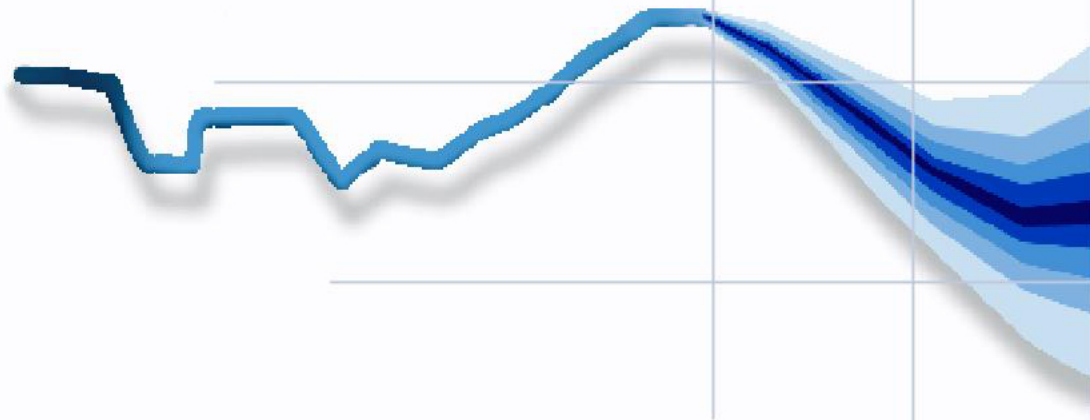


2011  
SEPTEMBER

IPoM 2011

# Monetary Policy Report



BANCO CENTRAL DE CHILE

# Monetary Policy Report\*

SEPTEMBER 2011



**BANCO CENTRAL  
DE CHILE**

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\* This is a translation of a document written originally in Spanish. In case of discrepancy or difference in interpretation, the Spanish original prevails. Both versions are available at [www.bcentral.cl](http://www.bcentral.cl).

Preface	5
Summary	7
Monetary policy decisions in the last three months	11
I. International scenario	13
II. Financial markets	19
III. Demand and output	23
IV. Prices and costs	27
V. Inflation scenarios	31
Index of tables and figures	47
Glossary and abbreviations	50
References	51
Boxes	
Stylized facts in episodes of international financial stress	17
Changes in the baseline forecast scenario in the last year	35
Appendices	
The Central Bank of Chile's balance sheet	37
International reserves management	39
Main measures taken by the Central Bank of Chile in 2011	43

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<sup>\*/</sup> The statistical closing date of the *Monetary Policy Report* was 1 September 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 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 promotes economic activity and 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 three central 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 participants' expectations on future inflation and output trends. In accordance with Article 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. Some 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 on 2 September 2011 for presentation to the Senate on 7 September 2011.

**The Board**



# Summary

Output and demand continued to moderate their dynamism in the second quarter, although somewhat less than forecast in June's *Report*. Inflation, by contrast, was slightly below expectations of a few months back. There have been important developments in the external scenario, as some of the risks considered in recent quarters have materialized. In particular, doubts about the solution to the high indebtedness—public and private—of some euro area countries and public finance consolidation in the U.S. have intensified. This, combined with prospects of a slowdown in developed economies and financial contagion to other Central Europe economies, has had significant impact on global financial markets causing increased volatility, higher risk premiums and marked uncertainty regarding the future behavior of the world economy. The European money markets show liquidity tensions. Within this context, the Board kept the monetary policy interest rate (MPR) unchanged in 5.25% in the meetings of July and August, and withdrew the tightening bias.

In the external scenario, the significant risk aversion has translated into high financial stress. Sovereign spreads of several euro area members are in record highs, as are the spreads of some banks. Asset prices have posted substantial changes, where the decline in the interest rates of long-term Treasury bonds of several developed economies, which are being used as a safe haven, and the sharp falls in stock exchanges around the world are worth singling out. Add to this—although to a lesser extent—the strengthening of the dollar vis à vis some currencies and the strong appreciation of gold and the Swiss franc, also considered to be safe havens. Finally, the drop in commodity prices, with the exceptions of agricultural products and the already mentioned gold, is worth noting.

Domestically, external turbulences have reflected on some variables of the local financial markets. The stock exchange has receded significantly and interest rates on Central Bank and Treasury bonds have fallen sharply. The monetary and interbank market has continued to operate normally and the liquidity conditions in dollars and pesos have not felt the impact of the increased interbank spreads at developed markets. The peso, after some oscillations, is at a similar level to that of the statistical cutoff date of June's *Report*.

In light of these developments, and considering output figures for the second quarter and preliminary indicators for the third—that are still weak in

## International baseline scenario assumptions

	2009	2010	2011 (f)	2012 (f)	2013 (f)
(annual change, percent)					
Terms of trade	4.6	23.8	-1.8	-5.3	-2.6
Trading partners' GDP (*)	-0.4	5.9	4.2	4.3	4.6
World GDP at PPP (*)	-0.6	5.0	3.9	4.0	4.5
World GDP at market exchange rate (*)	-2.1	3.8	3.0	3.3	3.7
External prices (in US\$)	-6.2	5.8	9.8	2.9	2.1
(levels)					
LME copper price (US\$/lb)	234	342	415	370	350
WTI oil price (US\$/barrel)	62	79	93	89	91
Gasoline parity price (US\$/m <sup>3</sup> ) (*)	471	598	816	797	774
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	6.25-6.75	4.25-5.25
National income	-1.9	15.7	6.6	4.2
Domestic demand	-5.9	16.4	9.1	4.5
Domestic demand (w/o inventory change)	-2.9	11.5	9.7	5.4
Gross fixed capital formation	-15.9	18.8	14.4	7.1
Total consumption	1.9	9.3	8.2	4.9
Goods and services exports	-6.4	1.9	6.5	5.0
Goods and services imports	-14.6	29.5	12.0	4.6
Current account (% of GDP)	1.6	1.9	-1.0	-2.1
(US\$ million)				
Current account	2,570	3,802	-2,400	-5,500
Trade balance	14,117	15,855	12,700	8,300
Exports	54,004	71,028	82,600	83,000
Imports	-39,888	-55,174	-69,900	-74,700
Services	-1,444	-1,019	-1,200	-1,200
Rent	-11,666	-15,424	-16,300	-15,200
Current transfers	1,563	4,390	2,400	2,600

(f) Forecast.

Source: Central Bank of Chile.

developed economies—, the baseline scenario revises world growth expected for 2011 down by 0.2 percentage points, and by half a percentage point for next year. The biggest change is for the U.S. where, aside from slow growth observed to this date, there will most likely be fiscal adjustments after the approval of the higher public debt ceiling. Growth in the euro area is still projected to be low. Also, the weakened economies in the developed world are foreseen to affect output in the emerging markets, which, in any case, will continue to outperform their developed counterparts. This projection for world growth is below the consensus forecast, which at the closing of this *Report* probably fails to reflect the full effects of current financial turbulences. However, the latest reports of investment banks do show significant downward revisions of their forecasts for developed economies.

Concerns about an overheating in the emerging world and its consequences on inflation have decreased. Monetary policy adjustments already made in several countries, the further weakening of the global economy and the recent drop in commodity prices are behind this evaluation. Thus, a number of economies have already paused their cycles of policy rate increases and, in general, the market has adjusted its expectations to the MPR remaining flat. In the developed economies, it is most likely that monetary policy will hold on to its current degree of expansiveness, and it is even possible for it to intensify. The Federal Reserve announced its intention to keep the rate at its minimum at least until mid-2013.

The sum of all the above will mean that the external impulse that the Chilean economy will be receiving in the coming quarters will be weaker than previously forecast. On one hand, the worsened global performance will have a negative impact on the economic activity of Chile's trading partners. Still, it will grow above its 2000-2007 average. The change in composition and weight of this group of countries—where emerging economies, most specially China, have strongly increased their share—explain this result. Whereas in 2000, the weight of emerging economies in the group of Chile's trading partners was less than a third, in 2011 it is estimated to be close to half. On the other hand, a deterioration in the terms of trade is foreseen. This last projection is based on an average copper price of US\$3.7 per pound in 2012 and US\$3.5 in 2013. Meanwhile, the average price for WTI oil is forecast around US\$90 per barrel between 2012 and 2013.

In this scenario of reduced external impulse, the Chilean economy is projected to grow in the range of 6.25% to 6.75% this year. This range is within the June projection. Up to the second quarter, output was growing somewhat above the trend and the forecast in June's *Report*; consumption was slowing its strong previous expansion, but less than forecast; the labor market continued to show signs of tightness and financial conditions remained favorable, with credit posting an increasing y-o-y growth rate.

The impact of the modified external scenario will be visible more strongly in the growth rate for 2012. For then, GDP is expected to increase between 4.25% and 5.25%. The slowdown from this year responds to several factors.

## Inflation

	2009	2010	2011 (f)	2012 (f)	2013 (f)
(annual change, percent)					
Average CPI inflation	1.6	1.4	3.1	2.8	
December CPI inflation	-1.4	3.0	3.3	2.9	
CPI inflation in around 2 years (*)					3.0
Average CPIX inflation	2.8	0.5	2.4	2.9	
December CPIX inflation	-1.8	2.5	2.9	2.8	
CPIX inflation in around 2 years (*)					3.0
Average CPIX1 inflation	2.7	-0.7	1.3	2.7	
December CPIX1 inflation	-1.1	0.1	2.4	2.8	
CPIX1 inflation in around 2 years (*)					3.0

(f) Forecast.

(\*) Inflation forecast at the third quarter of 2013.

Source: Central Bank of Chile.

On one hand, there is the necessary convergence to growth figures consistent with trend growth, which the Board continues to estimate around 5%. This convergence relies on the impact of increases already made to the MPR on aggregate demand. On the other hand, there is the already mentioned reduced external impulse, which will be felt in the coming quarters. It is also assumed that the fiscal balance will converge to a structural deficit of 1% of GDP towards the end of the present Administration, as announced by the authority and in conformity with the Fiscal Accountability Law.

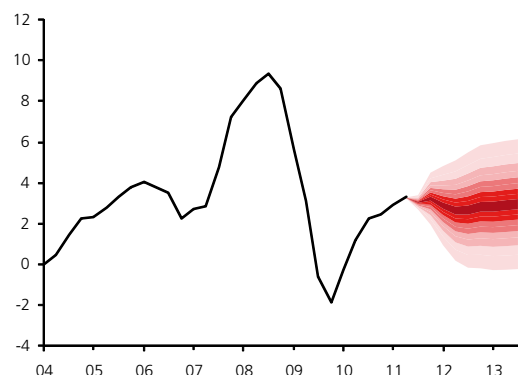
The change in the external scenario has also caused major changes in the inflation outlook, especially for the short term. In the baseline scenario, the y-o-y CPI inflation rate prevailing towards the end of the year will be less than forecast in June, mainly reflecting the lower fuel prices. Private inflation expectations have been revised in the same direction and point at CPI inflation being slightly above 3% by year's end. Going forward, it will remain around the target, up to the third quarter of 2013, which now marks the end of the projection horizon. This path for inflation is based on several assumptions. As already mentioned, that the economy will grow close to the trend over the next few quarters. Also that the real exchange rate will remain in its current levels, which are within the range estimated to be consistent with its long-term fundamentals. Another assumption is that labor costs will grow in line with the inflation target. As for monetary policy, the MPR has reached a range that is considered normal. Unlike forecasts of a few months back, when market surveys indicated an expectation of further rises in the MPR, the changes in the macroeconomic scene have led to a higher dispersion of private expectations. Furthermore, certain indicators even suggest a decline in the short run. However, the baseline scenario uses as a working assumption that, in the short run, the MPR will be around its current level.

This scenario, as usual, reflects the events that are thought to have the highest probability of occurrence with the information available at the statistical cutoff of this *Report*. There are risks that, if materialized, will shape a different macroeconomic outlook than the one described here. On this occasion, after evaluating the likelihood of alternative scenarios, the Board estimates that the risk balance for output is biased downward, and unbiased for inflation.

The main risks have to do with the complex global economic outlook. Stress episodes repeating themselves or intensifying cannot be ruled out, with the resulting effects on the financial sector and agents' confidence. This, because the main problems of private and public indebtedness in developed economies have yet to be resolved. The deleveraging process continues its course, a part of the market believes that the fiscal adjustment measures are still insufficient to turn around the problem of public over-borrowing, global imbalances are still unresolved and tensions are accumulating in the European monetary union. The response to these developments is complicated, given that monetary and fiscal policies in the developed world have little room to maneuver.

## CPI inflation forecast (\*)

(annual change, percent)

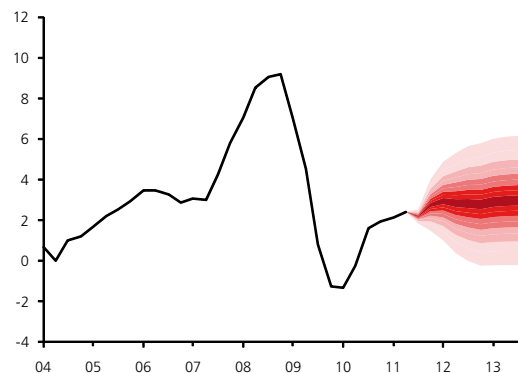


(\*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% around the baseline scenario are included. These intervals summarize the risks on inflation as assessed by the Board. The baseline scenario uses as a working assumption that, in the short run, the MPR will be around its current level.

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 risks on inflation as assessed by the Board. The baseline scenario uses as a working assumption that, in the short run, the MPR will be around its current level.

Source: Central Bank of Chile.

Another part of the risks in the external scenario comes from developed countries' growth beyond the projection horizon. As aforesaid, the baseline scenario contains a projection that is below the consensus. However, it cannot be ruled out that the impact will be even stronger than foreseen. At any rate, beyond this specific effect, doubts persist about the strength of the recovery process in the developed world. The carry-over effects of the 2008 crisis, plus the high level of unemployment and increased uncertainty caused by recent tensions could have more lasting effects on output in the developed economies. It is also possible, as has begun to be discussed more frequently, that these economies' potential growth has fallen because of the crisis. This could have consequences on the level of interest rates, the speed of leverage problems' resolution, and growth in emerging economies. In this scenario, world growth will be slower than in the past.

Nor can a scenario where postponed increases in monetary policy interest rates of developed economies and their lack of dynamism push investors to seek for higher returns in emerging countries be ruled out. This would cause a resurgence of capital inflows to these countries. Accommodating them could complicate the conduct of macroeconomic policies.

Domestically, risks are centered on the ongoing strength of output and demand. Although the economy has proceeded fairly close to forecasts, moderation has been somewhat less than expected, the labor market is still tight—various sources of casuistic information reveal difficulties and pressures in the labor market—and the y-o-y credit expansion rate has risen. It is possible that, beyond global tensions, the Chilean economy will continue to grow above trend, accumulating inflationary pressures misaligned with the inflation target.

Doubts about the way the external scenario will unfold and how it will affect the Chilean economy advise to act prudently. Being Chile a globally integrated economy, it cannot be immune to foreign developments. Monetary policy has the necessary tools to cushion the possible impact of worse-than-foreseen external scenarios, as it has shown in the recent past. The Board reaffirms its commitment of conducting monetary policy with flexibility in order for projected inflation to stand at 3% over the policy horizon. Any future changes to the MPR will depend on the implications of domestic and external macroeconomic conditions on the inflation outlook.

# Monetary policy decisions in the last three months

## Background: June 2011 meeting and *Monetary Policy Report*

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The main news for the second quarter of the year was the attenuation of some of the inflationary risks identified in March. International commodity prices did not continue to rise at the rate recorded between mid-2010 and early 2011, although they remained high. In addition, the propagation of specific price shocks was limited, in line with expectations. Together with the monetary policy decisions adopted by the Board, this had contributed to lessen the fears of a further acceleration of inflation that were evident in March. Private inflation expectations thus reverted somewhat at the margin. In the baseline scenario of the June *Monetary Policy Report*, the projected increase in total inflation was somewhat lower than estimated in March. The CPI inflation would end 2011 at 4.0%, being for a few months around that value, while for 2012, it would be located around the target and remain in that range until the end of the forecast horizon.

Locally, domestic demand and output continued to be very dynamic. Private consumption and, to a lesser extent, the machinery and equipment component of investment grew strongly. Although there were clear signs of a slowdown at the margin, it was still too early to confirm whether or not it involved a change in trend. Thus, the baseline scenario of the June *Monetary Policy Report* estimated that GDP would grow between 6 and 7% in 2011, putting it in the upper part of the range forecast in March. This growth was consistent with the upward bias identified at the time and with output gaps that remained closed along the forecast horizon. The labor market, in turn, remained tight. The unemployment rate had reached historically low levels and real wages grew at a rate around the inflation target.

The external scenario continued to be favorable for Chile, but the negative risks had intensified. On aggregate, the world growth forecast for the next two years was the same as in

March, but its composition had changed considerably. On one hand, the dichotomy between developed and emerging economies had sharpened, in terms of the outlook for growth and interest rates. The lower growth of the United States and Japan and the heterogeneous performance within the euro area, where financial tensions remained high, were offset by higher growth in emerging economies. Thus, the dollar continued to depreciate, while the emerging currencies continued to gain in value. On the other hand, inflation had increased in several countries, but the generalized concern seen at the beginning of the year with regard to the inflation path had subsided.

Inflation and output risks were balanced. One important risk was the persistence and propagation of the shock to specific prices recorded in the last few quarters, although the risk had diminished since March. While commodity prices were expected to be relatively stable in the external markets, the possibility of higher prices could not be ruled out. This could have important effects on local inflation given the state of the output gap. The evolution of output and demand was also relevant in this sense. If they continued to grow as dynamically as in the first quarter, it could lead to an over-utilization of installed capacity, with the subsequent inflationary pressures that would induce.

With regard to the monetary policy decision for June, the most plausible options were to hold the MPR at 5% or increase it to 5.25%. In this context, holding the MPR at 5% was consistent with a more complex external scenario, characterized by extraordinarily low interest rates and the implications of a widening interest rate gap for the exchange rate. In addition, local inflation expectations had fallen. However, the option of raising the MPR by 25 basis points (bp) was consistent with the balance of risks for inflation: continuing to withdraw the monetary stimulus so as to align it with historically neutral ranges would act as a preventive measure to mitigate dynamic domestic demand and contain the propagation of adverse supply shocks. The Board therefore decided to increase the MPR by 25bp, to 5.25% in annual terms.

The Board considered that, under the most probable scenario, additional increases in the MPR would be necessary, although the timing would depend on the evolution of internal and external macroeconomic conditions. The Board reiterated that it would continue to be flexible in its use of policy in order to keep forecast inflation at 3% in the policy horizon. The baseline scenario of the June *Monetary Policy Report* considered that the MPR path would be comparable to the path deduced from the different measures of expectations.

## July and August meetings

For the July meeting, the external scenario featured greater uncertainty about the world economic outlook, whose effects were difficult to gauge. In Europe, the fiscal and financial problems of the peripheral economies had intensified and extended to other countries in the region, creating less favorable financial conditions in the international markets and heightening the pressure for a stronger fiscal adjustment. In the United States, consumption remained depressed, as a result of the high unemployment level, the continued deflation of housing prices, and the effects of the debate on the fiscal deficit limit. In China and other emerging economies, there was still a risk of greater inflationary pressures and the possibility of a sudden, unexpected slowdown in growth, which would have negative consequences on commodity prices and growth in other regions. Domestically, there were ongoing risks related to the growth rate of the economy and the intensity of use of domestic factors, although, in contrast to previous months, the risks had not escalated in the last month. Recent data showed some signs of moderation in private consumption and employment, which was a welcome development and was not surprising based on the projections of the last *Report*. Inflation had been somewhat below the market forecast in June, and inflation risks were easing as a result of the detention and partial reversal of rising commodity prices, the reduction in inflation expectations in Chile, and the limited pass-through of increases in international food and energy prices to domestic prices. Nevertheless, these risks were still significant due to the volatility of commodity prices, the closing of the domestic output gap, and the persistence of inflation expectations in the upper part of the target range. Given the developments since the last meeting, the most plausible options were either to raise the MPR 25 basis points (to 5.50%) or to hold it at 5.25%. Both options were consistent with the MPR path outlined in the last *Report*, which left room for pauses between meetings. A hike of 25 basis points would provide room for maneuver in the face of an uncertain external scenario and a latent risk that output and demand would continue to post an unsustainable

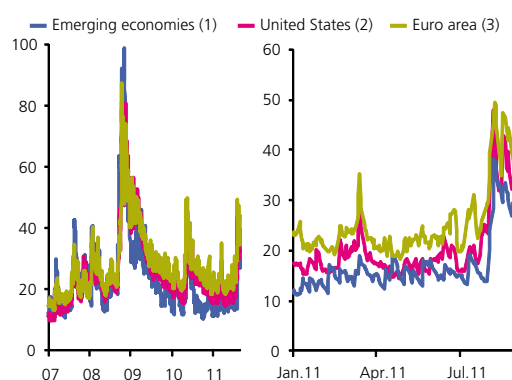
growth rate. At the same time, the option of taking a short break in the process of normalizing monetary policy was consistent with the need to monitor the effects of the earlier MPR adjustments on aggregate demand and to more fully assess the consequences of recent external events. The Board therefore decided to hold the MPR at 5.25% in annual terms.

For the August meeting, the external scenario had worsened significantly, with weak macroeconomic data for the developed countries and a significant increase in financial market volatility. The change in this scenario would probably have global repercussions, whose effects would be felt in the emerging economies, including Chile. Domestically, output indicators recorded a solid performance. With regard to inflation, the reduction in some commodity prices and the limited pass-through of earlier fuel and food price hikes to other domestic prices had led to a reduction in the immediate outlook for price increases. As a result, medium-term inflation expectations had aligned with the 3% annual target. At the same time, expectations were not unanimous regarding the need to start increasing the MPR again. Based on the data collected since the last meeting, a proposal was made to hold the MPR at 5.25%. This was consistent with a scenario in which the short-term inflation outlook and risks had diminished considerably, and the world economic outlook was more negative. The decision hinged on whether to maintain or eliminate the bias toward tightening. Maintaining the tight bias could be justified by a slower softening of domestic demand, a faster closing of the output gap, the risk of a possible intensification of inflationary pressures due to higher labor costs and/or bigger sales margins, and the expectation of a swift normalization of international financial market volatility. Eliminating the bias, in turn, was justified by the very broad range of negative risks stemming from the external scenario and their potentially significant—though as yet uncertain—consequences for domestic inflation and growth. Moreover, the political and financial difficulties affecting Europe and the United States would probably persist in the coming months, which would have a negative effect on the confidence of investors, business people, and consumers and hinder the recovery of these economies. The Board therefore decided to hold the MPR at 5.25% in annual terms, eliminating the tight bias.

# I. International scenario

**Figure I.1**

Stock market volatility  
(percent)



(1) Estimated historical volatility of the MSCI index in dollars.  
(2) VIX volatility index. See glossary for definition.  
(3) VSTOXX volatility index. See glossary for definition.

Sources: Central Bank of Chile, Bloomberg and Morgan Stanley Capital International.

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 relevant to the Chilean economy, as well as the main risks.

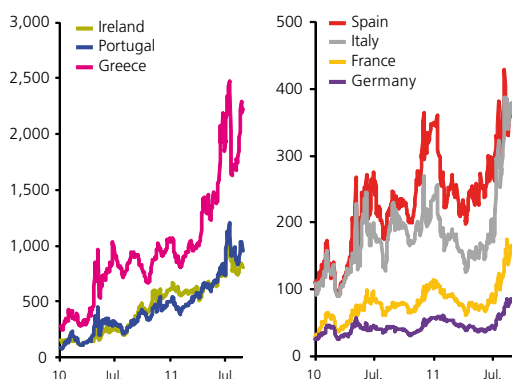
## Financial markets

Since mid-July, the world economic scenario has been characterized by heightened concern for the debt situation and fiscal position of some economies in the euro area, the consolidation of fiscal finances in the United States and the prospect of slower growth in the developed economies, which has triggered strong turbulence in the world financial markets.

These concerns grew in early August, causing a significant increase in uncertainty and volatility, which was reflected in high risk aversion. The VIX index and the risk indicators of countries in the euro area increased substantially (figure I.1). The sovereign spreads of Spain, Greece, Ireland, and Portugal hit new historical peaks (figure I.2). Germany and France also saw their spreads rise. Bank spreads increased considerably in the European peripheral economies and the United States, as did corporate spreads. Moreover, liquidity conditions have been tight in the monetary markets, particularly in Europe (figure I.3).

**Figure I.2**

Sovereign spreads (\*)  
(basis points)



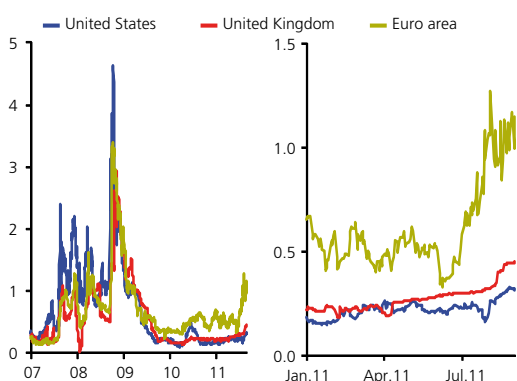
(\*) Measured by the five-year CDS spread. See glossary for definition.

Source: Bloomberg.

The increased preference for safer assets has also been reflected in stock market drops around the world and a new historical peak for the price of gold. Long-term interest rates have fallen sharply in a number of developed economies that serve as safe havens. The United States, the euro area, Switzerland, and the United Kingdom have posted reductions of between 70 and 90 basis points since June, and in the majority, rates are at historical lows (figure I.4). In some of these economies, the rate reductions are also related to weaker growth. An additional factor in the United States is the Federal Reserve's announcement that it intends to hold the monetary policy rate at the minimum level through mid-2013. In this context, the dollar began to appreciate in early August, after having fluctuated since the statistical closing date of the June *Monetary Policy Report*. Nevertheless, the multilateral dollar is at a similar level to the close of the June *Report*. The Swiss franc appreciated markedly in line with the demand for safer assets, forcing the authorities to implement measures to slow the trend.

**Figure I.3**

Three-month liquidity conditions in the interbank market (\*) (percent)

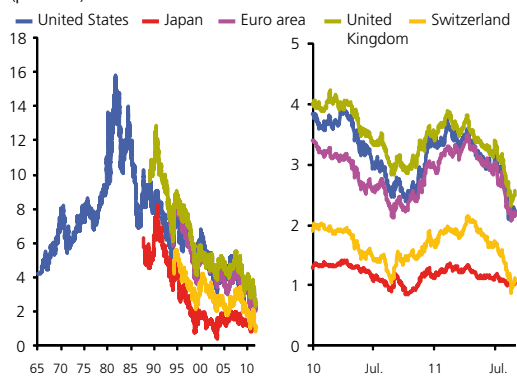


(\*) Spread between the three-month Libor and the three-month Treasury bond rate. For the euro area, it is the spread between the three-month Euribor and the three-month German Treasury bond rate.

Source: Bloomberg.

**Figure I.4**

Long-term interest rates in developed economies (\*) (percent)

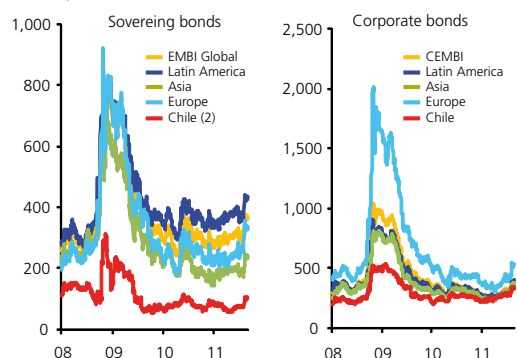


(\*) Interest rate on ten-year government bonds.

Source: Bloomberg.

**Figure I.5**

Emerging market spreads (1) (basis points)



(1) Measured by the EMBI and CEMBI index, respectively. See glossary for definition.

(2) The five-year CDS spread. Prior to 8 September 2009, it is the sovereign spread excluding Codelco bonds.

Sources: Central Bank of Chile, Bloomberg and JP Morgan Chase.

The increased risk aversion also contributed to higher risk indicators for the emerging economies. Both sovereign and corporate spreads increased, though to a lesser degree than in the developed economies (figure I.5). The stock markets declined substantially. Based on the respective MSCI indices measured in local currency, the stock exchanges in Latin America, Asia, and emerging Europe have fallen between 10 and 15% since the *June Report*, with the sharpest drop recorded in emerging Europe (figure I.6). These economies have also witnessed capital outflows, and their currencies returned to the clear upward trend registered since the first of the year (figures I.7 and I.8).

The situation in the euro area is still very complex. Political, economic, and financial efforts by the authorities to prevent contagion to the cost of debt of Spain and Italy have not succeeded in easing market stress. Doubts remain about the long-term sustainability of the debt, given the significant fiscal adjustments that will have to be made for countries to meet their commitments. Tension is also rising in the European monetary union, in view of weak output and domestic demand and the limited possibility of implementing expansive policies.

The pressure in the European debt markets, the expectations of a lower growth and of a deepening of the fiscal adjustment in the developed economies have affected monetary policy management at the global level. In the developed economies, monetary policy will continue to be extraordinarily expansive for longer than projected a few months ago. As mentioned, the Federal Reserve communicated its intention of holding its rate at the lower limit at least through mid-2013 and left open the possibility of taking additional monetary stimulus measures. Expectations of a new rate hike have been pushed back in the euro area. The United Kingdom and Japan are also expected to keep the reference rate at a minimum for some time.

The emerging economies continued to increase their monetary policy rates through July, albeit with some interruptions, in response to inflation trends and dynamic output. In August, almost all the central banks of these economies held their rates, justifying the decision by the heightened uncertainty about the world economic scenario. Brazil and Turkey even lowered their reference rates by 50 basis points. Consequently, the policy rate expected in these economies from here through the end of 2012 has declined relative to the projections in the *June Report* (figure I.9).

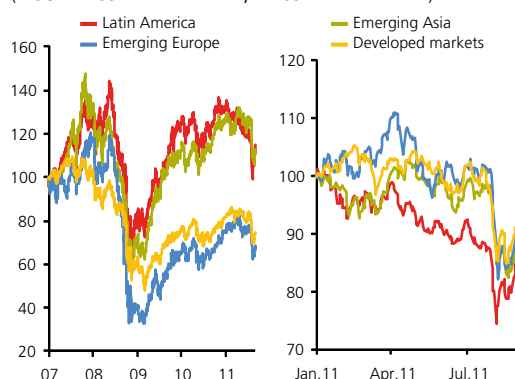
## World growth

As indicated, concerns about the recovery of the developed economies have intensified (figure I.10). Real output data for the second quarter were lower than expected, and partial data for the third quarter point to a further weakening of their growth rate. Consumption has not recovered, as a result of the weak labor market. Confidence indicators have continued to decline, with a sharp drop in August in response to the greater uncertainty at the global level. In addition, the possibilities for a more expansive monetary policy are limited, and there are no options in terms of fiscal stimulus to boost growth. The emerging economies continue to be markedly more dynamic than the

**Figure I.6**

World stock markets (\*)

(index 02.Jan.2007 = 100; 03.Jan.2011 = 100)



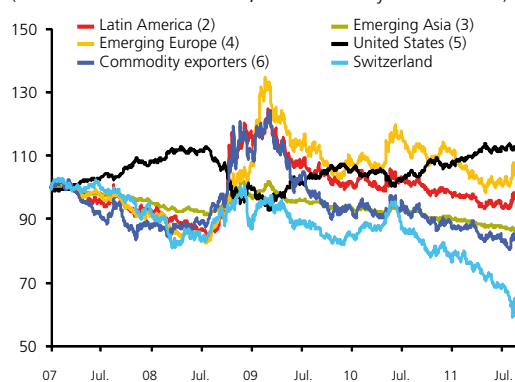
(\*) MSCI indices in local currency.

Source: Bloomberg.

**Figure I.7**

Currency parities (1)

(index 01.Jan. 2007 = 100, local currency to the dollar)



(1) PPP-weighted average for each region. An increase indicates depreciation.

(2) Includes Argentina, Brazil, Chile, and Mexico.

(3) Includes China, Indonesia, Malaysia, South Korea, and Thailand.

(4) Includes Hungary, Poland, Czech Rep., and Russia.

(5) Dollar against a basket of currencies from the main U.S. trading partners. An increase indicates depreciation of the dollar.

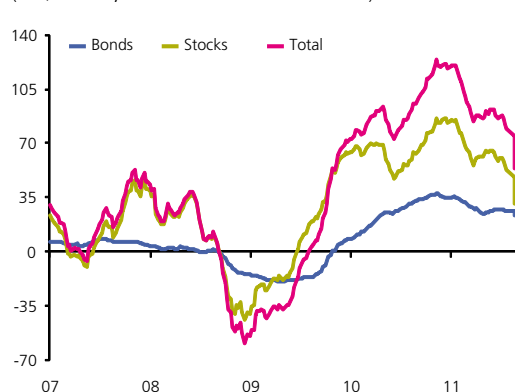
(6) Includes Australia, Canada, and New Zealand.

Sources: Bloomberg and International Monetary Fund.

**Figure I.8**

Net flow of investment funds to emerging economies (\*)

(US\$ billion, accumulated in 12 months)



(\*) Investment funds that are invested in emerging economies.

Source: Emerging Portfolio Fund Research.

developed countries, despite the fact that their growth rates have slackened in line with the withdrawal of the monetary stimulus and the convergence toward trend rates. Partial indicators, such as buyers' forecasts, suggest that their output will continue to slow in response to the factors mentioned above and the lower growth outlook of the developed economies.

The world growth forecast has been affected by real output data for the developed world, the effect of the fiscal cuts announced in these economies, and the possible effects of the recent increase in financial turbulence on consumption and investment decisions. In the baseline scenario, world growth has been adjusted downward two-tenths of a percentage point for 2011 and five-tenths for 2012, both relative to June (table I.1). The correction for this year is due to the large adjustment in the United States. In the euro area, growth is still expected to be low. The emerging economies, in general, have not changed, due to higher real data in the first half, which offsets the global downturn expected in the second half. In any case, most of the effects of the current turbulence and lower growth in the developed economies are expected to be felt in 2012. As of the statistical close of this *Report*, consensus forecasts have probably not yet incorporated all of these factors, and their growth projections for 2011 and 2012 are between one- and three-tenths of a point higher than the baseline scenario. However, the investment banks' most recent reports do include significant downward adjustments for the developed economies.

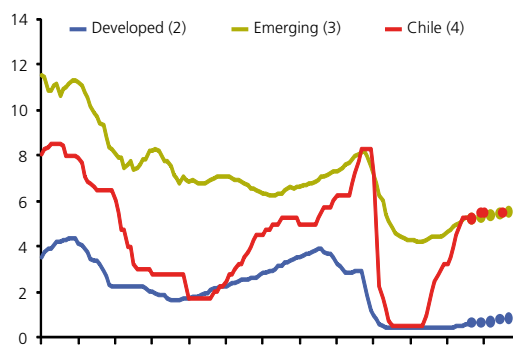
The emerging economies will continue to record higher growth than the developed countries, despite the impact of the weakening of the latter on the performance of the former. In the second quarter, China continued to post high annual growth rates, above trend. Going forward, China's growth is expected to slow, in line with the strong monetary adjustments being implemented to stem the increase in the price level and face the decline in world growth. For 2012, GDP growth in China is forecast at 8.3%, which is lower than in past years.

The worse global performance will also affect the output of Chile's trading partners, which has been adjusted downward by one-tenth of a percent for 2011 and by four-tenths for 2012. However, the projected growth is still higher than the average for 2000–07. A key factor in this trend is the change in the composition and weight of this group of countries, in which the emerging world, especially China, has strongly increased its share. Whereas the emerging economies represented 28% of Chile's trading partners in 2000, the share is estimated to have increased to 48% in 2011. At the global level, the emerging economies also account for a larger share of world growth. In 2000, GDP adjusted for the purchasing power of these economies was 26% of world GDP, and it will be 36% in 2011.

The risks to the external baseline scenario are significant. The underlying problems of the debt situation in the developed economies have not yet been resolved. It is therefore possible that the recent stress could recur or intensify, generating more risk aversion and a greater lack of confidence in the financial markets than seen thus far. Another source of risk involves the possibility that the United States and the euro area will continue to record low growth

**Figure I.9**

Real and expected monetary policy rates in the world (1)  
(percent)



(1) The solid lines graph the simple average of the reference rates for each group of countries. For the regions, the dots indicate the median of the Bloomberg analyst surveys for the expected MPR in September 2011, December 2011, March 2012, June 2012, and September 2012. For Chile, the data are from the August EES for the expected MPR in September 2011, December 2011, January 2012, and July 2012. The baseline scenario of this *Monetary Policy Report* uses the working assumption that the MPR will stay around its current level in the short term.

(2) Includes United States, euro area, Japan, and United Kingdom.

(3) Includes Brazil, China, Colombia, Hungary, Mexico, Peru, Poland, Czech Rep., South Korea and South Africa.

(4) Data before the nominalization of the reference rate (August 2001) consider the real interbank overnight interest rate plus CPI inflation.

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

**Table I.1**

World growth (\*)  
(annual change, percent)

	Ave. 90-99	Ave. 00-07	2010 (e)	2011 (f)	2012 (f)	2013 (f)
World at PPP	3.1	4.2	5.0	3.9	4.0	4.5
World at MER	2.7	3.2	3.8	3.0	3.3	3.7
United States	3.2	2.6	3.0	1.6	2.0	2.8
Euro area	2.2	2.2	1.7	1.7	1.2	2.1
Japan	1.5	1.7	4.0	-0.5	2.8	1.8
China	10.0	10.5	10.3	9.0	8.3	8.7
Rest of Asia	5.6	5.1	7.8	4.9	4.5	5.0
Latin America (excl. Chile)	2.8	3.5	6.3	4.2	3.9	4.2
Commodity exporters	2.8	3.1	2.9	2.2	2.5	3.2
Trading partners	3.1	3.6	5.9	4.2	4.3	4.6

(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. 90-99	Ave. 00-07	2010	2011 (f)	2012 (f)	2013 (f)
United States	3.0	2.8	1.6	3.0	2.1	2.0
Euro area	2.3	2.2	1.6	2.6	1.9	2.0
Japan	1.2	-0.3	-0.7	0.3	0.2	0.4
China	7.8	1.7	3.3	5.3	4.1	3.8
Australia	2.5	3.2	2.8	3.3	2.9	2.5
New Zealand	2.1	2.6	2.3	4.3	2.7	2.0
Brazil	854.8	7.3	5.0	6.5	5.6	4.8
Mexico	20.4	5.2	4.2	3.4	3.7	3.3
EPI (*)	1.8	4.6	5.8	9.8	2.9	2.1
LPI (*)	27.2	5.2	4.8	5.8	3.2	2.9

(\*) 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.

rates for an extended period, further delaying their recovery to growth rates in line with their historical averages. In addition, the United States or another developed economy could potentially suffer a new recession. Finally, the delay in raising the monetary policy rates in the developed world and the lack of dynamism in their economies could lead investors to seek higher returns in the emerging world. This would imply capital inflows to emerging economies, which could complicate their economic policy management.

## Commodity prices

The forecast of a weaker performance in the developed economies and its effect on world growth have been reflected in a drop in commodity prices, with the exception of agricultural products. The WTI oil price declined from just over US\$100 a barrel at the close of the *June Report* to just under US\$90 a barrel at the close of this *Report*. Gasoline is around the level recorded in June, although it has fluctuated. Copper traded at around US\$4.10 a pound, which is close to the value at the close of the last *Report*, although it hit a nominal peak of nearly US\$4.50 a pound in July.

In line with the lower real prices and the reduced world growth forecast, the baseline scenario adjusts the price of both oil and copper downward for 2011 and 2012. Based on average futures curves in the last ten business days, the WTI oil price is projected to average US\$93 in 2011 and US\$89 in 2012 (versus US\$99 and US\$103, respectively, in June). For copper, the price forecast for 2011 remains US\$4.15 a pound, based on the high prices in the first half of the year. For 2012, the price has been adjusted to US\$3.70 a pound (versus US\$4.00 in June). In contrast, most agricultural prices have increased. In particular, rice and sugar have risen 15% and 25%, respectively, since the statistical closing date of the *June Report*.

## World inflation

Inflationary pressures have eased at the world level, mainly due to the drop in commodity prices and the lower growth forecast, in particular in the developed economies. Consequently, the risk of an inflationary scenario at the world level has currently decreased.

Consensus inflation forecasts are no longer showing the sharp rises seen early in the year. Expectations measures based on the most recent information have continued to decline. Nevertheless, the baseline scenario assumes that in 2011, the external prices relevant to the Chilean economy, measured in dollars (EPI), will be higher than projected in June (table I.2). This adjustment mainly reflects the sharp depreciation of the dollar in the first half of the year and the higher real inflation in the second quarter, especially in the emerging economies.

## Box I.1: Stylized facts in episodes of international financial stress

This box describes some stylized facts for the movements of certain financial variables and commodity prices during episodes of international financial stress. Specifically, episodes of international financial stress are characterized by a sharp, lasting increase in volatility in the international financial markets and in the different spreads. A quick way to identify these periods is to examine the evolution of the VIX volatility index, which corresponds to the volatility implied in options prices on the S&P 500 stock index. In this box, an episode of financial stress is defined as a period in which the VIX exceeds its historical average by more than two standard deviations.

From 1990 to date, there have been nine of these episodes: May 1990, October 1997, August 1998, September 2001, July 2002, March 2003, September 2008, May 2010, and the current episode, August 2011. These events had a variety of causes, including geopolitical events (1990, 2001, and 2003), crises in emerging economies (1997 and 1998), and financial events in advanced economies (2002, 2008, 2010, and 2011).

The September 2008 episode clearly displays the greatest movement in the different variables. For all of the variables discussed in this box, the movement during that event far exceeds both the sample average and the level recorded in the event that began in August 2011. This was also the only episode that was followed by a world recession. Consequently, this exercise considers the average movements of all the events both including and excluding the September 2008 episode.

First, the increase in financial volatility that is generated in each episode tends to peak in the first thirty days, and it then gradually levels off over the next ninety days. On average, however, the level at the end of the period in question is higher than before the event (figure I.10). In the episode starting in August 2011, the increase in the VIX was larger than the average of the episodes included in the sample, hitting an intermediate point between the general average and the level reached in 2008.

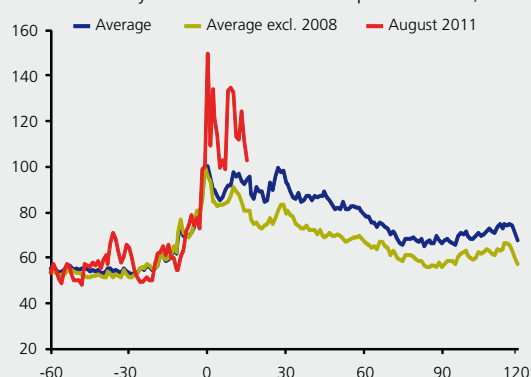
Second, the stock markets follow a similar pattern to the VIX. After an initial drop, they remain low for around thirty days and then start recovering slowly, but the volatility is too high

to establish a general pattern (figure I.11). In the early August event, the initial contractions were sharper than average, but not as sharp as recorded in 2008.

**Figure I.10**

VIX (\*)

(index on the first day of the financial stress episode = 100)



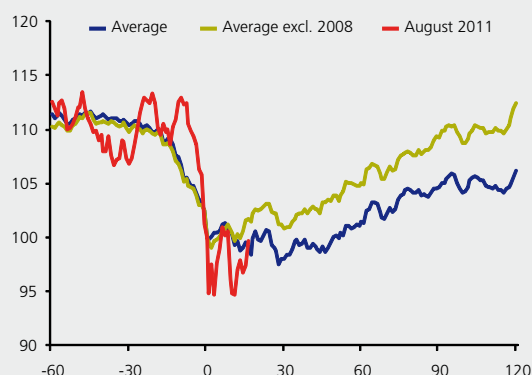
(\*) Daily movement of the variable from 60 days before the starting point of the financial stress episode to 120 days after. Point 0 on the x axis is the first day of the episode. The average is based on eight episodes from May 1990 to May 2010. In all these events, the VIX exceeded its historical average by more than two standard deviations.

Sources: Central Bank of Chile and Bloomberg.

**Figure I.11**

Global MSCI stock index (\*)

(index on the first day of the financial stress episode = 100)



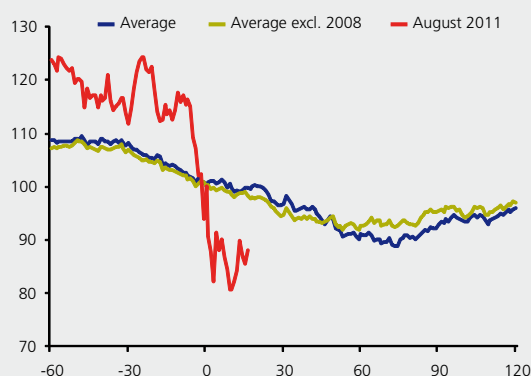
(\*) Daily movement of the variable from 60 days before the starting point of the financial stress episode to 120 days after. Point 0 on the x axis is the first day of the episode. The average is based on eight episodes from May 1990 to May 2010. In all these events, the VIX exceeded its historical average by more than two standard deviations.

Sources: Central Bank of Chile and Bloomberg.

Third, long-term interest rates in the United States fall significantly in periods of financial stress (figure I.12), and they have fallen more than average in the current episode. However, the usual drop in interest rates does not imply a reduction in the cost of financing, because spreads for both businesses in advanced economies and government bonds in emerging economies also increase significantly during this type of episode.

**Figure I.12**

Nominal ten-year interest rate in the United States (\*)  
(index on the first day of the financial stress episode = 100)



(\*) Daily movement of the variable from 60 days before the starting point of the financial stress episode to 120 days after. Point 0 on the x axis is the first day of the episode. The average is based on eight episodes from May 1990 to May 2010. In all these events, the VIX exceeded its historical average by more than two standard deviations.

Sources: Central Bank of Chile and Bloomberg.

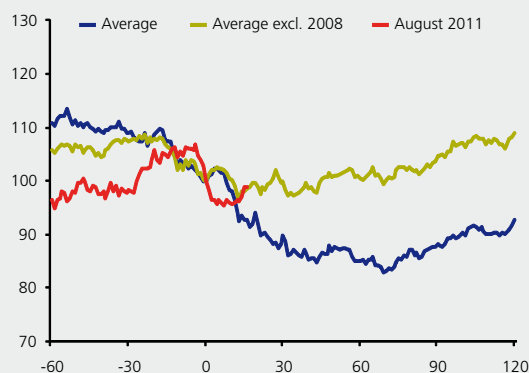
Fourth, the dollar tends to appreciate in periods of financial stress, while the currencies of commodity exporters and emerging economies tend to depreciate.

Finally, the response of commodity prices is less conclusive than the variables discussed above, especially if the September 2008 event is excluded. Commodity prices generally fall on the order of 5 to 10% around the time the crisis erupts (figures I.13 and I.14). The 2008 episode, in particular, featured a sharp drop, which probably reflects the high price levels when the crisis hit and the fact that the 2008 crisis sparked a world recession that strongly affected demand. Agricultural prices responded less than oil and copper prices. One possible explanation is that agricultural prices had already begun a

process of reduction in the second quarter of 2008, and that the demand from the emerging economies—the main consumers of these products—contracted less than the rest of the world. There are also some specific factors that are not controlled for in this exercise, such as the climatic factors affecting supply, and possible supply restrictions.

**Figure I.13**

LME copper price (\*)  
(index on the first day of the financial stress episode = 100)

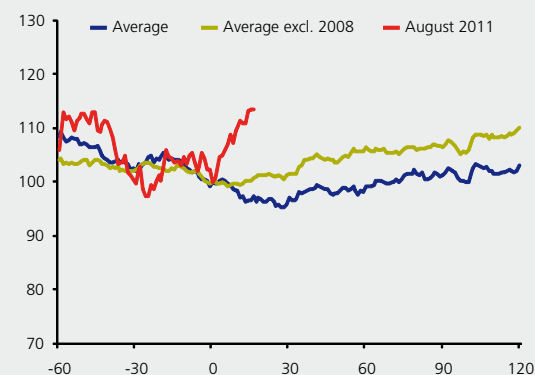


(\*) Daily movement of the variable from 60 days before the starting point of the financial stress episode to 120 days after. Point 0 on the x axis is the first day of the episode. The average is based on eight episodes from May 1990 to May 2010. In all these events, the VIX exceeded its historical average by more than two standard deviations.

Sources: Central Bank of Chile and Bloomberg.

**Figure I.14**

Agricultural prices (1) (2)  
(index on the first day of the financial stress episode = 100)



(1) Measured by the GSCI index.

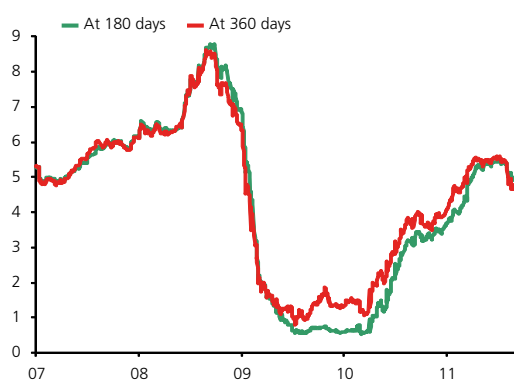
(2) Daily movement of the variable from 60 days before the starting point of the financial stress episode to 120 days after. Point 0 on the x axis is the first day of the episode. The average is based on eight episodes from May 1990 to May 2010. In all these events, the VIX exceeded its historical average by more than two standard deviations.

Sources: Central Bank of Chile and Bloomberg.

## II. Financial markets

**Figure II.1**

Swap rates (\*)  
(percent)

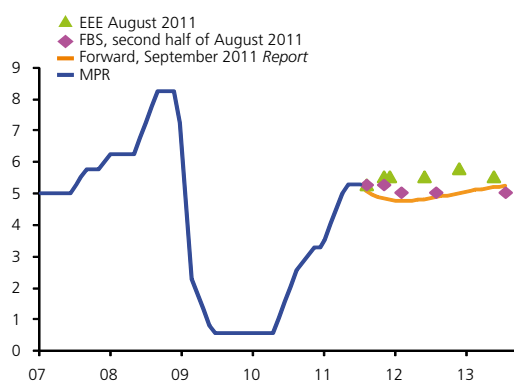


(\*) See glossary for definition.

Source: Central Bank of Chile.

**Figure II.2**

MPR and expectations  
(percent)



Source: Central Bank of Chile.

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

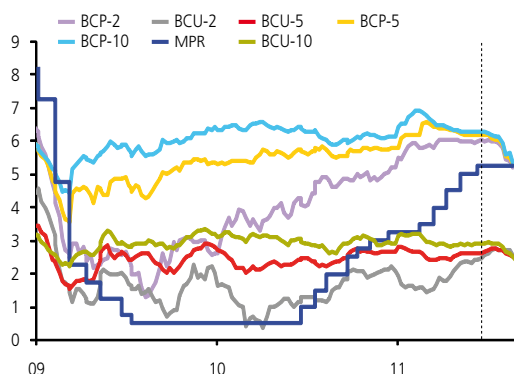
### Monetary policy

In the second quarter, output and demand continued to ease, though at a slower rate than forecast in the *June Report*. Inflation, however, was lower than projected. The most important recent changes have occurred in the external scenario, with the materialization of some of the risks considered in the past few quarters—most notably the deterioration in the growth outlook for the developed economies and the emergence of doubts about the public and private financial situation in the euro area and the United States. This has translated into higher risk aversion, leading to a widening of interbank spreads in the developed countries, a rise in stock market volatility, and increased demand for safer instruments. In the domestic interbank and money markets, operations proceeded normally, and the strongest effects were seen in the fixed-income, stock, and currency markets. Nevertheless, domestic financial conditions continue to be favorable, and credit continues to expand month on month. The Board kept the monetary policy rate (MPR) unchanged at 5.25% at the meetings of July and August and withdrew the tightening bias.

The changes in the macroeconomic scenario have led to higher dispersion in private expectations for the MPR. This contrasts with the situation in June, when it was generally expected that the MPR would continue to rise. Some measures, like the Financial Brokers Survey (FBS) for the second half of August and financial asset prices, even suggest a decline in the short run (figure II.1 and table II.1). The different expectations measures indicate that in one year, the MPR will lie between 4.5 and 5.5% (versus 5.7 and 6.0% in June), and in two years the range will be similar, between 4.7 and 5.5% (5.7 and 6.4%) (figure II.2). A working assumption in the baseline scenario of this *Report* is that in the short run, the MPR will be around its current level.

**Figure II.3**

MPR and interest rates on Central Bank instruments (\*)  
(weekly averages, percent)

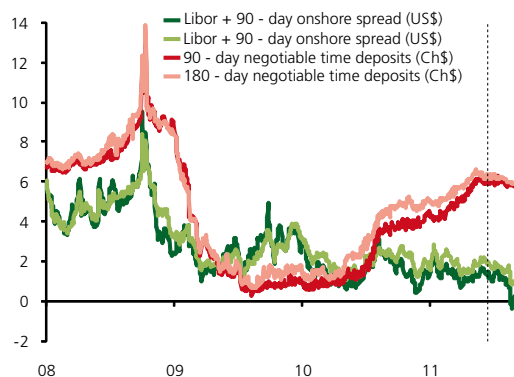


(\*) Vertical dotted line indicates the publication date of the June 2011 Monetary Policy Report.

Source: Central Bank of Chile.

**Figure II.4**

Interest rates in dollars and pesos in the local market (\*)  
(percent)

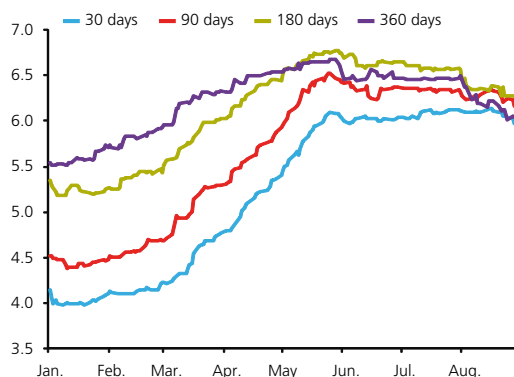


(\*) Vertical dotted line indicates the publication date of the June 2011 Monetary Policy Report.

Source: Central Bank of Chile.

**Figure II.5**

Nominal TAB rates at different maturities in 2011(\*)  
(percent)



(\*) See glossary for definition.

Source: Superintendence of Banks and Financial Institutions.

**Table II.1**

Expectations for the MPR  
(percent)

	In December 2011		One year ahead		Two years ahead	
	Report June	Report September	Report June	Report September	Report June	Report September
EES (1)	6.00	5.50	6.00	5.50	6.00	5.50
FBS (2)	5.75	5.25	5.75	5.00	5.75	5.00
Forward curve (3)	5.66	4.82	5.97	4.87	6.36	5.24
Swap contracts (4)	5.53	4.74	5.72	4.49	5.93	4.69

(1) June and August 2011 surveys.

(2) Survey for the first fifteen days of June and the second fifteen days of August 2011.

(3) Constructed using the interest rates on swap contracts up to two years and then the BCP interest rates.

(4) Constructed using the interest rates on swap contracts up to two years.

Source: Central Bank of Chile.

Most of the interest rates on peso- and UF-denominated Central Bank and Treasury instruments are lower than at the close of the June Report. In particular, interest rates began to drop in August, coinciding with investors' search for safer assets and the high exposure of the pension funds in these instruments and also following the trend for U.S. Treasury bonds and German government bonds. The drop was sharper for interest rates in pesos than in UF and, in particular, for long-term rates. Thus, since the statistical closing date of the June Report, interest rates on five- to ten-year BCP fell nearly 100 basis points, while the rates on two-year BCP dropped around 80 basis points. For UF-denominated instruments, the interest rates on BCU decreased around 40 basis points at ten years and almost 10 basis points at five years, while the rates on two-year BCU rose around 15 basis points since the close of the June Report. However, looking at the year to date, peso interest rates at different maturities have been approaching levels around 5.2%. Similarly, UF interest rates at different maturities have reached values around 2.5% (figure II.3).

The interbank and money markets have operated normally, and liquidity conditions in dollars and pesos have not felt the impact of the increased interbank spreads in the developed markets. The volumes traded in the interbank market do not show a different pattern than in June. The interest rates on dollar loans at 90 and 360 days have even declined in the last months. This stems from the decrease in the onshore rate spread and coincides with the lower exposure of the pension funds in the international market. The nominal TAB rates in pesos (the *tasa activa bancaria*, calculated by the SBIF), which reflect the banks' cost of funding, were practically stable in June and July and then began to decrease in August, especially at longer terms. A similar trend was seen for the rates on 30- to 180-day peso of negotiable time deposits (figures II.4 and II.5).

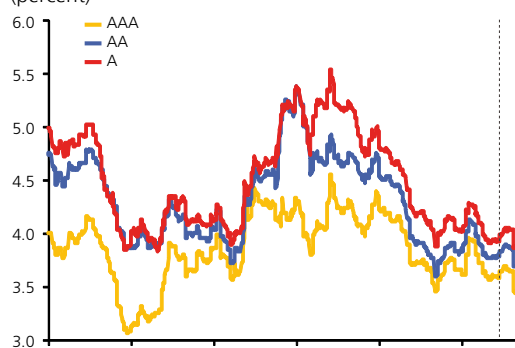
## Financial conditions

External financing conditions are less favorable than in June, as a result of the increased risk perception and the volatility in the international markets. Emerging markets saw a generalized increase in their sovereign and corporate spreads in early August, although the movement is partly associated with the decrease in long-term interest rates on government bonds and in U.S.

**Figure II.6**

Long-term interest rates on private sector bonds, by risk rating (1) (2)

(percent)



(1) Vertical dotted line indicates the publication date of the June 2011 Monetary Policy Report.

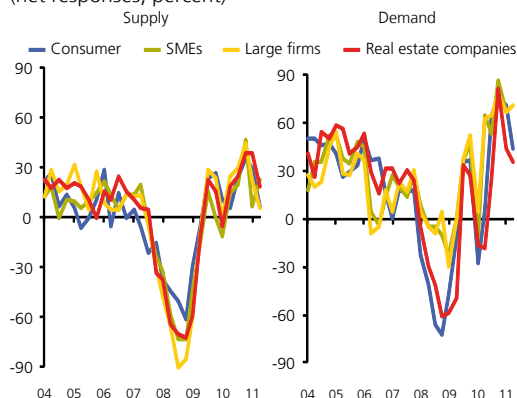
(2) Interest rates on corporate and bank bonds with a maturity of over nine years.

Sources: Central Bank of Chile and LVA indices.

**Figure II.7**

Bank Lending Survey (\*)

(net responses, percent)



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

Source: Central Bank of Chile.

dollar swap rates<sup>1/</sup>. Measured through credit default swaps, Chile's sovereign spread at five and ten years has increased almost 30 basis points since the close of the last Report.

In the local market, the spreads on corporate and bank bonds also rose in response to these factors. If this premium is discounted, however, the interest rates on bonds issued in the domestic market have decreased since early August, and they are now lower than at the close of the June Report (figure II.6).

In line with the heightened uncertainty and the flight to safer instruments, the world stock markets have been more volatile since the beginning of August, generally recording net decreases. Some of these exchanges lost the gains accrued over the past year. Some markets subsequently began to recover, including the Chilean stock exchange. However, based on the last ten business days, the local stock market, measured through the IPSA index, decreased around 10% relative to June, in both local currency and in dollars. This was slightly less than the average for emerging stock markets, as measured through the MSCI index.

**Table II.2**

Interest rates in the financial system, by type of loan (1)

(percent)

	Consumer 181 days to one year (2) (29.5)	Consumer over 3 years (2) (43.9)	Commercial 30 to 89 days (2) (23.3)	Commercial 181 days to one year (2) (19.6)	Housing over 3 years (3) (99.0)
Ave. 2002–09	32.2	25.6	7.6	10.2	4.9
2010					
Ave. I	35.9	27.0	3.8	9.4	4.5
Ave. II	34.9	25.1	3.5	8.0	4.1
Ave. III	35.5	25.6	4.8	8.9	4.0
Ave. IV	35.2	24.9	5.7	8.9	4.3
2011					
Ave. I	35.0	25.2	6.7	10.0	4.4
Apr.	36.3	25.1	7.2	10.3	4.3
May	36.0	25.3	7.7	9.9	4.2
Jun.	35.2	24.7	8.5	10.0	4.1
Jul.	36.0	25.4	8.5	10.5	4.1

(1) Weighted average rates of all operations carried out in the month. In parentheses, the share of total loans by type of loan in 2010.

(2) Nominal rates.

(3) UF rates.

Source: Central Bank of Chile.

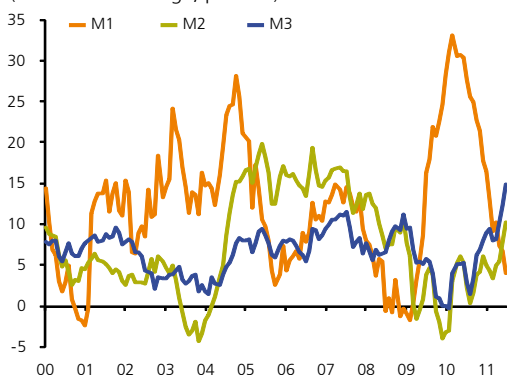
Credit conditions in the local banking system remain favorable, with few changes relative to June. In the most important segments, the interest rates applied by the banks did not change substantially in the last three months (table II.2). Preliminary data show that the stock of bank loans continued to grow month on month up to July. In annual terms, the growth rate of consumer and home loans was stable at 17 and 13%, respectively, while commercial loans increased to 12% (versus 10% in May).

<sup>1/</sup>One measure of the spread is the EMBI Global calculated by JP Morgan Chase. This index measures the yield differential on an emerging country's sovereign debt issued in dollars on the international financial markets relative to the U.S. Treasury bond with the same maturity. Another measure is the credit default swap, which is an insurance contract tied to credit events of an issuer.

**Figure II.8**

Monetary aggregates (\*)

(Real annual change, percent)



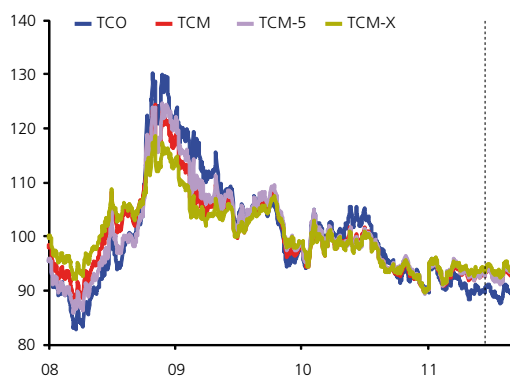
(\*) See glossary for definition.

Source: Central Bank of Chile.

**Figure II.9**

Nominal exchange rate (1) (2)

(index 02.Jan.2008–01.Sept.2011 = 100)



(1) See glossary for definition.

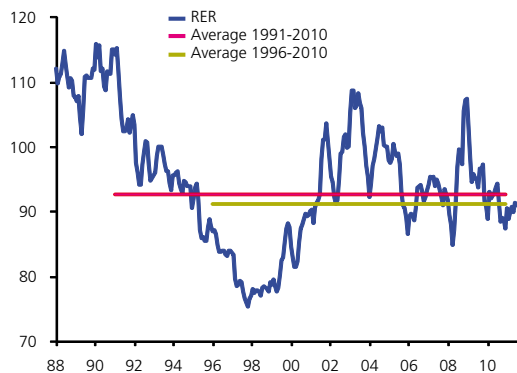
(2) Vertical dotted line indicates the publication date of the June 2011 Monetary Policy Report.

Source: Central Bank of Chile.

**Figure II.10**

Real exchange rate (\*)

(index 1986 = 100)



(\*) Preliminary data for August 2011.

Source: Central Bank of Chile.

As for credit access conditions, the Bank Lending Survey for the second quarter indicates that the majority of banks continue to further loosen their lending standards, in terms of larger loan amounts and longer maturities on loans in most sectors. At the same time, the demand for loans has strengthened relative to the last quarter (figure II.7).

With regard to the monetary aggregates, M1 (primarily unremunerated assets) continued to reduce its rate of annual growth, in line with the monetary policy cycle of the past year. In July, M1 grew at a real annual rate of 4% (versus 7% in May). M2 and M3 grew at a faster real annual rate, especially in time deposits and other fixed-income instruments. This is consistent with the external scenario of increased uncertainty and the flight to safer assets. In July, M2 grew 10% in real annual terms (versus 5% in May) while M3 grew 15% in real annual terms (10% in May) (figure II.8).

## Exchange rate

The Chilean peso has fluctuated in the past few months. In July, the currency appreciated against the U.S. dollar, to around \$455. This trend was reversed in early August, when the Chilean peso depreciated against the U.S. currency in response to higher risk aversion and the decline in the price of copper. A similar trend was seen in other emerging economies and/or commodity exporters. The currencies of some developed economies, such as the yen and the Swiss franc, appreciated markedly against the U.S. dollar in this period. However, one distinctive factor in the current episode of financial stress has been the response of the peso: whereas the peso reacted in past episodes, this time the initial depreciation was quickly reversed (box I.1). Thus, comparing the last ten business days prior to the close of the June and September Reports, the peso appreciated 0.1%. In multilateral terms, the peso depreciated 0.4% against Chile's main trading partners (the MER-5). The depreciation was lower excluding the U.S. dollar, 0.1% for the MER-X (figure II.9).

The real exchange rate (RER) has remained around 90 (where 1986 = 100), based on the nominal exchange rate level and currency parities in the ten days prior to the close of this Report (figure II.10). At the margin, the RER increased 0.4% relative to June, following the trend of the multilateral parity. The current RER level is within the range estimated to be consistent with its long-term fundamentals. As a working assumption, the RER is expected to remain around its current level.

# III. Demand and output

**Table III.1**

Gross domestic product  
(real annual growth, percent)

	Pond. 2010	2009	2010	2011	
				I	II
Agriculture, livestock and forestry	3.6	-1.1	1.0	19.0	12.9
Fishing	0.9	-7.3	-13.7	36.6	5.5
Mining	6.4	-1.3	1.2	-0.9	-2.5
Manufacturing	14.3	-6.4	-1.0	11.2	9.4
EGW	2.3	14.5	13.7	9.0	5.4
Construction	6.8	-7.9	3.6	9.4	7.4
Retail (1)	11.2	-3.1	13.3	12.7	7.6
Transportation	7.4	-2.6	8.5	14.0	8.7
Communications	3.4	11.2	10.5	10.0	12.2
Other services (2)	37.4	1.1	4.4	7.0	5.8
Natural resources (2)	9.6	0.9	2.1	6.1	0.1
Other (2)	84.1	-1.7	4.9	10.2	7.6
<b>Total GDP (3)</b>	<b>100.0</b>	<b>-1.7</b>	<b>5.2</b>	<b>10.0</b>	<b>6.8</b>

(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 collected and 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.

## Aggregate demand

Output and demand continued to ease in the second quarter of 2011, although to a lesser extent than forecast in June. The first final figures for second-quarter National Accounts and the revised first-quarter figures indicate that annual growth rates are above the June projections. The first-quarter revision raised the growth rate of the first half to around 0.3 percentage point above the June forecast. The economy thus grew 6.8% in the second quarter of the year, accumulating an annual increase of 8.4% in the first half (tables III.1 and III.2; figures III.1 and III.2). This growth is largely explained by dynamic consumption and especially gross fixed capital formation (GFCF). All of this, supported by a tight labor market and financial conditions that remain favorable, with an expanding annual growth rate of lending. In the moving year ending in the second quarter, the current account of the balance of payments recorded a cumulative surplus of 0.6% of GDP. The quarterly growth rate of domestic demand and output was also higher

**Table III.2**

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

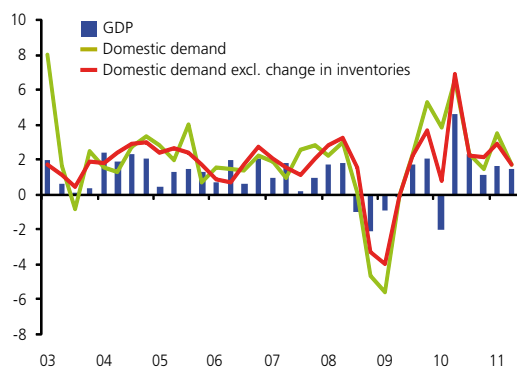
	Weight 2010	2009	2010					2011	
			I	II	III	IV	Year	I	II
Domestic demand	117.4	-7.0	12.0	19.9	19.0	14.6	16.4	15.1	9.4
Final demand (excl. inventories)	114.9	-2.1	6.7	13.9	12.6	12.5	11.5	14.3	9.3
GFCF	28.4	-9.1	7.2	29.2	18.6	19.9	18.8	20.4	11.3
M&E	13.1	-4.4	-3.2	2.0	3.1	5.1	1.8	8.8	8.3
C&O	15.3	-14.3	20.1	64.2	35.9	35.0	38.5	32.1	13.8
Other	89.1	-6.2	13.6	17.1	19.1	13.0	15.7	13.5	8.7
Private consumption	73.4	-0.8	7.6	10.8	12.4	10.9	10.4	13.3	9.6
Durables	9.6	-23.4	31.0	46.8	36.9	38.0	38.6	38.0	17.0
Nondurables	31.3	2.7	4.4	7.3	11.5	8.9	8.0	12.8	9.9
Services	32.5	1.0	6.5	5.7	7.5	5.7	6.4	8.3	7.1
Government consumption	13.1	7.8	0.5	2.1	3.1	7.0	3.3	7.1	3.2
VE (%GDP) (*)	2.5	-2.3	-1.0	0.5	2.0	2.5	2.5	2.7	2.8
Goods and services exports	36.6	-5.2	-5.6	0.6	8.0	5.1	1.9	9.5	10.2
Goods and services imports	54.0	-14.7	19.7	35.3	36.8	26.0	29.5	21.2	14.8
<b>GDP</b>	<b>100.0</b>	<b>-2.5</b>	<b>1.7</b>	<b>6.4</b>	<b>6.9</b>	<b>5.8</b>	<b>5.2</b>	<b>10.0</b>	<b>6.8</b>

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

Source: Central Bank of Chile.

**Figure III.1**

Gross domestic product (\*)  
(quarterly change, percent)

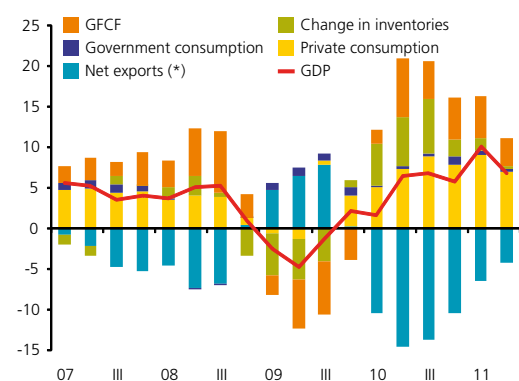


(\*) Seasonally adjusted series.

Source: Central Bank of Chile.

**Figure III.2**

Contribution to annual GDP growth  
(Real annual change, percentage points)

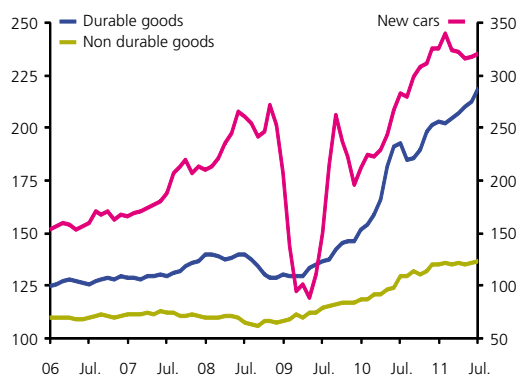


(\*) Goods and services exports less Goods and services imports.

Source: Central Bank of Chile.

**Figure III.3**

Retail sales and new car sales (\*)  
(index 2003 = 100)

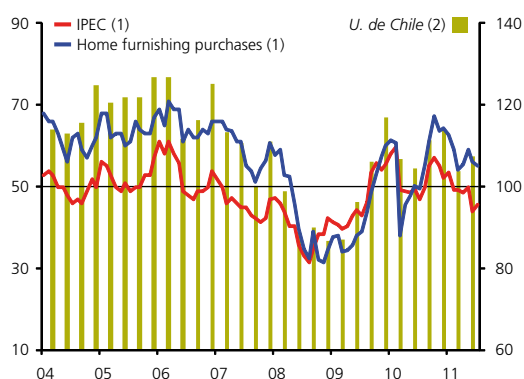


(\*) Sold in the moving quarter. Seasonally adjusted series.

Sources: Central Bank of Chile, National Association of Car Dealers and National Chamber of Commerce.

**Figure III.4**

Consumer perception indices



(1) IPEC: A value over (under) 50 points indicates optimism (pessimism).

(2) Index March 2001 = 100.

Sources: Adimark and Universidad de Chile.

than projected. Quarter-on-quarter growth of output fluctuated around 6% in the first half, such that the economy continued to grow above trend.

Growth in the second quarter was driven by economic sectors tied to domestic demand, in particular retail and services in general. The growth rate of retail, in particular, increased its pace of growth relative to the previous quarter. Retail sales made the strongest contribution, although wholesaling and cars were also significant in the quarter. Manufacturing maintained high annual growth rates, thanks to the positive effect of the low basis of comparison due to the earthquake in late February 2010 (27-F). It was less dynamic, however, than in the previous quarter. Agriculture and fishing also slowed in the second quarter, consistent with the decrease in shipments in the fruit sector and the downturn in the fishing industry associated with declining ocean resources.

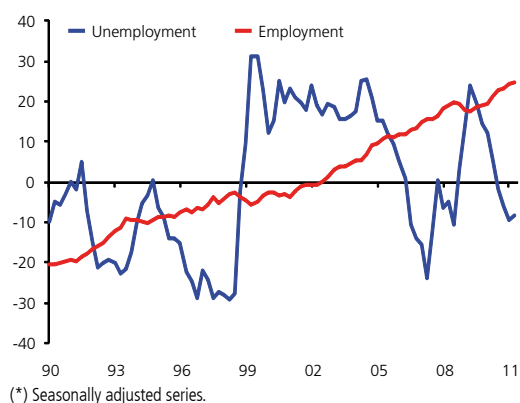
The mining sector continued to post negative annual growth rates, due in part to the low grade of copper and the labor conflicts that paralyzed production in some mines. This is consistent with the lower quantity of mining exports relative to a year ago. In the second quarter, the volume of total goods exports grew 7% in annual terms (30.6% in value). The growth in volume will be smaller in the second half of the year, in part because of the performance of mining exports.

In the baseline scenario, the economy is expected to grow between 6.25 and 6.75% this year. This range is in line with the June projections, and it reflects both the higher-than-forecast growth rates in the first half and a more marked slowdown in the second half. Output data for the start of the third quarter already point to a reduction in the annual growth rate and in the month-on-month expansion of output. Bear in mind, however, that these projections in part reflect the impact of isolated factors. For 2012, the baseline scenario assumes that the Chilean economy will grow between 4.25 and 5.25%. The slowdown in the economy's growth rate takes into account the impact on aggregate demand of earlier increases in the monetary policy rate (MPR) and the normalization of durable goods consumption and investment, as well as the influence of a more adverse external scenario and a more uncertain financial environment.

The forecast for 2011 is in line with expectations derived from the August Economic Expectations Survey (EES), which put the annual growth rate for 2011 at 6.5%. According to this measure, the annual growth rate is expected to be 5.3% in the third quarter. For next year, the market forecasts contained in the EES also project a lower economic growth rate than in 2011, and the 2012 growth rate has been adjusted downward over the last few months, from 5.5% in May to 5.0% in August (5.3% in July).

**Figure III.5**

Employment and the unemployment rate (\*)  
(index, centered on the average or the period 1990–2010)



Source: Ricaurte, M. 2011. "Indicadores de mercado laboral para la comparación de las crisis asiática y financiera internacional." Draft. Central Bank of Chile, June.

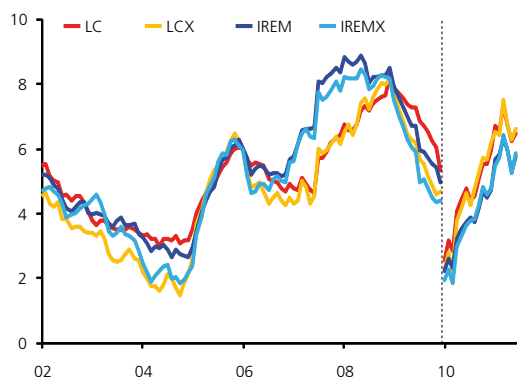
## Domestic demand

Private consumption continued to grow at strong annual growth rates in the second quarter, despite the fact that its quarterly growth rate fell as projected. Partial indicators for the third quarter suggest that this trend is ongoing. Nondurable goods sales and consumer goods imports have slowed at the margin. While durable goods sales continued to expand, the evolution of partial data on imports indicate that sales could decline going forward. New car sales slowed in the first half of the year, but recent data show a return to an upward trend. This highlights the risk that consumption and investment will not subside (figure III.3).

The determinants of consumption have not changed substantially in the past few months. Households continue to enjoy favorable financial conditions (consumer loans continue to grow month on month), the labor market continues to record low unemployment and strong wage growth, and consumer expectations, while pessimistic according to the IPEC consumer survey, have not exhibited any sharp movements (figure III.4).

**Figure III.6**

Nominal wages (1) (2)  
(annual change, percent)



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

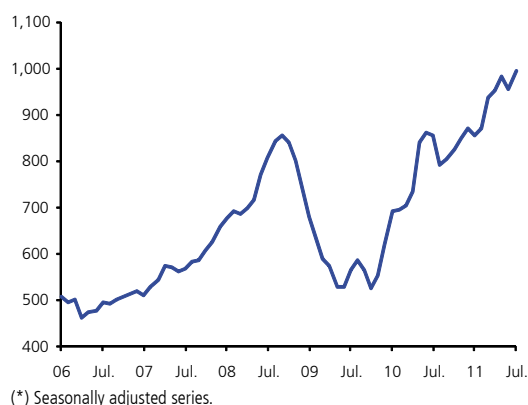
Sources: Central Bank of Chile and National Statistics Bureau.

In the labor market, the unemployment rate is at historically low levels (figure III.5). Data from the University of Chile's Survey of Employment and Unemployment in Greater Santiago reveal that the seasonally adjusted unemployment rate was 8.1% in June. According to data from the National Statistics Bureau, unemployment was 7.5% in the moving quarter comprising May, June, and July; this figure has been between 7.0 and 7.5% since November 2010. The surveys show a sustained increase in employment, with some ups and downs.

Wages continue to grow significantly, albeit at lower rates than in the first few months of the year (figure III.6). In June, the annual growth rate of nominal wages was between 5.8 and 6.6% according to different measures, which is nearly a full percentage point lower than the peak recorded in March. In real terms, annual growth rates fluctuated between 2.3 and 2.9%. Various sources of information from different regions of the country all indicate that finding workers has become increasingly difficult in some sectors, with a subsequent increase in labor costs.

**Figure III.7**

Capital goods imports (\*)  
(US\$ million, quarterly moving average)

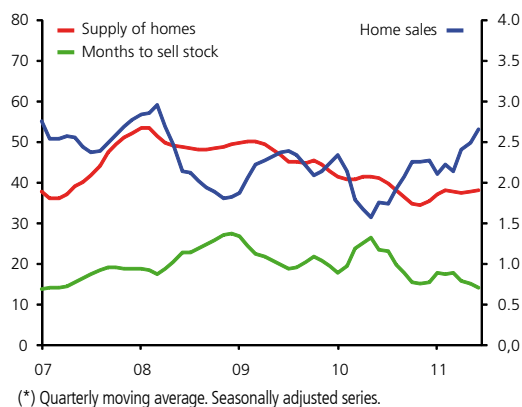


Source: Central Bank of Chile.

Like consumption, GFCF grew strongly in annual terms in the second quarter, but with a drop in the quarter-on-quarter annualized growth rate. The ratio of GFCF to GDP remained just under 30% in the moving year ending in the second quarter of 2011. The biggest share of the increase in GFCF came from the machinery and equipment component. The quantity of capital goods imports continued to post strong growth rates: after falling briefly in April, capital goods imports followed an upward trend month on month in seasonally adjusted terms, reaching a nominal value of US\$1.0 billion in July, a historical peak (figure III.7).

**Figure III.8**

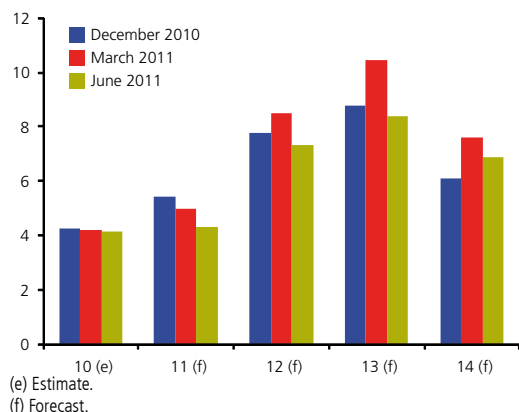
Real estate market in Greater Santiago (\*)  
(thousands of homes; months)



Sources: Central Bank of Chile and Chilean Chamber of Builders.

**Figure III.9**

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



(\*) Excludes telecommunication, manufacturing, and real estate sectors.

Sources: Central Bank of Chile and the Capital Goods Corporation.

GFCF in construction and engineering works grew around 8.0% in annual terms in the second quarter, with a quarter-on-quarter annualized growth rate of around 6.5%. Partial indicators for the sector point to a favorable scenario. Cement sales, building permits, and employment have picked up, while the sale of construction materials has fallen slightly but remains high. New home sales and demand continue to grow (figure III.8). Furthermore, various sources of information all point to high demand for housing. The engineering works subsector grew marginally, thanks to investment in state mining projects, public infrastructure, and forestry. The positive effects were attenuated by lower private mining investment and lower investment in the energy sector, due to the deferral of some projects and the completion of others.

The outlook for investment is mixed. The expectations contained in the Monthly Business Confidence Index (*Indicador Mensual de Confianza Empresarial*, or IMCE) remain optimistic, although they have fallen on aggregate relative to a few months ago. The baseline scenario assumes that machinery and equipment will be less dynamic in the coming months, in line with the completion of capital replenishment following the 2009 recession and the 27-F disaster and taking into account the effect on investment of the changes in the external scenario. For construction, sectoral expectations are favorable, and, as mentioned above, some sectors show a strong demand for housing. However, the June investment survey of the Capital Goods and Technological Development Corporation (*Corporación de Desarrollo Tecnológico y de Bienes de Capital*, CBC) adjusted the construction and engineering investment forecast downward for the four-year period 2011–14, with projects being deferred beyond 2014 (figure III.9). The adjustment is mainly associated with projects in the energy, public works, and mining sectors. However, various sources indicate that some large projects are underway or in the planning stages in several regions.

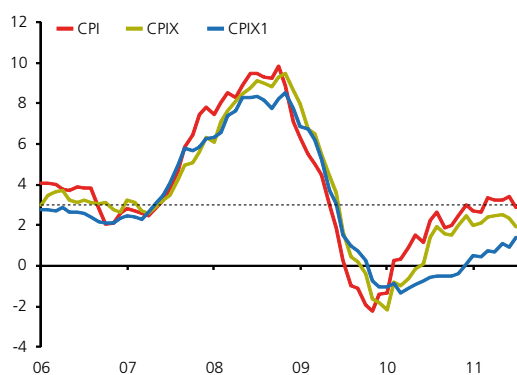
Inventory accumulation was 2.8% in the moving year ending in the second quarter. This is the highest level recorded since 2003, and it is due, in part, to a natural process of inventory restocking following the 2009 recession and the 27-F disaster.

With regard to public spending, total expenditures fell 0.8% in real annual terms, according to the budget performance of the first half of 2011. A large share of this reduction was concentrated in the first quarter of the year. According to data provided by the Budget Division in August, total expenditures should grow 9.2% in real annual terms in the second half, thus ending the year with a 4.6% growth rate.

## IV. Prices and costs

**Figure IV.1**

CPI, CPIX, and CPIX1 inflation (\*)  
(annual change, percent)



(\*) See glossary for definition.

Source: National Statistics Bureau (INE).

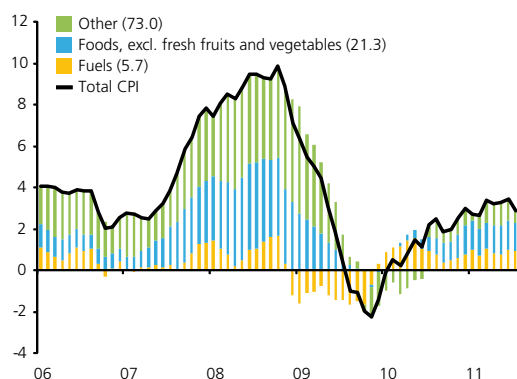
This chapter examines recent trends in the main components of inflation and costs, identifying different sources of inflationary pressures and their probable future behavior.

### Recent inflation trends

Total annual inflation has fluctuated around 3% in the last three months. The core measure, CPIX1, recorded an increase in its annual growth rate, but it remains contained. The inflation outlook continues to reflect a limited pass-through of the international food price hikes to the local market. Similarly, the propagation of earlier increases in these prices and in fuels has been in line with projections. These factors, together with the monetary policy actions of the Board, have produced a decline in inflation expectations since June, and the change in the external scenario in early August caused inflation expectations to drop further. Thus, most private expectations and the forecast used in the baseline scenario of this *Report* consider that inflation will close the year at just over 3% in annual terms, compared with a 4% forecast in June.

**Figure IV.2**

Contribution to annual CPI inflation (\*)  
(percentage points)



(\*) The share in the CPI basket is listed in parentheses.

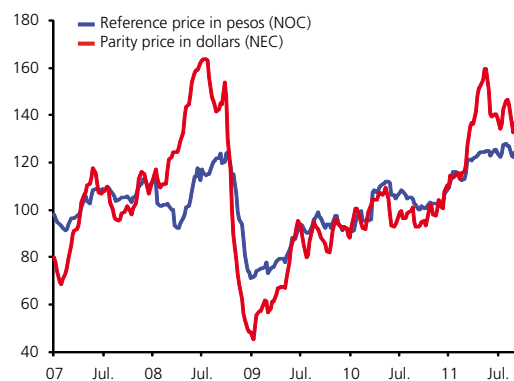
Sources: Central Bank of Chile and National Statistics Bureau (INE).

In July, annual CPI inflation was 2.9% (versus 3.3% in May), while the CPIX grew 1.9% (2.5%) and the CPIX1 rose 1.4% (1.1%) (figure IV.1 and table IV.1). Monthly inflation in the past few months has continued to be marked by the higher prices of foods and basic services and, to a lesser extent, by some isolated factors. The other products in the basket did not record any unusual price movements.

The annual rates of the different inflation measures are somewhat lower than forecast in June, largely due to specific factors. For example, beef prices dropped, in contrast to projections and the trend for international prices. Interurban transport fares and electricity rates were also lower than expected. Between June and July, two-thirds of annual CPI inflation continued to be explained by fuel and food prices (figure IV.2).

**Figure IV.3**

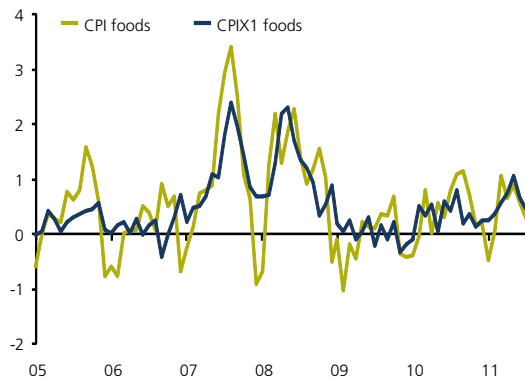
Weekly gasoline prices  
(index, average 2007–2010 = 100)



Sources: National Energy Commission (NEC) and National Petroleum Corporation (NPC).

**Figure IV.4**

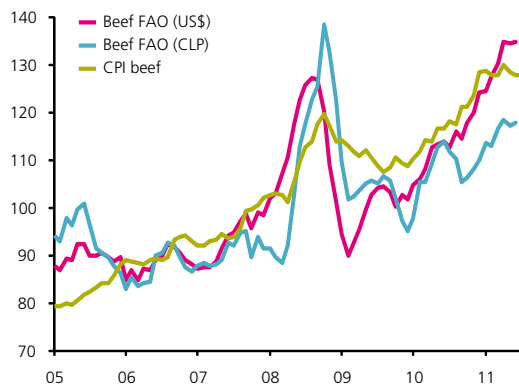
Food prices  
(monthly change, percent)



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

**Figure IV.5**

Beef prices in the local and external markets  
(index, average January 2004–June 2011 = 100)



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

**Table IV.1**

Inflation indicators (\*)  
(annual change, percent)

	CPI	CPIX	CPIX1	CPIX1 w/o food	CPI w/o food and energy	CPIT	CPINT	CPIG	CPIS
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

(\*) See glossary for definition.

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

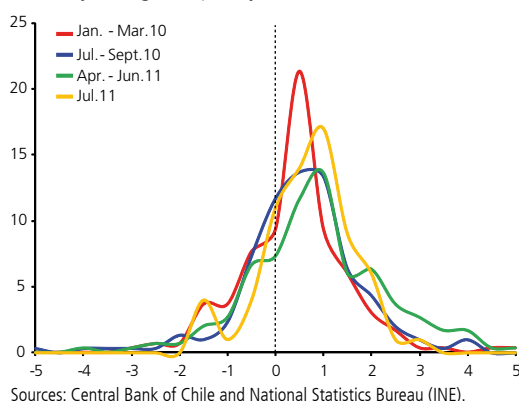
Local fuel prices were practically stable until the beginning of August, with a total change of  $-0.08\%$  between June and July. Similarly, the WTI oil price stayed at around US\$97 a barrel throughout June and much of July. Oil derivatives prices recorded a similar performance in external markets. In the local market, the stability of international fuel prices and the changes in the parameters governing the fuel price stabilization system (SIPCO) in early June and late July implied that SIPCO did not enter into operation (figure IV.3).

Changes in the international scenario triggered a sharp reduction in the price of oil and oil derivatives in early August, which was partially reversed in the last couple of weeks. The WTI oil price thus decreased from US\$97 a barrel in late July to under US\$90 at the close of this *Report*. The recent drop in international fuel prices will have a negative effect on short-term inflation. This is one of the main factors explaining the decline in private inflation expectations and also in the projection used in the baseline scenario of this *Report*. For the end of this year, the annual CPI inflation forecast is 0.7 percentage point lower than in June. Of this difference, 0.5 percentage point is explained by the lower fuel inflation.

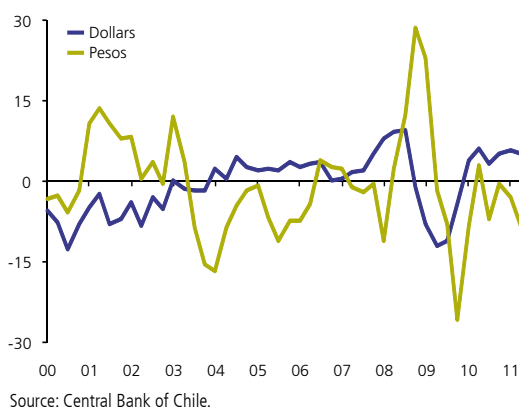
The food prices considered in the CPI have continued to increase in the last three months, but their growth rate has slowed (figure IV.4). In the international markets, food prices did not record major changes in this period, with the exception of agricultural products, whose prices have risen since July. Moreover, as has occurred in the past, the appreciation of the peso attenuated the international price hikes: this was particularly evident in the case of beef, whose local prices have fallen based on international prices deflated in pesos (figure IV.5). Through June, a large number of foods recorded strong price rises. The number of products with increases fell in

**Figure IV.6**

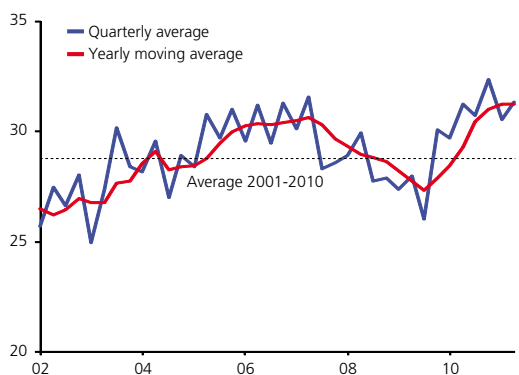
Distribution of foods in the CPIX1  
(monthly change frequency)

**Figure IV.7**

Unit price of imports index (IVUM) for consumer goods  
(annual change, percent)

**Figure IV.8**

Retail operating margins (\*)  
(ratio)



July, and the increase were smaller in magnitude. This can be seen in the distribution of the monthly inflation of prices in the CPIX1 food basket, which shifted to the left in July relative to the April–June period (figure IV.6).

Other items that had a strong effect on inflation in the past few months were health services, transport fares, and electricity rates. Home furnishing and clothing continued to record declining prices. The remaining prices did not record any important movements that might indicate a change in the behavior of inflation.

Imported inflation continues to be a limited source of inflationary pressure. The exchange rate has fluctuated, but overall it has appreciated relative to a year ago, and the external prices of imported goods in dollars have grown at stable rates over the past year and a half. The unit price of imports index (IVUM) for consumer goods, measured in dollars, continued to grow at around 5% in annual terms since mid-2010. Measured in pesos, these consumer goods prices fell in the same period, with annual inflation of –8.2% in the second quarter of 2011 (figure IV.7).

The assessment of inflationary pressures coming from the labor market has not changed since June. There are still signs that the labor market is tight. Dynamic output and demand have caused unit labor costs to grow at rates in line with the inflation target. At any rate, the risks represented by the labor market and the impact on inflationary pressures are incorporated in the baseline scenario.

Partial indicators on margins suggest that they remain high. According to data reported in the Uniform Codified Statistical Forms (FECU), average operating margins of retail, weighted by income from sales, are higher than last year and even higher than the average of the last ten years (figure IV.8)—despite the increases in the cost of some inputs, especially labor.

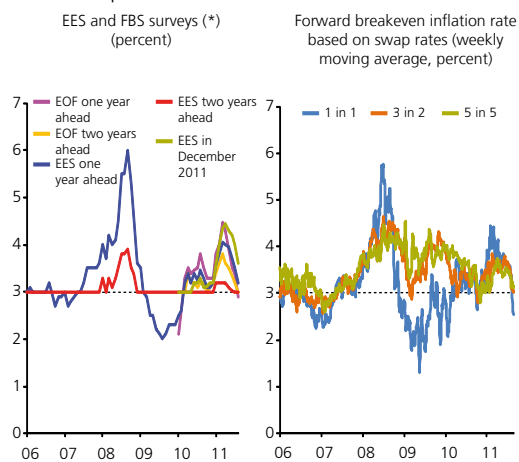
## Short-term inflation outlook

The change in the external scenario has reduced the short-term inflation outlook. As mentioned above, total annual inflation will be lower at the end of the year than forecast in June, mainly due to the effects of lower fuel prices. In the case of the CPIX1, its annual growth rate is expected to converge to 2% more slowly between the end of the third quarter and the beginning of the fourth. The main factor behind this change involves adjustments to specific prices, in particular transportation. Food prices will continue to rise at around the same annual rate recorded over the past several months. Some rate changes in electricity and the lower beef prices will put the CPIX near 3% toward the end of the last quarter.

Private inflation expectations have adjusted downward in response to the lower short-term inflation outlook, especially the drop in the oil price. Together with the effect of the MPR hikes and the changes in the world economic forecast, this has triggered a reduction in medium-term expectations, as well. Expectations derived from surveys of financial brokers and analysts declined at all horizons. In June, the Financial Brokers Survey (FBS) indicated that inflation would be 3.5% one year ahead, which fell to 2.9% in the survey for the second half of August. In the same survey, inflation two years ahead fell from 3.4 to 3.0% in the same period. In the Economic

**Figure IV.9**

## Inflation expectations



(\*) The FBS is the survey for the first fifteen days of the month, except for August 2011, which uses the survey for second fifteen days of the month.

Source: Central Bank of Chile.

Expectations Survey (EES), projected inflation one year out fell from 3.7% in June to 3.2% in August; inflation in December of this year dropped from 4.2 to 3.6% in the same period; and inflation two years ahead held at 3.0% (figure IV.9). Consumer surveys also show a decline. The percentage of people who think that inflation will rise “a lot” in the next twelve months, as measured by the Economic Perceptions Index (IPEC), decreased from 63% in May to 58% in July.

Inflation expectations identified in the breakeven inflation rate were relatively stable after the close of the last *Report*, but they began to fall sharply in the first few days of August, especially for the short term. Thus, the one in one forward breakeven inflation rate, derived from the average interbank swap rates, dropped from 3.7% in June to 2.5% in August. Expectations three to five years ahead decreased from 3.7% at the close of the June *Report* to 3.0% in August. Expectations six to ten years ahead show a downward trend, declining from 3.4% in June to 3.1% in August (figure IV.9).

# 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	-1.8	-5.3	-2.6
Trading partners' GDP (*)	-0.4	5.9	4.2	4.3	4.6
World GDP at PPP (*)	-0.6	5.0	3.9	4.0	4.5
World GDP at market exchange rate (*)	-2.1	3.8	3.0	3.3	3.7
External prices (in US\$)	-6.2	5.8	9.8	2.9	2.1
(levels)					
LME copper price (US\$/lb)	234	342	415	370	350
WTI oil price (US\$/barrel)	62	79	93	89	91
Gasoline parity price (US\$/m <sup>3</sup> ) (*)	471	598	816	797	774
Libor US\$ (nominal, 90 days %)	0.7	0.3	0.3	0.3	0.3

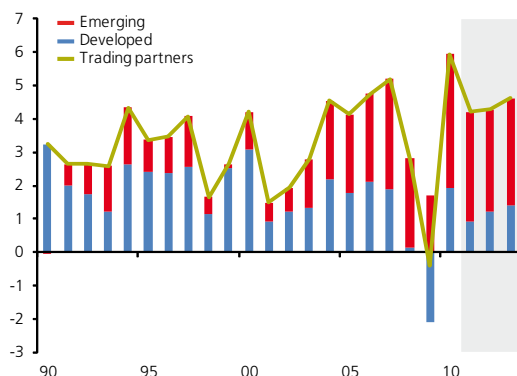
(\*) For definition, see glossary.

(f) Forecast.

Source: Central Bank of Chile.

**Figure V.1**

Trading partners' growth (\*)  
(percentage points)



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

Sources: Central Bank of Chile based on a sample of investment banks, Consensus Forecasts, International Monetary Fund and statistics bureaus of the respective countries.

This chapter presents the Board's assessment on the Chilean economic outlook over the next two years, including the analysis performed up to 1 September 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

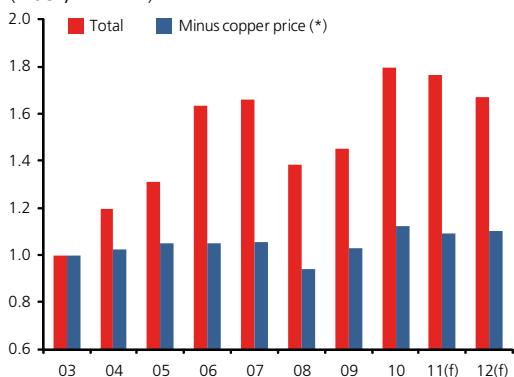
The main changes made to the baseline projection scenario with respect to the *June Report* originate in the prevailing global economic and financial scenario. The increasing concerns about fiscal and financial problems in the euro area, the U.S. debt rating downgrade, together with the doubts about the recovery of growth in developed economies created significant stress in international financial markets and a downward revision to world growth forecasts. Such scenario has also resulted in lower growth estimates for Chile's trading partners, an increase in short-term foreign financing and a drop in commodity prices which leads to lower terms of trade. Nonetheless, trading partners' growth and terms of trade will be still high by historic standards. All this shapes a baseline scenario where the external impulse that the Chilean economy will be receiving in the next two years will fall somewhat short of previous estimates.

For 2011, projected world growth is revised down by 0.2 percentage points (pp) with respect to *June Report*. For 2012, the revision is 0.5 pp smaller. Thus, world growth is forecast at 3.9% in 2011 and 4.0% in 2012 (table V.1). These projections are below market consensus figures available at the cutoff date of this *Report*, considering that the latter do not reflect the full effects of the events of early August in the world economy. Revisions to the growth rates considered in the baseline scenario are motivated by the actual figures of the first half of 2011, which are weaker than anticipated for developed economies. This combines with weakened prospects resulting, in particular, from labor market conditions and poor results from surveys to firms and consumers. All in a context in which these economies have little room for taking any fiscal and monetary stimulus action; some must even undertake fiscal adjustment plans and monetary policy interest rates

**Figure V.2**

Terms of trade

(index, 2003=1)



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

Source: Central Bank of Chile.

**Table V.2**

Economic growth and current account

	2009	2010	2011 (f)	2012 (f)
(annual change, percent)				
GDP	-1.7	5.2	6.25-6.75	4.25-5.25
National income	-1.9	15.7	6.6	4.2
Domestic demand	-5.9	16.4	9.1	4.5
Domestic demand (w/o inventory change)	-2.9	11.5	9.7	5.4
Gross fixed capital formation	-15.9	18.8	14.4	7.1
Total consumption	1.9	9.3	8.2	4.9
Goods and services exports	-6.4	1.9	6.5	5.0
Goods and services imports	-14.6	29.5	12.0	4.6
Current account (% of GDP)	1.6	1.9	-1.0	-2.1
(US\$ million)				
Current account	2,570	3,802	-2,400	-5,500
Trade balance	14,117	15,855	12,700	8,300
Exports	54,004	71,028	82,600	83,000
Imports	-39,888	-55,174	-69,900	-74,700
Services	-1,444	-1,019	-1,200	-1,200
Rent	-11,666	-15,424	-16,300	-15,200
Current transfers	1,563	4,390	2,400	2,600

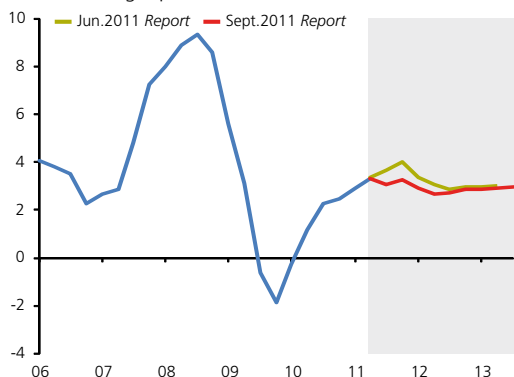
(f) Forecast.

Source: Central Bank of Chile.

**Figure V.3**

CPI inflation forecast (\*)

(annual change, percent)



(\*) Gray area, as from third quarter of 2011, shows forecast.

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

are in their lower limits.

The scenario of less growth in the developed world will have negative effects on the emerging economies' activity. These could be aggravated by the negative effects of the recent financial turbulences that, if they last, could negatively affect consumption and investment decisions around the world. Nevertheless, projected growth of Chile's trading partners is still high by historic standards, coming close to their 2000-2007 average. This, because of the higher incidence in world growth that emerging economies have been showing over the years, particularly China (figure V.1).

Consistently with the weaker and more uncertain global scenario, commodity prices have declined, as have their projections. For oil, based on futures contracts over the ten business days previous to the statistical cutoff date, average prices of US\$93, US\$89 and US\$91 per WTI barrel are assumed for 2011, 2012 and 2013, respectively. The projected copper price is also revised down, to US\$4.15, US\$3.70 and US\$3.50 per pound in 2011, 2012 and 2013. These elements, plus corrections to the prices of other exported and imported goods will pull down the terms of trade this year and next, but they will remain high (figure V.2).

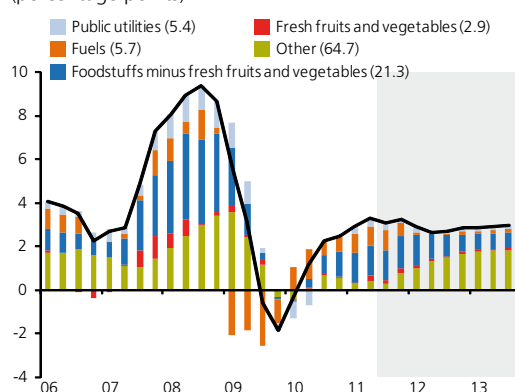
Up to the second quarter this year, inflation rates in emerging economies were higher than estimated in June, which combined with a larger-than-expected depreciation of the dollar results in a significant upward correction to the external price inflation (EPI) indicator relevant to Chile: 9.8% (9% in June's Report). For 2012, a slight appreciation of the dollar is foreseen in international markets, which will more than offset the reduction in inflation expectations forecast for the year associated to slower expected growth and lower commodity prices. Accordingly, the EPI should then post a y-o-y change somewhat higher than was forecast in June.

Domestically, the baseline scenario assumes that output will grow in the range of 6.25% to 6.75% in 2011 (table V.2). This scenario foresees that domestic demand will grow 9.1% this year, surpassing figures in the last Report. This will reflect a significant effect of the higher gross fixed capital formation (GFCF) seen during the first half, especially machinery and equipment and inventory accumulation. Another assumption is a slowdown in output and demand in the second half of the year, as compared to June figures. The greater increase in GFCF in the full year 2011 will result in that, measured in 2003 prices, the investment-to-GDP ratio will be close to 30% (almost 23% in current prices), somewhat more than foreseen in June. Going forward, the pace of GFCF growth will decrease to single-digit numbers. Growth in the machinery and equipment component will decrease, while construction and other works will accelerate in 2012, as can be derived from conjunctural indicators that are reflecting a dynamic sector.

The baseline scenario also assumes that the slowdown in consumption seen during the past few months will continue, albeit with a different composition. Non-durable consumption will post higher growth rates than assumed in June, while durable consumption will adjust, consistently with the behavior of preliminar data of imports of this category in recent months, among other factors. On the fiscal side, the baseline scenario assumes that the structural deficit will converge to 1% of GDP by the end of the present Administration, as announced by the authority and in conformity with the

**Figure V.4**

Incidences on annual CPI inflation (1) (2)  
(percentage points)



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

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

**Table V.3**

Inflation

	2009	2010	2011 (f)	2012 (f)	2013 (f)
	(annual change, percent)				
Average CPI inflation	1.6	1.4	3.1	2.8	
December CPI inflation	-1.4	3.0	3.3	2.9	
CPI inflation in around 2 years (*)					3.0
Average CPIX1 inflation	2.8	0.5	2.4	2.9	
December CPIX1 inflation	-1.8	2.5	2.9	2.8	
CPIX1 inflation in around 2 years (*)					3.0
Average CPIX1 inflation	2.7	-0.7	1.3	2.7	
December CPIX1 inflation	-1.1	0.1	2.4	2.8	
CPIX1 inflation in around 2 years (*)					3.0

(f) Forecast.

(\*) Inflation forecast at the third quarter of 2013.

Source: Central Bank of Chile.

Fiscal Accountability Law.

The projection that output and demand will further moderate expansion over the second half and reach rates consistent with the economy's trend growth is based on a number of elements. On one hand, there is the impact on aggregate demand of increases already made to the MPR, which accumulate 475 basis points since June 2010. On the other hand, there is the normalization dynamic of durable goods and investment itself. Also the influence of a scenario for world growth that is more adverse and has more financial uncertainty. With this deceleration, the average velocity of the GDP of sectors other than natural resources will approach 5% in the second half of the year, in line with the trend rate that the Board continues to estimate around 5%. On average, this will be the pace of growth into next year, so GDP growth in 2012 is expected to post a variation between 4.25% and 5.25%.

In contrast with June estimates, that projected a balanced current account, the baseline scenario now assumes a deficit of 1.0% of GDP in 2011. This revision obeys to reduced copper export volumes and increased import volumes associated to the dynamics of investment in machinery and equipment. In 2012, the deficit should widen to 2.1% of GDP, mainly because of the projected drop in the copper price. Measured at trend prices, the current account would post a somewhat larger deficit than in June, around 6% of GDP in 2011 and 2012<sup>1/</sup>.

In the baseline scenario, y-o-y CPI inflation will follow a path below the one foreseen in June (figures V.3 and V.4). This considers that inflation has been somewhat below June's projections and that the recent decline in international fuel prices will have a negative effect on short-term inflation. This is one of the main factors behind the drop in private inflation expectations and also those in the baseline scenario of this *Report*. At the end of the year, y-o-y CPI inflation will be 0.7 percentage points less than expected in June. Out of this difference, half a percentage point is explained by the lower fuel inflation. Thus, in the baseline scenario inflation will close the year slightly above 3%. Private inflation expectations have had similar corrections and for year's end are also near the figures of the baseline scenario. From 2012 onwards, inflation will oscillate around the target, ending at 3% in the third quarter of 2013, which this time is the end of the projection horizon. Core measures will slowly converge to 3% (table V.3).

The baseline scenario assumes that the real exchange rate will remain around its current level, which now is within the range that is believed to be consistent with its long-term fundamentals. It also assumes that labor costs will increase in line with the inflation target, and that pricing decisions are based on inflation expectations consistent with the target. As for monetary policy, the MPR has reached a range that is considered normal. Unlike forecasts of a few months back, when market surveys indicated an expectation of further rises in the MPR, the changes in the macroeconomic scene have led to a higher dispersion of private expectations. Furthermore, certain indicators even suggest a decline in the short run. However, the baseline scenario uses as a working assumption that, in the short run, the MPR will be around its current level.

<sup>1/</sup> This estimate considers revisions to prices and not volumes. A copper trend price of US\$2.6 per pound and an oil trend price of US\$75 per barrel are assumed.

**Figure V.5**

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

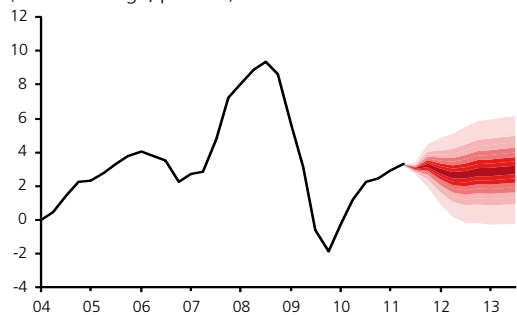


(\*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% around the baseline scenario are included. These intervals summarize the risk on growth as assessed by the Board. The baseline scenario uses as a working assumption that, in the short run, the MPR will be around its current level.

Source: Central Bank of Chile.

**Figure V.6**

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

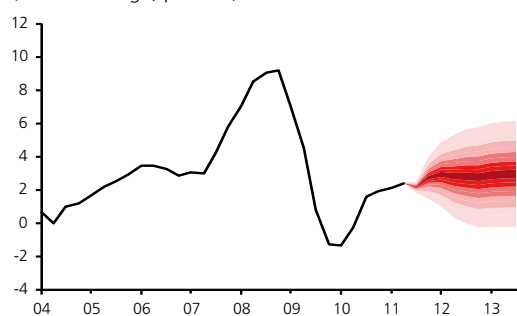


(\*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% around the baseline scenario are included. These intervals summarize the risks on inflation as assessed by the Board. The baseline scenario uses as a working assumption that, in the short run, the MPR will be around its current level.

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 risks on inflation as assessed by the Board. The baseline scenario uses as a working assumption that, in the short run, the MPR will be around its current level.

Source: Central Bank of Chile.

## Risk scenarios

The baseline scenario reflects the events estimated to be the most likely with the information at hand when making these projections. Any divergence will shape a different macroeconomic scenario and an also different monetary policy trajectory. After evaluating them, the Board estimates that the risk balance for output is biased downward, and unbiased for inflation (figures V.5, V.6 and V.7).

The main risks have to do with the complex global economic outlook. A repetition or intensification of recent episodes of financial stress cannot be ruled out. The deleveraging process continues its course, a part of the market estimates that fiscal tightening measures are still insufficient to turn around the public debt problem, global imbalances are still unresolved and tensions are accumulating in the European monetary union. Dealing with these events is complicated, since monetary and fiscal policies in the developed world have little room to maneuver. In addition, doubts persist about the strength of the recovery of developed economies beyond the projection horizon. The carry-over effects of the crisis of 2008, plus high unemployment and increased uncertainty due to recent tensions could have more lasting effects on developed countries' output. It is also possible that these economies' potential growth has fallen because of the crisis. This could have consequences on the level of interest rates, the pace of the resolution of leveraging problems and growth in emerging economies. In this scenario, the world economy will grow less than in the past.

Nor can a scenario where the postponement of monetary policy rate increases in developed countries and their weak economies lead investors to seek for better returns in emerging economies be ruled out. This would cause a resurgence of capital inflows to these countries. Accommodating them could complicate the conduct of macroeconomic policies.

Domestically, risks center around the ongoing strength of output and demand, which could lead the Chilean economy to continue to grow above the trend, causing inflationary pressures misaligned with the inflation target.

Doubts about the way the external scenario will unfold and how it will affect the Chilean economy advise acting prudently. The Board reaffirms its commitment to conducting monetary policy with flexibility in order for projected inflation to stand at 3% in the policy horizon. Any future changes to the MPR will depend on the implications of domestic and external macroeconomic conditions over the inflation outlook.

## Box V.1: Changes in the baseline forecast scenario in the last year

In the last year, the macroeconomic scenario facing the Chilean economy has undergone changes in several directions. Locally, the output gap has closed faster than expected a year ago; externally, the difference between the growth rates of emerging and developed economies has widened. Developed economies have recorded a constant deterioration in their growth outlook. These changes were accompanied by a resurgence of inflationary worries early in 2011, given the new episode of rising commodity prices—especially for oil and food—and its possible second-round effects on local inflation. As a result of the Board's monetary policy decisions and the developments in the macroeconomic scenario, the inflationary pressures of a few months ago have eased. The baseline scenario of this *Report* thus projects that inflation will fluctuate around 3% for the next two years, while the domestic economy will maintain growth rates in line with its trend. This box describes how these factors were linked in the last year and how they have affected the current baseline forecast scenario, taking into account the main revisions since the September 2010 *Monetary Policy Report*.

In the last year, world growth forecasts were adjusted upward for 2011. A key feature in this process was the diverging performances of emerging and developing economies. In the latter, output continued to be affected by the slow recovery of the labor market and the process of debt reduction or deleveraging in the private sector, in a context in which the possibility of stimulating the economy through monetary and fiscal policy were increasingly limited. In contrast, the emerging economies continued to sustain high growth rates, led by China. Real output data for the emerging economies have been surprisingly dynamic, which is explained, in part, by the marked increase in commodity prices and the upward adjustment of the terms of trade. The WTI oil rose from US\$75 a barrel in early September 2010 to over US\$110 in April of this year. Copper, which traded around US\$3.40 a pound in September 2010, has been over US\$4.00 a pound since December 2010, with a few dips.

The higher growth of the emerging economies, the limited excess capacity in the majority of them, and the rising commodity prices increased inflationary pressures and real inflation. In this scenario, the central banks of these economies

accelerated the process of raising their monetary policy interest rates, although this process was put on hold in the last few months. In the developed economies, the main concerns are the weak growth and the low inflation outlook, and monetary policies are thus likely to remain extraordinarily expansive for a long time.

In 2011, the international financial markets have been affected by episodes of volatility, in particular in relation to the debt problems in some of the peripheral European economies. Since end-July, the growing concerns for these economies were magnified by the possibility of contagion to the banking system and other countries in the euro area, the difficulties the United States was facing in consolidating its fiscal position, and a weakening of the output recovery rate in the developed economies. All this has contributed to an episode of financial stress and asset price adjustment. As a result of the recent data on growth in the advanced economies and this episode of financial stress, current forecasts are lower than in June. Nevertheless, the growth forecast for Chile's trading partners for 2011 rose from 3.5% in September 2010 to 4.2% in the baseline scenario of this *Report* (table V.4). In this scenario, the high world growth from a historical perspective reflects the contribution of growth in the emerging economies.

**Table V.4**

Main assumptions of the international scenario

	Sept. 10	Dec. 10	Mar. 11	Jun. 11	Sept. 11
World GDP at PPP (annual change, percent)					
2011	3.8	3.8	4.1	4.1	3.9
2012	4.7	4.5	4.4	4.5	4.0
GDP trading partners (annual change, percent)					
2011	3.5	3.6	4.4	4.3	4.2
2012	4.6	4.2	4.6	4.7	4.3
WTI oil price (US\$/barrel)					
2011	79	89	102	99	93
2012	82	89	103	103	89
LME copper price (US\$/lb)					
2011	290	330	420	415	415
2012	290	320	400	400	370
Terms of trade (annual change, percent)					
2011	-4.3	-2.0	4.2	-1.6	-1.8
2012	0.5	1.4	-2.0	-2.1	-5.3
External prices, in US\$ (annual change, percent)					
2011	2.3	6.1	7.8	9.0	9.8
2012	4.7	3.1	2.9	2.8	2.9

Source: Central Bank of Chile.

Domestically, growth forecasts have gradually been adjusted upward, mainly because domestic demand did not ease as sharply as expected. This reflects both robust consumption and dynamic gross capital formation, led by the machinery and equipment component. As early as the *March Report*, the output gap was estimated to have closed. The forecast for domestic demand rose for an annual growth rate of 6.2% in September 2010 to 9.1% in this *Report*. This, in turn, led to an adjustment in the GDP growth range from 5.5–6.5% to 6.25–6.75% in the same period (table V.5).

**Table V.5**

Economic growth and current account for 2011

	Sept. 10	Dec. 10	Mar. 11	Jun. 11	Sept. 11
(annual change, percent)					
GDP	5.5-6.5	5.5-6.5	5.5-6.5	6.0-7.0	6.25-6.75
Balance of output risks	unbiased	downward bias	upward bias	unbiased	downward bias
Domestic demand	6.2	6.6	7.6	8.5	9.1
- Total consumption	5.3	5.8	7.0	8.3	8.2
- Gross fixed capital formation	13.6	14.6	13.9	11.9	14.4
(percent of GDP)					
Current account	-2.5	-1.4	1.2	0.0	-1.0

Source: Central Bank of Chile.

In March, the closing of the output gap and the rising commodity prices, especially fuels and foods, caused inflation worries to deepen. In addition, the tight labor market could have effects on the evolution of wages and labor costs. Consequently, domestic and market inflation forecasts for 2011 were adjusted sharply upward (table V.6). Inflation forecasts later subsided, to the extent that the Board stepped up the withdrawal of the monetary stimulus, commodity prices eased, real inflation was lower than expected, and the second-round effects of the external price hikes were in line with projections. Thus, whereas the forecast in March was for annual CPI inflation to exceed 4.0% throughout the second half of 2011, this *Monetary Policy Report* projects that it will only be a little over 3.0% in the period, closing the year at 3.3% (0.1 percentage point higher than considered in September 2010).

**Table V.6**

Changes in the average CPI inflation forecast for 2011

	Dec.10	Mar.11	Jun.11	Sept.11
Initial forecast (1)	3.3	3.0	3.9	3.5
Fuels	-0.1	0.6	-0.3	-0.1
Foods excl. fresh fruits and veg.	-0.1	-0.1	0.1	0.0
Fresh fruits and vegetables	-0.1	-0.2	0.1	0.0
Public services	-0.1	0.0	0.0	0.0
Other products	0.0	0.6	-0.4	-0.2
Final forecast (2)	3.0	3.9	3.5	3.1

(1) The forecast used in the previous *Monetary Policy Report*.(2) The forecast used in the corresponding *Report*.

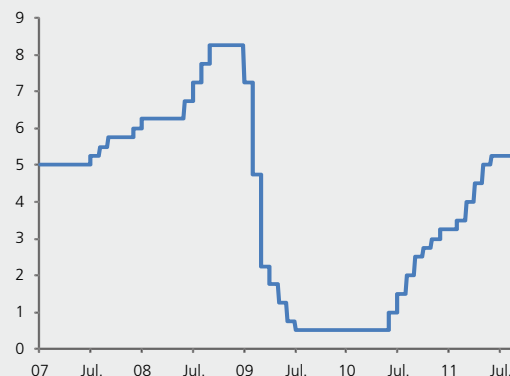
Source: Central Bank of Chile.

During the year, the Board has continued the process of withdrawing the monetary stimulus initiated in mid-2010. However, the change in the inflation outlook implied changes in the rate of the adjustment. After raising the monetary policy rate (MPR) 25 basis points at each of the meetings in October, November, and December 2010 and again in February 2011, the Board implemented increases of 50 basis points at the March, April, and May 2011 meetings, which put the MPR at 5.0%. In June, the MPR rose to 5.25%, and it has stayed at that level since then (figure V.8). The Board indicated that future changes in the MPR would depend on the implications of internal and external macroeconomic conditions for the inflation outlook. With regard to monetary policy, the MPR is now within a range considered normal. In terms of expectations, a few months ago the MPR was generally expected to continue rising, but the changes in the macroeconomic scenario have produced a greater dispersion in private expectations. Some measures even suggest that it will fall slightly in the immediate future. Nevertheless, the baseline scenario uses as a working assumption that, in the short run, the MPR will be around its current level.

**Gráfico V.8**

Monetary policy rate

(percent)



Source: Central Bank of Chile.

# Appendix A: The Central Bank of Chile's balance sheet

This appendix presents and analyzes the position and projections of the main items on the Central Bank of Chile's financial statements. It starts with a brief review of the evolution of the balance sheet in the first half of 2011 and then presents asset and liability forecasts for year-end 2011 and 2012.

The movements in any balance sheet account can be explained by (a) flows, which are related to settled liabilities and new transactions, (b) profits, which correspond to interest earned, and (c) adjustments, which are earnings and losses associated with accounts indexed to movements in the exchange rate or inflation. Because around 70% of its assets are international reserves and 70% of its liabilities are policy instruments and promissory notes (debt), the Central Bank is a net debtor in domestic currency and a net creditor in foreign currency. Therefore, the bottom line of the balance sheet is determined by the evolution of the differential between international interest rates (profitability of reserves) and domestic interest rates or the cost of debt. Since the reserves are made up primarily of dollars and euros (almost 50% dollars and 35% euros), earnings and losses depend on the fluctuation of the peso against these currencies.

## Evolution of the balance sheet in the first half of 2011

In the first half of 2011, the evolution of the balance sheet was marked by the implementation of the reserve accumulation plan, which has increased the size of the Central Bank's assets and liabilities.

Between 31 December 2010 and 30 June 2011, the size of the balance sheet grew Ch\$3.37 trillion (1.6% of GDP). This largely reflects the increase in international reserves<sup>1/</sup>. As of 30 June, international reserves had expanded US\$6.25 billion through that item. In accordance with the policies defined by the Board and the associated monetary issue, the foreign exchange accumulation has been sterilized through the placement of Central Bank bonds and promissory notes.

The Bank's equity position improved relative to the close of the last year *Report* (table A.1). Based on the usual accounting procedures, the Central Bank of Chile's equity rose from –Ch\$3.45 trillion on 31 December 2010 (–3.3% of GDP) to –\$3.14 trillion on 30 June 2011 (–2.9% of GDP). This is due to

earnings associated with the depreciation of the peso between these dates. At the same time, net losses were recorded as a result of the widening of the local and external rate differential. The reference rate remained low in the developed economies, while the MPR (which affects the cost of local debt) increased 200 basis points in the first half.

## Balance sheet projections for 2011 and 2012

The main assumptions underlying the forecast are the following: (a) bank deposits in the Central Bank (standing deposit facility) will remain around the levels recorded in June 2011; (b) the balance of monetary policy instruments, mainly repos and the liquidity line, will decline to almost zero; (c) Treasury deposits will remain at their current minimum levels; (d) the evolution of the monetary base will be consistent with the growth of the economy and inflation; and (e) the reserve accumulation plan will continue in 2011 until reaching US\$12.0 billion, after which there will be no foreign currency operations in 2012 (table A.2). PDBC operations are expected to be used to adjust for a deficit or surplus of funds.

The baseline forecast scenario assumes that the differential between local and international interest rates will hold at its current level, consistent with the projections and working assumptions used in the *Monetary Policy Report*. As a result, earnings on international reserves will be similar to the first half of the year. Equity losses are expected from net interest, with projections of 0.3 and 0.5% of GDP at year-end 2011 and 2012, respectively (table A.1). This difference should converge to the level of the long-term sovereign spread to the extent the world economy picks up and the process of normalizing international interest rates begins.

The baseline scenario assumes that the peso-dollar exchange rate, which mainly affects international reserves, will follow a path consistent with the expected trend for the real exchange rate<sup>2/</sup>. In the most recent period, the peso-dollar parity has been lower than in the first half of the year<sup>3/</sup>. Consequently, in the second half, the balance sheet is expected to show a loss associated with valuation effects, which is projected to reach 0.4% of GDP in late 2011 (table A.1).

<sup>1/</sup> On 3 January, the Board decided to implement a reserve accumulation program, which consists in the purchase of US\$12.0 billion in foreign exchange, via daily auctions of US\$50 million.

<sup>2/</sup> Given that the real exchange rate is currently aligned with its fundamentals, the baseline scenario of this *Report* assumes that it will not undergo any major fluctuations.

<sup>3/</sup> It averaged \$467 to the dollar in August, versus an average of \$476 in the first half.

<sup>1/</sup> On 3 January, the Board decided to implement a reserve accumulation program, which consists in the purchase of US\$12.0 billion in foreign exchange, via daily auctions of US\$50 million.

Inflation is forecast to rise above 3% toward the end of 2011 and then stay around the target in 2012. This will generate losses on indexed debt—mainly bonds—equivalent to 0.1% of GDP in 2011.

Thus, in 2011 the assets and liabilities (including equity) on the balance sheet are projected to increase as a share of GDP by around 4 percentage points (table A.1). In 2012, the forecast assumes that the balance sheet, as a share of GDP, will decrease around one percentage point relative to the previous year.

The changes in the size of assets and liabilities is associated with the reserve accumulation plan. As mentioned, the forecast assumes that, as announced, the Central Bank will continue to purchase foreign exchange in the second half of 2011, generating an expansion of its assets. This accumulation will be sterilized via the placement of Central Bank bonds and promissory notes, which will increase liabilities. For 2012, the balance sheet forecast assumes that there will not be any new foreign exchange operations, which implies that the value of the Bank's assets and liabilities will be stable and will fall as a share of GDP.

**Table A.1**

The Central Bank's balance sheet: summary of accounts and balances  
(percent of GDP)

	2007	2008	2009	2010	Jun.11	2011 (f)	2012 (f)
<b>Assets</b>	12.8	20.4	20.3	14.6	16.8	18.6	17.9
International reserves	9.8	16.3	14.0	12.6	15.0	16.7	16.1
Treasury promissory notes and other gov. loans	1.0	1.0	1.0	0.9	0.9	0.9	0.9
Monetary policy instruments	0.7	1.8	4.1	0.1	0.1	0.1	0.1
Other assets	1.3	1.4	1.3	1.0	0.9	0.8	0.8
<b>Liabilities</b>	15.3	19.7	22.5	18.0	19.7	22.1	21.6
CBC promissory notes traded in secondary market	9.1	11.9	12.6	8.6	12.0	14.7	14.5
Policy instruments with banks	1.4	2.4	3.4	2.5	0.8	0.6	0.4
Other liabilities with banks	0.1	0.3	0.3	0.4	0.4	0.4	0.4
Other liabilities excl. the monetary base	0.5	0.4	1.1	1.0	1.4	1.4	1.3
Monetary base	4.3	4.7	5.0	5.4	5.1	5.1	5.1
<b>Equity (A+B)</b>	-2.5	0.7	-2.1	-3.3	-2.9	-3.5	-3.8
A. Revaluated initial equity	-2.7	-2.6	0.7	-1.9	-3.1	-2.8	-3.5
B. Net balance	-0.3	2.9	-2.8	-1.4	0.3	-0.8	-0.4
Nonfinancial	-0.1	-0.1	-0.1	-0.1	0.0	-0.1	-0.1
Net interest	-0.2	-0.5	0.0	-0.1	-0.1	-0.3	-0.5
From fluctuations in exchange rates and UF	-0.3	3.2	-2.8	-1.2	0.4	-0.4	0.1
Capital revaluation	0.2	0.2	0.0	0.0	0.0	0.0	0.1
C. Capital contributions	0.5	0.5	0.0	0.0	0.0	0.0	0.0
<b>Memorandum</b>							
Position payable in foreign currency (1)	9.3	16.2	13.5	10.8	13.4	15.3	14.7
Position denominated in foreign currency (2)	9.1	16.2	13.5	10.8	13.4	15.3	14.7

(1) Assets minus liabilities payable in foreign currency.

(2) Foreign currency position minus exchange-rate-indexed liabilities payable in local currency.

(f) Forecast.

Source: Central Bank of Chile.

**Table A.2**

The Central Bank's balance sheet flows (1)  
(Ch\$ billion)

	2007	2008	2009	2010	Jun.11	2011 (f)	2012 (f)
1. International reserves	-2,045	2,691	701	1,306	2,691	2,673	0
2. Policy instruments in local currency	333	-2,223	354	1,030	-2,773	-2,424	285
2a, of which: exchange rate indexed	230	196	3	0	0	0	0
3. Central Bank promissory notes in dollars	0	0	0	0	0	0	0
4. Other operations in local currency excl. the monetary base (2)	-109	-121	-26	-110	-135	-85	-50
5. Other operations in foreign currency (3)	2,051	180	-684	-1,295	259	0	0
Monetary base (change = 1+2+3+4+5)	230	527	345	931	42	164	235
<b>Memorandum</b>							
Position payable in foreign currency (exchange operations = 1+3+5)	6	2,871	16	11	2,950	2,673	0
Position denominated in foreign currency (= 1+2a+3+5)	236	3,067	19	11	2,950	2,673	0

(1) Foreign exchange flows. Where applicable, the balances are also affected by interests, inflation indexation, and price changes.

(2) Debt service on UF-denominated Treasury promissory notes, subordinate debt service, and other operations in local currency.

(3) Treasury and bank deposits, and other operations in foreign currency.

(f) Forecast.

Source: Central Bank of Chile.

# Appendix B: International reserves management

International reserves are the liquid assets in foreign currency held by the Central Bank of Chile (the Bank) to back its monetary and exchange rate policy. Its management seeks to provide, in an efficient fashion, secure access to international liquidity, safeguarding the Bank's financial net worth, in conformity with the legal framework as defined in article 38, Title III, of its Basic Constitutional Act.

For its international reserves management, the Bank has separated responsibilities across hierarchical levels, that comply with relevant international recommendations and have been assessed by the IMF. Also, on a regular basis, internal and external audit exercises are performed to international reserves management, through which the different investment processes are reviewed. In this way the decision-making and management assessment processes inside the Bank are well defined and have limited risk exposure.

Within this context, and with the purpose of focusing its business areas on the main issues and transfer the operations' support and risks to its services areas, in September 2010 it restructured the Financial Operations Division. For international reserves management, it separated the front-office and back-office functions, and created the International Markets Department (which replaced the former International Investments Department) and the new Financial Services Department. The former is in charge of managing the front office while the latter oversees the back office and related services.

Meanwhile, to monitor compliance with investment guidelines and parameters defined by the Board, the Bank has a middle office that oversees them on a daily basis. To determine the eligibility of countries, supranationals, commercial banks and agencies for investing international reserves, variables such as risk rating, net worth and debt ratio of institutions, among others are used. Moreover, the international markets department has developed a number of additional indicators that allow better follow-up to the various managed positions (e.g., daily positioning reports, levels of CDS and ratings). As for information systems, the Bank has continued to make improvements to its technological platforms, reinforcing the operational continuity of processes and implementing mechanisms of high availability.

International reserves are mainly grouped into two portfolios: investment and liquidity. The investment portfolio is made up of short-term assets in foreign currency, including bank deposits and money-market instruments maturing in up to one year, and long-term assets, consisting largely of investments in nominal and indexed bonds at one to ten years.

At the closing of the first half of this year, a minor portion of the investment portfolio (1%) was managed by an external manager (Pimco), which manages a global long-term portfolio. It is worth mentioning that, in November 2010, the Bank decided to modify the mandates regarding the external management program, terminating its contractual relationship with one of the managers of the global mandate and ending an exclusive program of mortgage-backed securities (MBS). In this context, the Bank is carrying out a selection process to incorporate a second external manager to the international reserves portfolio. This process is now in the stage of evaluating the 59 firms invited to apply, and of selecting an independent consultant who will support the Bank's staff during the second stage of the process. The new manager is expected to be in the Bank during the fourth quarter of this year.

Meanwhile, the liquidity portfolio is oriented at meeting the foreseeable short-term fund needs, and is made up of bank deposits (overnight and term) and money-market instruments.

The benchmark of the investment portfolio has not been changed between September 2010 and August 2011, and has the same credit risk structure, benchmark currency composition (50% U.S. dollar, 40% euro, 3.5% Australian dollar, 3.5% Canadian dollar, and 3.0% pound sterling) and benchmark duration (16.9 months) (tables B.1 and B.2)

**Table B.1**

Benchmark structure of the internally managed investment portfolio by type of risk and comparator

Structure	Credit risk	Share %	Benchmark
Short-term portfolio	Banking	10	Merrill Lynch indices: 3-month Libid average last 3 months (USD, EUR, AUD, CAD and GBP)
	Sovereign, Agency, and Supranational	50	Merrill Lynch indices: US Treasury bills (USD) German Gov. Bill Index (EUR) 6-mo Fixbis average last 6 months (AUD, CAD and GBP)
Long-term portfolio	Sovereign, Agency, Supranational, and Banking	34	JP Morgan bond index for different brackets 1- 10 years in the U.S. and Germany. For Australia, Canada and the U.K., 1-10 global.
	Inflation-indexed bonds	6	Barclays bond index for 1-10 brackets in the U.S. and Europe.
Total portfolio		100	

Source: Central Bank of Chile.

**Table B.2**

Currency, maturity, and duration structure of internally managed benchmark portfolio

		U.S. dollar		Euro		Australian dollar		Canadian dollar		Pound sterling		Total	
		Share %	Duration (months)	Share %	Duration (months)	Share %	Duration (months)	Share %	Duration (months)	Share %	Duration (months)	Share %	Duration (months)
Short-term portfolio	Banking	5.0	1.5	4.0	1.5	0.4	1.5	0.4	1.5	0.3	1.5		
	Sovereign. Agency and Supranational	25.0	2.6	20.0	4.2	1.8	3.0	1.8	3.0	1.5	3.0		
	<b>ST Subtotal</b>	<b>30.0</b>	<b>2.5</b>	<b>24.0</b>	<b>3.8</b>	<b>2.1</b>	<b>2.8</b>	<b>2.1</b>	<b>2.8</b>	<b>1.8</b>	<b>2.8</b>	<b>60</b>	<b>3.0</b>
Long-term portfolio	Nominal bonds												
	Maturities												
	1-3 years	9.3	22.6	7.5	21.6								
	3-5 years	4.0	45.5	3.2	43.1								
	5-7 years	1.7	64.6	1.3	59.6								
	7-10 years	1.7	86.6	1.3	84.6								
	1-10 years					1.4	49.6	1.4	44.8	1.2	54.7		
	<b>Subtotal</b>	<b>16.7</b>	<b>38.7</b>	<b>13.3</b>	<b>36.9</b>	<b>1.4</b>	<b>49.6</b>	<b>1.4</b>	<b>44.8</b>	<b>1.2</b>	<b>54.7</b>	<b>34</b>	<b>39.2</b>
	Indexed bonds												
	Maturities												
	1-10 years	3.3	29.6	2.7	28.6								
	<b>Subtotal</b>	<b>3.3</b>	<b>29.6</b>	<b>2.7</b>	<b>28.6</b>							<b>6</b>	<b>29.2</b>
	<b>LT Subtotal</b>	<b>20.0</b>	<b>37.2</b>	<b>16.0</b>	<b>35.5</b>	<b>1.4</b>	<b>49.6</b>	<b>1.4</b>	<b>44.8</b>	<b>1.2</b>	<b>54.7</b>	<b>40</b>	<b>37.7</b>
<b>Total portfolio</b>		<b>50.0</b>	<b>16.3</b>	<b>40.0</b>	<b>16.4</b>	<b>3.5</b>	<b>21.5</b>	<b>3.5</b>	<b>19.6</b>	<b>3.0</b>	<b>23.5</b>	<b>100</b>	<b>16.9</b>

Source: Central Bank of Chile.

During the first half of 2011, the annualized return obtained by international reserves management was 0.96% measured in foreign currency<sup>1/</sup>. The excess return with respect to the benchmark structure was 0.07% (table B.3).

**Table B.3**

Absolute benchmark and differential returns on international reserves (percent)

Period	In foreign currencies		In U.S. dollars		Differential
	RRII	BMK	RRII	BMK	
2011 (*)	0.96	0.89	8.62	8.56	0.07
2010	0.36	0.45	-0.15	-0.06	-0.09
2009	2.15	1.65	3.34	2.84	0.50
2008	5.70	5.37	4.14	3.81	0.33
2007	4.81	4.78	8.86	8.83	0.03
2006	2.45	2.39	6.84	6.78	0.06
2005	2.90	2.85	-1.72	-1.77	0.05
2004	1.84	1.95	4.08	4.20	-0.11
2003	2.31	1.78	6.64	6.12	0.53
2002	5.25	4.69	9.34	8.78	0.57
2001	5.57	5.27	3.90	3.60	0.30
2000	6.88	6.65	4.84	4.61	0.22

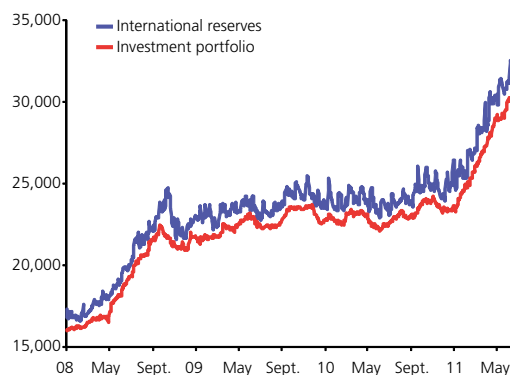
(\*) Annualized returns of first half of the year.

Source: Central Bank of Chile.

At 30 June this year, the international reserves had increased by US\$7.02 billion from the closing of 2010, to US\$34.88 billion.

Of this, US\$30.78 billion were in the investment portfolio and US\$2.33 billion in the liquidity portfolio. Of total reserves, 49.9% were invested in U.S. dollars, 35.0% in euros and 15.1% in other currencies.

This increase in reserves was due primarily to the foreign currency purchase program being carried out by the Bank. Said operations began on 5 January 2011 and are expected to conclude in December 2011, with an associated increase in reserves of US\$12.00 billion. At the end of the first half of 2011, the reserves had increased by US\$6.25 billion from the currency purchase program. The rest of the increase is explained by gains from rates and parities (figure B.1 and table B.4).

**Figure B.1**International reserves (\*)  
(stock, US\$ million)

(\*) Excludes other assets.

Source: Central Bank of Chile.

<sup>1/</sup> As a function of the benchmark currency basket of the investment portfolio.

**Table B.4**

International reserves breakdown  
(US\$ million)

Type of portfolio	Currency	2010		2011	
		Dec.	%	Jun.	%
<b>Investment portfolio</b>		<b>23,479.4</b>	<b>84.3</b>	<b>30,778.8</b>	<b>88.2</b>
Currency and deposits	U.S. dollar	1,130.8	4.1	1,338.4	3.8
	Euro	1,272.8	4.6	1,793.2	5.1
	Other	747.1	2.7	1,321.9	3.8
Securities	U.S. dollar	10,505.7	37.7	13,716.3	39.3
	Euro	8,016.6	28.8	10,412.5	29.8
	Other	1,806.3	6.5	2,196.5	6.3
Total	U.S. dollar	11,636.6	41.8	15,054.7	43.2
	Euro	9,289.4	33.3	12,205.7	35.0
	Other	2,553.4	9.2	3,518.4	10.1
<b>Liquidity portfolio</b>		<b>2,838.4</b>	<b>10.2</b>	<b>2,329.4</b>	<b>6.7</b>
Currency and deposits	U.S. dollar	2,838.4	10.2	2,329.4	6.7
	Euro	0.0	0.0	0.0	0.0
	Other	0.0	0.0	0.0	0.0
Total	U.S. dollar	2,838.4	10.2	2,329.4	6.7
	Euro	0.0	0.0	0.0	0.0
	Other	0.0	0.0	0.0	0.0
<b>Other assets</b>		<b>1,545.9</b>	<b>5.5</b>	<b>1,775.7</b>	<b>5.1</b>
Monetary gold	Other	11.2	0.0	11.9	0.0
IMF SDR	Other	1,217.3	4.4	1,265.9	3.6
IMF reserve position	Other	282.1	1.0	473.6	1.4
Reciprocal credit agreements					
U.S. dollar		35.3	0.1	24.3	0.1
<b>Total</b>		<b>27,863.7</b>	<b>100.0</b>	<b>34,883.9</b>	<b>100.0</b>
	U.S. dollar	14,510.3	52.1	17,408.3	49.9
	Euro	9,289.4	33.3	12,205.7	35.0
	Other	4,064.0	14.6	5,269.8	15.1

Source: Central Bank of Chile.

As of June 2011, bank deposits in the investment portfolio amounted to US\$4.46 billion, meaning an increase of US\$1.30 billion from December 2010. The larger part of bank deposits in the investment portfolio is rated AA-. The bank credit risk, measured as the weighted average of deposits outstanding each day using a risk rating numeral index<sup>2/</sup>, has improved this year (figure B.2).

**Figure B.2**

Bank rating index  
(numeral)



Source: Central Bank of Chile.

<sup>2/</sup> The numeral index is built by assigning a value of 10 to the AAA rating, 9 to AA+, 8 to AA, and so on down to 5 for the A rating.

Investments in securities in the investment portfolio increased by US\$5.99 billion during the period, closing the first half at US\$26.33 billion. The liquidity portfolio closed the period at US\$2.33 billion.

As for the exposure of the internally-managed investment portfolio by country and credit risk, to date there are appropriate degrees of diversification for the various risk categories where international reserves are invested. Investments in sovereign risks are mostly in the United States and Germany, which account for a combined 57.6% of the internally-managed investment portfolio. Investments in bank risk are primarily in banks in the United Kingdom, France, the Netherlands, Switzerland and Germany (table B.5).

**Table B.5**

Internally-managed portfolio. Investments by country and credit risk  
(US\$ million)

Country	Sovereign (1)	Bank (2)	Agency (3)	Supranational (4)	Total
United States	9,053	66	1,722		10,841
Germany	8,481	311	125		8,917
France	1,775	1,125			2,900
United Kingdom	250	1,206			1,456
The Netherlands	589	466			1,055
Supranational				1,011	1,011
Canada	764	116			881
Italy	480	100			580
Belgium	479				479
Sweden	245	224			469
Australia	325	120			446
Spain	212	230			442
Switzerland		425			425
Austria	296				296
Denmark	102				102
Slovenia	60				60
Finland	32	15			47
New Zealand	30				30
<b>Total</b>	<b>23,173</b>	<b>4,414</b>	<b>1,847</b>	<b>1,011</b>	<b>30,445</b>

(1) Sovereign exposure includes the following institutions which have an explicit sovereign guarantee: *Instituto de Crédito Oficial* (Spain, 61), *Oesterreichische Kontrollbank* (Austria, 98), *KfW* (Germany, 1717) and *Export Development Canada* (Canada, 73).

(2) Bank exposure in the U.S. corresponds to an overnight deposit with the Federal Reserve and current account balances.

(3) Out of agency exposure in the U.S., US\$732 million corresponds to investments in Freddie Mac, US\$514 million in Federal Home Loan Bank and US\$476 million in Fannie Mae; while the position in Germany corresponds to Rentenbank.

(4) Corresponds to exposure in the European Investment Bank (550), Eurofima (39) BIS (116), Council of Europe (27), Inter-American Development Bank (10), International Bank for Reconstruction & Development (124) and European Bank for Reconstruction & Development (143).

Source: Central Bank of Chile.

Regarding the composition by currencies of the internally-managed investment portfolio, at 30 June this year, 48.96% was in U.S. dollar and 39.74% in euro. The remaining 11% was invested in pound sterling, Danish krone, Australian dollar, Swedish krona, Norwegian krone, Swiss franc, Singapore dollars, Canadian dollar, New Zealand dollar and Chinese yuan (table B.6).

In the case of external management, most of the exposure corresponds to sovereign risk. The United States and Germany stand out with the greater shares. Bank risk is minimal, while agency risk comes mainly from MBS (table B.7).

**Table B.6**

Internally-managed portfolio: Investments by currency  
(percent)

Currency	Share
U.S. dollar	49.0
Euro	39.7
Pound sterling	2.9
Danish krone	0.3
Australian dollar	3.6
Norwegian krone	0.1
Swedish krona	0.2
Swiss franc	0.1
Singapore dollar	0.2
Canadian dollar	3.5
New Zealand dollar	0.1
Yuan	0.3
<b>Total</b>	<b>100</b>

Source: Central Bank of Chile.

**Table B.7**

Externally-managed portfolio. Investments by country and credit risk  
(US\$ million)

Country	Sovereign (1)	Bank (2)	Agency (3)	Supranational (4)	Total
United States	84		30		115
Germany	33	40	5		77
Italy	28				28
France	21				21
The Netherlands	20				20
Canada	17				17
Australia	17				17
Slovenia	11				11
Supranational				10	10
Spain	10				10
United Kingdom	9				9
<b>Total</b>	<b>250</b>	<b>40</b>	<b>35</b>	<b>10</b>	<b>334</b>

(1) Sovereign exposure includes the following institutions that have explicit sovereign guarantee: KfW (Germany, 8).

(2) Bank exposure in Germany corresponds to Jumbo Pfandbriefe bonds.

(3) Out of agency exposure in the U.S., US\$26 million corresponds to investments in MBS, and exposure in Germany corresponds to Rentenbank.

(4) Corresponds to exposure in the European Investment Bank."

Source: Central Bank of Chile.

# Appendix C: Main measures taken by the Central Bank of Chile in 2011

## January

3 The Board of the Central Bank of Chile decided to intervene in the foreign exchange market to strengthen its international liquidity position. The objective of this initiative was to bring foreign exchange reserves to a level consistent with values seen in other economies similar to Chile, as well as to soften the effects of the exchange rate adjustment underway in the Chilean economy. The increase in international reserves was set at US\$12.0 billion, which would be accomplished through periodic foreign exchange purchases starting on 5 January and continuing through the end of December 2011. At the same time, the Board established the conditions for operations taking place from 5 January through 9 February. The monetary effects of the measure would be offset with the goal of maintaining the provision of liquidity in pesos in the market, consistent with current monetary policy; the sterilization would be implemented via the issue of a combination of short-term liquidity instruments and long-term debt.

On adopting the above measure, the Board clarified that the accumulation of international reserves carries significant financial costs, associated with the differential between the return on investment and the cost of financing it. The Board further stated that the proposed international reserve level was consistent with the long-term financial sustainability of the Central Bank of Chile, although it is close to the allowed limit.

The Board reiterated its commitment to conducting monetary policy based on an inflation target and a floating exchange rate. Given the levels of external volatility, the Chilean economy could face significant changes in external financial conditions and in its terms of trade. Exchange rate flexibility is therefore an essential ingredient for macroeconomic and financial stability, as it avoids the undesired costs often associated with the adoption of a fixed exchange rate regime, in terms of the volatility of growth, credit, interest rates, and inflation.

The auction protocols applicable to the foreign exchange purchase program were communicated in Administrative Directive to Banks (*Carta Circular*) 532, dated 4 January 2011.

4 The Board of the Central Bank of Chile reported that, in its special session on Monday, 3 January, it approved the annual auction program for 2011. This program includes the automatic renewal of debt coming due in the current year, for

a total of US\$1.0 billion, as well as the monetary sterilization of the foreign exchange purchase program announced earlier, for an additional US\$12.0 billion.

The breakdown of the bonds to be issued from February to December is as follows:

- (a) Two-year peso-denominated bonds (BCP-2): Ch\$230 billion (in pesos).
- (b) Five-year peso-denominated bonds (BCP-5): Ch\$700 billion (in pesos).
- (c) Ten-year peso-denominated bonds (BCP-10): Ch\$470 billion (in pesos).
- (d) Two-year UF-denominated bonds (BCU-2): 22 million (in UF).
- (e) Five-year UF-denominated bonds (BCU-5): 55 million (in UF).
- (f) Ten-year UF-denominated bonds (BCU-10): 44 million (in UF).
- (g) Twenty-year UF-denominated bonds (BCU-20): 28 million (in UF).
- (h) Thirty-year UF-denominated bonds (BCU-30): 28 million (in UF).

It was further stated that the bonds would be issued in accordance with the provision of Article 104 of the Income Tax Law.

This auction program could be subject to modifications in the case of significant changes in market conditions.

5 By Resolution 1583-01-101230, published in the *Official Gazette* on 5 January 2011, the Board of the Central Bank of Chile authorized the use of the designs of Chile's legal currency for the purposes of public diffusion or utilization in partial reproductions, provided that said use complies with the general terms and conditions outlined in the authorization and with all other requirements established in the Operating Regulations of 18 January 2011. This permission was issued in accordance with the authority granted to the institution in its Basic Constitutional Act and as legal copyright holder of the designs.

This authorization covers public diffusion or utilization of the illustrations or images incorporated in these designs, provided it is solely for educational purposes and is tied to instructional programs established by the Ministry of Education; or when it involves activities that are strictly related to the cultural or

informational diffusion of the characteristics of Chile's legal currency, including institutional activities organized by the Bank itself or by public welfare bodies.

This authorization excludes the total or partial reproduction of banknotes in legal circulation for the purposes of publicity or marketing, as sanctioned by Decree Law 726 of 1925, which covers any and all uses of the banknote images in articles destined for sale or souvenirs. Also excluded are any reproductions that could be confused with a real banknote or coin, which remain subject to the penal sanctions outlined in the legislation governing counterfeiting; any reproductions that place the banknote in an offensive context or that could discredit or damage the image of or confidence in the legal currency; or any use that goes against public order, morality, or the interests of the State.

10 By Board Resolution 1585-03-110106, the brokerage firm IM Trust S.A. was authorized to operate in the formal exchange market as a regulated nonbank entity undertaking foreign exchange operations, in accordance with the stipulations of Article 41 of the legislation governing the banking system and Chapter III of the *Compendium of Foreign Exchange Regulations*.

13 By Board Resolution 1586-02-110113, the Central Bank of Chile accepted the role of fiscal agent granted by Ministry of Finance Supreme Decree 1,602, of 23 December 2010, published in the *Official Gazette* on 11 January 2011, to represent and act in the name and on the account of the Treasury in the placement and administration of bonds that will be issued by the Treasury, as well as the reopening of a series of previously issued Treasury bonds. The directive includes the service of the bonds at maturity.

20 The Operating Regulations for the application of Resolution 1583-01-101230 were published in the *Official Gazette*, establishing the general criteria for the authorization of the use of the designs of Chile's legal currency, granted by the Bank in its role of copyright holder of the designs, for the purposes of public utilization.

## February

17 At its monthly monetary policy meeting, the Board of the Central Bank of Chile decided to increase the monetary policy interest rate by 25 basis points, to 3.5%.

24 By Resolution 1593E-01-110224, published in the *Official Gazette* on 28 February 2011, the Board of the Central Bank of Chile accepted the changes to the performance guidelines, submitted by the Minister of Finance through Official Letter 215 of 23 February 2011, in relation to the annual compensation to which the Bank is entitled for its services as fiscal agent in the administration of resources in the Economic

and Social Stabilization Fund and the Pension Reserve Fund, as established in the Fiscal Responsibility Law.

## March

10 By Resolution 1595-01-110310, published in the *Official Gazette* on 11 March 2011, in the exercise of its authority on foreign exchange issues as provided in the last paragraph of Article 42 of its Basic Constitutional Act and in accordance with the general orientation of the government's economic policy, the Board modified Resolution 1282-02-060727 to extend the authorization for foreign issuers to issue peso-denominated bonds in the local securities market, effective on 1 April 2011. Both the issuing corporation and the issued peso-denominated bonds, which use the legal national currency and are expressed either in that currency or in some unit of indexation, must be listed in the Securities Registry as established in Title 11 of Law 18,045 on the securities market.

Previously, the only entities that could issue these bonds were corporate issuers eligible to trade their securities on stock exchanges authorized by the Risk Rating Commission.

The extension allows the issue of these peso-denominated bonds, as well as their acquisition by residents of Chile, to the extent that the issuers satisfy the following conditions:

(a) They are legally established in foreign states or jurisdictions that are members of the Financial Action Task Force (FATF) or an equivalent regional inter-governmental organization, such as the Financial Action Task Force of South America, and that are not classified as non-cooperative territories in terms of money laundering and financial terrorism by the FATF and do not appear on the list of fiscal paradises or tax havens that is periodically updated by the Organization for Economic Cooperation and Development (OECD).

(b) They are legally established in countries (i) whose sovereign debt has at least three risk ratings by agencies that comply with the stipulations of Resolution 1595-01; (ii) that are members of the Financial Action Task Force (FATF) or an equivalent regional inter-governmental organization; and (iii) that are not classified as non-cooperative territories in terms of money laundering and financial terrorism by the FATF or tax havens by the OECD.

This authorization is further extended to international or supranational organizations in which at least two-thirds of their member states fully comply with the stipulation of points (a) and (b) of the previous paragraph. Such organizations are not exempt from that requirement that the issuer must be listed in the Securities Registry, as indicated above.

This authorization further requires that the debt securities issued in the local market by corporations or by international or supranational organizations must, at the very least, have an international risk rating or, in the absence thereof, be rated by two risk rating agencies governed by Law 18.045.

This authorization further extends to foreign states, as well as to international or supranational organizations, that comply with the requirements established in accordance with the domestic securities market legislation, for issuing and placing these bonds on the local market, provided that they are listed in the Securities Registry or have been exempted from the listing requirement by a competent oversight authority. To qualify to issue bonds, such organizations must comply with the requirements outlined in points (a) and (b) above, in addition to the requirement of having at least three risk ratings, according to the terms of Resolution in question.

Section 3 of the Resolution establishes reporting requirements for these bond issues, which are applicable to both the foreign issuers and the institutional investors that acquire the bonds.

Finally, it was expressly stated that any and all foreign exchange operations that are carried out or implemented by the issuers and that originate from or are caused by the bond issue, the bond service, or the resources obtained for the purposes of investment, capital contributions, loans, or deposits—whether made or granted by the foreign issuers or carried out by the purchasers of the securities—will be subject to the foreign exchange regulations in force on the date the foreign exchange transaction is conducted.

17 At its monthly monetary policy meeting, the Board of the Central Bank of Chile decided to increase the monetary policy interest rate by 50 basis points, to 4.0%.

21 By Resolution 1597E, adopted in the Extraordinary Board Meeting held on 21 March 2011, the Central Bank of Chile announced that in accordance with the power vested in it by Article 31 section (b) of Law 19.396 on the new treatment of subordinated debt, the Bank, as creditor, had decided to receive a cash payment for the percentage of earnings from the *Banco de Chile's* 2010 accounting period, owed in the form of subordinated debt. Consequently, at a given time, the *Banco de Chile* must transfer to the Central Bank the payment of its annual installment of approximately Ch\$122.38 billion, or 35.33% of that banking institution's earnings in 2010.

24 By Board Resolution 1598-02-110324, published in the Official Gazette on 28 March 2011, the Central Bank of Chile modified Appendix 1 of chapter IV.B.8 of the *Compendium of Financial Regulations*, in order to incorporate the Unemployment Funds Management, governed by Law 19.728, into the group

of institutions authorized to operate in the primary market for debt instruments issued by the Central Bank.

## April

12 At its monthly monetary policy meeting, the Board of the Central Bank of Chile decided to increase the monetary policy interest rate by 50 basis points, to 4.5% in annual terms.

21 By Board Resolution 1604-01-110421, the Central Bank of Chile accepted the role of fiscal agent granted by Ministry of Finance Supreme Decree 19, of 10 January 2011, to represent and act in the name and on the account of the Treasurer in the administration of the Strategic Contingency Fund (SCF). The associated duties are outlined in the SCF Fiscal Agency Decree and in the specific instructions included in the performance guidelines proposed by the Ministry of Finance in Official Letters 435 and 437, both of 12 April 2011.

21 By Board Resolution 1604-02-110421 the Central Bank Board accepted new performance guidelines submitted by the Minister of Finance through Official Letters 432 and 433, both of 12 April 2011, in relation to the management of the resources in the Economic and Social Stabilization Fund (ESSF) and the Pension Reserve Fund (PRF), which involve a passive management of sovereign funds. Through this same Resolution, the Board agreed to resume the process of selecting external administrators for the PRF resources, as requested by the Ministry of Finance through Official Letter 436 of 12 April 2011.

## May

12 At its monthly monetary policy meeting, the Board of the Central Bank of Chile decided to increase the monetary policy interest rate by 50 basis points, to 5.0%.

13 By Resolution 1609E, adopted in the Special Board Meeting held on 13 May 2011, in the terms of Article 30 of Law 19.396, the Central Bank set the market price applicable for the sale of the preferred stock rights that will be offered by the *Banco de Chile*. These options correspond to shares belonging to the firm SAOS S.A., which were signed over to the Central Bank of Chile as collateral for subordinated debt.

The subscription of cash shares encompassed in the above options corresponds to a capital increase through the issue of cash shares, as decided at the Extraordinary Shareholders' Meeting of the *Banco de Chile* held on 20 January 2011.

## June

9 By Resolution 1615-01-110609, the Board renewed the appointment of Mr. Luis Bates Hidalgo to the Audit and

Compliance Committee of the Central Bank of Chile, for a period of three years, and also named him President of the Committee for the same period.

14 At its monthly monetary policy meeting, the Board of the Central Bank of Chile decided to increase the monetary policy interest rate by 25 basis points, to 5.25%.

16 By Resolution 1617E, adopted in the Special Board Meeting held on 16 June 2011, the Central Bank of Chile announced the decision to sell on the Securities Exchange the remaining stock subscription rights from the capital increase adopted in the Extraordinary Shareholders' Meeting of the *Banco de Chile* held on 20 January 2011, which were not sold in the preferred offer period.

These stock options correspond to *Banco de Chile* shares belonging to the firm SAOS S.A., which were signed over to the Central Bank of Chile as collateral for subordinated debt.

24 The Central Bank of Chile reported that, as of 7 July 2011, the Financial Brokers Survey (FBS) will include a question on expectations for the monetary policy rate (MPR) three months out. This question replaces a similar question on the MPR eighteen months out.

24 By Resolution 1619E-01-110624, the Central Bank of Chile announced the decision to award the remaining *Banco de Chile* stock subscription rights belonging to SAOS S.A., according to the conditions on stock market sales established in Resolution 1617E-01-110616, in the terms stipulated in section (b) of Article 30 of Law 19,396.

## July

4 Resolutions 1602E-01-110412 and 1621-01-110630 were published in the *Official Gazette*, outlining the procedures for exchanging Chilean banknotes that have been damaged and rendered unusable by deterrent technologies (dye packs), originating from bank automated teller machines (ATMs) and from security services offered by securities transport companies. These Resolutions replace Resolution 1432-03, of 28 August 2008, which applied to securities transport companies.

These Resolutions were adopted in response to the initiative reported to the Central Bank by the Ministry of the Interior and Public Security, requiring the use of dye packs in designated bank ATMs, as a deterrent security mechanism aimed at reducing criminal actions involving the theft of cash from these machines.

13 The Central Bank of Chile approved the operating rules for the implementation of the aforementioned Regulations on exchanging Chilean banknotes that have been damaged through the use of deterrent technologies (dye packs),

originating from bank automated teller machines (ATMs) and from security services offered by securities transport companies. These rules were published in the *Official Gazette* on 18 July 2011.

28 By Resolution 1625-05-110728, the Board modified the national accounts data provided by the Central Bank of Chile in the area of institutional accounts, in accordance with the provisions of Article 53 of its Basic Constitutional Act. To this end, Section III on Economic Activity and Expense in the Appendix of Resolution 1493-02-090806, published in the *Official Gazette* on 11 August 2009, was replaced, and the correction was published in the *Official Gazette* on 13 August 2009.

## August

18 By Board Resolution 1628-02-110818, the Board accepted the modifications to the performance guidelines for the Strategic Contingency Fund (SCF), submitted by the Ministry of Finance through Official Letter 990, dated 22 July 2011. These modifications involve the administration of the SCF and are aimed at standardizing the guidelines for all the fiscal funds managed by the Central Bank in its role of fiscal agent. Specifically, the changes allow a direct transfer to open current accounts held by the Treasury of Chile in the respective correspondent banks, when an eligible depositary bank has mistakenly paid the funds into other current accounts held by the Central Bank of Chile in that banks.

The Board also accepted the guidelines authorizing the fiscal agent to deduct third-party payments from the managed fiscal resources, to pay for services rendered or other expenses associated with the financial management of the SCF. Deductions are allowed up to 0.03% of the managed resources, subject to a rendition of accounts. Finally, the list of people designated to interact with the fiscal agent was updated, for purposes outlined in the Official Letter.

18 By Board Resolution 1628-03-110818, the Board accepted the modifications to the performance guidelines for the Pension Reserve Fund (FRP) and the Economic and Social Stabilization Fund (ESSF), submitted by the Minister of Finance through Official Letter 1051, of 8 August 2011. The changes are included in Official Letters 432 and 433 from the Ministry of Finance, both dated 12 August 2011.

The new guidelines incorporate the modifications described above for the SCF, in terms of the direct transfer of funds to current accounts held by the Treasury of Chile in the respective correspondent banks. The guidelines also address the possibility of temporarily holding new contributions to the FRP and ESSF, for liquidity management purposes, in assets identified for this purpose in the guidelines.

## Index of tables and figures

### Tables

International baseline scenario assumptions	8
Economic growth and current account	8
Inflation	9
I.1: World growth	16
I.2: World inflation	16
II.1: Expectations for the MPR	20
II.2: Interest rates in the financial system, by type of loan	21
III.1: Gross domestic product	23
III.2: Aggregate demand	23
IV.1: Inflation indicators	28
V.1: International baseline scenario assumptions	31
V.2: Economic growth and current account	32
V.3: Inflation	33
V.4: Main assumptions of the international scenario	35
V.5: Economic growth and current account for 2011	36
V.6: Changes in the average CPI inflation forecast for 2011	36
A.1: The Central Bank's balance sheet: summary of accounts and balances	38
A.2: The Central Bank's balance sheet flows	38
B.1: Benchmark structure of the internally managed investment portfolio, by type of risk and comparator	39
B.2: Currency, maturity, and duration structure of the internally managed benchmark portfolio	40
B.3: Absolute, benchmark and differential returns on international reserves	40
B.4: International reserves breakdown	41

B.5: Internally-managed portfolio. Investments by country and credit risk	41
B.6: Internally-managed portfolio. Investments by currency	42
B.7: Externally-managed portfolio. Investments by country and credit risk	42

## Figures

CPI inflation forecast	10
CPIX inflation forecast	10
I.1: Stock market volatility	13
I.2: Sovereign spreads	13
I.3: Three-month liquidity conditions in the interbank market	14
I.4: Long-term interest rates in developed economies	14
I.5: Emerging market spreads	14
I.6: World stock markets	15
I.7: Currency parities	15
I.8: Net flow of investment funds to emerging economies	15
I.9: Real and expected monetary policy rates in the world	16
I.10: VIX	17
I.11: Global MSCI stock index	17
I.12: Nominal ten-year interest rate in the United States	18
I.13: LME copper price	18
I.14: Agricultural prices	18
II.1: Swap rates	19
II.2: MPR and expectations	19
II.3: MPR and interest rates on Central Bank instruments	20
II.4: Interest rates in dollars and pesos in the local market	20
II.5: Nominal TAB rates at different maturities in 2011	20
II.6: Long-term interest rates on private sector bonds, by risk rating	21
II.7: Bank Lending Survey	21
II.8: Monetary aggregates	22
II.9: Nominal exchange rate	22
II.10: Real exchange rate	22
III.1: Gross domestic product	23
III.2: Contribution to annual GDP growth	24
III.3: Retail sales and new car sales	24
III.4: Consumer perception indices	24
III.5: Employment and the unemployment rate	25
III.6: Nominal wages	25

III.7: Capital goods imports	25
III.8: Real estate market in Greater Santiago	26
III.9: Construction and engineering investment survey	26
IV.1: CPI, CPIX and CPIX1 inflation	27
IV.2: Contribution to annual CPI inflation	27
IV.3: Weekly gasoline prices	28
IV.4: Food prices	28
IV.5: Beef prices in the local and external markets	28
IV.6: Distribution of foods in the CPIX1	29
IV.7: Unit price of imports index (IVUM) for consumer goods	29
IV.8: Retail operating margins	29
IV.9: Inflation expectations	30
V.1: Trading partners' growth	31
V.2: Terms of trade	32
V.3: CPI inflation forecast	32
V.4: Incidence on annual CPI inflation	33
V.5: Quarterly GDP growth scenarios	34
V.6: CPI inflation forecast	34
V.7: CPIX inflation forecast	34
V.8: Monetary policy rate	36
B.1: International reserves	40
B.2: Bank rating index	41

## Glossary

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

**Corporate Emerging Market Bond Index (CEMBI):** Indicator of corporate risk, calculated by J.P. Morgan Chase as the difference between the interest rate on dollar-denominated bonds issued by banks and firms in emerging economies, and the interest rate on U.S. Treasury bonds, which are considered risk free.

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

**CPIX1:** CPIX excluding fresh meats 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 risk of default 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.

**EGW:** Electricity, gas and water.

**Emerging Market Bond Index (EMBI):** The main indicator of country risk, calculated by J.P. Morgan Chase as the difference between the interest rate on dollar-denominated bonds issued by the government and public companies in emerging economies, and the interest rate on U.S. Treasury bonds, which are considered risk free.

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

**EPI-5:** EPI using the price indices of Canada, the euro area, Japan, the United Kingdom and the United States.

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

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

**GDP other services:** Includes financial and business services, home ownership, 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 93% of total exports.

**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, 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, EGW and mining

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

**M1:** A measure of the money supply that includes currency in circulation plus checking accounts, deposits net of clearing of the non-financial private sector, plus demand deposits other than checking accounts and demand savings deposits.

**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 at savings and loan cooperatives, less the time deposits of the aforementioned mutual funds and savings and loan cooperatives.

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

**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: Argentina, Belgium, Brazil, Canada, China, Colombia, France, Germany, Italy, Japan, Mexico, the Netherlands, Paraguay, Peru, Spain, South Korea, Switzerland, Thailand, the United Kingdom and the United States.

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

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

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

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

**RER:** Real exchange rate. A measure of the real value of the peso against a basket of currencies that matches the basket used to calculate the MER.

**Swap:** Derivatives contract between two parties, who carry out an exchange of flows at future dates. One of the most common 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.

**TAB:** Reference interest rate (*tasa activa bancaria*) calculated by the SBIF. Reflects the financial institution's cost of funding, which is calculated based on marginal deposit rates and other factors that affect funding costs, such as reserves, but excluding the administrative costs associated with the management of liabilities and all other costs.

**VIX:** Stock volatility index, based on S&P 500 index options contracts.

**VSTOXX:** Stock volatility index, based on Euro Stock 50 index options contracts.

**World growth:** Regional growth weighted by its share in world GDP at PPP, published in the IMF's World Economic Outlook (WEO, April 2011). World growth projections for 2011–2013 are calculated from a sample of countries that account for 85% of world GDP. For the remaining 15%, average growth is estimated at 4.6% for the period 2011–2013 (WEO update, June 2011).

**World growth at market exchange rate:** Growth measured at market exchange rate. Each country is weighted according to its GDP in dollars, as published by the IMF's World Economic Outlook (WEO, April 2011). The sample of countries used in the calculation account for 88% of world GDP. For the remaining 12%, average growth is estimated at 3.2% for the period 2011–2013.

## 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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Institutional Affairs Management

Publications Department

SEPTEMBER 2011

ISSN: 0716-2219

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BANCO CENTRAL  
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MONETARY POLICY REPORT SEPTEMBER 2011