial downturn, especially in Europe, which combined with incoming output figures that reinforced the prospects of global deceleration. Concerns about a potential default in Greece and its possible contagion over the rest of Europe had resulted in high volatility and strong risk aversion in financial markets. Domestically, output and demand figures continued to moderate while inflation performed as predicted. The labor market continued to be tight, which reflected in low unemployment rates and faster growth in nominal wages. Accordingly, keeping the MPR unchanged would permit to react flexibly to any sudden changes in the macroeconomic scenario. Finally, the Board decided to maintain the MPR at 5.25% annually.

In October, the macroeconomic scenario continued to be dominated by events in Europe, which meant high volatility in international financial markets. Along with this, output indicators in the developed world had worsened and commodity prices had fallen. At the same time, there were doubts regarding the dynamism of China and its implications on the Chinese economy's capacity to sustain high growth rates facing the developed world's persistent weakness. Domestically, incoming data suggested that output would deteriorate more than had been foreseen in September. In spite of this, labor market, import and credit indicators were still strong. Annual CPI inflation remained around the target, while core inflation posted a limited increase. Although the depreciation of the peso could have effects on inflation in the short term, these effects would not be as bad over the projection horizon. The information at hand led to propose as relevant options to keep the MPR unchanged or to cut it down 25bp to 5.0%. The option to cut 25bp off the MPR and introduce a negative bias into its future trajectory had the advantage that it started preventive actions facing the worsening of the external scenario, in anticipation of its likely effects on Chile's growth and inflation, considering monetary policy's normal lags. Such an option, however, could have communicated a more negative vision about the external scenario, producing the opposite effect than desired on the confidence of local consumers and firms. Thus, the option to maintain the MPR and communicate a more negative risk balance for the world economy and the national economy, bought some time to wait for the external situation to decant and manifest its effects on the local economy. Ultimately, the Board decided to maintain the MPR at 5.25% annually. It also stated that, in case of a more adverse global scenario with potential consequences for the inflation outlook, the Board would act with flexibility and would adjust the course of monetary policy.

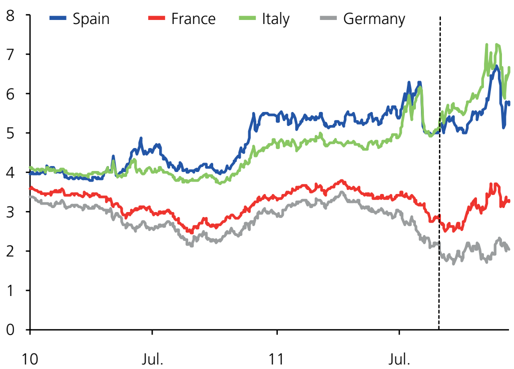
For the November meeting, the main news were still coming from abroad, especially the Eurozone. Despite agreements and political changes implemented in Europe, things were not improving, because of the weak economic situation and even more negative prospects. In addition, such tensions had spread to Italy, the country with the third largest public debt in the world. In the United States and Asia, effective data was somewhat better, showing that the U.S. slowdown was not over, but was not worse either, and Asia was still strong at the moment. This had helped sustain asset prices, with a currency appreciation in emerging countries, an increase in stock indices and a rebound in some commodity prices. In spite of everything, the main risk continued to be the European economy's contagion to the rest of the world, particularly to emerging economies, which were the ones sustaining world activity. Domestically, the latest inflation and output figures had been unexpectedly high. Domestic demand had also increased beyond predictions, although there were some signs of moderation, particularly in import indicators for consumer and capital goods. However, deviations were in normal levels, so they caused no significant change in the growth and inflation scenarios assumed in September's *Report*. Meanwhile, the labor market was still tight. Thus, data compiled since the previous meeting led to propose as the relevant options to maintain the MPR at 5.25% or reduce it by 25bp, to 5.0%. Reducing the MPR would permit to take preventive action facing the deteriorated external environment, in anticipation of its likely effects on growth and inflation in Chile. Still, despite that the probability of a more adverse global scenario had increased since the publication of the September *Report*, its potential effects on the Chilean economy were still bounded. On the other hand, the option of maintaining the MPR while reaffirming a more negative risk balance for both the local and the world economy, was consistent with the latest developments at home in terms of output and inflation, and bought some time to assess the intensity of the effects in the country of a potential worsening of the world economy. The Board ultimately decided to maintain the MPR at 5.25% annually.

# I. International scenario

**Figure I.1**

Cost of Eurozone's long-term debt (*)

(percent)



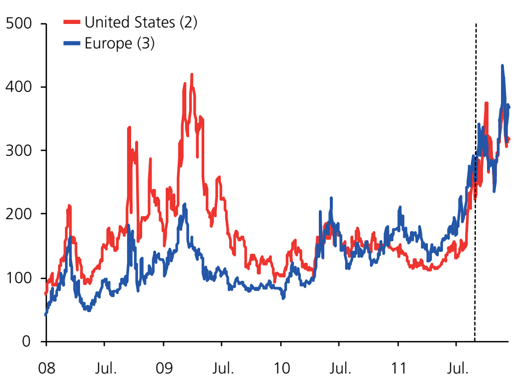

(*) Interest rates on generic 10-yr sovereign bonds. Dotted vertical line marks statistical cutoff of September *Report*.

Source: Bloomberg.

**Figure I.2**

Average banks' CDS (1)

(basis points)




(1) Simple average of 5-yr CDS premiums. See glossary for definition. Dotted vertical line marks statistical cutoff of September *Report*.

(2) The U.S. includes Citigroup, Goldman Sachs, Merrill Lynch, JP Morgan Chase and Bank of America.

(3) Europe includes Société Générale, Deutsche Bank, UBS AG, Santander, BBVA and UniCredit.

Source: Bloomberg.

This chapter analyzes the recent evolution of the world economy and the outlook for the next two years. It also describes the most likely external scenario, as well as the main risks.

## The economic conjuncture

The risks in the external scenario have increased significantly. The complex fiscal and financial situation in the Eurozone has worsened. The region's feeble economic growth has contributed to heightening tensions and raising doubts about fiscal solvency and the soundness of banks exposed to sovereign debt. This, in turn, has generated high volatility and greater risk aversion in the world markets.

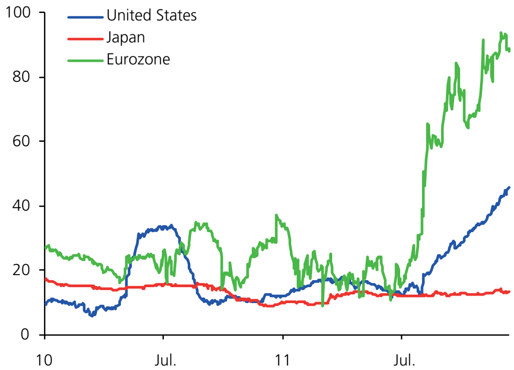
The worsening of the sovereign debt problem in the Eurozone caused the focus to shift from Greece to the fiscal sustainability of other, more systemically important countries such as Italy and Spain. The tension is even reaching countries that until a few months ago showed no signs of significant contagion. In this context of increasing uncertainty and growing doubts about the fiscal sustainability of the Eurozone, the sovereign spreads of most of the economies in the region have risen steadily, in some cases hitting historical peaks. Germany and France have also been affected by the higher cost of financing, although to a lesser degree (figure I.1). The situation is very complex in Spain, and especially in Italy, where low growth is combined with significant public financing needs.

The sovereign debt problem in the Eurozone has affected the banks' balance sheets, even in the United States. Uncertainty about the degree of exposure to this debt has led to deepening concerns for the financial stability of the Eurozone and the need to recapitalize the banking sector. This has been reflected in substantial increases in bank spreads, in both Europe and the United States (figure I.2). Corporate spreads have evolved similarly. Liquidity conditions have continued to tighten in the interbank markets, primarily in the Eurozone, limiting financing options (figure I.3). The main central banks have adopted various measures to increase the liquidity supply, including coordinated actions, but the problem persists. In addition, local credit conditions have tightened, both in the Eurozone and in other economies, directly affecting demand and worsening the growth outlook.

**Figure I.3**

Liquidity conditions (*)

(basis points)



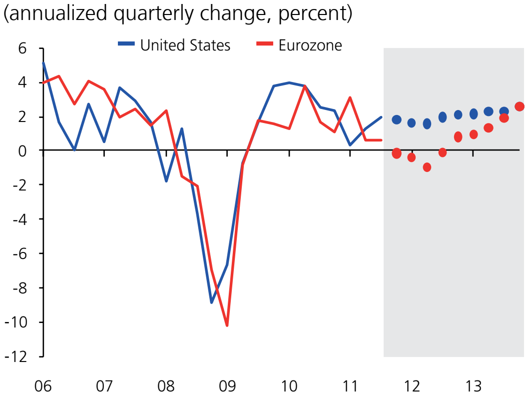

(*) Spread between Libo rate and overnight indexed swap (OIS), both at three months. For the Eurozone, spread between Euribo rate and respective OIS.

Source: Bloomberg.

**Figure I.4**

Developed economies' output (*)

(annualized quarterly change, percent)



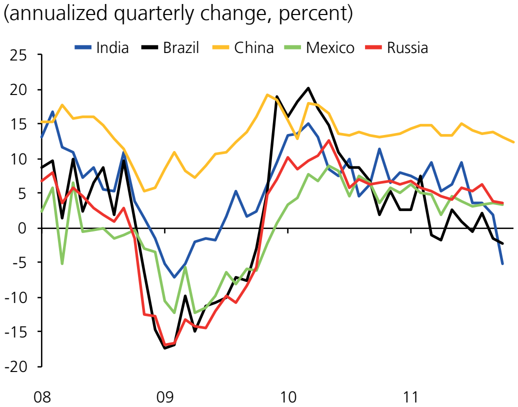

(*) Gray area, as from fourth quarter 2011, shows forecast.

Sources: Central Bank of Chile based on Bloomberg, International Monetary Fund and statistics institutes of respective countries.

**Figure I.5**

Manufacturing output in emerging economies (*)

(annualized quarterly change, percent)




(*) Data up to October 2011 for Brazil, India, Mexico and Russia. For China, data up to November 2011.

Source: Bloomberg.

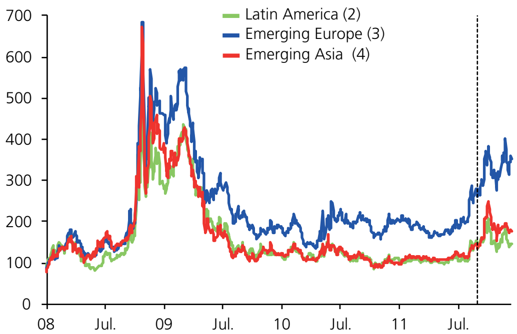
Data for the third quarter and other recent statistics show signs of a slow recovery in the developed world, and the outlook for activity indicates that these economies will follow a slow-growth path for prolonged period of time (figure I.4). Overall, consumption remains depressed, as a result of the fragile labor market and the high level of household debt. Business and consumer confidence indicators continue on a markedly downward trend that lies below expansion levels; reflecting a weak outlook for the developed world and the effects of greater global uncertainty. The scarce possibility of counteracting this weakness through countercyclical policies, due to the large fiscal deficits and the already low monetary policy rates, is another factor undermining growth prospects. In the Eurozone, records of activity, such as manufacturing output and purchasing managers' perspectives, have been pointing toward a recession scenario. In the United States, growth continues to be slow, despite the fact that the most recent real output and employment data and business confidence indicators have been somewhat better than expected. Moreover, the lack of a political consensus on the fiscal budget further increases uncertainty not only about growth, through its impact on demand, but also with regard to the financial markets, through its impact on the sustainability of the public debt in the medium term.

So far, the complex scenario in the developed world has had limited effects on emerging economies' activity. They continue to post higher growth rates than the developed countries, although their growth rate has eased off in line with forecasts in the September *Monetary Policy Report*. In particular, output growth in China has softened, but the rate is still high. Third-quarter GDP increased 9.1% in annual terms, which is lower than in the two previous quarters. Annual growth in manufacturing has held at around 13% in recent months. Other relevant data, such as purshasing managers' expectations, also point to a slowdown, settling below the expansion level recorded in November. This might obey to the lower demand from Europe, as well as lagged effects from tighter credit and monetary policies to control domestic inflationary pressures. Other emerging economies, especially in Asia, also show signs that output is slowing down and exports are declining. This is the case for India and South Korea. In Brazil, the economy has decelerated more sharply (figure I.5). The outlook for emerging economies is for the slump to continue into 2012, due to the impact of lower output in developed countries on world growth.

One way in which the tensions in the Eurozone have propagated to emerging economies is through the financial channel. Sovereign spreads have risen significantly, particularly in emerging Europe (figure I.6). The preference for safer assets has generated net outflows of capital, stocks and fixed-income instruments from emerging economies. The stock markets have fallen. The dollar has appreciated, mainly against emerging market currencies, albeit with a high volatility. The multilateral dollar fell around 5% relative to the statistical closing date of the September *Monetary Policy Report* (figure I.7).

**Figure I.6**

Sovereign risk premiums in emerging economies (1)
(basis points)

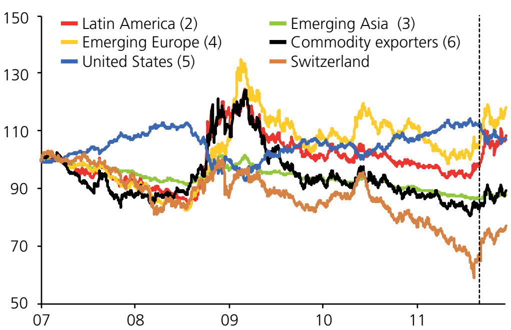



(1) Simple average of 5-yr CDS premiums. See glossary for definition. Dotted vertical line marks statistical cutoff of September *Report*.
(2) Includes Brazil, Chile, Colombia, Mexico and Peru.
(3) Includes Hungary, Poland, Russia and Turkey.
(4) Includes China, Indonesia and Thailand.

Source: Bloomberg.

**Figure I.7**

Currency parities (1)
(index, 01.Jan. 2007=100, local currency units per dollar)

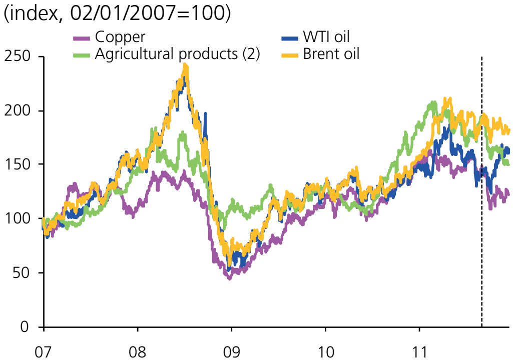



(1) PPP-weighted average for each region. An increase indicates depreciation. Dotted vertical line marks statistical cutoff of September *Report*.
(2) Includes Argentina, Brazil, Chile and Mexico.
(3) Includes China, Indonesia, Malaysia, South Korea and Thailand.
(4) Includes Czech Republic, Hungary, Poland and Russia.
(5) Dollar against a basket of currencies from the main U.S. trading partners. An increase indicates depreciation of the dollar.
(6) Includes Australia, Canada and New Zealand.

Sources: Bloomberg and International Monetary Fund.

**Figure I.8**

Commodity prices (1)
(index, 02/01/2007=100)




(1) Dotted vertical line marks statistical cutoff of September *Report*.
(2) Goldman Sachs aggregate index.

Source: Bloomberg.

Commodity markets have also been affected by high volatility and lower world demand. Relative to September, commodity prices continued along a downward trend, which affected the majority of products (figure I.8). As of the statistical close of this *Report*, copper was trading at around US$3.50 per pound, a drop of almost 14% since September. Food prices also decreased across the board, especially for corn, wheat and rice, which fell between 16% and 23% since September. The price of gasoline declined nearly 12% in the same period, while the Brent oil price is somewhat lower than in September. WTI oil is an exception to this trend, due to specific supply factors in the United States. At the close of this *Report*, the WTI price was around US$100 per barrel, which represents an increase of just over 16% relative to September and a narrowing of the gap relative to the Brent oil price.

## Outlook

The confirmation of weak growth in the developed economies and the sharpening of financial and fiscal tensions in the Eurozone have deteriorated the world growth prospects. Relative to September, the baseline scenario of the current *Monetary Policy Report* has adjusted the world growth forecast downward by 0.5 pp for 2012 and 0.4 pp for 2013. The biggest adjustments are for the developed economies. In particular, the Eurozone is expected to be hit by a recession in the coming year, and the growth forecast for this economy has been adjusted downward by 1.3 and 1.1 pp for 2012 and 2013, respectively (table I.1). In the United States and Japan, growth is expected to be slow for a prolonged period of time. As long as the financial turbulence does not worsen significantly, the recession in the Eurozone is expected to have a limited direct impact on world growth, since its importance for world trade outside the Eurozone is relatively low. In the emerging economies, growth will be somewhat lower than forecast in September, but they are still expected to outperform their developed counterparts. China will slow in the 2012–13 period, with projected GDP growth of 8.2% in 2012 and 8.5% in 2013. These figures, while high, represent the lowest growth for the country since 2001.

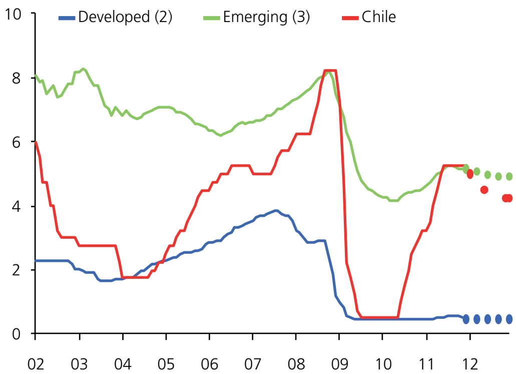
The outlook for lower world output has also affected commodity price forecasts, which are on a downward trend. The copper price is forecast at US$3.50 per pound for 2012 and US$3.40 for 2013 (versus US$3.70 and 3.50 in September). The WTI oil price, however, is expected to average US$100 per barrel in 2012 and US$96 in 2013 (versus US$89 and 91 in September), based on average futures contracts in the last ten business days before the close of this *Report*. This upward adjustment in the price forecast is a reflection of higher real data. Other fuel prices have been adjusted downward.

The external risks are significant because of the many directions the possible scenarios could take and their implications for world markets and output. The fiscal and financial problems in the Eurozone and the United States are far from being resolved. It is difficult to estimate the effects on the world

### Figure I.9

Actual and expected monetary policy rate (1)

(percent)




(1) Simple average of reference rates of each group of countries. For the regions, dots indicate the median of the Bloomberg analysts surveys for the expected MPR at December 2011 and the end of each quarter of 2012. For Chile, December EES is used for the expected MPR. The baseline scenario of this *Report* uses as a working assumption that the MPR will follow a path that, in the short term, is comparable to what can be inferred from various expectations surveys.
(2) Includes the United States., Eurozone, Japan and the United Kingdom.
(3) Includes Brazil, China, Colombia, Czech Republic., Hungary, Mexico, Peru, Poland, South Africa and South Korea.

Sources: Central Bank of Chile, central banks of respective countries, Bloomberg and International Monetary Fund.

### Table I.1

World growth (*)

(annualized quarterly change, percent)

| | Ave. 00-07 | 2010 (e) | 2011 (f) | 2012 (f) | 2013 (f) |
|---|---|---|---|---|---|
| World at PPP | 4.2 | 5.0 | 3.8 | 3.5 | 4.1 |
| World at MER | 3.2 | 3.9 | 2.8 | 2.7 | 3.2 |
| United States | 2.6 | 3.0 | 1.7 | 1.8 | 2.2 |
| Eurozone | 2.2 | 1.9 | 1.6 | -0.1 | 1.0 |
| Japan | 1.7 | 4.4 | -0.7 | 2.0 | 1.6 |
| China | 10.5 | 10.4 | 9.1 | 8.2 | 8.5 |
| Rest of Asia | 5.1 | 7.8 | 4.5 | 4.4 | 4.8 |
| Latin America (excl. Chile) | 3.5 | 6.3 | 4.2 | 3.6 | 4.0 |
| Commodity exporters | 3.1 | 2.9 | 2.0 | 2.5 | 2.8 |
| Trading partners | 3.6 | 6.1 | 4.2 | 3.8 | 4.2 |

(e) Estimate.
(f) Forecast.
(*) See glossary for definition.

Sources: Central Bank of Chile, based on a sample of investment banks, Consensus Forecasts, International Monetary Fund and statistics offices for each country.

### Table I.2

World inflation (*)

(average annual change in local currency, percent)

| | Ave. 2000-07 | 2010 | 2011 (f) | 2012 (f) | 2013 (f) |
|---|---|---|---|---|---|
| United States | 2.8 | 1.6 | 3.0 | 2.1 | 2.0 |
| Eurozone | 2.2 | 1.6 | 2.6 | 1.8 | 1.5 |
| Japan | -0.3 | -0.7 | 0.1 | 0.2 | 0.1 |
| China | 1.7 | 3.3 | 5.3 | 4.1 | 3.5 |
| Australia | 3.2 | 2.8 | 3.4 | 2.9 | 3.1 |
| New Zealand | 2.6 | 2.3 | 4.3 | 2.4 | 2.5 |
| Brazil | 7.3 | 5.0 | 6.5 | 5.5 | 4.4 |
| Mexico | 5.2 | 4.2 | 3.3 | 3.6 | 3.5 |
| EPI (*) | 4.6 | 5.8 | 9.8 | 1.3 | 2.1 |
| LPI (*) | 5.2 | 4.8 | 6.3 | 3.1 | 3.2 |

(*) See glossary for definition.
(f) Forecast.

Sources: Central Bank of Chile based on a sample of investment banks, Bloomberg, Consensus Forecasts and International Monetary Fund.

economy of extreme scenarios, such as a credit event in a systemically important economy or a chaotic breakup of the euro. A scenario like this is unlikely, but the costs would be high. Less extreme scenarios, such as a sharper credit contraction in the Eurozone as the banks seek to improve their capital ratios, could worsen the situation in the Eurozone economies and generate a large regional and global credit shock. In the United States, the lack of political agreement on the fiscal budget in the short and medium terms constitutes another risk factor. In the short term, there could be a sharper fiscal adjustment than forecast in this *Report*, with a negative impact on the growth trend. In the medium term, the lack of a plan to ensure the sustainability of the public debt could affect investors' confidence, with global repercussions. Another possibility is that output would be affected more than expected in the emerging economies. Another possible scenario involves forging agreements on fiscal and financial stability, which would restore market confidence. The announcements by the European Union in early December point in this direction. This type of scenario would imply low growth and strongly expansionary monetary policy in the developed world for a long period, which would accentuate the growth dichotomy with the emerging economies.

## Inflation and monetary policy

Concern for inflation has continued to abate at the global level. In the developed world, effective inflation records are still high due to the high fuel prices. In the emerging economies, inflation has eased, mainly in Europe and emerging Asia. Expectations point toward a gradual reduction in inflation in most economies, as a result of lower world growth (table I.2). The baseline scenario assumes that in 2012 the external prices relevant to the Chilean economy, measured in dollars (EPI), will be 1.6 percentage points lower than estimated in September. This reflects lower world inflation expectations and a more appreciated dollar worldwide, relative to forecasts in the September *Report*.

Faced with this scenario, central banks have changed the direction of their monetary policy to incorporate a more expansive orientation, implementing a downward bias or rate cuts (figure I.9). In the developed economies, some central banks, such as Australia and the Eurozone, have reduced the monetary policy rate, while others have applied unconventional measures to implement a more expansionary monetary policy and stimulate demand. The purchase of long-term government bonds by the U.S. Federal Reserve and the intensification of the asset purchase program by the Bank of England are examples of such measures. Some emerging economies, such as Brazil, Israel and Thailand, have been relaxing monetary policy. In China, the central bank reduced the reserve requirement rate in response to evidence of easing inflationary pressures, slower economic growth and a decline in exports to Europe. Exceptions include India and Colombia, which have raised their monetary policy rates in order to counteract domestic inflationary pressures, but their future monetary policy decisions are conditioned on developments in the external scenario.

# Box V.1: **The resilience of the emerging economies in the face of crisis scenarios**

In the past few months, the crisis in the Eurozone has deepened and propagated, triggering a widespread increase in global uncertainty, hikes in risk and liquidity spreads, significant reductions in financial asset and commodity prices and a generalized deterioration in world growth forecasts. The risks are substantial, and the evolution of the international economy could deviate significantly from the baseline scenario assumed in this *Monetary Policy Report*, in particular considering the effects of the European situation on the emerging economies. This box assesses the vulnerability factors affecting the G20 emerging economies and their capacity for implementing fiscal and monetary policies to counteract a deterioration in the international scenario. It also compares the current situation with the position of these economies leading up to the world financial crisis of 2008–09.

Authors Pistelli and Siravegna[1]/ carry out a vulnerability analysis considering some relevant factors: the external and domestic financial situation and the potential for the fiscal and monetary policy response to stimulate the economy. For the former, they incorporate variables such as the current account deficit, the net international reserve level, the real exchange rate and the short-term external debt. For the latter, they consider credit growth, stock market returns, asset prices and the non performing loans of banks. The fiscal position is made up of the general government debt and deficit, while monetary policy includes the real monetary policy rate (MPR), annual inflation and the output gap. To aggregate and compare the variables, they construct indices based on the standard deviation of the variables from their historical average (figure I.10). The further (closer) the value is to the center, the greater (lesser) the difference with its historical average, indicating that the economy is more (less) vulnerable and thus has less (more) political space for addressing adverse scenarios.

The results show that, for emerging economies as a group, there is space to apply countercyclical fiscal and monetary policies, although to a lesser degree than in 2007. With regard to domestic financing, the situation is better now. In contrast, the current situation is less favorable for external financing than before the 2008–09 global financial crisis. This reflects the widening of the current account deficit in recent years, supported by dynamic domestic expenditures and the appreciation of the real exchange rate (RER).

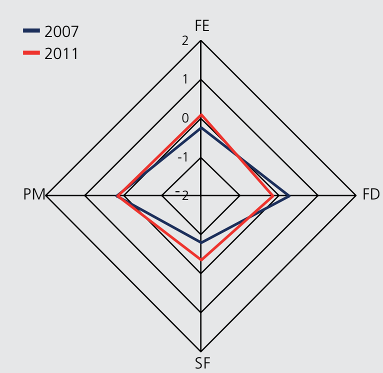
With regard to monetary policy, Latin America and emerging Europe have a better response capacity today than in 2008–09. The scenario is less favorable for emerging Asia, where the inflation trend and the real MPR level limit monetary policy actions.

**Figure I.10**

Vulnerability factors (*)

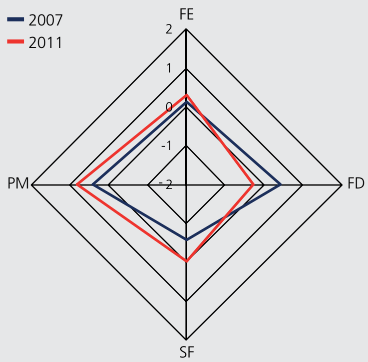
(index)

(a) Latin America

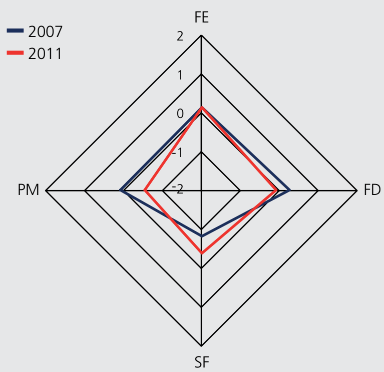



[1]/ Pistelli and Siravegna (2011).

(b) Emerging Asia




(c) Emerging Europe




(*) FE stands for external financial situation. FD is domestic financial situation, SF is the fiscal situation, and PM is the monetary policy situation.

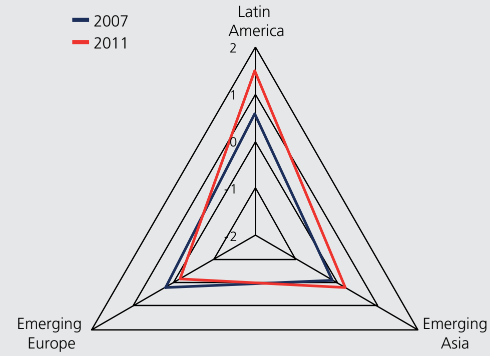
Source: Pistelli and Siravegna (2011).

In addition to the economic policy framework and the better initial position, another factor that allowed the emerging economies to recover quickly from the 2009 world recession was the high terms of trade. In fact, in the sample of countries analyzed, the terms of trade are generally higher today than in 2007 (figure I.11). The drop in commodity prices observed in the past few months, which is expected to persist over the coming quarters, is one of the channels through which the Eurozone crisis has passed through to the emerging economies.

**Figure I.11**

Terms of trade

(index)




Source: Pistelli and Siravegna (2011).

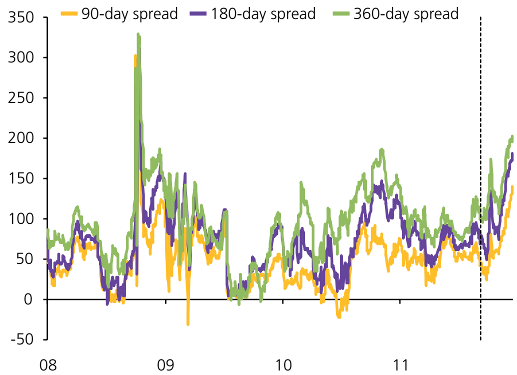
In the case of Chile, some of the vulnerability indicators are less favorable than in 2007. One is the current account deficit, in both its current level and the forecast for 2012. Nevertheless, the aggregate solvency of the economy has been stable in recent years, at historically high levels, and the government, the Central Bank, and the institutional investors are all net creditors. Moreover, there is currently more space to apply monetary policy to counteract a deterioration in the external situation than there was in 2008–09. Inflation is lower and within the target range, and the real MPR is higher. The country has made progress in recent decades in terms of constructing a robust economic policy framework that has already shown its capacity to deal with difficult scenarios. The experience of late 2008 and early 2009 confirms that monetary policy can react decisively and vigorously to adverse scenarios and thus mitigate the costs for the domestic economy.

# II. Financial markets

**Figure II.1**

Liquidity pressures in CLP market (1) (2)

(basis points)




(1) Constructed using the average spread prime-swap. See glossary for definition.

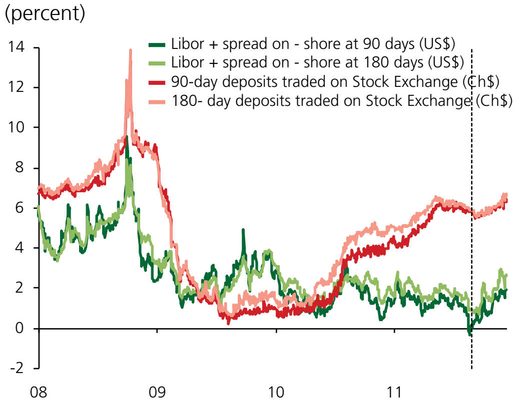
(2) Dotted vertical line marks statistical cutoff of September *Report*.

Source: Central Bank of Chile.

**Figure II.2**

Dollar and peso rates in local market (*)

(percent)




(*) Dotted vertical line marks statistical cutoff of September *Report*.

Source: Central Bank of Chile.

This chapter reviews the recent evolution of the main financial market variables from a monetary policy perspective.

## Financial conditions

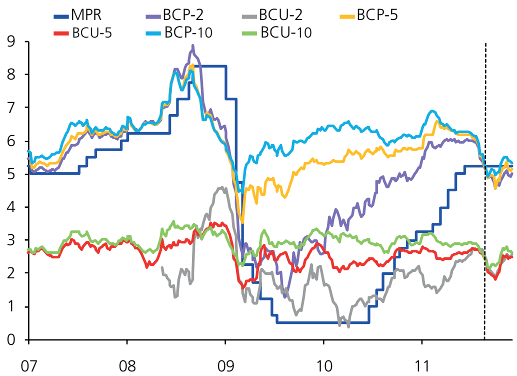
The external scenario has deteriorated since September. The worsening of the fiscal and financial problems in the Eurozone has translated into greater risk aversion, increased volatility in the international financial markets and tighter liquidity conditions, especially in the Eurozone. In Chile, the most recent period has been characterized by somewhat tighter conditions in the local financial market, as a result of the global situation. As in other emerging economies, the stress in the Eurozone has caused higher external financing costs and financial market fluctuations.

In the interbank market, the volume traded is not very different than a few months ago. The peso money market has been more volatile in response to the tighter conditions. With regard to liquidity in this market, the prime-swap spread has fluctuated and is currently higher than in the last *Monetary Policy Report* (figure II.1). The rates on peso time deposits traded in the stock exchange increased at the margin. Similarly, nominal TAB rates (the *tasa activa bancaria*, calculated by the SBIF), which reflect banks' funding costs, have had an upward trend. The dollar money market has also fluctuated. Interest rates on 90- and 360-day dollar loans rose relative to September, due to the increase in the onshore rate spread in line with the higher cost of dollar financing. Nevertheles, in absolute levels, these rates are similar to the beginning of the year (figure II.2).

The effects of the external scenario can also be seen in the interest rate fluctuations of peso- and UF-denominated Central Bank and Treasury instruments. However, they are currently near their September levels. Thus, since the statistical cutoff date of the last *Monetary Policy Report*, the interest rates on five- and ten-year UF-denominated Central Bank bonds (BCU) rose around 5 and 8 basis points, respectively, while the two-year BCU rate is about the same. For peso-denominated bonds, the interest rates on two- and five-year BCP decreased 20 and 11 basis points, respectively, while the ten-year BCP increased 8 basis points (figure II.3).

The heightened perception of global risk has also been reflected in larger spread on corporate and bank bonds in the local market. Domestic bond rates

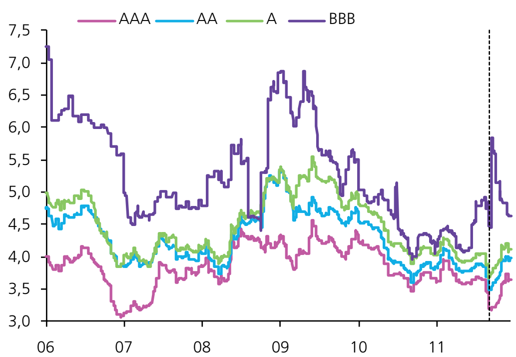
### Figure II.3
MPR and interest rates of Central Bank of Chile securities (*)
(weekly average, percent)




(*) Dotted vertical line marks statistical cutoff of September *Report*.

Source: Central Bank of Chile.

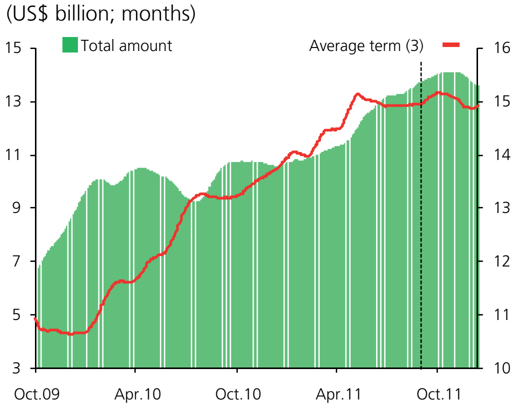
### Figure II.4
Interest rates on private sector long-term bonds by risk rating (1) (2)
(percent)




(1) Dotted vertical line marks statistical cutoff of September *Report*.
(2) Considers interest rates on bonds of enterprises and banks with more than 9 years' duration.

Sources: Central Bank of Chile and LVA Indices.

### Figure II.5
Total amount and term of external credits (1) (2)
(US$ billion; months)




(1) Excludes lending between related banks.
(2) Dotted vertical line marks statistical cutoff of September *Report*.
(3) Average monthly weighted average, 20-day moving average.

Source: Central Bank of Chile.

have risen since September, regardless of their currency of denomination, despite the fact that the rates on state bonds at comparable maturities are at similar levels. BBB bond rates increased sharply in September, but they are currently around the level recorded at the close of the last *Report* and are even below the average for the 2006–11 period. The rates on bonds with a better risk rating are around the average of that period (figure II.4).

With regard to external financing, Chile's five- and ten-year sovereign spread, measured through credit default swaps (CDS), has also fluctuated, increasing around 20 basis points since the closing date of the last *Report*. Thus, the five-year CDS has risen around 65 basis points from its low in the first part of the year. This trend is found in all the emerging economies, although the increase was larger in Asia and even more so in Europe. Spreads have also increased on loans contracted abroad by Chilean banks, and loan maturities and volumes have decreased in recent weeks (figure II.5). In any case, Chilean banks do not depend strongly on external financing, and their liquidity and solvency ratios remain high and stable[1]/.

Local bank credit standards have been stable since the last quarter. In the most important segments, the interest rates charged by banks on different public operations have not varied substantially in the last few months. As in other emerging economies, the Bank Lending Survey for the third quarter revealed somewhat tighter loan approval conditions in most segments relative to the previous quarter (figure II.6). The exception was consumer loans, which recorded looser conditions in line with dynamic domestic demand in the third quarter. The latest casuistic data suggest that paperwork required for loan approval has increased in some regions and institutions. At any rate, the Bank Lending Survey points to a strengthening of credit demand. According to preliminary data for November, the stock of bank loans has not changed much since the last *Report*. Total loans continued to grow month-on-month in November (based on preliminary data), but at a slower pace. The annual growth rate of consumer loans and home mortgages was essentially unchanged, at 18% and 12%, respectively (versus 17% and 13% in July). Commercial loans grew 14% in annual terms (versus 11% in July) (figure II.7).

In terms of the monetary aggregates, M1 (primarily non-interest-bearing instruments) recorded a higher annual growth rate in November vis-à-vis the closing date of the last *Report*, at 8.5% annually (versus 6.5% in July). In monthly terms, it was essentially unchanged. M2 and M3 continued to post rising annual growth rates: as of November, the annual growth rates of both M2 and M3 were over 20% (versus 12% and 16% in July, respectively).

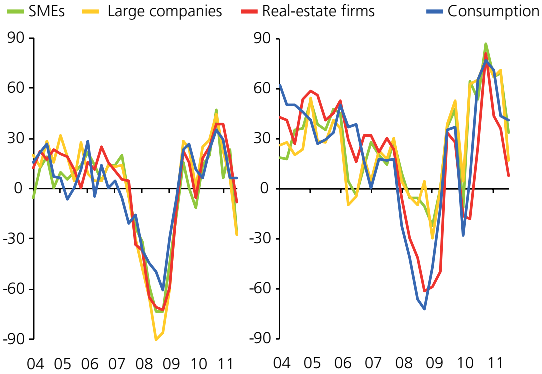
The stock markets have received a stronger impact from external developments. Stock exchanges around the world, including Chile's, have been highly volatile since September, and the correlations across markets has

[1]/ *Financial Stability Report,* second half of 2011.

### Figure II.6

Bank lending survey (*)

(net responses, percent)



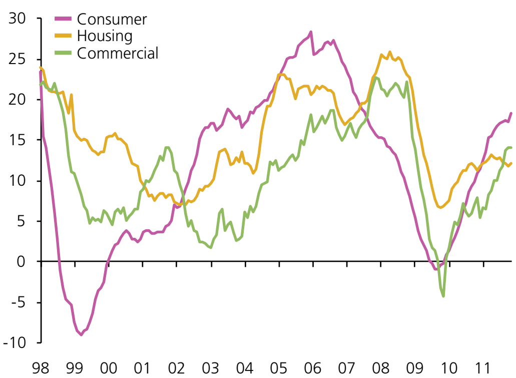

(*) Average responses per quarter. Negative (positive) values indicate tighter (looser) conditions than in previous quarter.

Source: Central Bank of Chile.

### Figure II.7

Nominal loans per type of credit (*)

(annual change, percent)



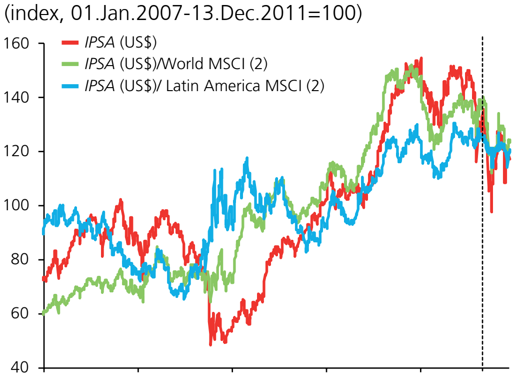

(*) Provisional data for November 2011.

Sources: Central Bank of Chile and Superintendence of Banks and Financial Institutions.

### Figure II.8

Stock markets (1)

(index, 01.Jan.2007-13.Dec.2011=100)




(1) Dotted vertical line marks statistical cutoff of September *Report*.
(2) Morgan Stanley Capital International stock indices by region.

Sources: Central Bank of Chile and Bloomberg.

increased. The majority recorded their lowest levels of the year in October. The local stock market, measured through the *IPSA* index, was 10% below its September level in dollars as of the closing date of this *Report*; the level is only slightly lower in local currency (figure II.8). Although this movement was somewhat greater than the average for emerging stock markets (as measured through the MSCI in dollars and in pesos), the performance of the *IPSA* is not far off the world average when viewed from a longer horizon. In the year to date, the *IPSA* has fallen 15% in pesos and 23% in dollars. For a sample of 15 emerging countries, stock market losses range from 5% to 40% in both dollars and local currency (as measured through the MSCI indices). In addition, emerging markets have generally recorded larger losses than the developed countries. This has contributed to net outflows of capital, stocks and fixed-income instruments from the emerging economies, due to the increased preference for safer assets at the world level.

The foreign exchange market has also been more volatile, echoing the external situation. After appreciating to nearly $460 to the dollar in early September, it reached $533 to the dollar in October. As of the closing date of this *Report*, the currency was trading at around $515 to the dollar, a depreciation of 10% relative to the closing date of the September *Report*. The depreciation of the peso reflects, in part, gains by the U.S. dollar at the international level, due to greater risk aversion, and the drop in the copper price. In multilateral terms, the peso has depreciated less, by 6%; the figure becomes 7% when only the five main trading partners are considered and 5% when the U.S. dollar is excluded (figure II.9). The peso's loss in value is similar to the average of other commodity exporters and emerging economies, especially when current values are compared with the lowest exchange rates for local currencies against the U.S. dollar in 2011 (table II.1).

### Table II.1

Parities with respect to U.S. dollar (1)

(percentage change)

| Country | Spot with respect to 2011 minimum | Sept.2011 *Report* - Dec.2011 *Report* (2) | Jun.2011 *Report* - Sept.2011 *Report* (2) | Mar.2011 *Report* - Jun.2011 *Report* (2) |
|---|---|---|---|---|
| Australia | 10.0 | 5.0 | 0.9 | -5.6 |
| Canada | 9.6 | 4.4 | 0.7 | -0.6 |
| Brazil | 21.1 | 13.5 | 1.2 | -4.9 |
| **Chile** | **22.8** | **10.1** | **-0.1** | **-3.1** |
| Colombia | 10.4 | 8.2 | 0.4 | -5.2 |
| Eurozone | 13.8 | 7.6 | 0.7 | -2.8 |
| Hungary | 31.4 | 21.4 | 3.3 | -4.7 |
| Indonesia | 7.6 | 5.8 | 0.3 | -2.5 |
| Israel | 13.0 | 4.7 | 5.8 | -4.4 |
| Malaysia | 8.3 | 6.1 | -1.4 | -0.7 |
| Mexico | 20.6 | 11.1 | 5.4 | -2.1 |
| New Zealand | 16.2 | 9.7 | -2.4 | -9.8 |
| Peru | 0.2 | -1.1 | -1.4 | -0.4 |
| Poland | 32.5 | 16.2 | 6.0 | -5.0 |
| United Kingdom | 7.9 | 4.6 | 0.1 | -1.3 |
| Czech Republic | 21.0 | 13.3 | 0.5 | -3.6 |
| South Korea | 9.9 | 5.8 | -0.3 | -3.9 |
| South Africa | 27.3 | 15.4 | 5.8 | -2.8 |
| Sweden | 16.1 | 7.5 | 1.7 | -1.9 |
| Switzerland | 31.2 | 15.2 | -4.7 | -7.6 |
| Thailand | 5.1 | 3.6 | -1.4 | 0.2 |
| Turkey | 24.5 | 5.1 | 10.9 | 0.7 |

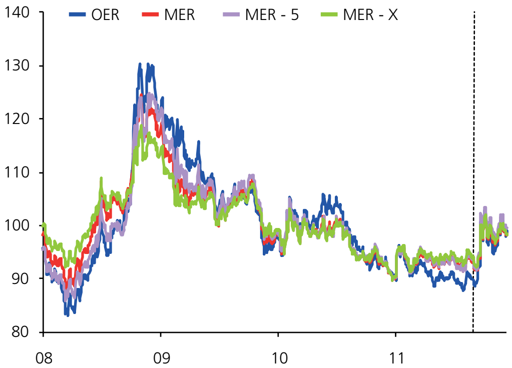
(1) Positive (negative) sign indicates a depreciation (appreciation) of the currency against the U.S. dollar.
(2) Calculated using average of last ten days before the statistical cutoff of indicated *Report*.

Sources: Central Bank of Chile and Bloomberg.

**Figure II.9**

Nominal exchange rate (1) (2)

(index, 02.Jan.2008-13.Dec.2011=100)



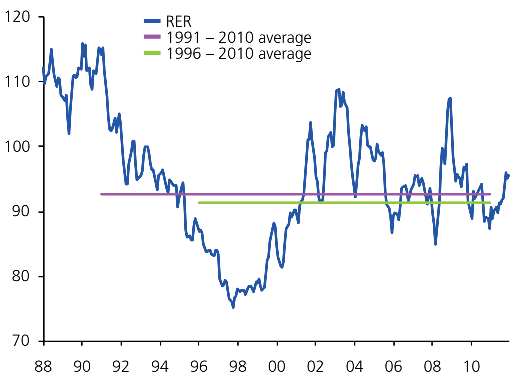

(1) See glossary for definition.
(2) Dotted vertical line marks statistical cutoff of September *Report*.

Source: Central Bank of Chile.

**Figure II.10**

Real exchange rate (*)

(index, 1986=100)



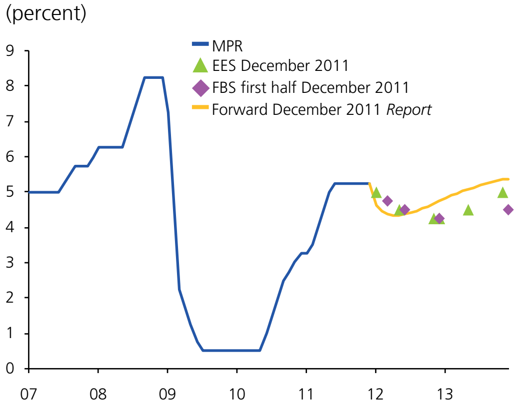

(*) Provisional data for November and December. December figure covers up to 13 December 2011.

Source: Central Bank of Chile.

**Figure II.11**

MPR and expectations

(percent)




Source: Central Bank of Chile.

In line with the trend for the nominal exchange rate, the real exchange rate (RER) increased, such that the value recorded in December was over 4.0% higher than in August. Given the nominal exchange rate and the currency parities in the ten business days prior to the close of this *Report*, the RER is currently 95.7 (where 1986 = 100) (figure II.10). This figure is within the range consistent with its long-term fundamentals. The working assumption used in the baseline scenario of this *Report* is that the RER will remain around its current level.

## Monetary policy

As described earlier, the most important event of the latest months is the deterioration in the external scenario. Domestically, output was lower than forecast, while domestic demand continued to be dynamic. Inflation remains within the target range. In this context, the Board has held the monetary policy rate (MPR) at 5.25% since September. However, in Chile the more adverse external scenario will probably have an impact on growth and inflation, as well as on the orientation of monetary policy.

In the face of the worsened international environment, the different measures of market expectations have been aligning around a scenario of MPR cuts in the short term (figure II.11). There is far less consensus in the surveys in terms of expectations for the medium term. According to these measures, the MPR will be in a range of 4.12% to 4.75% one year ahead (versus 4.5 to 5.5% in September) and 4.50% to 5.38% two years ahead (versus 4.7 to 5.5% in September) (table II). As a working assumption, the baseline scenario used in this *Report* considers that in the short term, the MPR will follow path comparable to what can be derived from the various expectations surveys.

**Table II.2**

Expectations for the MPR

(percent)

| | One year ahead | | Two years ahead | Two years ahead |
|---|---|---|---|---|
| | September *Report* | December *Report* | September *Report* | December *Report* |
| EES (1) | 5.50 | 4.25 | 5.50 | 5.00 |
| FBS (2) | 5.00 | 4.25 | 5.00 | 4.50 |
| Forward curve (3) | 4.87 | 4.75 | 5.24 | 5.38 |
| Swap contracts (4) | 4.49 | 4.12 | 4.69 | 4.70 |

(1) August and December 2011 surveys.
(2) Survey for second half of August and first half of December 2011.
(3) Constructed using interest rates on swap contracts up to two years and BCP interest rates thereafter.
(4) Constructed using interest rates on swap contracts up to two years.

Source: Central Bank of Chile.

# III. Demand and output

**Table III.1**

Gross domestic product

(weight in GDP; real annual growth, percent)

| | Weight. 2010 | 2010 | 2011 I | II | III |
|---|---|---|---|---|---|
| Agriculture, livestock and forestry | 3.6 | 1.0 | 16.1 | 11.7 | 3.2 |
| Fishing | 0.9 | -13.7 | 36.6 | 5.5 | 59.4 |
| Mining | 6.4 | 1.2 | -0.8 | -1.9 | -6.5 |
| Manufacturing | 14.3 | -1.0 | 11.4 | 9.5 | 2.3 |
| EGW | 2.3 | 13.7 | 9.1 | 5.5 | 11.5 |
| Construction | 6.8 | 3.6 | 9.3 | 6.0 | 7.1 |
| Retail (1) | 11.2 | 13.3 | 12.7 | 7.3 | 6.4 |
| Transportation | 7.4 | 8.5 | 14.0 | 8.6 | 5.3 |
| Communications | 3.4 | 10.5 | 10.0 | 12.2 | 11.1 |
| Other services (2) | 37.4 | 4.4 | 7.0 | 5.7 | 4.9 |
| Natural resources (2) | 9.6 | 2.1 | 6.2 | 0.5 | 2.0 |
| Other (2) | 84.1 | 4.9 | 10.0 | 7.4 | 5.1 |
| **Total GDP (3)** | **100.0** | **5.2** | **9.9** | **6.6** | **4.8** |

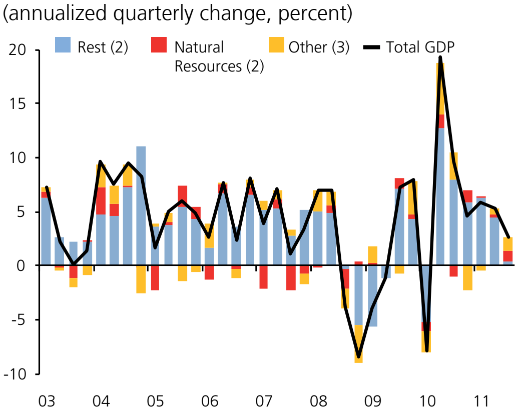
(1) Includes restaurants and hotels.
(2) See glossary for definition.
(3) Total GDP is defined as the sum of natural resources GDP, other GDP, net VAT revenue and import duties, minus banking imputations.

Source: Central Bank of Chile.

**Figure III.1**

Gross domestic product (1)

(annualized quarterly change, percent)




(1) Seasonally adjusted series.
(2) See glossary for definition.
(3) Other corresponds to net VAT revenue plus import duties, minus banking imputations.

Source: Central Bank of Chile.

This chapter reviews the recent evolution of demand and output and their short-term outlook, in order to examine possible inflationary pressures.

## Sectoral activity

In the third quarter of the year, GDP grew 4.8% in annual terms, with a lower q-o-q growth rate than in the previous quarters (table III.1). This slowdown is in line with the September forecast. In October, the economy showed signs of weakening somewhat further. However, partial indicators signaled that domestic demand was still dynamic, in part driven by the labor market, which remains tight. The baseline scenario of this *Monetary Policy Report* projects that the Chilean economy will grow 6.2% in 2011; this is in the lower end of the range estimated in September and is in line with the growth estimates in the Economic Expectations Survey (EES) for December. This adjustment reflects both a downward data revision in the first half of the year and lower growth in some sectors in recent months, most notably in manufacturing and mining.

Also in the third quarter, GDP of natural resourses recorded the highest annual growth rates and were the biggest contributors to quarterly output growth (figure III.1). In fishing, annual growth was largely tied to fish farming. In electricity, gas and water (EGW), growth was led by increased electricity generation. In contrast, mining posted negative y-o-y variation, due in part to lower ore quality and downtime at various mines. With regard to the latter, partial indicators for the fourth quarter show that these exceptional situations have normalized.

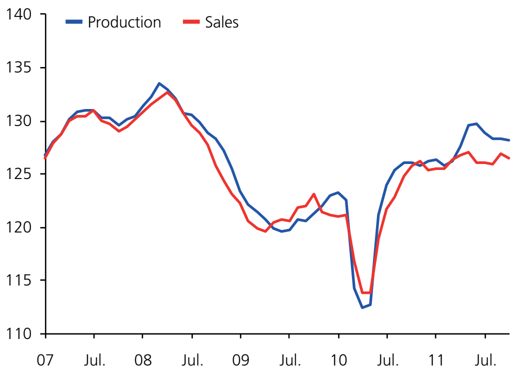
Regarding the GDP of other sectors, the annual growth of services—especially communications—, construction and trade, stands out. Trade activity continues to make a significant contribution to aggregate output growth, in line with consumption and investment trends. Fourth-quarter indicators show that retail sales remain high, and construction continues to grow strongly, consistently with investment performance.

In contrast to sectors tied to domestic demand, manufacturing production has recorded falling growth rates in recent quarters and even negative in the third quarter. Data for October are consistent with this trend. Manufacturing sales, in turn, also deteriorated.

**Figure III.2**

Manufacturing indicators

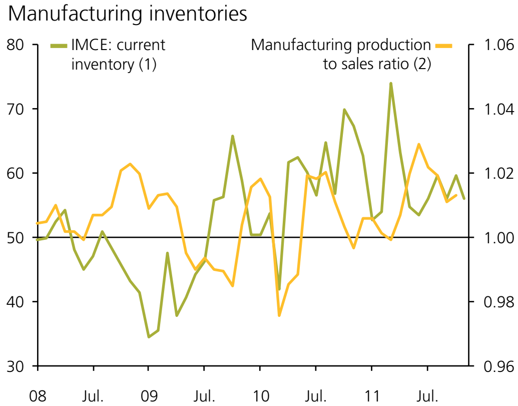
(quantity index, 2002=100, moving quarterly average, seasonally adjusted series)




Sources: Central Bank of Chile and National Statistics Bureau (INE).

**Figure III.3**

Manufacturing inventories




(1) A value over (under) 50 points indicates level over (under) desired objective.

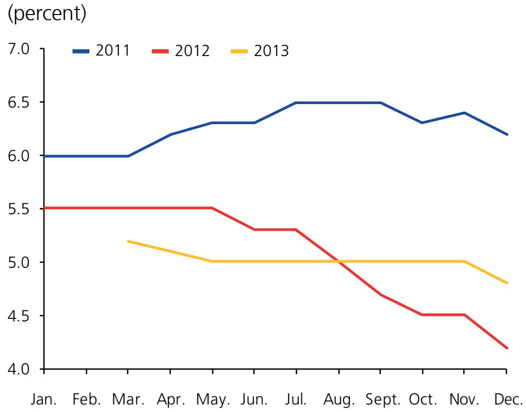
(2) Moving quarterly average. Seasonally adjusted series.

Sources: Central Bank of Chile and *Icare/Universidad Adolfo Ibáñez*.

**Figure III.4**

GDP growth estimate in EES during 2011

(percent)




Source: Central Bank of Chile.

In terms of levels, the weak performance of the manufacturing sector is most evident in segments associated with exports and intermediate goods, whereas those associated with consumption and investment have been more stable. Sales have also been more stable (figure III.2). It is possible that the recent performance of manufacturing production could reflect an early adjustment of inventory levels in response to the external uncertainty. The production-to-sales ratio shows a higher level of inventory buildup in recent months, and the sector's self-assessment of its inventory levels—captured in the IMCE—also indicates that they are undesirably high (figure III.3). The sector's production levels have grown slowly in the last two years, altered only by the disruptions caused by the earthquake and tsunami of 2010.

The baseline scenario in this *Report* assumes that the Chilean economy will grow in the range of 3.75% to 4.75% in 2012. This is lower than the September forecast, mainly because of the effects of lower world growth, tighter international financial conditions and lower terms of trade. Private expectations have also been adjusted downward in the past three months, with expected growth of 4.2% in 2012, in line with the December EES (figure III.4).

## Aggregate demand

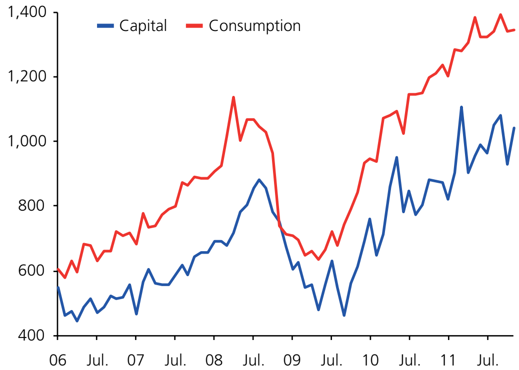
Domestic demand grew 9.4% in annual terms in the third quarter, for total growth of 10.8% in the first three quarters of the year (table III.2). In seasonally adjusted terms, quarterly growth was 3.1%, which represents an increase relative to the previous quarter. Excluding the change in inventories, domestic demand grew 10.2% in annual terms. The higher pace of growth of demand reflects dynamic consumption, mainly of durable goods, and gross fixed capital formation. However, a large share of this greater demand was channeled to the purchase of imported goods, which suggests that the pressure on output gaps would not have increased. In fact, consumer and capital goods imports hit new nominal peaks in the period and then stayed high in the following months, although there are signs of further moderation in some sectors (figure III.5).

The ratio of inventory buildup to GDP was high in the last moving year, as was the inventory stock to GDP ratio (figure III.7). However, there are signs of an earlier inventory adjustment in the fourth quarter, in response to the increasingly uncertain scenario. This, because partial sales indicators for the fourth quarter—in particular for the car market—have not changed significantly, although imports of this type of goods have fallen substantially (figure III.6).

Although private consumption continued to be very dynamic in the past few months, the trend was in line with its fundamentals, including financial conditions, the wage bill and various measures of nominal private income (figure III.8). The ratio of individual consumption to GDP and gross national disposable income (GNDI) has been stable at around the average for 2003–10, while the ratio of consumer loans to total loans has not recorded any significant changes. Of the determinants of consumption, only consumers' outlook has been consistently less favorable. According to the November economic perceptions index (IPEC), on aggregate, consumers continue to be in the pessimistic area.

**Figure III.5**

Nominal goods imports (*)
(US$ million)




(*) Seasonally adjusted series.

Source: Central Bank of Chile.

**Figure III.6**

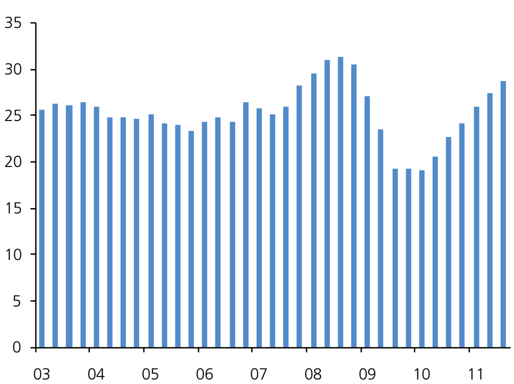
Sales and imports of new cars (*)
(index, 2003=100)


(*) Sold or imported during moving quarter. Seasonally adjusted series.

Sources: National Car Association and Central Bank of Chile.

**Figure III.7**

Inventory stock
(percent of GDP)




Source: Echavarría (2011).

**Table III.2**

Aggregate demand
(weight in GDP; real annual change, percent)

| | Weight 2010 | 2010 | 2011 | | |
|---|---|---|---|---|---|
| | | | I | II | III |
| Domestic demand | 117.4 | 16.4 | 15.0 | 8.6 | 9.4 |
| Final demand (excl. inventories) | 114.9 | 11.5 | 14.3 | 9.0 | 10.2 |
| GFCF | 28.4 | 18.8 | 20.4 | 10.7 | 21.6 |
| C&O | 13.1 | 1.8 | 8.7 | 6.7 | 9.8 |
| M&E | 15.3 | 38.5 | 32.1 | 13.8 | 31.5 |
| Other | 89.1 | 15.7 | 13.3 | 8.0 | 5.6 |
| Private consumptiono | 73.4 | 10.4 | 13.3 | 9.4 | 7.5 |
| Durables | 9.6 | 38.6 | 38.0 | 17.0 | 17.9 |
| Nondurables | 31.3 | 8.0 | 12.7 | 9.7 | 5.8 |
| Services | 32.5 | 6.4 | 8.3 | 6.7 | 5.9 |
| Government consumption | 13.1 | 3.3 | 7.1 | 3.3 | 1.2 |
| VE (%GDP) (*) | 2.5 | 2.5 | 2.7 | 2.7 | 2.5 |
| Goods and services export | 36.6 | 1.9 | 9.5 | 10.8 | 3.9 |
| Goods and services import | 54.0 | 29.5 | 21.3 | 13.9 | 13.8 |
| **GDP** | **100.0** | **5.2** | **9.9** | **6.6** | **4.8** |

(*) Change in inventories over GDP accumulated in four quarters.

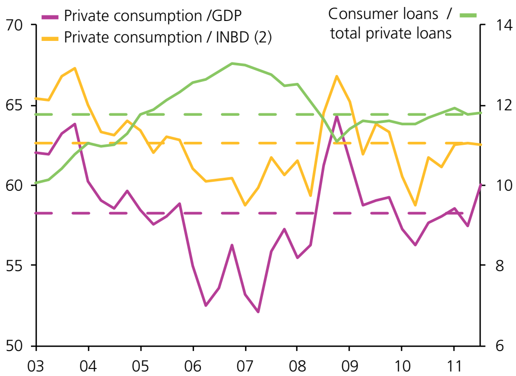
Source: Central Bank of Chile.

The labor market remains tight, although some regional data suggest that it was tighter in the first half of the year in some areas of the country. According to all measures, the unemployment rate is below its historical average (figure III.9). In September, Universidad de Chile's survey indicated that the unemployment rate had fallen 0.9 pp relative to September 2010, putting it at 7.8% in seasonally adjusted terms. Data published by the INE for the August-October moving quarter show a rate of 7.2%, which is 0.3 pp lower than at the cutoff date of the last *Report*. Employment thus continues to expand, but the rate of expansion has eased. Although the trend for wages has recorded some small dips, the performance in November was not very different from previous months, with annual growth rates between 5.7% and 6.9% (between 2.1% and 3.1% in real terms).

Gross fixed capital formation (GFCF) grew 21.6% in annual terms in the third quarter, with a strong increase in the pace of growth both in the machinery & equipment component and in construction and other works. The biggest contribution came from the machinery component. This growth is explained, in part, by increased investment in the mining sector, to take advantage of the high commodity prices and offset the effects of low ore quality. The IMCE confirms the favorable outlook for this sector. In the same way, and in line with the good results of the sector, the construction component of this indicator shows a strong performance, following two months of recovery. Partial indicators for the fourth quarter, such as sales of cement and other construction materials, also point to a continuation of the upsurge.

**Figure III.8**

Aggregate consumption indicators (1)
(percent)

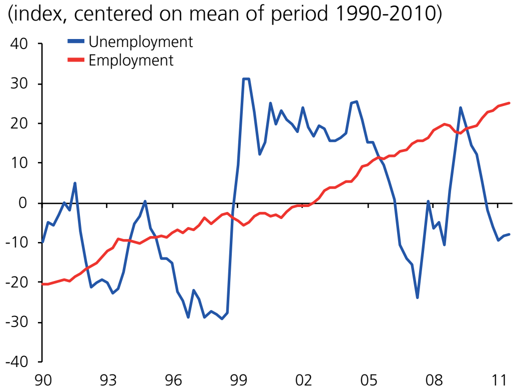



(1) Nominal series. Dotted lines show averages for the period.
(2) See glossary for definition.

Source: Central Bank of Chile.

**Figure III.9**

Employment and unemployment rate (*)
(index, centered on mean of period 1990-2010)

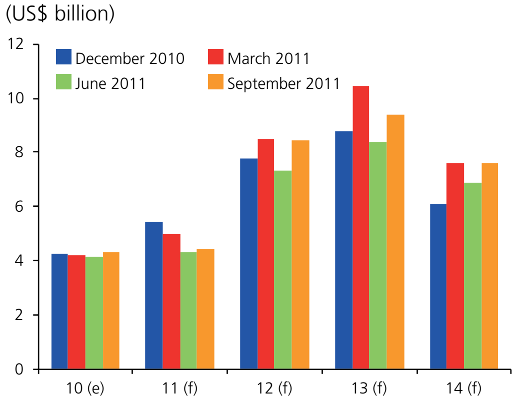



(*) Seasonally adjusted series.

Source: Ricaurte, M. 2011. "Indicadores de Mercado Laboral para la Comparación de las Crisis Asiática y Financiera Internacional". Preliminary document. Central Bank of Chile. June.

**Figure III.10**

Construction and engineering investment survey (*)
(US$ billion)




(e) Estimate.
(f) Forecast.
(*) Excludes telecommunications, manufacturing, and real estate sectors.

Sources: Central Bank of Chile and Capital Goods Corporation.

In terms of investment, the Capital Goods and Technological Development Corporation (CBC) reports a reduction in energy and mining projects in September, due to cost revaluation. Construction and engineering investment was adjusted upward for the 2011–14 four-year period relative to the last survey (figure III.10).

In the fiscal area, the overall balance was 0.4% of annual GDP in the third quarter of 2011. The consolidated central government's surplus as of the third quarter of 2011 equaled 2.8% of estimated GDP for the year. Total income increased 18.1% in real annual terms in the third quarter, while expenditures grew 6.1% in real annual terms in the same period. From July to September, capital transfers and investment expense increased 16% relative to the same period in 2010.

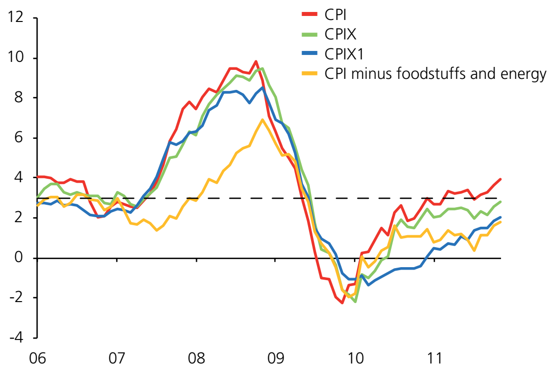
On the external side, exports grew 8.7% in annual terms in the third quarter, while imports increased 27.8%, with strong growth in both consumer and capital goods imports. The current account of the balance of payments registered a larger deficit than expected, accruing a negative balance equivalent to 0.5% of GDP in the last moving year. This is mainly explained by the lower copper price and the effect on imports of dynamic expenditures in recent months, which have mostly been concentrated in foreign goods. The baseline scenario of this *Report* considers that 2011 will close with a negative balance equivalent to 1.5% of GDP.

# IV. Prices and costs

**Figure IV.1**

CPI, CPIX, CPIX1 inflation and CPI minus foodstuffs and energy (*)

(annual change, percent)



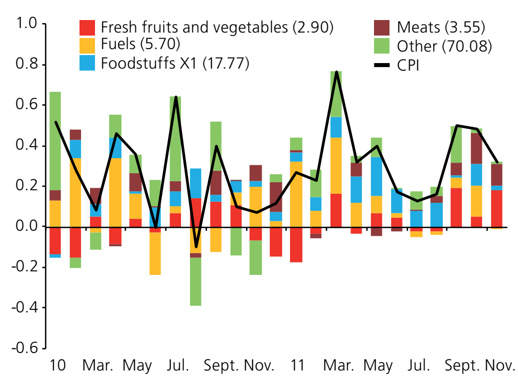

(*) See glossary for definition.

Sources: Central Bank of Chile and National Statistics Bureau (INE).

**Figure IV.2**

Contribution to monthly CPI inflation (*)

(percentage points)




(*) In parentheses, share in CPI basket.

Sources: Central Bank of Chile and National Statistics Bureau (INE).

This chapter examines recent trends in the main components of inflation and costs, identifying different sources of inflationary pressures and their probable future behavior.

## Recent inflation trends

In the last months, annual headline inflation has been above the 3% inflation target, but within the tolerance range. The annual growth rates of the core CPIX and CPIX1 measures are contained, despite having increased. Food and fuel prices have been the determining factors in short-term inflation fluctuations.

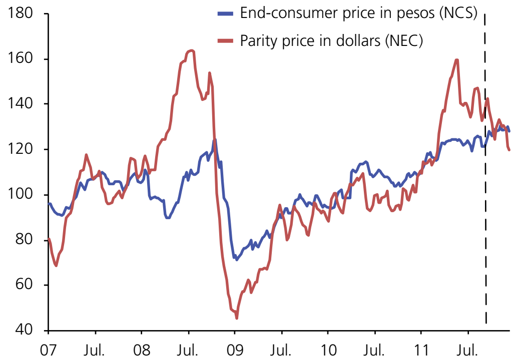
In November, annual CPI inflation was 3.9% (2.9% in July), while the CPIX increased 2.8% (1.9%) and the CPIX1 rose 2.0% (1.4%) (figure IV.1 and table IV.1). The forecast used in the baseline scenario of this *Report* assumes that inflation will close the year at 3.9% in annual terms. Private inflation expectations are consistent with this forecast. The y-o-y headline inflation rate continues to be dominated by foodstuff and fuel prices, which recorded particularly sharp increases in the first part of the year. The other products in the basket continue to exhibit low annual inflation rates. As a result, the core CPI measure, which excludes food and energy (leaving 72% of the total CPI basket), posted an annual rate of slightly less than 2%.

Monthly inflation was marked by higher prices of fruits and vegetables, meats and fuels in the last four months (figure IV.2). Fuel prices, in particular, were strongly affected by the depreciation of the peso. The nominal exchange rate has increased around 10% since September, based on data for the two weeks prior to the closing dates of this and the September *Reports*. The difference between accumulated inflation in the last four months and the estimate in September was 0.6 percentage point, and almost all of this difference is explained by higher fuel prices. The exchange rate is a fundamental factor in this trend.

## Figure IV.3

Weekly gasoline price (*)

(index, average 2007-2010 =100)



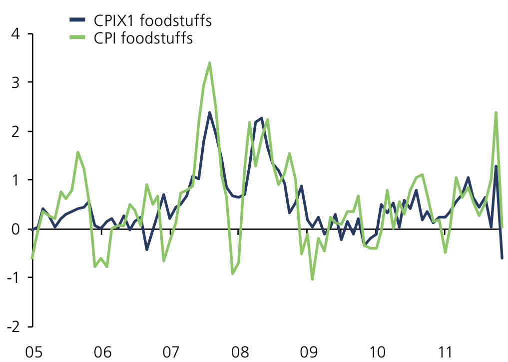

(*) Dotted line marks statistical cutoff of September *Report*.

Sources: National Energy Commission (NEC) and National Consumer Service (NCS).

## Figure IV.4

Foodstuff prices

(monthly change, percent)

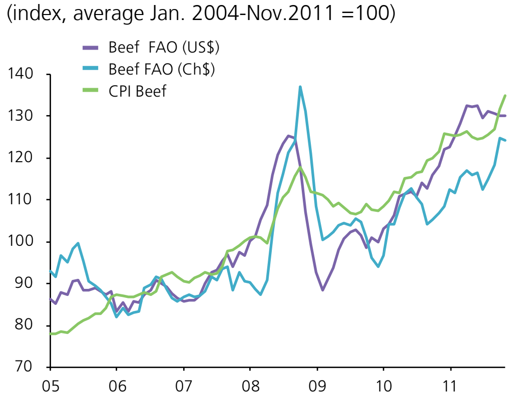



Sources: Central Bank of Chile and National Statistics Bureau (INE).

## Figure IV.5

Beef prices in the local and external markets

(index, average Jan. 2004-Nov.2011 =100)




Sources: Central Bank of Chile and Bloomberg.

## Table IV.1

Inflation indicators (*)

(annual change, percent)

| | CPI | CPIX | CPIX1 | CPIX1 w/o foodstuff | CPI w/o foodstuff and energy | CPI Tradables | CPI non-tradables | CPI Goods | CPI Services |
|---|---|---|---|---|---|---|---|---|---|
| 2010 Jan. | -1.3 | -2.2 | -1.1 | -1.3 | -1.7 | -2.5 | 0.3 | -1.8 | -0.8 |
| Feb. | 0.3 | -0.8 | -0.9 | -1.2 | 0.1 | -2.5 | 4.2 | -1.5 | 2.6 |
| Mar. | 0.3 | -1.0 | -1.3 | -1.9 | -0.4 | -2.2 | 3.8 | -1.3 | 2.3 |
| Apr. | 0.9 | -0.6 | -1.1 | -1.8 | -0.1 | -1.2 | 3.8 | -0.2 | 2.3 |
| May | 1.5 | -0.1 | -0.9 | -1.6 | 0.4 | -0.6 | 4.4 | 0.2 | 3.2 |
| Jun. | 1.2 | 0.1 | -0.7 | -1.5 | 0.6 | -1.5 | 4.9 | -0.6 | 3.5 |
| Jul. | 2.3 | 1.4 | -0.5 | -1.4 | 1.7 | -0.9 | 6.7 | -0.3 | 5.6 |
| Aug. | 2.6 | 1.9 | -0.5 | -1.5 | 1.1 | 0.4 | 5.7 | -0.3 | 6.4 |
| Sept. | 1.9 | 1.6 | -0.5 | -1.6 | 1.1 | -1.1 | 6.0 | -0.9 | 5.4 |
| Oct. | 2.0 | 1.5 | -0.5 | -1.7 | 1.1 | -0.9 | 6.0 | -0.7 | 5.5 |
| Nov. | 2.5 | 2.0 | -0.4 | -1.7 | 1.1 | -0.2 | 6.2 | -0.4 | 6.2 |
| Dec. | 3.0 | 2.5 | 0.1 | -1.3 | 1.5 | 0.5 | 6.4 | 0.4 | 6.3 |
| 2011 Jan. | 2.7 | 2.0 | 0.5 | -0.8 | 0.8 | 1.2 | 4.8 | 1.0 | 4.8 |
| Feb. | 2.7 | 2.1 | 0.4 | -0.9 | 0.9 | 1.2 | 4.7 | 0.9 | 4.8 |
| Mar. | 3.4 | 2.4 | 0.7 | -0.6 | 1.4 | 1.8 | 5.5 | 1.6 | 5.6 |
| Apr. | 3.2 | 2.4 | 0.7 | -0.7 | 1.2 | 1.7 | 5.2 | 1.4 | 5.4 |
| May | 3.3 | 2.5 | 1.1 | -0.4 | 1.2 | 1.8 | 5.2 | 1.7 | 5.1 |
| Jun. | 3.4 | 2.4 | 0.9 | -0.7 | 0.9 | 2.3 | 4.9 | 1.9 | 5.4 |
| Jul. | 2.9 | 1.9 | 1.4 | -0.2 | 0.4 | 2.5 | 3.4 | 2.0 | 4.0 |
| Aug. | 3.2 | 2.3 | 1.5 | 0.0 | 1.2 | 2.0 | 4.7 | 2.0 | 4.6 |
| Sept. | 3.3 | 2.1 | 1.5 | 0.1 | 1.2 | 2.5 | 4.3 | 2.4 | 4.3 |
| Oct. | 3.7 | 2.5 | 1.9 | 0.7 | 1.7 | 2.9 | 4.7 | 3.8 | 4.4 |
| Nov. | 3.9 | 2.8 | 2.0 | 0.7 | 1.9 | 3.2 | 4.8 | 3.4 | 4.5 |

(*) See glossary for definition.

Sources: Central Bank of Chile and National Statistics Bureau (INE).

International oil derivatives prices, measured in dollars, have declined facing the worsened international scenario, albeit moderately (figure IV.3). However, since September, import parity prices for gasoline increased 3% measured in dollars. Taking into account the depreciation of the peso and distribution costs and margins, the retail gasoline prices included in the CPI basket rose 5% between July and November. Throughout the period, parity prices stayed within the band established under the fuel price stabilization system (SIPCO), so the system was not triggered.

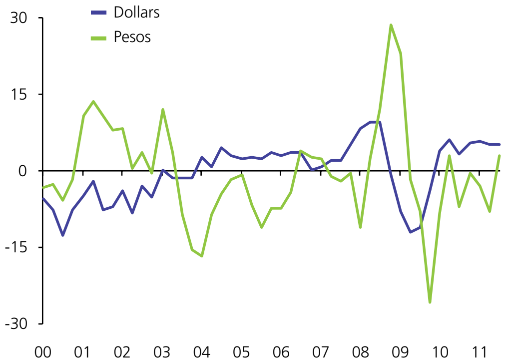
The food prices included in the CPI increased in recent months. The price hikes were recorded in different products than at the start of the year, as a result of some specific factors (figure IV.4). In September, fresh fruit and vegetable prices rose more than usual during the period around Chile's national holidays. In October and November, the price of beef rose sharply following the suspension of beef imports from Paraguay due to an outbreak of foot-and-mouth disease (figure IV.5).

Other items that had a strong effect on inflation in the past few months were health and education services and multimodal transport. Electricity rates fell, and home furnishing continued along the downward trend that has lasted for several quarters. The remaining prices did not record any important movements that might indicate a change in the behavior of inflation.

**Figure IV.6**

Unit price of imports index (IVUM) (*)

(annual change, percent)



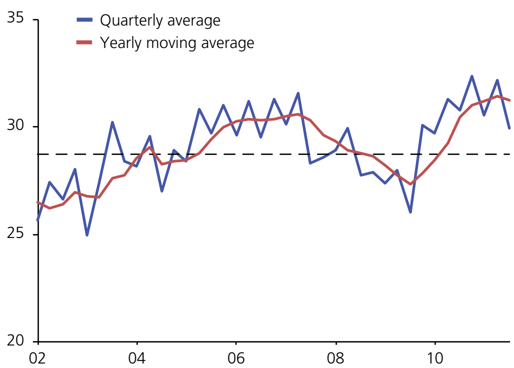

(*) See glossary for definition.

Source: Central Bank of Chile.

**Figure IV.7**

Retail operating margin (1) (2)

(percent)



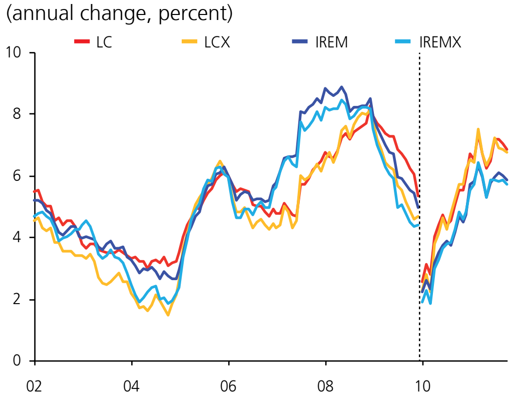

(1) Gross profit to sales income ratio. Average of four firms with largest share in retail, weighted by sales income.
(2) Dotted line marks 2001-2010 average.

Sources: Central Bank of Chile and Superintendence of Securities and Insurance (SVS).

**Figure IV.8**

Nominal wages (1) (2)

(annual change, percent)




(1) Starting in January 2010, the new indices with base year 2009 = 100 are used, so they are not strictly comparable with the earlier data.
(2) See glossary for definition.

Sources: Central Bank of Chile and National Statistics Bureau (INE).

The depreciation of the peso has magnified inflationary pressures from imported inflation, although to a very limited degree. Measured in dollars, the external prices of imported goods have posted stable annual inflation rates for almost two years. Measured in pesos, the downward trend since early 2010 was reversed. The unit price of imports index (IVUM) for consumer goods, measured in dollars, has continued to grow at around 5% in annual terms since early 2010. Measured in pesos, consumer goods prices fell 4%, on average, in the same period, and the latest available data show a recovery, with a positive annual inflation rate of 2.8% in the third quarter of 2011 (figure IV.6).

Partial indicators on margins suggest that they remain high. According to data for the third quarter of 2011 reported in the Uniform Codified Statistical Forms (FECU), average operating margins of retail, weighted by income from sales, are higher than the average of the last ten years, although they are lower than in the last quarter (figure IV.7).

In the third quarter, unit labor costs registered an annual growth rate of over 3%. There are still signs that the labor market is tight, as reflected in employment and unemployment indicators. Nominal wages continue to grow at over 6%, and there are indications that it is becoming difficult to contract workers in some regions of the country (figure IV.8).

## Short-term inflation outlook

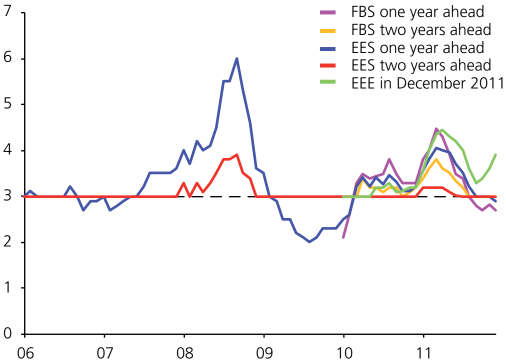
As described above, the exchange rate depreciation and some specific factors have generated higher inflation than forecast in September.

The annual CPIX1 inflation rate is expected to converge to 3% more slowly than projected in September. The main factors behind this change are lower prices for food and private transport, in particular new and used cars. The annual change in the core CPIX measure is in line with the September forecast, because the smaller increase in the CPIX1 will offset the price hikes in meat, electricity rates and multimodal transport. At year-end, annual CPI inflation is 0.6 percentage point higher than the September forecast. Almost all of this difference is explained by higher prices for fuels and fruits and vegetables than projected.

Private inflation expectations have adjusted upward in the short term, in response to the aforementioned factors. Medium-term expectations, however, have not changed, in the midst of the turbulent global economic scenario and dynamic domestic demand. In September, the Financial Brokers Survey (FBS) indicated that inflation would be 3.0% one year ahead, which fell to 2.7% in the survey for the first half of December. In the Economic Expectations Survey (EES), projected inflation one year out fell from 3.2% in August to 2.9% in December. Expectations for December of this year dropped from 3.6% in August to 3.3% in September and then rose again to 3.9% in December (figure IV.9). Inflation two years ahead held at 3% according to all measures.

**Figure IV.9**

Inflation expectations: EES and FBS surveys (*)
(percent)

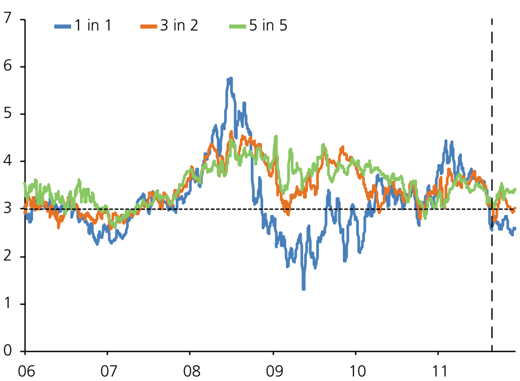



(*) FBS is for the first fifteen days of the month.

Source: Central Bank of Chile.

**Figure IV.10**

Forward breakeven inflation rate (*)
(weekly moving average, percent)




(*) Based on swap rates. Dotted vertical line marks statistical cutoff of September *Report*.

Source: Central Bank of Chile.

Consumer and business surveys also reveal declining or stable expectations. The percentage of people who think that inflation will rise "a lot" in the next twelve months, as measured by the Economic Perception Index (IPEC), decreased from 61% in August to 52% in November. The Monthly Business Confidence Index (IMCE) indicates that inflation expectations for the coming twelve months did not change between September and November, holding at 3.5%.

Inflation expectations identified in the breakeven inflation rate have been relatively stable, but they have fluctuated since the close of the last *Report* in line with the volatile external scenario. Thus, the one-year forward breakeven inflation rate one year ahead, derived from the average interbank swap rate, remained at 2.6% in December (it was also 2.6% in September). Expectations three to five years ahead were 3.0% in December, the same as at the closing date of the September *Report*. Expectations six to ten years ahead display an upward trend, rising from 3.1% in September to 3.4% in December (figure IV.10).

# V. Inflation scenarios

**Table V.1**

International baseline scenario assumptions

| | 2009 | 2010 | 2011 (f) | 2012 (f) | 2013 (f) |
|---|---|---|---|---|---|
| | | | (annual change, percent) | | |
| Terms of trade | 4.6 | 23.8 | -2.9 | -6.7 | -3.5 |
| Trading partners' GDP (*) | -0.4 | 6.1 | 4.2 | 3.8 | 4.2 |
| World GDP at PPP (*) | -0.7 | 5.0 | 3.8 | 3.5 | 4.1 |
| World GDP at market exchange rates (*) | -2.3 | 3.9 | 2.8 | 2.7 | 3.2 |
| External prices (in US$) | -6.2 | 5.8 | 9.8 | 1.3 | 2.1 |
| | | | (levels) | | |
| LME copper price (US¢/lb) | 234 | 342 | 401 | 350 | 340 |
| WTI oil price (US$/barrel) | 62 | 79 | 95 | 100 | 96 |
| Gasoline parity price (US$/m$^3$) (*) | 471 | 598 | 804 | 784 | 748 |
| Libor US$ (nominal, 90 days) | 0.7 | 0.3 | 0.3 | 0.3 | 0.3 |

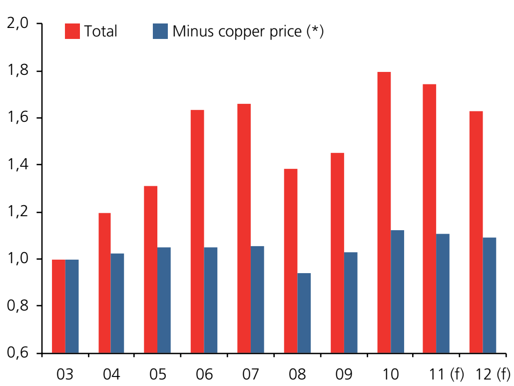
(*) For definition, see glossary.
(f) Forecast.

Source: Central Bank of Chile.

**Figure V.1**

Terms of trade

(index, 2003=1)




(f) Forecast.
(*) Estimated using the average London Metal Exchange price of 2003 as reference. No other potential effects on price or quantity are considered.

Source: Central Bank of Chile.

This chapter presents the Board's assessment on the Chilean economic outlook over the next two years, including the analysis performed up to the monetary policy meeting of 13 December 2011. Projections are presented of the most likely inflation and growth trajectories. These are conditional on the assumptions in the baseline scenario, thus the Board's assessment of the risk balance for output and inflation is also provided.

## Baseline projection scenario

The baseline scenario assumes that the external impulse that the Chilean economy will be receiving in the next two years will be less than previously forecast. The European crisis has deepened and widened in the past several months as doubts about the fiscal and banking situation escalate. Global uncertainty is higher, with increased liquidity and risk spreads, reduced financial asset prices, a widespread appreciation of the dollar in world markets and slower global economic growth. For the emerging world, the transmission channel has been the financial system, lower commodity prices, and reduced manufacturing exports. So far, economic deceleration has been moderate and consistent with September forecasts.

In the baseline scenario, assuming that the Eurozone problems will take time to be resolved, financial tensions will persist. The Eurozone is expected to fall into a recession in 2012. The importance of intra-regional trade in the region will limit the effects of its reduced demand over the rest of the world, but will amplify them within its borders. The other developed economies will see slow growth for some time, as there is little room for applying countercyclical monetary and fiscal policies. Emerging markets will be affected by the worse performance of the developed world. Accordingly, the baseline scenario assumes that Chile's trading partners will grow 3.8% in 2012, and 4.2% in 2013 (table V.1).

Commodity prices forecast over the next two years will also be lower[1]/. For copper, prices of US$3.5 and US$3.40 per pound are foreseen in 2012 and 2013. Fuels and oil will follow a descending path. This, combined with the

[1]/ The exception is WTI oil, due to the reduced supply of fuel in the main U.S. market, and some technical aspects, which has helped to narrow the spread it had with Brent oil.

## Table V.2

Economic growth and current account

| | 2009 | 2010 | 2011 (f) | 2012 (f) |
|---|---|---|---|---|
| | | (annual change, percent) | | |
| GDP | -1.7 | 5.2 | 6.2 | 3.75-4.75 |
| National income | -1.9 | 15.7 | 6.5 | 2.5 |
| Domestic demand | -5.9 | 16.4 | 9.5 | 3.7 |
| Domestic demand (w/o change in inventories) | -2.9 | 11.5 | 10.2 | 4.8 |
| Gross fixed capital formation | -15.9 | 18.8 | 16.9 | 5.8 |
| Total consumption | 1.9 | 9.3 | 8.1 | 4.5 |
| Goods and services exports | -6.4 | 1.9 | 7.4 | 3.7 |
| Goods and services imports | -14.6 | 29.5 | 14.3 | 3.0 |
| Current account (% of GDP) | 1.6 | 1.9 | -1.5 | -3.3 |
| | | (US$ million) | | |
| Current account | 2,570 | 3,802 | -3,700 | -7,700 |
| Trade balance | 14,117 | 15,855 | 10,400 | 4,800 |
| Exports | 54,004 | 71,028 | 80,900 | 78,800 |
| Imports | -39,888 | -55,174 | -70,500 | -74,000 |
| Services | -1,444 | -1,019 | -900 | -400 |
| Rent | -11,666 | -15,424 | -15,400 | -13,900 |
| Current transfers | 1,563 | 4,390 | 2,200 | 1,800 |

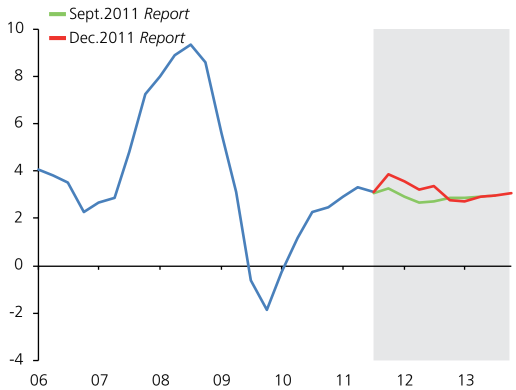
(f) Forecast.

Source: Central Bank of Chile.

## Figure V.2

CPI inflation forecast

(annual change, percent)



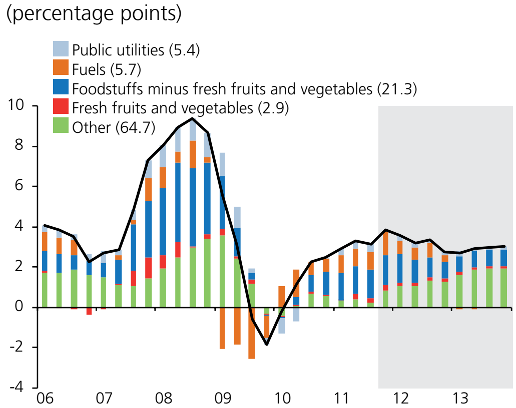

(*) Gray area, as from the fourth quarter of 2011, shows forecast.

Sources: Central Bank of Chile and National Statistics Buseau (INE).

## Figure V.3

Incidences on annual CPI inflation (1) (2)

(percentage points)




(1) Gray area, as from the fourth quarter of 2011, shows breakdown of forecast inflation in the baseline scenario.
(2) In parentheses, share in CPI basket.

Sources: Central Bank of Chile and National Statistics Institute (INE).

deteriorated global growth outlook, translates into lower world inflation forecasts which, coupled with the appreciation of the U.S. dollar drives the external price inflation relevant to the Chilean economy (EPI) to be revised down in 2011 and 2012. The terms of trade will also be lower than in 2011 (figure V.1).

In Chile, output indicators of the past few months show a somewhat greater than expected deceleration. In the baseline scenario, the reduced external impulse will expectedly translate into lower growth than foreseen in September. The main sources of this correction are the effects on domestic output of the weakened external demand, tighter international financial conditions and lower terms of trade. In 2012, the Chilean economy will grow between 3.75% and 4.75% after growing 6.2% this year (table V.2). The Board continues to estimate that Chile's trend economic growth is around 5%.

As for domestic demand, the baseline scenario assumes that durable consumption and investment in machinery and equipment will post declining y-o-y variation rates, because of both the effects from abroad and a normal convergence consistent with the current level of the stock of this type of good. The foreseen consumption trend is also based on a slower velocity of job creation than until now—a situation that recent data is already confirming—so labor income growth will slow down. Regarding investment, despite the lower increase forecast for 2012, the investment-to-GDP ratio will be somewhat above 32% in prices of 2003, and 23% in nominal terms.

The behavior of inventory accumulation will also affect domestic demand significantly during 2012. The inventory adjustment that has been seen recently in manufacturing and retail points to an anticipated inventory adjustment, consistent with external uncertainty (figures III.2 and III.6). Accordingly, during 2012 inventory variation will decline as a percentage of GDP. Actually, next year domestic demand minus inventory change will grow by a little over one percentage point more than total domestic demand.

On the fiscal spending side, the baseline scenario assumes that the structural deficit will converge to reach 1% of GDP towards the end of the present Administration, as announced by the authority and in conformity with the Fiscal Responsibility Law.

The baseline scenario projects a current account deficit that will exceed September forecasts in both 2011 and 2012. The main sources of this correction are the lower average copper prices in 2011 (actual) and 2012 (forecast). In 2011 there is also the effect on imports from the dynamism of expenditure in the past few months, mostly concentrated in goods of foreign origin. The foreseen widening of the current account deficit in 2012, with respect to 2011, responds mainly to the impact of the world economic scenario on Chile's export value and, to a greater extent, to the lower copper

**Table V.3**

Inflation

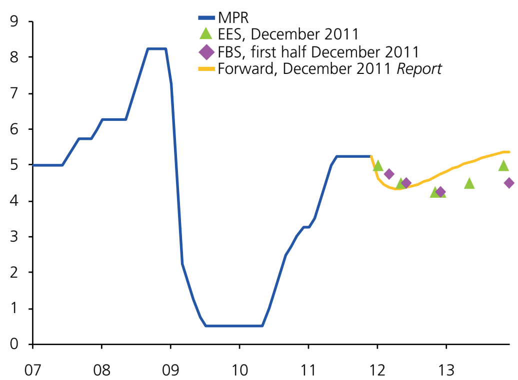
| | 2009 | 2010 | 2011 (f) | 2012 (f) | 2013 (f) |
|---|---|---|---|---|---|
| | | (annual change, percent) | | | |
| Average CPI inflation | 1.6 | 1.4 | 3.3 | 3.2 | 2.9 |
| December CPI inflation | -1.4 | 3.0 | 3.9 | 2.7 | 3.0 |
| CPI inflation in around 2 years (*) | | | | | 3.0 |
| Average CPIX inflation | 2.8 | 0,5 | 2.4 | 2.7 | 3.2 |
| December CPIX inflation | -1.8 | 2.5 | 2.9 | 2.6 | 3.3 |
| CPIX inflation in around 2 years (*) | | | | | 3.3 |
| Average CPIX1 inflation | 2.7 | -0.7 | 1.2 | 2.5 | 3.0 |
| December CPIX1 inflation | -1.1 | 0.1 | 2.1 | 2.7 | 3.1 |
| CPIX1 inflation in around 2 years (*) | | | | | 3.1 |

(f) Forecast.
(*) Inflation forecast at the fourth quarter of 2013.

Source: Central Bank of Chile.

**Figure V.4**

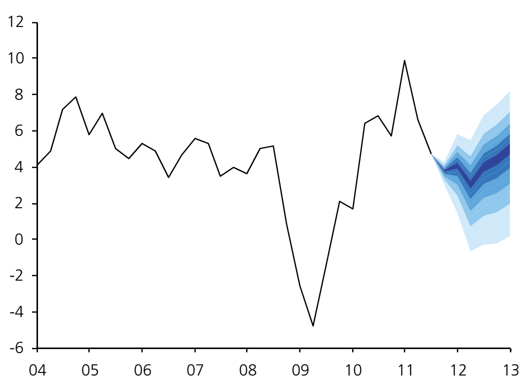
MPR and expecations
(percent)




Source: Central Bank of Chile.

**Figure V.5**

Quarterly GDP growth scenarios (*)
(annual change, percent)




(*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% around the baseline scenario are included. These intervals summarize the risk on growth as assessed by the Board. The baseline scenario uses as a working assumption that, in the short term, the MPR will follow a path comparable to what can be derived from the various expectations surveys.

Source: Central Bank of Chile.

price, compounded with the foreseen slowdown in exports. In addition, although expenditure will slow down its annual rate of expansion next year, it will remain high. Measured in trend prices, the current account will continue to post a deficit of around 6% in 2011 and 2012[2]/.

As regards CPI inflation, it has exceeded September projections in the last few months. Towards year's end, it is expected to stand at 3.9%, that is, 0.6pp higher than foreseen in the latest *Report*. Almost the whole difference is explained by the higher fuel price, a result fundamentally determined by the depreciation of the peso.

In the baseline scenario, y-o-y CPI inflation, after peaking at the end of this year will decline to around 3% in the first half of 2012. From there, and until the end of the projection horizon—this time the fourth quarter of 2013—it will stay close to 3%. The convergence to 3% of the y-o-y CPIX1 variation will be somewhat slower than previously thought (figures V.2 and V.3) (table V.3).

These projections are based on the working assumptions that the real exchange rate, which at the moment is within the range of values estimated to be consistent with its long-term fundamentals, will remain fairly constant over the next two years. As for monetary policy, in a baseline scenario that assumes that the effects of external uncertainty over the national economy are bounded, the working assumption that is used is that, in the short term, the monetary policy rate will follow a path comparable to what can be derived from the various expectations surveys (figure V.4).

## Risk scenarios

The baseline scenario reflects the events estimated to have the highest probabilities of occurrence with the information at hand when making these projections. The Board estimates that, on this occasion, this probability is less than usual. There is a wide range of risks that could significantly deviate the international economy's performance from the baseline scenario. The repercussions on Chile's macroeconomic outlook of different scenarios than the one described are varied and, in some cases, difficult to estimate. On this occasion, after assessing the probabilities of alternative conditions, the Board believes that the balance of risks is downward biased for activity, and unbiased for inflation (figures V.5, V.6 and V.7).

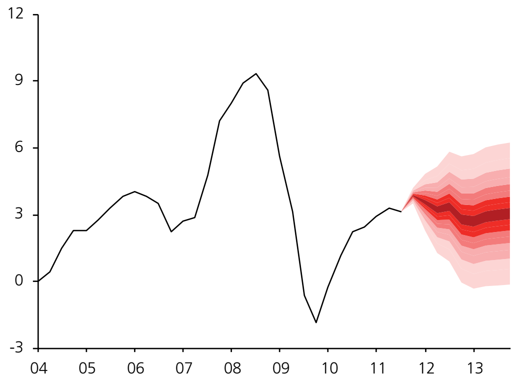
The main risks have to do with the way the situation in the Eurozone will unfold, especially because of possible scenarios whose implications for the Chilean economy could be more negative than in the baseline scenario. In a worst-case scenario, there could be credit events in an economy of systemic size, or a disorderly fragmentation of the euro. Such a situation, while unlikely, could have very severe consequences on the world economy.

There are intermediate scenarios, such as, for instance, a deeper contraction of credit from Eurozone banks, which aside from aggravating the recession

[2]/ This calculation contemplates corrections in prices, not in volumes. Assumed prices for copper and oil are US$2.6 per pound and US$75 per barrel.

**Figure V.6**

CPI inflation forecast (*)
(annual change, percent)

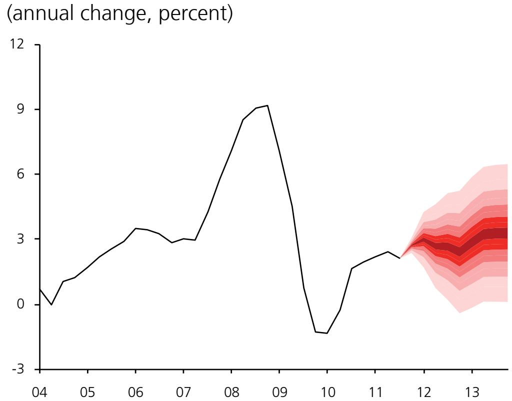



(*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% around the baseline scenario are included. These intervals summarize the risk on inflation as assessed by the Board. The baseline scenario uses as a working assumption that, in the short term, the MPR will follow a path comparable to what can be derived from the various expectations surveys.

Source: Central Bank of Chile.

**Figure V.7**

CPIX inflation forecast (*)
(annual change, percent)




(*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% around the baseline scenario are included. These intervals summarize the risk on inflation as assessed by the Board. The baseline scenario uses as a working assumption that, in the short term, the MPR will follow a path comparable to what can be derived from the various expectations surveys.

Source: Central Bank of Chile.

in that region, could further tighten lending conditions and liquidity in the rest of the world. It is also possible that emerging economies are hurt more than expected, causing deeper or longer-lasting effects on world growth and commodity prices. Meanwhile, a weakening of the U.S. economy cannot be ruled out, as it depends on the trajectory that will ultimately be followed by fiscal policy.

Should any of these scenarios materialize, it would have an impact in Chile, the magnitude of which depending on how its effects would be passed through the different transmission channels, namely foreign trade, external credit and terms of trade. A deterioration of all three factors combined could have more negative effects in the evolution of Chile's economic growth over the projection horizon. However, its effects can be attenuated through monetary, fiscal, and financial policy actions.

Although the more negative scenarios dominate, there is always the possibility that the Eurozone authorities succeed in building a set of measures and reforms that restore market confidence. The European Union's announcements of early December point in that direction. Still, in such a setting, given the required fiscal adjustments, the developed economies will see a long period of slow growth and maintain their lax monetary policies for a long time. This would accentuate the dichotomy between advanced and emerging economies. In this context, a rebound in capital inflows to emerging economies may possibly complicate the application of macroeconomic policies.

Domestically, stronger effects of the higher external uncertainty cannot be ruled out. On one hand, in the past few weeks the global situation has generated somewhat more stringent conditions in the local financial market, a development that is shared with other emerging economies. An intensification of these frictions would significantly affect output, demand, and inflation. For now, no major changes are visible in lending rates or credit growth. On the other hand, it is also possible that the increased global uncertainty has a greater incidence on market confidence and consumption and investment decisions.

The more adverse external outlook considered in the baseline scenario will have consequences for growth and inflation in Chile, as well as for the orientation of monetary policy. A working assumption is that, in the short term, the monetary policy interest rate will follow a path comparable to what can be derived from the various expectations surveys. However, the true magnitude of the external deterioration and its impact on the Chilean economy is yet to be seen. Conditions in the Eurozone are severe and there are major risks at play in other developed economies. If some of the risk scenarios described materialize, the country can rely on its robust economic policy framework, which is capable of mitigating the negative effects of the situation abroad, as is confirmed by the experience of 2008-2009. The Central Bank has the necessary mechanisms and tools to react decisively to adverse scenarios and thus mitigate their effects on the domestic economy. The Board reiterates its commitment to conduct monetary policy in order for projected inflation to stand at 3% over the policy horizon.

# Box V.1: **Uncertainty shocks**

In the last few months, the lack of a resolution of the situation in the Eurozone has caused the appetite for risk to drop sharply in international financial markets. Although the bloc countries have adopted measures and agreements, the lateness of these decisions and the spiraling concern for the lack of a definitive solution have exacerbated the uncertainty about the course of the regional economy and its possible effects on the rest of the world. The likelihood of a disorderly breakup of the euro is low, but the costs for the world economy would be high. There are, however, alternative scenarios that are more likely and that would also generate significant costs. This box outlines the effects of an uncertainty shock on macroeconomic variables, and quantifies its possible impacts.

Pasten and Raddatz (2011) summarize the recent literature on uncertainty shocks, identifying three strands. All three predict a drop in output in response to this type of shock, although differences in the transmission mechanisms have implications in terms of possible policy responses.

First, one line of research characterizes the rise in uncertainty as an increase in the probability that a catastrophic financial event will trigger a destruction of the stock of wealth. Even if the probability is low, the possibility of this type of event reduces investment and employment, because it causes an increase in the risk premium demanded by investors. Consumption increases in the immediate term and then decreases, as the expected return on investment falls. In this scenario, stock spreads increase significantly. The monetary policy response is not at all clear. The dilemma in this case is whether monetary policy should soften or accommodate these shocks. Regardless, estimates indicate that an active monetary policy has strong possibilities for reducing the effects.

A second line of research defines an uncertainty shock as the materialization of ambiguous situations in which agents face unknown risks, either because the risks are not quantifiable or because the usual risk measures were incorrect. The literature suggests that in these cases agents make decisions based on the worst possible scenario, acting as if their risk aversion had increased substantially. In this type of event, output falls as investment risk premiums rise. One example of the consequences of ambiguous situations is that, in the face of unknown counterparty risk, the financial system tends to hoard liquidity excessively because all agents self-insure against events that only affect a fraction of the market. These market failures result in strong asset price distortions, which can be reduced through unconventional policies on price insurance or liquidity provision. In general, monetary policy plays an important role in mitigating the real effects of this type of shock.

Finally, a third set of studies defines an uncertainty shock as an episode in which there is an increase in the variance of the shocks facing an economy (productivity, financial conditions, terms of trade, and so on). In these studies, there are negative effects to the extent that agents' decisions are irreversible. Under greater uncertainty, a decision that is right today could be wrong under a probable new scenario, so agents tend to postpone their consumption and investment decisions, with negative effects on the economy's performance. These studies show that monetary policy is less effective in affecting output dynamics when uncertainty is high or when monetary policy is approaching the limits of conventional tools (the zero lower bound). However, this does not mean that an active monetary policy is undesirable. On the contrary, monetary policy should react aggressively to reverse the effects of the greater uncertainty or, if conventional tools are near the limit, to implement unconventional measures. Recovery from a recession in these cases can be fast once uncertainty is reduced, as agents increase their expenditures to compensate for having postponed their decisions. Such a reversal would require a swift withdrawal of the monetary stimulus to avoid inflationary pressures.

Carrière-Swallow and Céspedes (2011) estimate the effects of an uncertainty shock using this last definition. According to their calculations, this type of event has a larger impact on consumption, investment and output in the emerging economies than in the developed countries. In particular, the effect on investment is almost three times greater in emerging economies. With regard to consumption, they show that these events might not have any effect at all in the developed economies, whereas emerging markets register a significant and persistent drop. These results suggest that financial market depth is a key factor in the amplification of this type of shock, especially in terms of the credit channel. The authors consider that fiscal and monetary policy have strong possibilities for mitigating the impact of higher uncertainty.

In this same line of research, Carrière-Swallow and Medel (2011) estimate the effects of an uncertainty shock on the Chilean economy. Their results show that in the face of an increase in uncdertainty[1]/, output can fall as much as 1.7% relative to trend[2]/. By sector, the largest effects are in construction and manufacturing. For domestic demand, the drop deepens to 2.2%, with the biggest impacts on durable goods consumption and investment in machinery and equipment. For both demand and GDP, the maximum impact is recorded around three quarters after the shock hits.

Finally, Kirchner and Naudon (2011) analyze the effects of greater external uncertainty and lower world growth on the Chilean economy. Their results, using structural VARs, show that in the face of a 10 percentage point increase in the VIX, external GDP contracts around 1% relative to trend, the terms of trade fall 7% relative to trend and the Libor decreases around 70 basis points. In this scenario, after one year, Chile's GDP would fall around 1% relative to trend, and total inflation would be almost 1.2% lower.

In sum, the review of the available literature shows that an uncertainty shock, under different definitions, has negative effects on the output level. More importantly, in all cases, the research supports the possibility that economic policies, and in particular monetary policy, can mitigate the adverse effects of greater uncertainty.

[1]/ Based on the deviation from trend of the daily stock option returns in the U.S. market.

[2]/ According to Bloom (2009), the decrease would be around 1% in the United States.

# Index of tables and figures

**Tables**



**Figures**

# Glossary

**Commodity exporters:** Australia, Canada, and New Zealand.

**CPI excluding food and energy:** CPI excluding food and fuel prices (food goods and beverages in the CPIX1, fresh fruits and vegetables, meats, and fish), leaving 72% of the total CPI basket.

**CPIX:** Core consumer price index. CPI excluding fuels and fresh fruit and vegetables, leaving 91% of the total CPI basket.

**CPIX1:** CPIX excluding fresh meat and fish, regulated tariffs, indexed prices, and financial services, leaving 73% of the total CPI basket.

**Credit default swap (CDS):** A derivative instrument that provides insurance against the credit risk of sovereign or corporate debt. The spreads implicit in the cost of this hedge (the CDS spread) are commonly used as an indicator of sovereign or corporate risk.

**EPI:** External price index, calculated using the wholesale price index (WPI)—or the CPI if the WPI is not available—expressed in dollars, of the countries relevant to Chile (that is, the countries used for the calculation of the multilateral exchange rate, MER), weighted according to their share of Chilean trade, excluding oil and copper.

**GDP, natural resources:** Includes electricity, gas, and water (EGW); mining and fishing.

**GDP, other services:** Includes financial and business services; residential property; personal services and public administration.

**GDP, other:** Includes agriculture, livestock, and forestry; manufacturing; construction; retail; transport and communications; financial and business services; residential property; personal services; and public administration.

**Growth of trading partners:** Growth of Chile's main trading partners weighted by their share in total exports over two moving years. The countries included are the destination of 94% of total exports, on average, for the 1990–2010 period.

**IREM:** Wage index. The average wage paid per hour, weighted by the number of regular hours worked.

**IREMX:** IREM excluding community, social, and personal services, electricity, gas, and water (EGW), and mining.

**Latin America:** Argentina, Bolivia, Brazil, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, and Venezuela.

**LCX:** Labor costs (LC) excluding community, social, and personal services, electricity, gas, and water (EGW), and mining

**LPI:** Local price index of the economies relevant to Chile, calculated using the WPI (or the CPI if the WPI is not available) expressed in the local currencies of the countries considered in the EPI, weighted according to their share of Chilean trade, excluding oil and copper.

**M1:** A measure of the money supply that includes currency in circulation, the value of checking accounts held by the nonfinancial private sector (net of clearing), non-checking demand deposits, and demand savings accounts.

**M2:** M1 plus time deposits, time savings deposits, mutual fund shares with investments in debt instruments with a maturity of up to one year, and deposits with savings and loan cooperatives, less the time deposits of the aforementioned mutual funds and savings and loan cooperatives.

**M3:** M2 pus foreign currency deposits, Central Bank of Chile notes, Treasury bonds, mortgage bonds, commercial papers, corporate bonds, other mutual fund shares, pension fund shares in voluntary savings (AFPs), less mutual fund and pension fund investments in the assets that make up M3.

**MER-5:** MER using only the currencies of Canada, the Eurozone, Japan, the United Kingdom, and the United States.

**MER-X:** MER excluding the U.S. dollar.

**MER:** Multilateral exchange rate. A measure of the nominal value of the peso against a broad basket of currencies, weighted as for the RER. For 2011, the following countries are included: Argentina, Belgium, Brazil, Canada, China, Colombia, France, Germany, Italy, Japan, Mexico, Netherlands, Paraguay, Peru, South Korea, Spain, Switzerland, Thailand, the United Kingdom, and the United States.

**Nominal TAB rate:** Reference interest rate (*tasa activa bancaria*) calculated by the SBIF. The weighted average deposit rate on indexed 90-, 180-, and 360-day operations. Calculated based on the maximum deposit rate less bank reserve costs.

**Parity price of gasoline:** Reference cost of gasoline imports, calculated on the basis of quotes for similar conditions to Chile, in relevant markets (America, Europe, and Asia). Includes maritime shipping, the insurance rate, tariffs, and other duties.

**Prime deposit rate:** Interest rate that financial institutions offer their best clients on short- and medium-term deposits.

**Prime-swap spread:** The difference between the prime deposit rate and the average interbank swap rate. Like equivalent measures in other markets (such as the LIBOR-OIS spread), it is used as a benchmark for analyzing funding liquidity conditions in the banking sector.

**RER:** Real exchange rate. A measure of the real value of the peso against a basket of currencies, which includes the same countries used to calculate the MER.

**Rest of Asia:** Hong Kong, Indonesia, Malaysia, Philippines, South Korea, Singapore, Thailand and Taiwan.

**Swap:** Derivatives contract between two parties, who carry out an exchange of flows at future dates. One of the most common swap contracts is the interest rate swap, in which the parties exchange predetermined flows at a fixed rate, set when the contract is written, for predetermined flows at a variable rate.

**World growth:** Regional growth weighted by its share in world GDP at PPP, published in the IMF's *World Economic Outlook* (WEO, September 2011). World growth projections are calculated from a sample of countries that represent about 85% of world GDP. For the remaining 15%, average growth is estimated at 4.4%.

**World growth at market exchange rate:** Each country is weighted according to its GDP in dollars, published in the IMF's *World Economic Outlook* (WEO, September 2011). The sample of countries used in the calculation represent around 88% of world GDP. For the remaining 12%, average growth is estimated at 2.5%.

# Abbreviations

**BCP**: Central Bank bonds in pesos

**BCU**: Central Bank bonds in UFs

**CPIG**: Consumer goods price index

**CPINT**: Non-tradables consumer price index

**CPIS**: Consumer services price index

**CPIT**: Tradables consumer price index

**EES**: Economic Expectations Survey

**FOS**: Financial Operators Survey

**IVUM**: Unit price of imports index

**MPR**: Monetary policy rate

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