

# MONETARY POLICY REPORT

December 2013



# **MONETARY POLICY REPORT\*/ December 2013**



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



# CONTENTS\*/

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PREFACE	5
SUMMARY	7
MONETARY POLICY DECISIONS IN RECENT MONTHS	11
I. INTERNATIONAL SCENARIO	13
II. FINANCIAL MARKETS	19
III. DEMAND AND OUTPUT	23
IV. PRICES AND COSTS	27
V. INFLATION SCENARIOS	31
REFERENCES	37
GLOSSARY AND ABBREVIATIONS	39
BOXES	
Financial impact on emerging economies of withdrawal of the quantitative easing program by the United States	17
Real effects of an increase in the price of energy	35

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\*/ The statistical cutoff date of this *Monetary Policy Report* was 24 November 2013.



# PREFACE

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

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

The *Monetary Policy Report* is published four times a year, in March, June, September and December. It analyzes the main factors influencing inflation, which include the international environment, financial conditions, the outlook for aggregate demand, output, and employment, and recent price and cost developments. The last chapter summarizes the results of this analysis in terms of the prospects and risks affecting inflation and economic growth over the next eight quarters.

Boxes are included to provide more detail on issues that are relevant for evaluating inflation and monetary policy.

This *Report* was approved at the Board's session of 29 November 2013 for presentation to the Senate's Finance Committee on 3 December 2013.

## The Board



# SUMMARY

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In the course of this year, and as expected, output and expenditure have been gradually losing strength, as have all the components of domestic demand. The slower growth of the economy has eased the cumulative pressures on the use of domestic resources and the current account deficit. Inflation has remained low and inflation expectations two years ahead are still around 3% annually. Externally, the decision of the Federal Reserve to push back the tapering of its asset purchase program brought relief to global financial conditions, but the risks associated with this process, especially for the emerging economies, are still latent. Developed economies continue on a gradual recovering trend, while the outlook for emerging markets has moderated over the short and medium term. International prices of commodities, including copper, have dropped, contributing to reduce the already low international inflationary pressures. As the economy evolved as projected in September's *Monetary Policy Report*, the Board lowered the monetary policy rate (MPR) by 25 basis points in both of its October and November meetings, bringing it to 4.5%.

In Chile, GDP expanded by 4.7% y-o-y in the third quarter. Mining showed high rates of annual change, boosted by the startup of major investment projects of recent years. Accordingly, the sector's exports have increased, helping to reduce the current account deficit. Sectors other than natural resources continued to grow at a lower rate than in 2012. This, together with the revision of the growth rates of previous quarters, confirmed that the Chilean economy has reduced its dynamism compared to last year.

On the expenditure side, the slowdown was extended to all components, including private consumption, which was accompanied by a significant depletion of inventories. In this trajectory, the maturation of the mining investment cycle discussed in previous *Reports* has played a key role. In addition, the extraordinary imports of transport material of the last quarter of 2012 has not repeated this year. Consumption also shows a slowdown. In any case, it has adjusted smoothly as labor market conditions remain tight, real wages are growing strongly and consumer expectations are still optimistic, although less so than in the first half of the year. It is estimated that the slowdown in private consumption will continue in the coming months, in line with a not so dynamic labor market, a view that is supported by our report on business perceptions *Informe de Percepciones de Negocios*.

CPI inflation has been lower than expected, mainly due to the drop in international fuel prices, which more than offset the seasonal increases of some perishable foods and the peso depreciation. Thus, in October the CPI rose 1.5%

**ECONOMIC GROWTH AND CURRENT ACCOUNT**

	2012	2013 (f)	2014 (f)
	(annual change, percent)		
GDP	5.6	4.2	3.75-4.75
National income	6.3	5.2	4.4
Domestic demand	7.1	3.9	4.8
Domestic demand (w/o inventory change)	7.3	5.1	4.5
Gross fixed capital formation	12.3	3.9	4.1
Total consumption	5.8	5.4	4.7
Goods and services exports	1.0	5.3	3.1
Goods and services imports	4.9	4.4	4.6
Current account (% of GDP)	-3.5	-3.2	-3.7
National savings (% of GDP)	21.4	21.1	20.6
GFCF (% of nominal GDP)	24.1	24.4	24.3
GFCF (% of real GDP)	26.8	26.8	26.7
	(\$ million)		
Current account	-9,497	-9,000	-10,450
Trade balance	3,422	2,500	600
Exports	78,277	78,300	78,400
Imports	-74,855	-75,800	-77,800
Services	-2,435	-3,000	-2,650
Rent	-12,676	-10,800	-10,650
Current transfers	2,192	2,300	2,250

(f) Forecast.

Source: Central Bank of Chile.

**INTERNATIONAL BASELINE SCENARIO ASSUMPTIONS**

	2012	2013 (f)	2014 (f)	2015 (f)
	(annual change, percent)			
Terms of trade	-4.1	-3.9	0.2	-1.5
Trading partners' GDP (*)	3.4	3.4	3.6	3.8
World GDP at PPP (*)	3.1	3.0	3.5	3.7
World GDP at market exchange rates (*)	2.5	2.3	2.9	3.2
External prices (in US\$)	-0.2	0.2	-0.4	0.0
	(levels)			
LME copper price (US\$/lb)	361	332	310	290
WTI oil price (US\$/barrel)	94	98	93	88
Brent oil price (US\$/barrel)	112	109	106	100
Gasoline parity price (US\$/m <sup>3</sup> ) (*)	824	783	712	679
Libor US\$ (nominal, 90 days)	0.4	0.3	0.3	0.7

(\*) For definition, see glossary.

(f) Forecast.

Source: Central Bank of Chile.

y-o-y, which again placed it temporarily below the tolerance range. In contrast, the core measure CPIEFE brought no major surprises and continued to increase up to 1.6% y-o-y in the same month. Inflation expectations two years ahead are still near 3%.

In the last few months, movements in international financial markets have been largely determined by news about the future course of monetary and fiscal policies in the U.S. Even though this led to a temporary improvement of external financing conditions for emerging economies, the baseline scenario considers new volatility episodes in the transition towards more normal financial conditions. In any case, the fiscal agreements reached in the U.S. are temporary and could thus lead to new tensions at the turn of the year. Even though external financial conditions remain less favorable than earlier in the year, compared with September long-term interest rates dropped and world stock markets improved. A number of emerging market currencies depreciated against the dollar. Among the latter was the Chilean peso, which traded above \$520 per dollar at the close of this *Report*. The real exchange rate (RER) is near its averages of the last 15 to 20 years, and is estimated to be within ranges consistent with its long-term fundamentals.

In terms of the outlook for global growth, gradual recovery is under way in developed economies. In the third quarter, U.S. growth outperformed market consensus expectations and, while inventory accumulation played an important role, the better performance of the labor market and the real estate sector, business and consumer confidence, together with the behavior of the prices of stocks and other assets and, in particular, the tampering of the fiscal adjustment suggest that in 2014 U.S. growth will surpass the 2013 figure. The recovery of the Japanese economy continues, but the tax increases announced for 2014 will take a toll on economic growth. The Eurozone posted positive growth for the second consecutive quarter, but somewhat less than expected by the consensus. Worth noting were slower growth in Germany and the contraction of the French economy, and on a positive note, that some peripheral economies grew again.

Emerging economies have decelerated further and consensus forecasts have seen new downward revisions. In China, after an important correction to its growth outlook in the first half of the year, incoming data show growth leveling off around 7.5%. This rate, however, is much lower than it was in previous years. The baseline scenario assumes that the growth rate of China will decrease to 7.2% in 2015, reflecting the need to move forward in modifying the composition of the sources of that growth and resolving some of the vulnerabilities of its financial system. The rest of the emerging world continues to slow, which has led some economies to cut down their policy rates. Others, however, have restricted their monetary policy to respond to stronger pressures on inflation and on the exchange rate associated with fiscal, monetary or external vulnerabilities. However, China's lower growth outlook, lower commodity prices, not so expansionary external financial conditions and the contractionary adjustments in some larger emerging economies, support the notion that emerging economies will not repeat the growth rates of the last three years.



The baseline scenario of this *Report* foresees that, after expanding 3.4% in 2013, Chile's trading partners will grow 3.6% in 2014 and 3.8% in 2015, somewhat down from September's projections. In this context, both in emerging and developed economies actual and expected inflation have declined steadily. Commodity prices have also declined. Geopolitical tensions in the Middle East have abated, as have some oil refinery difficulties in the U.S., which resulted in lower actual and forecast fuel prices than in September. The price of copper, although remaining relatively stable for some months, had a decline in recent weeks, with which the projections for the metal are similar to those in the previous *Report*. Accordingly, the baseline scenario foresees similar terms of trade too.

The baseline scenario assumes that the Chilean economy will expand 4.2% in 2013, and then grow between 3.75% and 4.75% in 2014, slightly less than forecast in September. In 2014, gross fixed capital formation will post a similar annual growth rate as this year. For consumption, the baseline scenario foresees a slight deceleration from 2013. This result combines, on one hand, a moderation in private income growth—associated with some easing in the labor market—with the convergence of inflation to 3% and the exchange rate depreciation that will affect durable consumption. On the other hand, consumer expectations are still on the optimistic side. This scenario assumes an external impulse similar to September's. Furthermore, it considers that part of the inventory depletion of recent quarters is an unwanted development, so it will be reversed going forward. Taking account of the slowdown in imports and stronger exports, this scenario also foresees a narrowing of the current account deficit compared with September's: 3.2% of GDP in 2013 and 3.7% in 2014. The estimate measured at trend prices is also down, so the risk associated with the evolution of the current account that had been identified in the last *Reports* is reduced.

In the baseline scenario, CPI inflation will converge to 3% towards the end of the projection horizon, this time the last quarter of 2015. Thus, the arrival at the target will take longer than expected in September. The CPIPEFE will continue to gradually approach 3%, without major changes from the September forecast. This implies that nominal wages will be adjusted in line with productivity and the inflation target. It also includes as a methodological assumption that the RER will remain virtually unchanged. Finally, the baseline scenario uses as a working methodological assumption that the policy rate will follow a path similar to the one in the latest Economic Expectations Survey.

The baseline scenario reflects those events that are estimated to be the most likely to occur with the information at hand at the closing of this *Report*. There are risk scenarios, however, which if materialized, may reshape the macroeconomic environment and, therefore, may modify the course of monetary policy. On this opportunity, having evaluated the alternative scenarios, the Board estimates that the risk balance is unbiased for both output and inflation.

On the external front, one risk relates to growth in emerging economies, particularly China. Concerns persist about the fragility of the Chinese financial system, which together with doubts about the evolution of real-estate prices could limit its future growth prospects. As has been noted before, China's

## INFLATION

	2012	2013 (f)	2014 (f)	2015 (f)
	(annual change, percent)			
Average CPI inflation	3.0	1.7	2.6	
December CPI inflation	1.5	2.6	2.5	
CPI inflation in around 2 years (*)				3.0
Average CPIPEFE inflation	2.2	1.2	2.6	
December CPIPEFE inflation	1.5	1.9	2.9	
CPIPEFE inflation in around 2 years (*)				2.9

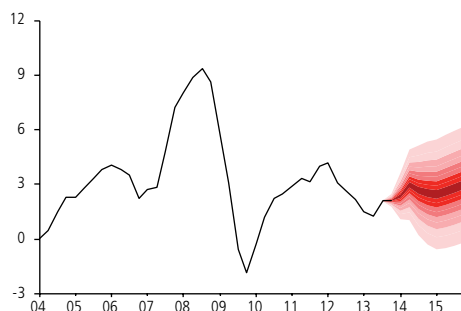
(f) Forecast.

(\*) Inflation forecast at the fourth quarter of 2015.

Source: Central Bank of Chile.

**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 future inflation as assessed by the Board. The baseline scenario uses as a working methodological assumption that the policy rate will follow a path similar to the one in the latest Economic Expectations Survey.

Source: Central Bank of Chile.

evolution is cause for unrest because of its weight in world GDP and its impact on the pricing of commodities, copper included.

The volatility that financial markets have shown in recent months implies that ending the quantitative easing in the U.S. will not be stress-free, especially because of the difficulty to calibrate the policy actions of this unprecedented process. In this regard, a major risk has to do with its effects on some of the larger emerging economies that have accumulated macroeconomic imbalances and are more dependent on external financing. The risk associated with the complex interaction between weak growth, a frail fiscal situation and financial problems in Europe is still present.

Domestically, headline inflation of recent quarters has been lower than forecast, and the moment when it will expectedly reach the target has been postponed time and again. While the recent cuts to the MPR will help inflation converge to 3%, if widespread slowdown in all the demand components is confirmed, along with longer-lasting low inflation in the rest of the world and maybe a sharper fall in international fuel prices could further postpone such convergence to 3%. However, the depreciation of the peso and the still tight labor market could work in the opposite direction.

Projections indicate that in the short term the Chilean economy will continue to expand somewhat below trend for still some quarters. However, labor market conditions and a faster recovery in inventories, among other factors, could result in a faster recovery of the economy that would bring it closer to its trend.

**CPIEFE 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 future core inflation as assessed by the Board. The baseline scenario uses as a working methodological assumption that the policy rate will follow a path similar to the one in the latest Economic Expectations Survey.

Source: Central Bank of Chile.

The macroeconomic scenario has evolved in line with the trends described in the last *Reports*. The international outlook is of more balanced growth between developed and emerging economies, more normal financial conditions, and lower terms of trade. Domestic output and demand are gradually decelerating and inflation remains low. In its recent meetings, the Board deemed appropriate to lower the MPR in order to accommodate the level of monetary stimulus to weaker economic growth in Chile and ensure convergence of inflation to the target. The recent depreciation of the peso, which has driven the RER to near its historical average, is part of the restructuring of the sources of growth that should accompany the change in the external environment. The baseline scenario does not foresee the need for any significant changes in the MPR but, should such need arise, monetary policy has room and is prepared for further adjustments. The Board follows the evolution of the external and domestic macroeconomic scenarios and their implications on inflation closely, and reiterates its commitment to conduct monetary policy in such a way that projected inflation stands at 3% over the policy horizon.

# MONETARY POLICY DECISIONS IN THE LAST THREE MONTHS

## BACKGROUND: SEPTEMBER 2013 REPORT

Since the June *Monetary Policy Report (Report)*, output and domestic demand had continued the gradual normalization process begun earlier this year, with growth rates remaining lower than in 2012. Inflation had evolved in line with what was anticipated and had again returned within the tolerance range, while expected inflation two years ahead remained around 3%. On the international front, the gradual recovery of developed economies had consolidated and was accompanied by an outlook of marked deceleration of emerging economies, particularly China. Additionally, markets anticipated the upcoming beginning of the withdrawal of the United States quantitative easing program. This change in the international scenario had affected the direction of capital flows and had created some turbulence in emerging markets. Although the fall in the price of copper had ceased, it remained lower than the average level of the first half of the year. All in all, the outcome was a lower external drive than foreseen in June. In this context, the Board had kept the monetary policy interest rate (MPR) at 5.0%, but had noted that, if these tendencies were to persist, an adjustment to this variable could be necessary.

GDP growth in Chile reached 4.1% in the second quarter, confirming that activity was decelerating. Annual growth of the natural resources sector dropped, mainly associated to lower output in mining at the start of the quarter, but also due to a significant fall in fishing. During the second quarter, performance of other than natural resources sectors continued below their trend. Growth was driven mainly by trade and construction, while other investment-related sectors decelerated. Thus, the use of installed capacity had fallen.

Domestic demand had continued decelerating during the second quarter. Nonetheless, final demand, which excludes inventories, had maintained an annual growth rate similar to the first quarter. Annual growth of gross fixed capital formation was below levels of the second half of 2012. On the other hand, private consumption had been more dynamic, particularly in its non-

durable component, while growth of the durable component remained high. Labor market conditions had ceased to tighten, but continued to be the main driving force of this component. Annual growth rates of nominal and real wages had eased, and unemployment rate remained close to historical lows. A significant drop in inventories had occurred in the last quarter due to a reversal of the first quarter build-up, which among other factors was due to a port strike.

CPI inflation had returned to levels within the tolerance range, hand in hand with the fading away of transitory factors which had affected it. Particularly, electricity and gas prices had risen, in the first case as a result of the end of the tariff refund process, and in the second, due to the evolution of international prices, and to a lesser extent, to the exchange rate depreciation. All in all, core inflation had remained close to 1% (annual), reflecting that the goods component still had a negative incidence.

Although the Board had kept the MPR unchanged, movements in domestic interest rates and the real exchange rate allowed the economy to adjust more easily to an environment in which the external stimulus was lower and pressures over domestic resources had tempered. So far in the year, market rates had dropped. The real exchange rate (RER) had depreciated to levels close to the average of the last 15 to 20 years and was thought to be within the range consistent with its long-term fundamentals.

On the external front, China posed risks, among other reasons because of weakness in its financial system. This could create difficulties resulting in a sustained slowdown of that economy. Additionally, there was uncertainty as to how emerging economies would adjust to a withdrawal of the monetary stimulus by developed countries. Risks associated to the Eurozone's complex fiscal and financial situation continued. Moreover, heightening of geopolitical tensions in the Middle East could significantly affect oil prices. Domestically, it was impossible to rule out that final demand, and particularly private consumption, would continue to adjust at a lower than desirable rate, increasing the risk of higher inflation and of a similar or wider current account deficit. The



latter risk would increase in the face of a stronger deterioration in terms of trade. Upon assessment of these scenarios, the Board concluded that the risk balance was biased downwards for output and balanced for inflation.

## SEPTEMBER AND OCTOBER MEETINGS

At the time of the September meeting, domestic and external developments were consistent with forecasts published in the latest *Report*. On the external front, indicators confirmed that growth in developed economies was gradually recovering and that emerging economies were decelerating. A positive factor for emerging economies was that some indicators for China were stabilizing. Nonetheless, concern over the strength of its financial system lingered. International investors continued to be expectant regarding the upcoming Federal Reserve meeting.

Since the first quarter, Chile had experienced a deceleration of GDP growth associated to a slowdown in investment, while private consumption had been more dynamic. The forecasts included in the previous *Report* anticipated that output would continue the trend of the first half of the year, and that deceleration of final demand would intensify in the coming quarters, hand in hand with less dynamic private consumption. Up to then, deceleration of private consumption had been minor, reflecting the fact that labor income or loan availability for consumers had not changed significantly.

Thus, relevant options put forward by the Research Division were to maintain the MPR at 5% or to cut it by 25 basis points (bp) to 4.75%. As mentioned in former meetings, the option of lowering the MPR could be justified by evidence of a weaker external drive, maturing of the mining investment cycle and outlook of lower dynamism in the labor market and private consumption, all of which should ease pressures on installed capacity, the labor market and ultimately, inflation. The option of keeping the MPR unchanged could be sustained by the fact that labor market conditions were still tight, output deceleration had been soft, and final demand continued to be dynamic, plus the fact that some external risks had moderated. Hence, the Board decided to keep the MPR at 5%.

In October, available information confirmed that the trends anticipated in the September *Report*, both on the external and domestic fronts, had materialized. On the external front, difficulties faced by the US government to reach a fiscal agreement with Congress were significant. Moreover, postponing the start of the quantitative easing program withdrawal in the United States led to a slight improvement in external financial conditions. As to world growth, developed economies continued on a path of slow recovery, and emerging economies consolidated a trend of greater deceleration. Chile's output data continued to be in line with anticipated figures. Demand showed signs of deceleration. A highlight was the improvement in the trade balance, which could result in lower risks associated to a current account deficit. Inflation remained low and there were signs of postponement in its convergence towards the target.

This led the Research Division to again put forward as relevant options maintaining the MPR at 5.0% or cutting it by 25 basis points (bp) to 4.75%. The option of leaving the MPR unchanged was consistent with the slow deceleration of final demand when compared to forecasts in the *Report*, tight conditions persisting in the labor market and the upturn of certain private consumption indicators. On the other hand, the option of cutting the rate was backed by the progressive consolidation of the scenario forecast in the June and September issues of the *Report*. Over recent months a scenario of lower external drive, decelerating growth and limited inflationary pressures in the Chilean economy had consolidated. This option was adequate in terms of easing economic adjustment and maintaining inflation aligned with the target. Although some divergent elements that needed to remain under close scrutiny were present at the time, it was also necessary to consider the lagged effects of monetary policy. Therefore, it was inevitable to act on the basis of incomplete data, after weighing the costs of making mistakes in either direction. Thus, the Board decided to cut the MPR by 25 bp to 4.75%.

In November, the Board also decided to cut the MPR by 25 bp to 4.5%. More background information on this decision may be found in the minutes of the November Monetary Policy Meeting (MPM) published after the statistical closing of this *Report*.

# I. INTERNATIONAL SCENARIO

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

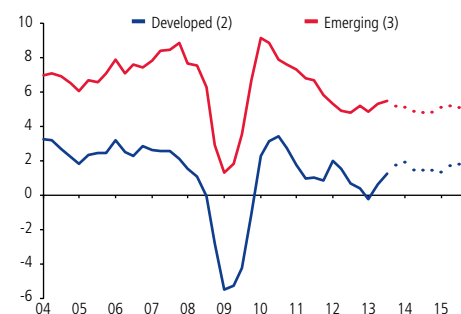
## WORLD GROWTH

On the international front, a scenario of slow but sustained recovery of developed economies has taken hold, coupled with a slowdown in emerging countries (figure I.1). Thus, on the one hand, led by the United States, developed economies are improving their performance. On the other hand, emerging economies continued to decelerate, although at a slower pace than during preceding quarters. Noteworthy was China's recent rebound in growth. For 2014, growth forecast for Chile's trading partners remains unchanged at 3.6%, and for 2015 it is adjusted downward by two tenths to 3.8% (table I.1).

Reflecting the improved scenario of developed countries, surveys conducted to purchase managers of manufacturing and services companies were more optimistic (figure I.2), consumer confidence increased, and stock market performance was positive. In the United States, economic expansion continued to accelerate during the third quarter (2.8% annualized quarterly growth) with a significant contribution coming from consumption of goods and residential investment. However, the contribution of inventories (0.8 percentage points) puts a note of caution. Positive results for companies and banks during the third quarter and easing of credit standards for big companies were highlights during this period. Recovery continued in the labor market, evidenced by healthy job creation and a reduction in the unemployment rate so far this year. Nonetheless, political disagreements regarding the budget and the debt ceiling created tensions and led to the approximately two week government shutdown. This could have a negative impact over growth in the last quarter. Moreover, because the agreements were transitory, tensions could resurface in early 2014.

The Eurozone also showed signs of improvement. By growing for a second consecutive quarter, although at a slower pace, the region confirmed that it overcame recession. Likewise, some peripheral economies managed to grow for the first time after several quarters of contraction. Also, the process of introducing structural reforms in the banking system made progress. In addition, the European Central Bank reaffirmed its commitment to sustain monetary stimulus during an extended period by renewing some liquidity measures and lowering the interest rate. However, significant difficulties persist. In spite of improved output, unemployment remained high and vulnerabilities associated to the complex fiscal

**FIGURE I.1**  
GDP growth by region (1)  
(annual change, percent)



(1) Dots show forecasts as from the fourth quarter of 2013.

(2) Includes Canada, the Eurozone, Japan, Switzerland, the U.K. and the U.S.

(3) Includes Argentina, Bolivia, Brazil, China, Colombia, Ecuador, Mexico, Peru, South Korea, Taiwan and Venezuela.

Source: Central Bank of Chile based on Bloomberg.

**TABLE I.1**  
World growth (\*)  
(annual change, percent)

	Avg. 90-99	Avg. 00-07	2012 (e)	2013 (f)	2014 (f)	2015 (f)
World GDP at PPP	3.1	4.2	3.1	3.0	3.5	3.7
World GDP at market exchange rates	2.7	3.2	2.5	2.3	2.9	3.2
Trading partners' GDP	3.1	3.6	3.4	3.4	3.6	3.8
United States	3.2	2.6	2.8	1.7	2.6	2.7
Eurozone	1.6	2.2	-0.6	-0.4	1.0	1.4
Japan	1.5	1.7	1.9	1.8	1.3	1.0
China	10.0	10.5	7.7	7.6	7.4	7.2
India	5.6	7.1	5.1	4.1	5.3	6.3
Rest of Asia	5.6	5.1	3.8	3.8	4.0	4.5
Latin America (excl. Chile)	2.8	3.5	2.7	2.6	2.9	3.4
Commodity exporters	2.7	3.1	2.5	2.1	2.4	2.6

(e) Estimate.

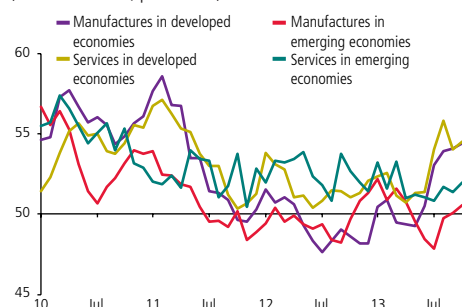
(f) Forecast.

(\*) See glossary for definitions.

Sources: Central Bank of Chile based on a sample of investment banks, Consensus Forecast, the IMF and statistics bureaus of respective countries.

**FIGURE I.2**

Procurement managers' expectations: PMI (\*)  
(diffusion index; pivot= 50)

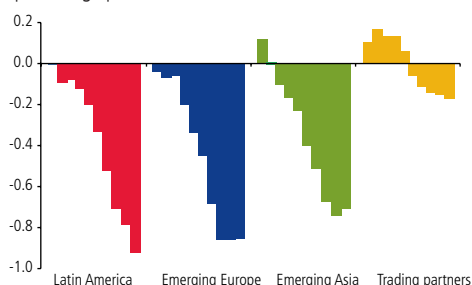


(\*) Value above (below) 50 indicates expansion (contraction).

Source: Central Bank of Chile based on Bloomberg.

**FIGURE I.3**

Accumulated revisions to the 2014 growth outlook  
for emerging economies (1) (2)  
(percentage points)



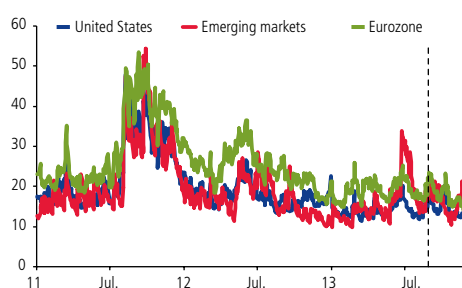
(1) Countries weighted at PPP. Share of each economy taken from WEO (IMF).

(2) See glossary for definitions.

Sources: Central Bank of Chile based on Consensus Forecasts, and IMF.

**FIGURE I.4**

Stock market volatility (1) (2)  
(percent)



(1) Dashed vertical line shows statistical cutoff date of September 2013 *Report*.

(2) VIX index for the United States, Vstoxx for the Eurozone, and an estimate of the MSCI's historical volatility denominated in dollars for emerging markets.

Source: Bloomberg.

and financial situation continue. On the whole, the baseline scenario envisaged for 2014 considers a 1.0% growth rate in the Eurozone (-0.4% in 2013). In the U.K. growth in the third quarter accelerated to an annualized rate of 3.2%. All economic sectors improved. Outstanding among them was construction. Likewise, expectations, industrial production and the reduction of the unemployment rate predict that this vigor will continue. Japan also showed positive results: during the third quarter, annualized GDP grew 1.9%, unemployment rate fell and inflation increased. However, the fiscal consolidation, aimed at lowering the high level of public debt, considers a permanent increase in the consumption tax beginning in 2014, to be partly offset by some transitory fiscal stimulus measures. Thus, forecasts in this *Report* consider that Japan will grow 1.3% in 2014, compared to 1.8% in 2013.

In the emerging world, after the growth outlook deteriorated over the year, perspectives have stabilized in recent months (figure I.3). This was due mainly to the improved performance of the Chinese economy during the third quarter: 7.8% annual (7.5% the second). Recent data on production and manufacturing expectations, foreign trade and consumer confidence continue to confirm that growth has tended to stabilize. All in all, the baseline scenario considers that annual growth rate in China will fall to 7.2% in 2015, reflecting the Chinese authorities' desire to achieve long-term sustainable growth. This will allow China to face risks related to its financial system as well as to give more weight to consumption over investment. As to the former, new regulations were introduced to safeguard compliance with the established credit limits. Additionally, recent announcements revealed willingness to increase the role of the market in resource allocation.

A widespread deceleration continued in Latin America. However, its intensity was lower than in the first half of the year. Accordingly, although the baseline scenario maintains projected growth for 2014, it makes a downward correction of one and three tenths of one percent for 2013 and 2015, respectively. The largest downward corrections are for Brazil, Mexico and Peru. In Mexico, retail sales, industrial production and fixed investment continued to shrink, while consumer confidence and manufacturing expectations remained negative. In any case, third quarter data improved some. In Peru, the growth outlook for this year and the next also deteriorated, standing at around 5.5%. In both economies, deceleration led to a reduction in monetary policy rates.

Changes in the international scenario, particularly, more unfavorable financial conditions, have made emerging economies of significant size come under closer scrutiny. Outstanding among them are Brazil, India, Indonesia, Turkey and South Africa, which suffered the biggest cuts in growth projections for 2014. In addition, since May financial prices also underwent the most significant adjustments. Those countries run significant current account deficits, with high inflation and fiscal deficits, as well as other indicators of vulnerability which may hinder their ability to respond to a weaker external scenario compared to previous years (box I.1).



## INTERNATIONAL FINANCIAL MARKETS

Movements in financial markets have been largely determined by the signals about the future course of U.S. monetary and fiscal policy. Thus, after significant fluctuations following the Fed announcement last May, in recent weeks there has been a temporary improvement in external financial conditions for emerging economies, linked to new announcements by the Fed and to partial fiscal agreements reached in the U.S. As already mentioned, the baseline scenario considers that along with higher growth in developed countries, the exceptionally favorable financial conditions of external markets should also return to more normal conditions.

Thus, market volatility reduced compared to the situation up to September (figure I.4). In developed economies, interest rates of long-term government bonds fell (figure I.5), while in emerging economies they increased marginally. In contrast, in Chile interest rates fell. As to stock markets, data available at the statistical closing of this and the previous *Report* indicated that markets rose in both regions. On the whole, at the margin, performance of the developed and the emerging world has been dissimilar (figure I.6). After the September Fed meeting, capital flows towards emerging economies were beginning to pick up, linked mainly to variable income instruments. Recently, these flows have reversed. Fixed income instruments flows continue to retreat (figure I.7). Accordingly, towards the statistical closing of this *Report*, currencies of emerging economies had again begun to depreciate. At the same time, sovereign and corporate risk premiums fell (figure I.8).

## COMMODITIES

Since the statistical closing of the last *Report*, commodity prices have fallen, although at varying intensities. Outstanding were fuel prices, and to a lesser extent, foodstuffs and metals (figure I.9). Several events underpin this, among them moderation of geopolitical tensions in the Middle East, improved conditions on the supply side, and lower demand from emerging economies.

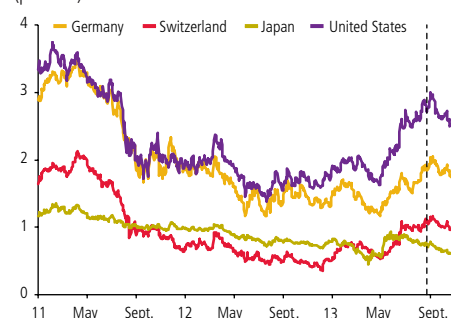
Oil prices fell from September onward: WTI 11.8% and Brent 1.9%. This was due mainly to an increase in U.S. production and easing of geopolitical tensions in the Middle East<sup>1/</sup>. In line with WTI oil and increased supply due to an expansion of oil refining capacity, price of gasoline in the Gulf of Mexico fell 11.9% during the same period. Based on implicit prices of future contracts of the latest ten working days prior to the closing of this *Report*, we continue to forecast a downward path for fuel prices, although at a lower level than previously projected for WTI, and unchanged for Brent.

Copper price receded 3.9% between the statistical closing of the previous and this *Report*, standing at close to US\$3.20 per pound by end November. The pickup of Chinese growth, with investment as a significant share, braced demand. However, greater domestic production led to a fall in its copper imports. Although depletion of inventories in the commodity exchange market continued, it was due mainly to

<sup>1/</sup> Fall in OPEC production was compensated by increases in that of the United States, reflecting the impact of investment in shale gas extraction.

FIGURE I.5

Interest rates on 10-year government bonds (\*) (percent)

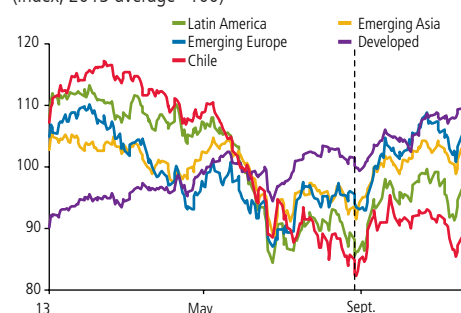


(\*) Dashed vertical line shows statistical cutoff date of September 2013 *Report*.

Source: Bloomberg.

FIGURE I.6

Stock market indicators (1) (2)  
(index, 2013 average=100)



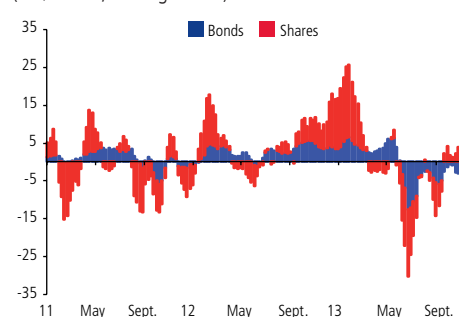
(1) Dashed vertical line shows statistical cutoff date of September 2013 *Report*.

(2) Morgan Stanley Capital International's stock indices by region denominated in dollars. For Chile, selected price index IPSA measured in dollars.

Source: Bloomberg.

FIGURE I.7

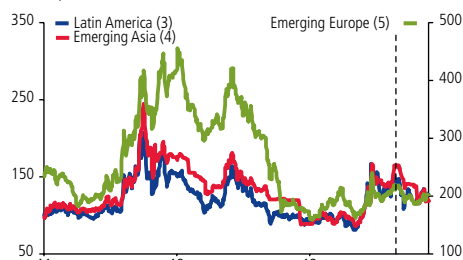
Capital inflows to emerging economies  
(US\$ billion, moving month)



Source: Emerging Portfolio Fund Research.

**FIGURE I.8**

Emerging economies' risk premiums (1) (2)  
(basis points)



(1) Dashed vertical line shows statistical cutoff date of September 2013 Report.

(2) Measured by 5-yr CDS premiums. Simple average of countries in each region.

(3) Includes Chile, Brazil, Peru, Mexico, Panama and Colombia.

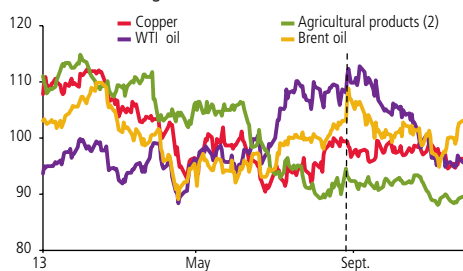
(4) Includes China, the Philippines, Indonesia, Thailand and Malaysia.

(5) Includes Czech Republic, Hungary, Croatia, Bulgaria and Turkey.

Source: Bloomberg.

**FIGURE I.9**

Commodity prices (1)  
(index, 2013 average=100)



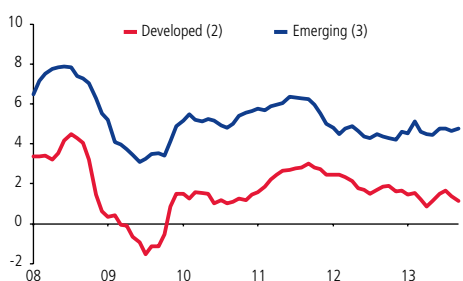
(1) Dashed vertical line shows statistical cutoff date of September 2013 Report.

(2) Goldman Sachs aggregate index.

Source: Bloomberg.

**FIGURE I.10**

Inflation by region  
(annual change, percent)



(1) Includes the U.S., Japan and the Eurozone. Countries weighted at PPP.

(2) Includes Argentina, Brazil, Chile, Colombia, Mexico, Peru, Hungary, Poland, Czech Republic, India, Indonesia, Malaysia, China, South Korea, Russia, Thailand, Taiwan and Turkey. Countries weighted at PPP.

Source: Central Bank of Chile based on Bloomberg.

improvement in storage logistics and therefore does not necessarily anticipate a higher price in the future. The baseline scenario in this Report forecasts copper prices of US\$3.32 per pound in 2013 and US\$3.10 in 2014. Although actual prices fell, they are above forecasts, thus explaining their slight upward revision.

Prices of agricultural products as measured by the Goldman Sachs index fell 3%. This was due largely to grains and cereals because better results in crops increased supply.

## INFLATION AND MONETARY POLICY

Global inflation has remained restrained during a long time, partly because of excess capacity in the developed world. Over the last months it has fallen further, mainly due to the decline in commodity prices (figure I.10). In emerging economies, where recorded inflation is higher, deceleration of growth also takes pressure off inflation. On the whole, although recent data shows lower levels, the outlook for inflation does not diverge significantly from its levels of preceding months, something that does not rule out possible future adjustments.

Thus, the outlook is that conventional monetary policy, i.e., low levels of monetary policy interest rates, will continue to prevail for a long time. In fact, surveys show that towards 2015 there could be some change in U.S. federal funds rates. In the Eurozone, annual inflation dropped sharply (0.7%), triggering a cut in the monetary policy rate to 0.25%, the lowest since the establishment of the union. Most central banks in developed economies continue to communicate that they will maintain their policy rates at minimum levels during a long period.

The latter differs from unconventional policies, particularly from the gradual tapering of the Fed asset purchase program. Although in May there were signs of an anticipated withdrawal, in September the process was called back as a result of certain indications of weakness in the labor market and expected tensions in fiscal matters. Subsequent data reveal that the labor market continues improving, leading analysts to anticipate a reduction in asset purchases from March onward, without ruling out that it may start before.

In emerging economies, over recent months, conduction of monetary policy was mixed. Maintenance of the policy rate prevailed in most of them. Nonetheless, some lowered the interest rate, in line with decelerating economies and external conditions deemed to become less favorable than in the preceding years. Others, such as Brazil, India and Indonesia, raised their reference rates because they had accumulated domestic and external imbalances that were turning into persistently high inflation and depreciation of their currencies.



## BOX I.1

## FINANCIAL IMPACT ON EMERGING ECONOMIES OF WITHDRAWAL OF THE QUANTITATIVE EASING PROGRAM BY THE UNITED STATES

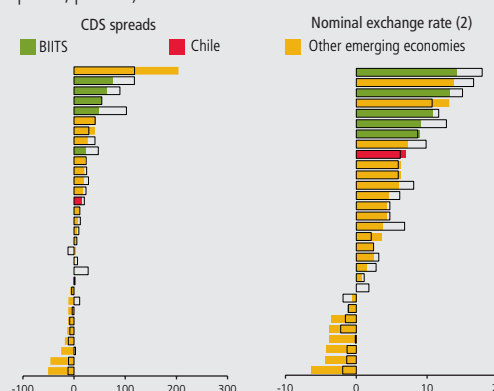
During recent years emerging economies have benefited from very favorable external financial conditions. These conditions originated mainly from significant conventional and unconventional monetary stimulus programs implemented by developed economies. The measures they adopted led to historically low interest rates and a significant rise in global liquidity. Among other things, this environment fostered investors to search for higher yields, resulting in significant capital flows to emerging economies. However, in May 2013, the U.S. monetary authorities gave some indication that they might be close to starting a withdrawal of these programs. In addition, there were warning signs that the Chinese economy was decelerating. The response of financial markets was a rise in long-term interest rates, capital outflows from emerging economies and U.S. dollar appreciation. Discussions arose as to the effects of deteriorating external financial conditions over emerging countries.

Although the withdrawal of monetary stimulus by developed economies, particularly by the U.S., will not be free from financial market volatility, the lower expansiveness of monetary policies in the developed world is good news on its own. The reason is that this phenomenon will only occur when higher growth rates in those economies become more firmly entrenched. This higher growth will benefit not only developed economies but emerging ones as well, by means of heightened external demand and increased commodity prices.

Overall, the way in which emerging economies will face this change in the financial conditions is not the same across the board, and some might encounter greater difficulties to adapt to such change. In fact, in the months immediately following the first signs of stimulus withdrawal by the U.S. some large emerging economies (Brazil, India, Indonesia, Turkey and South Africa, known as BIITS) drew special attention because they were the most highly affected by the ensuing volatility (figures I.11 and I.12). Moreover, since then these economies have had the largest downward adjustments in growth forecasts (figure I.13).

FIGURE I.11

Movements in spreads and the exchange rate since May 2013 (1)  
(basis points; percent)



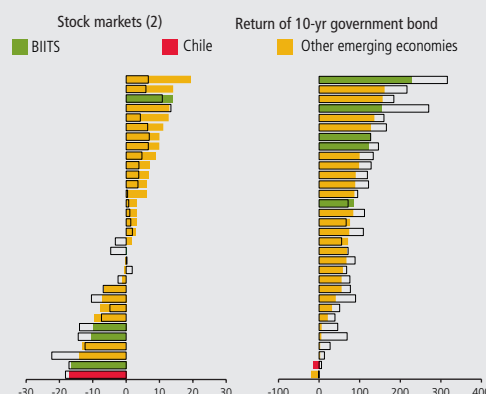
(1) Solid bar shows variation from 01.May.13 to 25.Oct.13. Transparent bar shows variation from 01.May.13 to 17.Sept.13.

(2) An increase denotes a depreciation of the local currency against the U.S. dollar.

Source: Pistelli and Sáez (2013).

FIGURE I.12

Movements of local stock prices and interest rates since May 2013 (1)  
(basis points; percent)

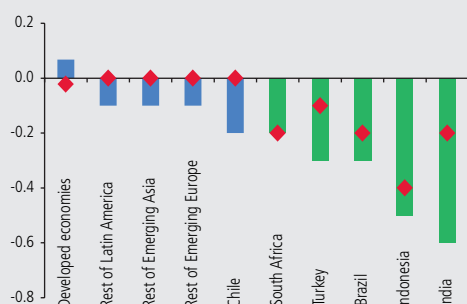


(1) Solid bar shows variation between 01.May.13 and 25.Oct.13. Transparent bar shows variation between 01.May.13 and 17.Sept.13.

(2) Change in the local currency MSCI deflated by the CPI.

Source: Pistelli and Sáez (2013).

**FIGURE I.13**  
Revisions to growth forecasts of Consensus Forecast for 2014  
GDP (\*)  
(percentage points)



(\*) The bars represent the variation from the Consensus Forecast Reports of August and October, while the diamonds show the variation between September and October.  
Source: Consensus Forecasts.

The diverse reactions among emerging economies may be explained by several factors. Prominent among them are the accumulation of macroeconomic imbalances and the higher dependence on external financing sources. In fact, in the case of BIITS, the relative institutional weakness compared to other

countries, coupled with high inflation and elevated current account deficits help to explain the reactions of financial markets and their economic prospects. Although economies with those characteristics tend to be the ones that grow and their currencies appreciate the most when capital is abundant, they also depreciate more when faced with events that limit external financing. By contrast, economies that have managed to build a sounder macroeconomic and institutional framework, and that are better integrated to the international environment, have been able to better adapt to the change in external conditions<sup>1/</sup>.

Chile is among those economies that have been able to erect solid bases with which to face impending changes. Developments over recent months have also helped to reduce the current account deficit, which, as highlighted in preceding *Reports*, is a risk element for the Chilean economy. The country's domestic and external position is sound, financial system risks are limited, and monetary policy is in a stance that, if necessary, could enter into a different stage without facing major difficulties. On the whole, the Chilean economy is not isolated from the rest of the world, so global events will undoubtedly have local effects. However, it also has the policy tools that allow mitigating those impacts.

<sup>1/</sup> See Pistelli and Sáez (2013), and Contreras and Pinto (2013).

## II. FINANCIAL MARKETS

This chapter reviews the evolution of local financial markets in connection with the transmission of monetary policy.

### MONETARY POLICY

Over recent months, output and demand growth rates have continued to moderate, while inflation has remained low and two year ahead expectations remain around 3%. On the international front, the external sector boost has settled at lower levels than envisaged at the beginning of the year. World growth and terms of trade have also been lower, and financial conditions are on the path to normalization. Considering that anticipated trends were unfolding, between October and November the Board lowered the Monetary Policy Rate (MPR) by 50 basis points (bp) to 4.5%. It also pointed out that further MPR changes would depend on the implications of domestic and external macroeconomic conditions over the inflationary outlook.

After the October meeting cut in the MPR, expectations as to its path were adjusted downward (figure II.1). Stands out that different measures of expectations as to the minimum level of MPR, and also as to where it would stand at the end of the projection horizon, showed lower dispersion than previously (figure II.2 and table II.1). In this way, considering different measures of expectations over a one year term, MPR would stand between 4.0 and 4.3% (4.5 and 4.9% in the previous *Report*), and in a two year horizon between 4.3 and 4.8% (4.5 and 5.3% in the previous *Report*).

**TABLE II.1**  
Expectations for the MPR  
(percent)

	To December 2013		To one year		To two year	
	September Report	December Report	September Report	December Report	September Report	December Report
EES (1)	4.50	4.50	4.50	4.25	4.75	4.50
FBS (2)	4.75	4.50	4.50	4.00	4.50	4.25
Forward curve (3)	4.63	4.37	4.88	4.29	5.27	4.80
Swap contracts (4)	4.66	4.51	4.50	3.99	4.83	4.29

(1) Surveys of August and November 2013.

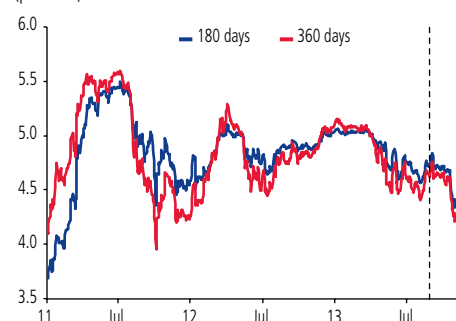
(2) Survey of the second half of August and November 2013.

(3) Built using interest rates of swap contracts up to one year, and then interest rates on BCPs.

(4) Built using interest rates of swap contracts up to two years.

Source: Central Bank of Chile.

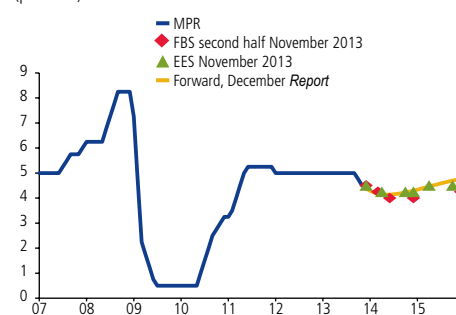
**FIGURE II.1**  
Swap rates (\*)  
(percent)



(\*) Dashed vertical line shows statistical cutoff date of September 2013 *Report*.

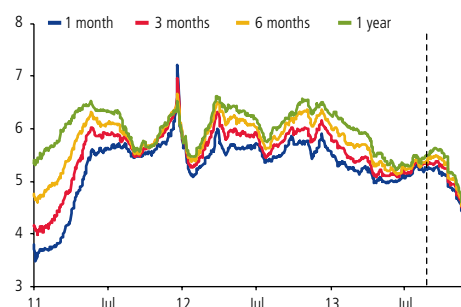
Source: Central Bank of Chile.

**FIGURE II.2**  
MPR and expectations  
(percent)



Source: Central Bank of Chile.

**FIGURE II.3**  
Prime deposit rate (1) (2)  
(percent)

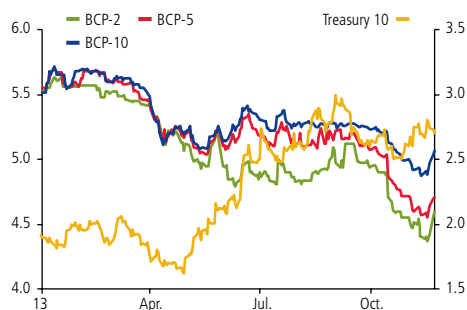


(1) See glossary for definition.

(2) Dashed vertical line shows statistical cutoff date of September 2013. *Report*.

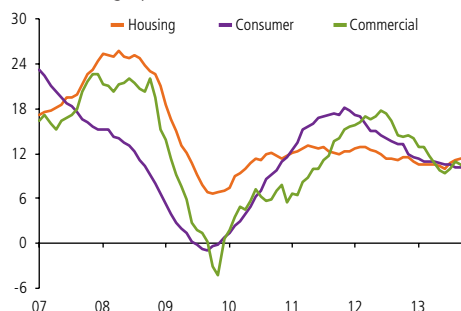
Source: Central Bank of Chile.

**FIGURE II.4**  
Nominal interest rate  
(percent)



Sources: Central Bank of Chile and Bloomberg.

**FIGURE II.5**  
Nominal loans by type of credit  
(annual change, percent)



Sources: Central Bank of Chile and Superintendencia de Banks and Financial Institutions (SBIF).

Interest on fixed income instruments - particularly nominal rates - and on money market instruments decreased after the MPR cut and the downward adjustment in expectations. Specifically, money market prime-rates fell around 70bp (figure II.3). Thus, they stood at around 4.4% for 30 days and at 4.7% for a one year term. Something similar happened with the peso rates of deposits transacted in the exchange market. TAB nominal rates, which reflect banks' funding costs, have followed a decreasing path since October.

In contrast to external markets, the local market of fixed income instruments showed a decline in nominal rates of Central Bank and Treasury documents, particularly in short-term rates. Accordingly, BCP rates for 2- and 5-year terms fell around 45 and 50bp, respectively, and those for 10 years fell 30 bp. In this way, the gap between short- and long-term rates that had prevailed since mid-year has remained stable. As aforementioned, the evolution of nominal rates in Chile continues to diverge from international markets, where movements have been determined mainly by changes in expectations as to the start of the withdrawal of the asset purchase program by the Federal Reserve (Fed). As stated in the *Financial Stability Report* (FSR) of the second semester, in Chile it is not unusual to find periods of low covariance between domestic and external interest rates. Nonetheless, the FSR highlighted that it is not possible to rule out future adjustments in domestic rates (figure II.4).

For rates of indexed instruments, the impact of lower expectations for the MPR was minor. As to short-term rates, particularly those for one year-term BCUs, the predominant underlying factor was inflation. Thus, although with ups and downs, rates of one year-term BCUs were 25bp above those at the close of the preceding *Report*, and those of BCUs from 5 to 10 years were between 5 and 20bp below their level at the time.

## FINANCIAL CONDITIONS

External financial conditions for emerging economies, including Chile, continue to be less expansionary than during the first half of the year or a year back, although they still remain favorable when viewed from a historical perspective. Nonetheless, compared to the September *Report*, they have somewhat improved, although still with the volatility present since the second quarter of 2013.

In the domestic market, financial conditions for individuals and companies are similar to those of the previous *Report*. Annual growth of loans to individuals remained around 10% for consumption loans and 11% for housing lending (figure II.5). Although with ups and downs, the average interest rates on those loans are similar to those at the statistical closing of the September *Report*. As to conditions for access to lending, the Bank Lending Survey (BLS) for the third quarter again showed tight conditions for consumer credit (figure II.6). For housing loans, banks reported no changes over the previous quarter. On the demand side, however, the survey showed a change over the previous quarter, with stronger demand for both consumer as well as mortgage loans.

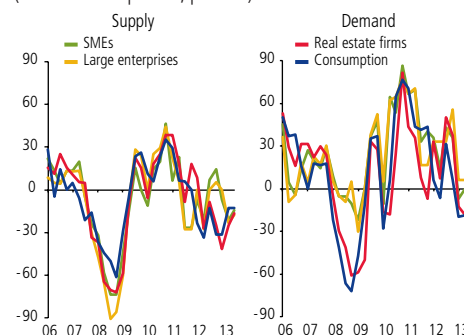
Credit conditions for companies showed no significant changes. Annual growth of loans up to October was around 10%. Although with ups and downs, this rate was similar to that of the previous *Report*. Interest rates on those loans were, on average, 40 bp below those prevailing at the time. This was due mainly to short-term rates. According to the BLS, conditions for access to credit continued to become tighter for companies. For large companies as well as for small and medium-sized firms (SMEs), banks pointed out that this result was affected by a deterioration of the current or foreseen economic environment, and by the capital position of banks. This was reflected, among others, in larger premiums, collateral requirements or imposition of other contractual terms. For construction companies, stringent conditions responded to perceptions by banks of a more deteriorated outlook for the sector and increased client credit risk. This coincided with the deterioration in profitability of construction firms. According to the FSR of the second semester, the shrinkage of margins of construction companies has been reflected in a deterioration of their bank payment performance. Overall, the FSR pointed out that this margin shrinkage should revert in the medium term, insofar as wage growth in the sector diminishes and new contracts are tendered. On the demand side, compared to the previous quarter, the BLS reported increases of credit applications by large firms as well as SMEs. The banks attributed this to larger working capital requirements from their clients.

As mentioned, annual growth rates of commercial loans stand at similar levels to those of the previous *Report*. However, use of other financing sources such as bond placements by non-financial firms, both in domestic as well as external markets, increased compared to the September *Report* (figure II.7). The latter seems to respond to a certain improvement in external financial conditions after the withdrawal of the quantitative easing program was postponed by the Fed. This led to a combination of lower external rates and sovereign and corporate risk premiums. Overall, as stated, external financial conditions were less favorable than six months or a year ago. Thus, sovereign and corporate risk premiums remained at levels higher than during that period.

As to the stock market, most exchanges in emerging economies accumulated negative yields during the year, whereas in developed economies they increased. This concurred with net capital outflows, both in stocks and fixed income instruments, from the former to the latter economies (figure I.7). The current situation differs, in particular from the close of the previous *Report*, as it depicts increases of varying sizes in most stock exchanges. Thus, although with fluctuations, stock exchanges in emerging and developed economies, measured by the MSCI index in local currency, rose, on average, around 6 and 7% over figures in the previous *Report* (7 and 8% each, measured in US dollars). The Chilean stock exchange, as measured by IPSA (Selective Stock Price Index), rose 2% in local currency and 1% in US dollars (figure I.6). So far this year, IPSA has fallen 15% in local currency and 22% in US dollar terms. Although this fall was greater than the average for emerging economies, it was within the range for other Latin American countries, where stock exchanges dropped between 5 and 35% in local currency and US dollars, as measured by the MSCI index.

**FIGURE II.6****Bank lending survey (\*)**

(balance of responses, percent)

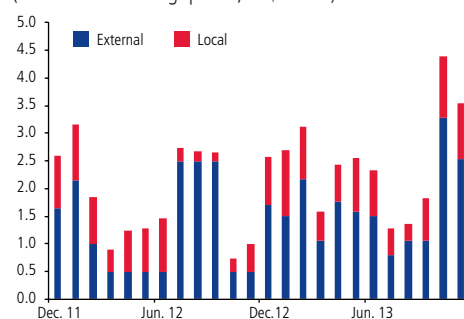


(\*) Average responses per quarter. Negative (positive) value indicates more contractionary (expansionary) conditions than in previous quarter.

Source: Central Bank of Chile.

**FIGURE II.7****Bond placements of non-financial companies (\*)**

(accumulated moving quarter, US\$ billion)



(\*) November 2013 figure contains information up to the 26th of the month.

Sources: Central Bank of Chile based on information from Bloomberg and the Santiago Stock Exchange.

**FIGURE II.8****Nominal exchange rate (1) (2)**

(index 03.Jan.11 - 26.Nov.13=100)



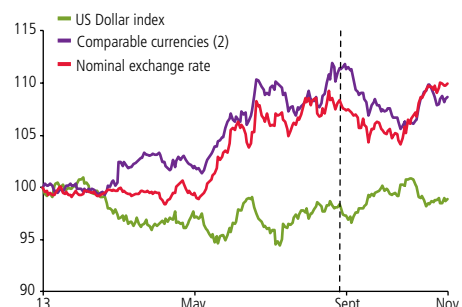
(1) See glossary for definition.

(2) Dashed vertical line shows statistical cutoff date of September 2013 *Report*.

Source: Central Bank of Chile.

**FIGURE II.9**

**Nominal exchange rate (1)**  
(index 02.Jan.13=100)



(1) An increase indicates depreciation. (2) Brazil, Mexico, Colombia, South Korea, Philippines, South Africa, Czech Republic, Turkey, Israel and Poland. October 2013 WEO weights.

Sources: Bloomberg and IMF.

**TABLE II.2**

**Quotation respect of the U.S. dollar (1)(2)**  
(percent)

Country	Nominal exchange rate variation				Spot/ 2012 minimum
	Jun./Mar. 2013 (2)	Sept./Jun. 2013 (2)	Dec./Sept. 2013 (2)	Spot/ 01.Jan.13	
Brazil	9.7	9.1	-3.9	12.2	35.3
Indonesia	2.1	8.1	8.4	20.1	32.4
Malaysia	1.4	4.3	-2.8	5.3	7.5
Turkey	4.5	3.9	2.5	12.7	15.5
Australia	10.6	3.8	-2.4	13.9	18.4
Thailand	5.2	2.5	0.2	4.8	5.7
<b>Chile</b>	<b>6.3</b>	<b>2.2</b>	<b>1.5</b>	<b>9.0</b>	<b>11.0</b>
Perú	6.2	2.0	-0.2	9.9	10.1
South Africa	8.7	1.4	-0.5	19.7	36.1
Canada	0.4	1.4	0.6	6.1	8.8
Hungary	-5.6	0.8	-1.6	-0.3	3.8
Colombia	5.1	0.4	0.5	9.2	9.8
Mexico	4.9	0.2	-0.2	1.3	4.0
United Kingdom	-3.1	-0.1	-3.3	0.2	0.4
Switzerland	-2.2	-0.2	-1.2	-1.0	1.2
Czech Republic	-2.6	-0.3	4.6	6.0	9.3
New Zealand	4.7	-0.3	-4.0	1.0	3.3
Sweden	1.1	-0.4	1.6	1.1	1.1
Eurozone	-2.6	-0.5	-1.1	-2.7	-0.8
Israel	-1.5	-0.9	-1.3	-5.2	-4.4
Polonia	0.1	-1.6	-2.2	0.4	1.1
South Korea	2.4	-1.8	-4.9	-0.4	-0.4

(1) Positive (negative) value indicates depreciated (appreciated) currency respect of the U.S. dollar.

(2) Based on the last ten-day average at the corresponding Report cutoff date.

Sources: Central Bank of Chile and Bloomberg.

**FIGURE II.10**

**Real exchange rate (\*)**  
(index 1986=100)



(\*) November 2013 figure contains information up to the 26th of the month.  
Source: Central Bank of Chile.

As to monetary aggregates, M1—made up mostly of non-remunerated banking liabilities—decreased its annual growth rate, with ups and downs along the way. With data available in November, it grew 12.9% (13.7% in July). This was due to a decline in the annual growth rate of deposits and demand savings. In October, annual growth rates of M2 and M3 increased slightly, to 11 and 12%, respectively (10 and 11% in July).

## EXCHANGE RATE

In the foreign currency market, in recent months the peso fluctuated, partly because of changes in the external scenario, but also due to the lower interest rate differential between external and domestic rates brought about by the lowering of MPR. In this way, since the close of the previous Report, the peso/dollar parity appreciated to almost \$490 per dollar in mid-October and exceeded \$520 in November. With this, the peso/US dollar parity had depreciated around 1.5% since September (figure II.8). Currencies of other emerging economies followed a similar path, also influenced by the changed expectations regarding the end of the quantitative easing program by the Fed. Nonetheless, loss of peso value during this period was greater than for currencies of most emerging countries, due to the aforementioned effect of a lower MPR (figure II.9). The same happened to currencies of some other emerging economies that also lowered their monetary policy rates. Considered multilaterally and excluding the US dollar, the peso depreciated around 1.9% since the previous Report. On the whole, so far this year, currencies of most emerging and commodity exporting economies, including Chile, depreciated against the US dollar (table II.2).

The real exchange rate (RER) remained at levels above 90. Thus, it continued close to its average level of the last 15 to 20 years, and within the range consistent with its long-term fundamentals (figure II.10). At the close of this Report, considering the nominal exchange rate and the parities of the last ten days before that date, the RER stood at 93.7 (92.1 in September). The working assumption of the baseline scenario in this Report is that the RER will remain close to its recent values.

### III. DEMAND AND OUTPUT

*This chapter reviews the short-term outlook for demand and output on the basis of recent developments, in order to analyze possible inflationary pressures derived from them.*

#### SECTORAL ACTIVITY

During the third quarter, output continued expanding at annual rates lower than in 2012: 4.7% (table III.1). This result was in line with the deceleration process of the economy in recent quarters (figure III.1). The decline in activity was more pronounced in sectors other than natural resources, where activity is linked to the evolution of domestic demand (figure III.2).

Outstanding among the natural resources sectors was mining, that by the end of the second quarter presented a significant rebound. This upturn resulted from increased output of leading copper companies and implementation of projects that enhance production conditions. An additional factor was the low basis for comparison associated to the irregularity in some operations during the same period in 2012. Copper shipment volumes rose 20.8% annually (11% in the second quarter), and partial data for the last quarter indicated that those high levels persisted in October. Thus, for a second consecutive quarter, mining sector volumes expanded at a higher rate than output (figure III.3), causing another decline in inventories which in turn had a negative impact on domestic demand during the quarter. Annual growth of the electricity, gas and water sector (EGW) moderated during the quarter although remained higher than at the beginning of the year, mainly due to use of inputs for generation of electricity that were cheaper than in 2012. Fishing continued to show negative growth, associated to poor performance both in extraction and aquaculture.

Performance of the remaining sectors—those not linked to natural resources—was similar to the most recent quarters and maintained lower growth rates than in 2012. Annual growth in construction declined, in line with the heterogeneous indicators for that sector and the current stage of the mining investment cycle. Communications and financial services significantly lowered their annual growth rates. As in previous quarters, manufacturing performed poorly. Trade continued to lead growth in this group and lowered its annual rate to 7.3% (7.7% in the second quarter), in line with less buoyant consumption in the third quarter. This sector continued to be driven by high retail sales—particularly of durable goods—whereas wholesale trade continued to decelerate. Monthly business confidence expectations (IMCE) for the trade sector were the only ones

**TABLE III.1**

**Gross domestic product (1)**  
(weight in GDP; real annual change, percent)

	Weight		2012				2013		
	2012	I	II	III	IV		I	II	III
Agriculture-forestry	2.9	-5.5	3.5	5.0	1.2		5.2	5.7	7.4
Fishery	0.5	-2.1	0.1	-0.5	10.8		-17.7	-14.0	-8.1
Mining	13.0	1.5	2.6	8.1	5.0		7.6	4.5	8.5
Manufacturing	10.2	3.3	2.9	-0.4	4.5		-0.2	1.0	2.0
EGW	2.2	13.1	9.2	7.4	-1.2		2.7	6.5	5.7
Construction	7.6	8.0	8.2	8.2	7.9		4.4	4.8	4.2
Trade	9.1	6.5	8.1	9.4	9.2		7.5	7.7	7.3
Restaurants and hotels	1.7	5.5	5.6	3.3	2.1		-2.3	-3.0	1.5
Transportation	4.1	2.5	5.7	3.1	5.3		4.8	4.0	4.4
Communications	2.0	6.1	7.3	7.5	6.7		5.1	3.3	2.5
Financial services	5.2	9.5	9.8	10.3	10.3		8.1	5.8	5.1
Entrepreneurial services	13.3	8.9	7.4	5.9	4.4		4.3	3.6	3.9
Housing services	4.5	2.6	2.9	3.2	3.4		3.4	3.3	3.4
Personal services (2)	11.0	6.1	6.2	6.0	5.6		4.4	3.0	2.9
<b>Total GDP</b>	<b>100.0</b>	<b>5.1</b>	<b>5.7</b>	<b>5.8</b>	<b>5.7</b>		<b>4.7</b>	<b>4.0</b>	<b>4.7</b>
<b>Other GDP (3)</b>	<b>76.0</b>	<b>5.4</b>	<b>6.2</b>	<b>5.4</b>	<b>5.9</b>		<b>4.2</b>	<b>3.8</b>	<b>4.0</b>
<b>Natural Resources GDP (3)</b>	<b>15.6</b>	<b>3.2</b>	<b>3.5</b>	<b>7.7</b>	<b>4.1</b>		<b>6.1</b>	<b>4.2</b>	<b>7.6</b>

(1) Preliminary figures.

(2) Includes education, health care and other services.

(3) See glossary for definition.

Source: Central Bank of Chile.

**FIGURE III.1**

**Monthly Indicator of Economic Activity-Imacec (\*)**  
(monthly change in seasonally-adjusted series, percent)



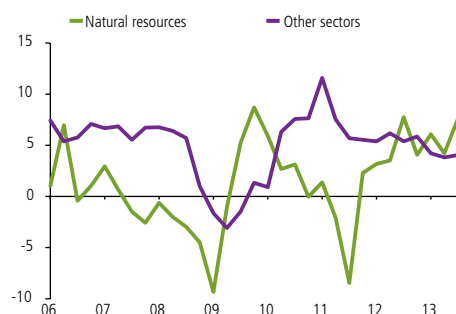
(\*) Six-month moving average.

Source: Central Bank of Chile.



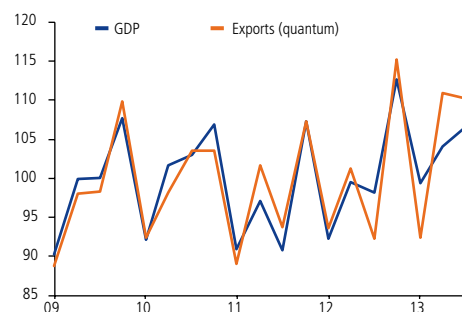


**FIGURE III.2**  
GDP growth  
(annual change, percent)



Source: Central Bank of Chile.

**FIGURE III.3**  
Mining sector  
(index 2009-2013=100)



Source: Central Bank of Chile.

**TABLE III.2**  
Domestic demand (1)  
(share of GDP; real annual change, percent)

	Weight	2012					2013		
		2012	I	II	III	IV	I	II	III
<b>Domestic demand</b>		<b>99.6</b>	<b>4.9</b>	<b>6.9</b>	<b>8.3</b>	<b>8.2</b>	<b>7.2</b>	<b>4.1</b>	<b>1.3</b>
Domestic demand (w/o inventory change)		98.8	5.2	6.4	7.3	9.8	6.8	6.7	4.7
Gross fixed capital formation		24.1	7.3	9.8	13.4	18.1	9.4	8.6	3.2
Construction and other works		14.6	9.2	9.0	8.6	9.1	5.3	5.3	4.8
Machinery and equipment		9.5	3.7	10.8	20.6	31.3	16.2	13.7	1.3
Total consumption		74.7	4.6	5.4	5.4	7.3	5.9	6.1	5.2
Private consumption		62.5	5.1	5.7	6.0	7.3	6.5	6.5	5.3
Durable goods		6.5	13.9	11.5	11.4	14.1	16.1	17.0	11.6
Non-durable goods		25.9	3.1	4.2	5.3	6.9	5.8	7.5	5.9
Services		30.2	5.0	5.7	5.5	6.3	5.0	3.6	3.5
Government consumption		12.1	1.6	4.2	2.5	7.2	2.5	3.7	4.9
Inventory change (2)		0.8	1.0	1.1	1.3	0.9	1.0	0.3	-0.4
Goods and services export		34.2	3.5	-0.2	-4.3	4.7	0.2	7.0	13.1
Goods and services import		33.9	2.9	2.4	2.3	11.9	6.7	7.0	2.9
<b>Total GDP</b>		<b>100.0</b>	<b>5.1</b>	<b>5.7</b>	<b>5.8</b>	<b>5.7</b>	<b>4.7</b>	<b>4.0</b>	<b>4.7</b>

(1) Preliminary figures.

(2) Ratio of inventory change to GDP, at average prices of previous year, accumulated in the last 12 months.

Source: Central Bank of Chile.

that have remained positive over the last years. Nevertheless, they now stand at a lower level than observed up to May. In contrast, annual activity growth in restaurants and hotels increased significantly, while business services continued to grow around 4%, after the upward revision of the second quarter.

The Board considers a baseline scenario in which the economy will grow 4.2% in 2013, within the range envisaged in September. According to the Economic Expectations Survey (EES), market expectations have been corrected downward since the second quarter. Thus, the forecast also stood at 4.2% in November (5.1% in April). For 2014, the Board estimates GDP growth will be in the range of 3.75 to 4.75%, slightly lower than envisaged in September. The November EES reported lower expansion perspectives for next year: 4.1% (4.5% in August).

## DOMESTIC DEMAND

During the third quarter, final demand—excluding inventories—continued to moderate at a more intense pace than during the first half of the year. Lower growth was evident both in investment and consumption. Annual growth of domestic demand fell more sharply because of a decline in accumulation of mining inventories. Thus, its annual expansion fell to 1.3% (4.1% in the second quarter) (table III.2 and figure III.4).

The largest adjustment in annual growth was in investment, mainly due to a significant fall in machinery and equipment. Capital goods imports showed negative annual growth rates between August and October, partly reflecting the high basis of comparison a year back. Overall, in terms of levels, these imports have recently tended to stabilize, after a sustained rise during the previous months (figure III.5). So far this year, slowdown of gross fixed capital formation has also been linked to the fact that the mining investment cycle was approaching maturity. In addition, this has unfolded in an environment in which less favorable external conditions have become more firmly rooted<sup>1/</sup>.

Investment in construction and other works lowered its expansion rate to 4.8% (5.3% in the second quarter), in line with the less favorable outlook for the year depicted in the September update of the Capital Goods Corporation (CGC) register. Postponement of several energy projects largely affected these results. On the whole, this adjustment could be due to a normal rescheduling of projects, because the same register showed a higher forecast for total engineering works in 2014, mainly explained by mining projects. The outlook for 2015-2016 also improved, hand in hand with new real estate projects, mainly commercial ones, that were included in the register. As to housing projects, corrections were made to a lesser extent<sup>2/</sup> (figure III.6). Partial indicators for the sector continued

<sup>1/</sup>See more details in box V.2: "Mining investment cycle". September 2013, *Monetary Policy Report*, p.35.

<sup>2/</sup>Nonetheless, the register also shows a marked fall in mining investment from 2015 onward. At the same time, indicators of hired hours with engineering firms declined, anticipating a slowdown in those projects over the medium term.



to show mixed results during the third quarter. Demand continued to be highly dynamic. According to different measures (Chilean Construction Chamber and Collect), new home sales remained high and available stocks remained low. As highlighted in the 2013 second semester Financial Stability Report (FSR), prices of homes kept up the buoyant growth of previous periods. According to the Bank Lending Survey (BLS) for the third quarter, demand of loans for home purchases became stronger during the third quarter.

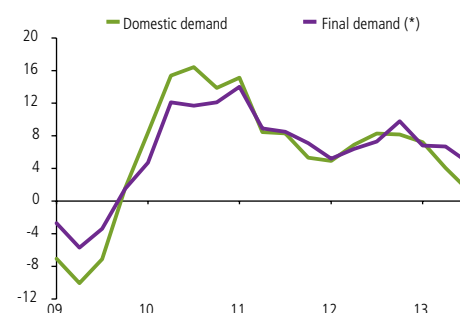
Nonetheless, construction activity indicators were somewhat less favorable. As already noted, during the last quarters GDP of construction slowed down. Added to that, and eliminating seasonality, construction permits as well as cement and concrete dispatches have gradually declined over recent months (figure III.7). Against this background, business confidence (IMCE) in the construction sector remained below the neutral threshold. In addition, the BLS indicated that loan supply to construction and real estate firms continued to be more stringent.

Private consumption lost strength in the third quarter and ended with a year-on-year rate of 5.3% (6.5% in the second). To a significant degree, this decline was related to a sharp decrease in the growth of durable goods consumption, which, however, continued to be the component of consumption with the highest growth rate. Cars continued to be an outstanding component of sales of durable goods, but their annual expansion rate fell and has stabilized at high levels during recent months<sup>3/</sup>. Consumption of non-durable goods also moderated, although at a slower pace. This poorer performance was particularly evident at the end of the quarter, particularly in clothing and food, whose sales were affected by some price increases. Growth of services remained around 3.5% year-on-year. They continued to be the weakest component of consumption (figure III.8).

The lower annual expansion rate of private consumption was consistent with the evolution of its fundamentals. On one hand, growth of labor income in real terms tended to moderate during the second half of the year, due to a combination of lower growth of employment and of real wages. In this way, data reported by the National Statistics Institute (INE) indicated that annual growth of employment decreased during the third quarter, contrasting with the estimate of the University of Chile, which only covers Greater Santiago. Likewise, after a temporary decline at the beginning of the third quarter—linked to the lag in the coming into effect of the minimum wage raise—the annual growth of real wages returned to rates around 4% (6% in nominal terms), lower than in the first part of the year. Also, according to the *Business Perceptions Report*, the labor market became less tight during the last months, insofar as output moderated over the year. This foreshadows that growth rates of both employment and wages will keep narrowing. On the other hand, financial conditions did not show major changes: annual growth of credit

<sup>3/</sup>Preliminary data does not allow concluding whether the loss of dynamism in car sales during September and October was associated with structural or with short-term factors such as the strike that affected the Civil Registry and Identification Service, among other events. See more detail in the *Business Perceptions Report*, November 2013.

**FIGURE III.4**  
Domestic and final demand  
(annual change, percent)



(\*) Domestic demand excluding inventory change.

Source: Central Bank of Chile.

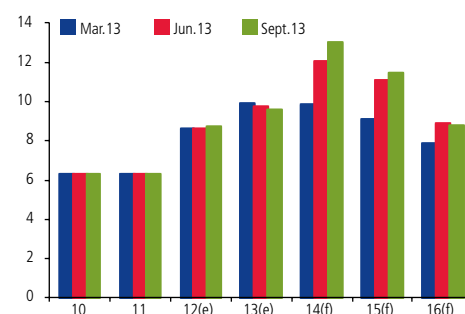
**FIGURE III.5**  
Imports of capital goods (\*)  
(index, 2009-2013=100)



(\*) Six-month moving average of seasonally-adjusted series.

Source: Central Bank of Chile.

**FIGURE III.6**  
Investment in engineering works  
(US\$ billion)



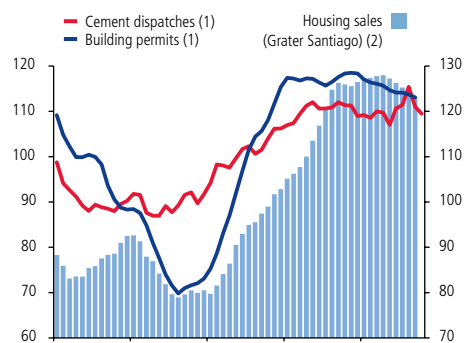
e) Estimate.

f) Forecast.

Source: Capital Goods Corporation (CBC).



**FIGURE III.7**  
Real-estate market indicators  
(index, 2009-2013 average=100)

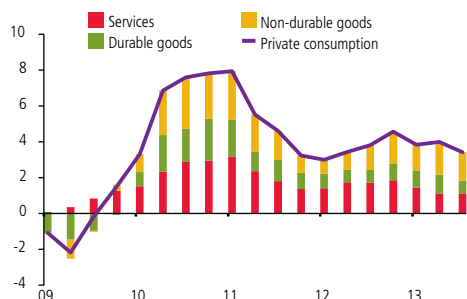


(1) Moving quarterly average of the seasonally-adjusted series.

(2) Accumulated in 12 months.

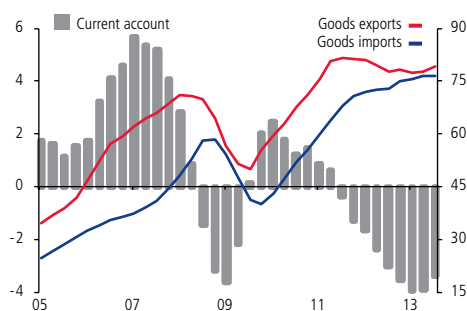
Sources: Central Bank of Chile, Chilean Chamber of Construction (CChC) and Cement and Concrete Institute.

**FIGURE III.8**  
Contribution to annual private consumption growth  
(real annual change, percentage points)



Source: Central Bank of Chile.

**FIGURE III.9**  
Current account and trade balance (\*)  
percent of GDP; US\$ billion)



(\*) Accumulated in one moving year.

Source: Central Bank of Chile.

remained at 10%, and interest rates on loans did not change significantly. At the same time, the BLS for the third quarter again showed tighter conditions for that loan category.

As already mentioned, in recent months changes in inventories continued to fall. During the third quarter, inventories accumulated -0.4% of GDP in the last moving year (0.3% in the second quarter). The boom of mining exports in the last two quarters was the most significant factor that contributed to this result. Overall, perception of inventory levels (IMCE) in the trade and manufacturing sectors is above the optimum level.

## CURRENT ACCOUNT

During the third quarter, the balance of payments current account accumulated a US\$3,440 million deficit, or 3.4% of GDP in the last moving year (3.9% in the second quarter). This balance was US\$1,458 million above that of the same period in 2012. The main reason for this change was the US\$1,376 million improvement of the trade balance. In turn, this was due to a rise in exports (US\$1,325 million), while imports fell slightly (US\$51 million) (figure III.9). Initiation of operations in several mining projects developed over the past years allowed export shipments to increase. Added to that, less dynamic imports contributed to the narrowing of the current account deficit. In addition, over the year, slower output growth became a significant mitigating factor of the risks associated to a current account deficit. As a result, the baseline scenario considered a lower current account deficit: 3.2 and 3.7% of GDP in 2013 and 2014, respectively. Measured at trend prices, the forecast deficit was also corrected downward, although less so, to 3.8 and 3.9% of GDP for the current and the next year.

## IV. PRICES AND COSTS

*This chapter analyzes the recent evolution of the main components of inflation and costs, identifying the main sources of inflationary pressures at present and their likely evolution in the future.*

### RECENT INFLATION TRENDS

Annual headline inflation was lower than its level at the statistical closing of the previous *Report*. After standing at 2.2% in July, inflation dropped to 1.5% in October, temporarily below the tolerance range. In contrast, annual growth of the core measure which excludes food and energy prices (CPIEFE) increased to an annual 1.6% (0.9% in July) (figure IV.1 and table IV.1). Headline inflation in the last three months was significantly affected by the fall of fuel prices in external markets. That explains why CPI inflation was below the September *Report* forecast, whereas the core indicator posed no big surprises. In this framework, inflation expectations towards the end of the projection horizon remain around 3%.

TABLE IV.1

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

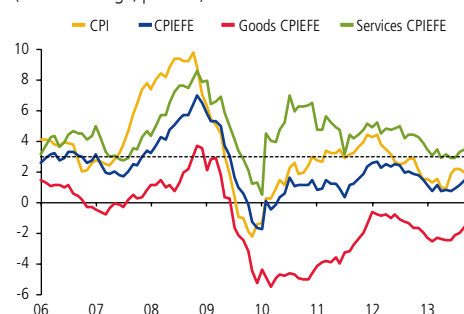
	CPI	CPIEFE	Tradable CPI	Non-tradable CPI	Goods CPI	Services CPI
2011 Avg.	3.3	1.3	2.2	4.8	2.1	4.8
2012 Jan.	4.2	2.6	3.6	5.1	4.0	4.6
Feb.	4.4	2.7	3.6	5.4	4.0	4.9
Mar.	3.8	2.3	3.0	4.7	3.7	3.9
Apr.	3.5	2.5	2.4	5.0	3.5	3.5
May	3.1	2.4	1.9	4.7	2.4	4.0
Jun.	2.7	2.5	1.0	4.8	1.8	3.6
Jul.	2.5	2.5	0.6	4.9	1.6	3.6
Aug.	2.6	2.0	1.3	4.2	2.2	3.0
Sept.	2.8	2.0	1.6	4.5	3.0	2.7
Oct.	2.9	1.9	1.8	4.4	2.9	3.0
Nov.	2.1	1.8	0.4	4.3	1.6	2.7
Dec.	1.5	1.5	-0.5	3.9	0.8	2.3
2013 Jan.	1.6	1.1	0.0	3.6	0.9	2.4
Feb.	1.3	0.8	-0.2	3.2	0.6	2.2
Mar.	1.5	1.1	-0.1	3.6	0.5	2.8
Apr.	1.0	0.8	-0.7	3.1	-0.2	2.4
May	0.9	0.9	-1.0	3.3	0.3	1.7
Jun.	1.9	0.8	0.9	3.1	1.5	2.3
Jul.	2.2	0.9	1.5	3.0	1.9	2.5
Aug.	2.2	1.2	1.2	3.4	1.7	2.8
Sept.	2.0	1.4	0.7	3.5	0.6	3.5
Oct.	1.5	1.6	0.0	3.5	0.2	3.2

(\*) See glossary for definition.

Source: National Statistics Institute (INE).

FIGURE IV.1

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

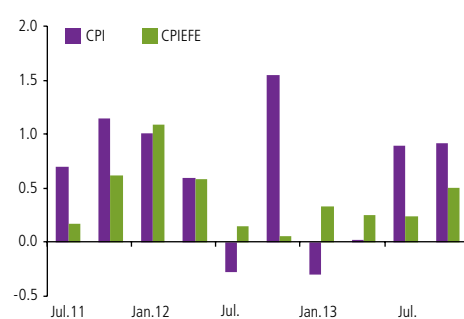


(\*) See glossary for definition.

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

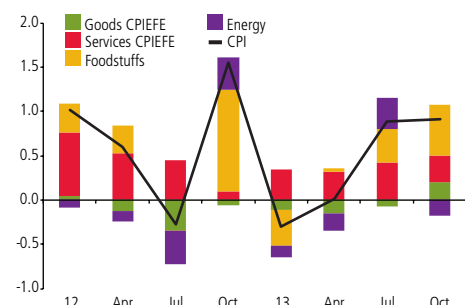
FIGURE IV.2

Monthly inflation  
(accumulated in three months, percent)



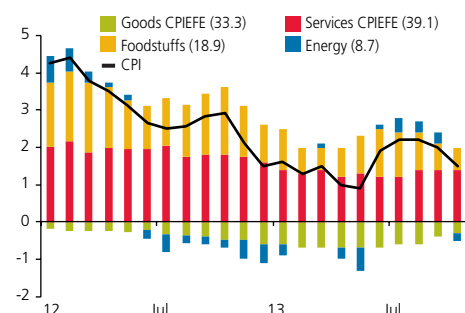
Source: National Statistics Institute (INE).

**FIGURE IV.3**  
Contributions to monthly CPI inflation  
(accumulated in three months, percentage points)



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

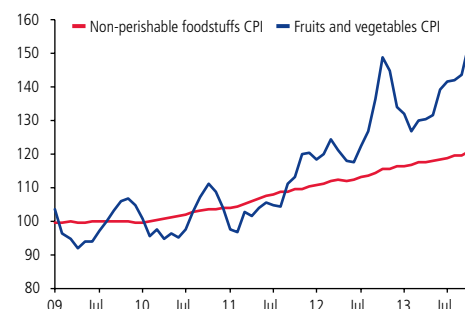
**FIGURE IV.4**  
Contributions to annual CPI inflation (\*)  
(percentage points)



(\*) In parentheses, shares in CPI basket.

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

**FIGURE IV.5**  
Food prices  
(index 2009=100)



Sources: Central Bank of Chile and National Statistics Institute.

As highlighted above, and also mentioned in the previous *Report*, the path of inflation was mainly determined by fluctuations in prices of fuel and foodstuffs. In the last three months, CPI accumulated an increase similar to the quarter ending in July (figure IV.2). CPIPE, in turn, increased 0.5 percentage points (pp) between August and October, and 0.2 pp between May and July. By component, inflation of services continued to make a positive contribution, while goods, in contrast to the previous *Report*, accumulated a positive contribution (figure IV.3). In annual terms, the breakdown of inflation shows a positive contribution of services, which is included in CPIPE and foodstuffs. This was offset by a negative contribution of goods inflation in CPIPE and, in contrast to the previous *Report*, by the price of energy (figure IV.4).

Foodstuffs made the largest contribution to inflation of recent months. Due to seasonal factors, between August and October its contribution was higher than between May and July. Potatoes and pork were among the products that made positive contributions to inflation during that period. On its part, inflation of non-perishable foodstuffs was fairly stable (figure IV.5). This occurred simultaneously with a slight reduction in international prices as measured by the FAO aggregate index, which fell between July and October (-0.8%). In this context, the path followed by international futures prices was adjusted downward from the previous *Report*, due to the positive outlook for crops.

The main factor underpinning the slowdown in inflation was the reduction in the price of energy. Thus, fuel and electricity accumulated a negative incidence, contrasting with its positive contribution between May and July (figure IV.6). Fuel prices made a contribution of -0.19 pp over the last three months. This was caused by a fall in international prices. Outstanding among the main fuel products was the decrease in the price of gasoline (-0.21 pp). In particular, in October the price of gasoline from the Gulf of Mexico fell 12.5% down from its value in July. In the domestic market, these reductions were partly offset by the depreciation of the peso (figure IV.7). However, in the days prior to the statistical closing of this *Report*, the external price of gasoline increased, and its effects on local prices began to be felt. Overall, considering prices of oil futures in the world market during ten days immediately before the statistical closing of this *Report*, the expected path for gasoline in the domestic market was below that foreseen in the previous *Report*.

Monthly inflation of goods in the CPIPE tended to decrease during several quarters. This trend was interrupted in October, resulting in a positive incidence accumulated over the last three months. This was due mainly to the fact that the price of new cars rose in September, simultaneously with the change of year in new models. Another possible factor could be the enforcement of the Euro 5 regulation, as stated in the November *Business Perception Report* (figure IV.8). In annual terms, CPIPE for goods increased its rate of change from -2.2

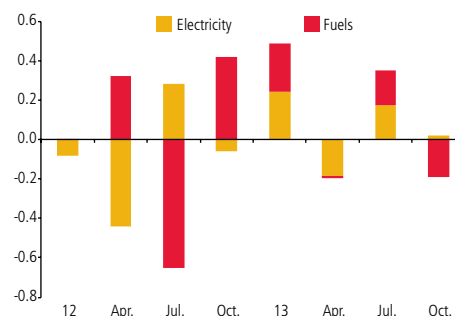
to -1.2%. Annual variation of the Unit Value Import Index (IVUM) for consumer goods, measured in US dollars, remained stable since the second quarter of this year. Measured in pesos, these prices increased over the same period, with an annual variation of around 5% in the third quarter of 2013. To a significant extent, this was due to the peso depreciation.

Services inflation in the CPIPE, more closely linked to excess capacity, increased from an annual growth of 2.9 to 3.4%. Prices of most services continued to make a positive contribution to annual inflation. Home maintenance services had the largest incidence. Overall, in monthly terms, inflation of services included in the CPIPE made a positive contribution, but lower than that accumulated between May and July. By component, the main positive contribution was made by restaurants, coffee shops and similar establishments, particularly lunches eaten out of home. Exceptions were transport, telephone and recreational and cultural services, which made a negative contribution to monthly inflation. Interurban bus transport had the main negative incidence, particularly in August. According to INE, this was explained by the high basis of comparison in July, when prices rose due to winter holidays.

Pressure from labor costs did not change significantly during recent months. The labor market remained tight, although it started to show early signs of easing. According to data taken from the *Business Perceptions Report*, there was a general feeling that in recent months it had become less difficult to find workers. All in all, most of those surveyed mentioned that they had not observed a marked moderation in wage growth. This was consistent with the fact that annual changes in nominal and real wages continued to grow at around 4 and 6%, respectively (figure IV.9). It should be noted that the lag in the coming into effect of the minimum wage raise meant that nominal and real wages increased by around 1% per month. However, afterwards real and nominal wage growth returned to rates close to their average historical values of the last ten years. On the whole, unit labor costs in real terms have followed a declining path, which would indicate productivity increase (figure IV.10).

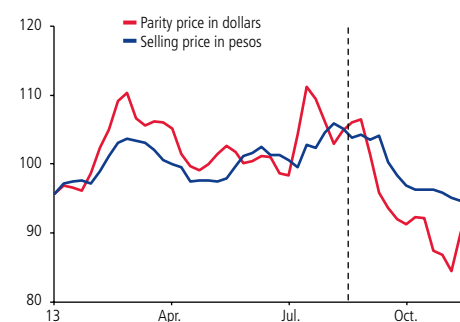
As to margins, different measures reveal mixed results. In contrast to the previous *Report*, the relationship between CPIPE and unit labor cost adjusted for productivity rose during the past months, whereas the relationship between prices of goods in the CPIPE and the exchange rate continued to narrow due to the depreciation of the peso. Normalization of these margins is consistent with a convergence of indicators of core inflation towards an annual rate of 3%.

**FIGURE IV.6**  
Energy's contribution to monthly CPI inflation  
(accumulated in three months, percentage points)



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

**FIGURE IV.7**  
Weekly price of gasoline  
(index, 07.Jan.13 – 25.Nov.13 average=100)



(\*) Dashed vertical line shows statistical cutoff date of September 2013 *Report*.

Source: National Energy Commission (CNE).

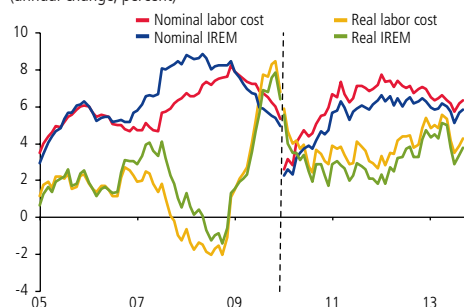
**FIGURE IV.8**  
Contribution of new cars to annual CPI inflation  
(percentage points)



Sources: Central Bank of Chile and National Statistics Institute.

**FIGURE IV.9****Wages (1) (2)**

(annual change, percent)



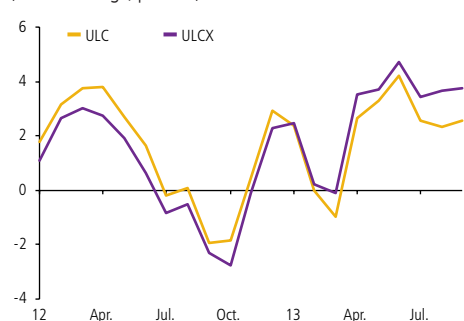
(1) As from January 2010 (dashed line) the new indices with annual base 2009=100 are used, so they are not strictly comparable with earlier figures.

(2) See glossary for definition.

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

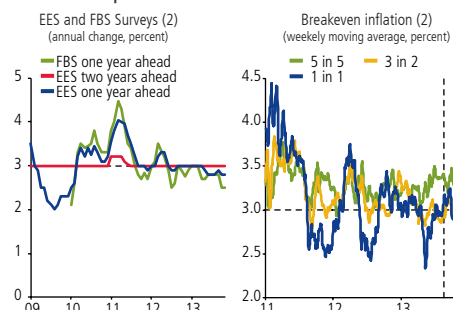
**FIGURE IV.10****Productivity-adjusted labor costs (\*)**

(annual change, percent)



(\*) See glossary for definition.

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

**FIGURE IV.11****Inflation expectations**

(1) FBS corresponds to the first fortnight of the month, except for November 2013, which correspond to the second fortnight.

(2) Forward inflation breakeven based on swap rates. Dashed vertical line shows statistical cutoff date of September 2013 *Report*.

Source: Central Bank of Chile.

**INFLATION OUTLOOK**

As mentioned earlier, expectations for annual inflation have remained around 3% in the projected horizon. The September *Report* anticipated that inflation would enter a gradual normalization process towards an annual rate of 3% in the coming 24 months. This *Report* continues to argue for this convergence, although it foresees that the path will be slower, mainly because of the reversal in fuel prices (figure IV.11).

Private expectations derived from the Financial Brokers Survey (FBS) were adjusted downward (second fortnight in November). In particular, the outlook one year ahead fell from 2.8 to 2.5%. Two years ahead, the adjustment was smaller: from 3.0 to 2.8%. The Economic Expectations Survey (November EES) continued to project annual inflation to stand at 2.8% at the end of one year, and at 3.0% in two years.

The outlook obtained from surveys to companies and consumers remained practically unchanged. The outlook of companies for inflation one year ahead, taken from the Monthly Business Confidence Index, continued around 3% since the last *Report*. Consumer perspectives (IPEC) indicated that the percentage of people who believed that inflation "will rise much in the next twelve months" remained around 50% since the September *Report*.

Expectations for inflation derived from breakeven inflation were slightly below those of the previous statistical closing of the *Report*. One in one forward breakeven inflation based on average swap rates decreased slightly from 3.1 to 2.8% at the statistical closing of this *Report*. On the other hand, forward breakeven inflation three in two and five in five fell from 3.0 and 3.4% to 2.8 to 3.0%, respectively.

In the baseline scenario, the Board deems that CPI inflation will converge to 3% towards the end of the projection horizon, this time the fourth quarter of 2015. This path assumes a convergence of inflation towards the target at a slower pace than anticipated in the previous *Report*. The CPIEFE will continue to approach 3% gradually, with no significant changes to the scenario forecast in September, until it reaches the target during the second half of 2014.

## V. INFLATION SCENARIOS

*This chapter presents the Board's assessment on the Chilean economic outlook over the next two years. 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.*

### BASILINE PROJECTION SCENARIO

In the baseline scenario, the external impulse that the Chilean economy receives is similar to what was considered in September, but milder than what was estimated in late 2012 and early 2013. Global growth for 2014-2015 will be somewhat lower than assumed in the previous *Report*, while financial conditions and the terms of trade should be close to last quarter's estimates (table V.1).

In recent months, while not as sharply, world growth projections continued to be revised downward, especially among emerging markets. This revision is in line primarily with the slowdown in China and other big emerging economies. In the past several months, China's growth rate flattened out, but growth figures under 7.5% are expected over the projection horizon, considering Chinese authorities' efforts to correct the vulnerabilities in their financial system and increase the weight of private consumption in domestic demand. Developments in China, together with contractionary forces coming from the commodity price normalization and less expansionary global financial conditions foreseen in the baseline scenario, result in a downward revision of the previously forecast expansion rates of emerging economies.

Developed economies are still recovering gradually, and both in the United States and the Eurozone, growth rates will continue to rise steadily in the coming years. In the U.S., it is worth noting the upturn of the labor market, entrepreneurial and consumer expectations, and rising prices of various assets, including stocks and houses, plus the lower incidence of the fiscal adjustment. This will result in higher growth rates for the U.S. economy. The Eurozone has made progress, albeit slow, in various structural reforms. In addition, incoming GDP figures showed positive growth rates for the region for the second consecutive quarter. In Japan, although projections have improved somewhat since September, growth rates are expected to decline in 2014 and 2015, owing to permanent tax increases, partially offset by certain transitory measures of fiscal impulse. Accordingly, the baseline scenario assumes that our trading partners will grow 3.6% in 2014 and 3.8% in 2015.

**TABLE V.1**  
International baseline scenario assumptions

	2012	2013 (f)	2014 (f)	2015 (f)
	(annual change, percent)			
Terms of trade	-4.1	-3.9	0.2	-1.5
Trading partners' GDP (*)	3.4	3.4	3.6	3.8
World GDP at PPP (*)	3.1	3.0	3.5	3.7
World GDP at market exchange rates (*)	2.5	2.3	2.9	3.2
External prices (in US\$)	-0.2	0.2	-0.4	0.0
	(levels)			
LME copper price (US\$/lb)	361	332	310	290
WTI oil price (US\$/barrel)	94	98	93	88
Brent oil price (US\$/barrel)	112	109	106	100
Gasoline parity price (US\$/m <sup>3</sup> ) (*)	824	783	712	679
Labor US\$ (nominal, 90 days)	0.4	0.3	0.3	0.7

(\*) For definition, see glossary.

(f) Forecast.

Source: Central Bank of Chile.

**TABLE V.2**  
Economic growth and current account

	2012	2013 (f)	2014 (f)
	(annual change, percent)		
GDP	5.6	4.2	3.75-4.75
National income	6.3	5.2	4.4
Domestic demand	7.1	3.9	4.8
Domestic demand (w/o inventory change)	7.3	5.1	4.5
Gross fixed capital formation	12.3	3.9	4.1
Total consumption	5.8	5.4	4.7
Goods and services exports	1.0	5.3	3.1
Goods and services imports	4.9	4.4	4.6
Current account (% of GDP)	-3.5	-3.2	-3.7
National savings (% of GDP)	21.4	21.1	20.6
GFCF (% of nominal GDP)	24.1	24.4	24.3
GFCF (% of real GDP)	26.8	26.8	26.7
	(US\$ million)		
Current account	-9,497	-9,000	-10,450
Trade balance	3,422	2,500	600
Exports	78,277	78,300	78,400
Imports	-74,855	-75,800	-77,800
Services	-2,435	-3,000	-2,650
Rent	-12,676	-10,800	-10,650
Current transfers	2,192	2,300	2,250

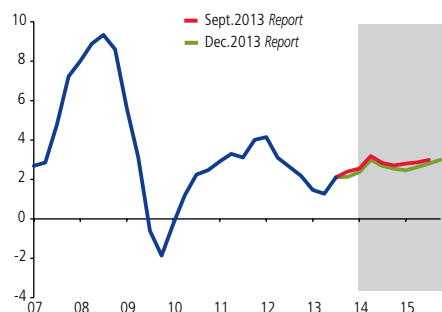
(f) Forecast.

Source: Central Bank of Chile.



FIGURE V.1

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



(\*) Gray area, as from the fourth quarter of 2013, shows forecast.

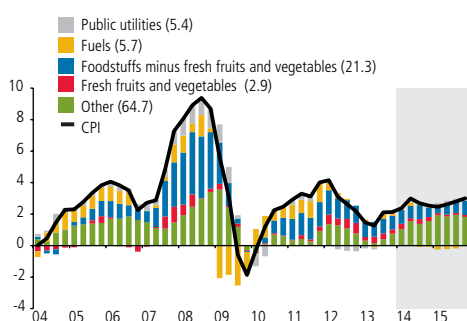
Source: Central Bank of Chile.

Although in recent months external financing conditions improved slightly for emerging economies, this is part of the volatility that is expected to come as part of the normalization process assumed in the baseline scenario. Therefore, conditions are considered to be similar to those in the last *Report*, which in any case are less favorable than those expected a few quarters back. Commodity prices will remain on a downward trend over the projection horizon, with fuel prices slightly below the September estimates, showing reduced geopolitical tensions in the Middle East and the supply increase that is expected in the coming years. The copper price projections use actual data of recent months, so they show a marginal improvement. In this case a significant increase in the global supply is expected in 2015. Thus, the terms of trade will see no major change from earlier forecasts.

In the baseline scenario, the Chilean economy will grow slightly less than forecast in September. For 2013 GDP is expected to expand by 4.2%. For 2014, the economy is expected to expand between 3.75% and 4.75% (table V.2). The composition of growth considers a higher weight of the mining sector—considering the start-up of investment projects of recent years—and a sharper deceleration of sectors other than natural resources, with a reduction in installed capacity utilization. Thus, the economy will grow somewhat below its trend rate, which the Board continues to estimate at 5%.

FIGURE V.2

Contribution to annual CPI inflation (1) (2)  
(percentage points)



(1) Gray area, as from fourth quarter 2013, shows forecast.

(2) In parentheses, shares in CPI basket.

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

In recent months the slowdown in domestic demand was mainly determined by the reduction in gross fixed capital formation (GFCF). This, owes to the maturation of the mining investment cycle which has reflected in less in investment in machinery and equipment, and also to the high comparison base of last year. In 2014 GFCF will grow at the same pace of this year, influenced by new investment projects in engineering works as shown in the CBC's survey. All these factors combined will pull down GFCF as a percentage of real GDP to slightly under 27% in 2014. Furthermore, it is considered that part of the inventory depletion of recent quarters is an unwanted development, and therefore it will be reversed in the coming months, which should give an additional boost to the economy, and also limits the size of the slowdown expected in 2014.

Recently, private consumption gave clearer signs of slowing down. Going forward, consumption is expected to continue to moderate gradually, in line with expectations of slightly lower growth in private income, inflation converging to 3% and the exchange rate depreciation affecting durable consumption. However, this moderation in consumption will be attenuated by still optimistic consumer expectations, household credit continuing to grow at 10% y-o-y and a tight labor market. All this will result in the national savings rate dropping to 20.9% of GDP by 2014. Finally, the baseline scenario considers full compliance with the fiscal rule.

The projection for the current account deficit was adjusted downward. Thus, while in September it was expected to be 4.5% of GDP in 2013 (from 4.7% in June), this *Report's* baseline scenario assumes that it will amount to 3.2%. The surprise in this figure is consistent with some mitigating factors that were discussed at length in previous *Reports*, which have begun to be visible sooner and more intensely than expected. In particular, the mining investment cycle,



which was one of the main sources of the larger deficit, is maturing, leading to higher copper exports and lower capital imports. By 2014, although the deficit will widen to 3.7% of GDP—because of a copper price drop—, this means one percentage point less than forecast in September. The same as in 2013, the lower deficit projection is partly explained by higher volume exports. Measured at trend prices the current account's average deficit will approach 4% of GDP in 2013-2014. These lower figures mean a lower risk associated with the evolution of the current account that had been identified in previous *Reports*.

In the baseline scenario, headline inflation will converge to 3% by the end of the projection horizon, this time the fourth quarter of 2015. This postponement of the convergence of inflation to 3% is consistent with the smaller contribution of food and energy prices in the projection horizon compared with the September forecast. In fact, the CPIPE trajectory is not very different from the one considered in the last *Report* and will continue to gradually approach 3% to hit the target in mid-2014. This implies that nominal wages will be adjusted in line with productivity and the inflation target. It also includes as a methodological assumption that the TCR will remain fairly unchanged. Finally, the baseline scenario uses as a working methodological assumption that the policy rate will follow a path similar to the one in the latest Economic Expectations Survey (figures V.1, V.2 and V.3, and table V.3).

## RISK SCENARIOS

The baseline scenario reflects those events that are believed to be the most likely to occur with the information at hand at the closing of this *Report*. There are risk scenarios, however, which if materialized, may reshape the macroeconomic environment and, therefore, may modify the course of monetary policy. On this opportunity, having evaluated the alternative scenarios, the Board estimates that the risk balance is unbiased for both output and inflation (figures V.4, V.5 and V.6).

On the external front, one risk relates to growth in emerging economies, particularly China. Concerns persist about the fragility of the Chinese financial system, which together with doubts about the evolution of real-estate prices could limit its future growth prospects. As has been noted before, China's evolution is cause for unrest because of its weight in world GDP and its impact on the pricing of commodities, copper included.

The volatility that financial markets have shown in recent months implies that ending the quantitative easing in the U.S. will not be stress-free, especially because of the difficulty to calibrate the policy actions of this unprecedented process. In this regard, a major risk has to do with its effects on some of the larger emerging economies that have accumulated macroeconomic imbalances and are more dependent on external financing. The risk associated with the complex interaction between weak growth, a frail fiscal situation and financial problems in Europe is still present.

**TABLE V.3**

### Inflation

	2012	2013 (f)	2014 (f)	2015 (f)
	(annual change, percent)			
Average CPI inflation	3.0	1.7	2.6	
December CPI inflation	1.5	2.6	2.5	
CPI inflation in around 2 years (*)				3.0
Average CPIPE inflation	2.2	1.2	2.6	
December CPIPE inflation	1.5	1.9	2.9	
CPIPE inflation in around 2 years (*)				2.9

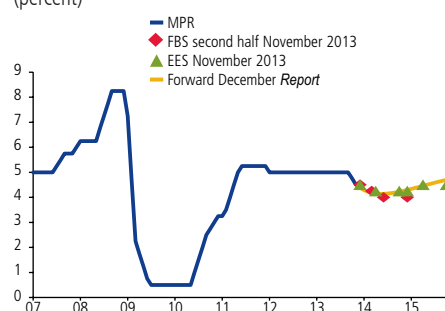
(f) Forecast.

(\*) Inflation forecast at the fourth quarter of 2015.

Source: Central Bank of Chile.

**FIGURE V.3**

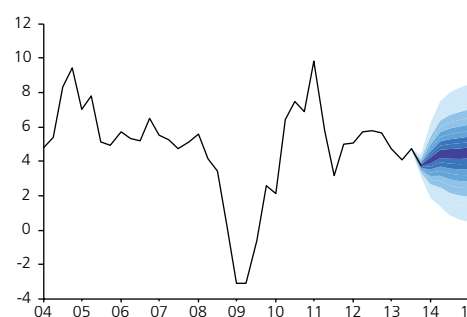
### MPR and expectations (percent)



Source: Central Bank of Chile.

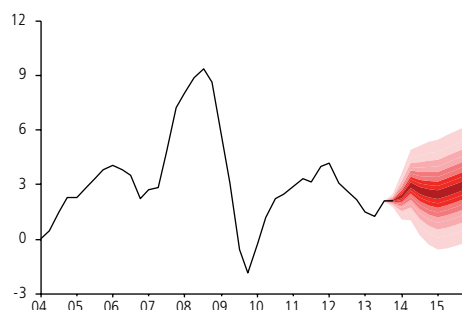
**FIGURE V.4**

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

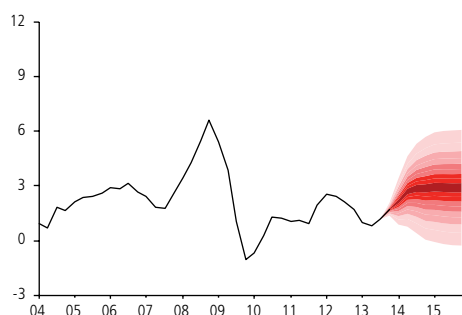


(\*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% around the baseline scenario are included. These intervals summarize the risks on growth as assessed by the Board. The baseline scenario uses as a working methodological assumption that the policy rate will follow a path similar to the one in the latest Economic Expectations Survey.

Source: Central Bank of Chile.

**FIGURE V.5**
**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 future inflation as assessed by the Board. The baseline scenario uses as a working methodological assumption that the policy rate will follow a path similar to the one in the latest Economic Expectations Survey. Source: Central Bank of Chile.

**FIGURE V.6**
**CPIEFE 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 future core inflation as assessed by the Board. The baseline scenario uses as a working methodological assumption that the policy rate will follow a path similar to the one in the latest Economic Expectations Survey. Source: Central Bank of Chile.

Domestically, headline inflation of recent quarters has been lower than forecast, and the moment when it will expectedly reach the target has been postponed time and again. While the recent cuts to the MPR will help inflation converge to 3%, if widespread slowdown in all the demand components is confirmed, along with longer-lasting low inflation in the rest of the world and maybe a sharper fall in international fuel prices could further postpone such convergence to 3%. However, the depreciation of the peso and the still tight labor market could work in the opposite direction.

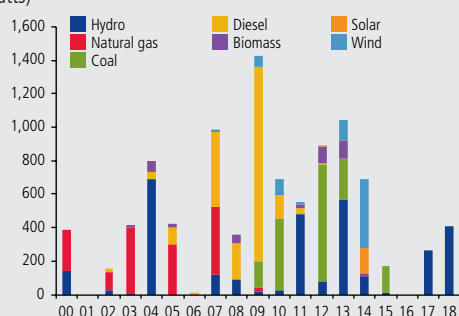
Projections indicate that in the short term the Chilean economy will continue to expand somewhat below trend for still some quarters. However, labor market conditions and a faster recovery in inventories, among other factors, could result in a faster recovery of the economy that would bring it closer to its trend.

The macroeconomic scenario has evolved in line with the trends described in the last *Report*. The international outlook is of more balanced growth between developed and emerging economies, more normal financial conditions, and lower terms of trade. Domestic output and demand are gradually decelerating and inflation remains low. In its recent meetings, the Board deemed appropriate to lower the MPR in order to accommodate the level of monetary stimulus to weaker economic growth in Chile and ensure convergence of inflation to the target. The recent depreciation of the peso, which has driven the RER to near its historical average, is part of the restructuring of the sources of growth that should accompany the change in the external environment. The baseline scenario does not foresee the need for any significant changes in the MPR but, should such need arise, monetary policy has room and is prepared for further adjustments. The Board follows the evolution of the external and domestic macroeconomic scenarios and their implications on inflation closely, and reiterates its commitment to conduct monetary policy in such a way that projected inflation stands at 3% over the policy horizon.

## BOX V.1 REAL EFFECTS OF AN INCREASE IN THE PRICE OF ENERGY

After a period in which significant electric power generation projects were introduced, several sectoral reports anticipate that in the coming years the pace of entry of new capacity will slow down (figure V.7).

**FIGURE V.7**  
Contribution of projects built or under construction to the Central Interconnected System (SIC) (\*) (megawatts)

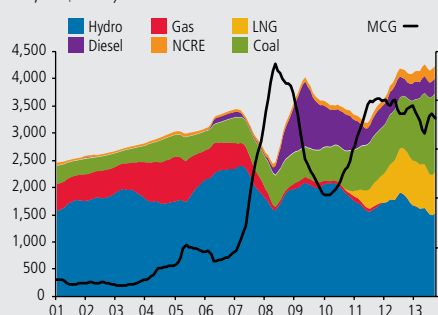


(\*) Excludes plant factor of respective technologies.

Source: National Energy Commission (CNE).

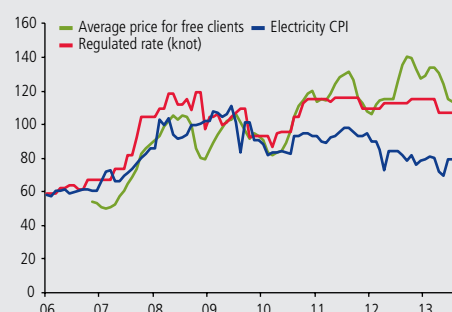
Changes in the composition of the electricity matrix, coupled with a widespread rise of international prices of energy, have resulted in increased average and marginal generation costs over the last years (figure V.8). These rises have mainly affected prices paid by free clients (large-sized companies), whereas the effects over prices to households have been more limited because of the framework regulating consumer tariffs (figure V.9).

**FIGURE V.8**  
Energy generation by type of technology and marginal cost (megawatts, US\$/MW)



Sources: Load Economic Dispatch Center – Central Interconnected Electric System (CDEC-SIC) and National Energy Commission (CNE).

**FIGURE V.9**  
Price of electricity  
(US\$/MW, index 2009 = 100)



Sources: National Energy Commission (CNE) and National Statistics Institute (INE).

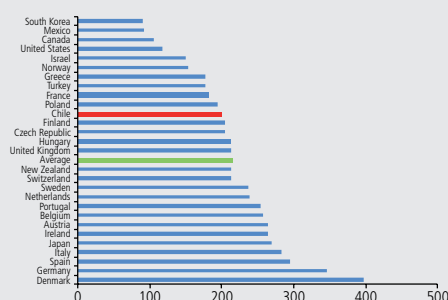
According to OECD data for 2012, tariffs paid by households in Chile were somewhat below the average for OECD countries. In turn, those of companies were somewhat above average (figures V.10 and V.11).

Looking ahead, the evolution of average and marginal costs of electricity will depend on the technology used for enlarging the generation matrix and its coherence with the country's growth in energy requirements, along with the evolution of international prices of fuel and the hydrologic scenarios. Among others, one possible scenario is that changes in the matrix will lead to increased production costs, thus affecting prices to companies and households. The extent of potential rises in costs is not easy to quantify, considering that technologies change over time, costs of inputs fluctuate widely, and meteorological conditions are difficult to assess. According to some studies, during the coming years the cost of electric power generation could rise between 30 and 50% in the Electric Interconnected System (SIC)<sup>7</sup>. At the same time, the maximum price for new tenders of energy supply to households in the coming years has increased 60% above average prices of existing contracts.

<sup>7</sup> CADE (2011); Bernstein et al (2013).

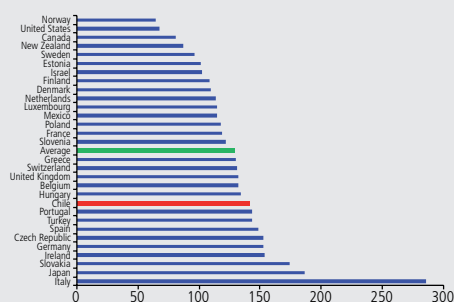
Of the two systems operating in the country, the Northern Electric Interconnected System (SING) has greater excess capacity and lower average generation costs than in the SIC. Because of this, in the medium term it is more likely that increases in generation costs in the SIC will materialize. Moreover, the SIC has become fragmented due to difficulties in the transmission system, a fact that has also had effects and might affect marginal production costs and, eventually, prices in some regions of the country.

**FIGURE V.10**  
Household electricity rates  
(US\$/MW)



Source: International Energy Agency.

**FIGURE V.11**  
Corporate electricity rates  
(US\$/MW)



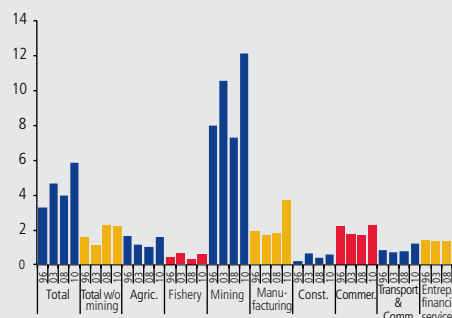
Source: International Energy Agency.

Sustained increases in electric power generation costs have effects on prices paid by consumers, and through them, on inflation. They also have effects on production costs of firms and therefore indirectly on inflation. This happens if companies are able to transmit cost increases to final prices. In companies that compete in international markets, the effects are felt on margins and on incentives to invest and hire personnel. This, in turn, may affect aggregate output level. Several factors affect the magnitude of those impacts. Outstanding among them are the

intensity with which electric power is used as a production input and the ability of firms and consumers to apply technology that is less energy intensive.

As to the first mentioned factor, sectors such as mining and manufacturing are more energy intensive users and could be affected the most. In fact, most electric power consumption comes from those sectors (figure V.12). As to households, the CPI basket—based on the 2006-2007 6th Household Budget Survey— assigns electricity a weight of 2.7% in average expenditure. From that perspective, a rise in tariffs could lower aggregate consumption or shift it away from some goods and services to others, insofar as there is some degree of substitution

**FIGURE V.12**  
Intensity of electric energy use (\*)



(\*) Electric energy consumption of each sector over intermediate costs plus respective compensations.

Source: Central Bank of Chile.

among them. Bertinatto et al. (2013) present three estimations of the effects that a permanent 10% increase in electric tariffs could have on aggregate variables. The first two are based on results of equilibrium models geared to Chile's characteristics. The third is based on microeconomic estimations with data taken from the National Annual Manufacturing Survey (ENIA), and assesses the effects of changes in prices of electric power on investment and employment. As the authors stress, results of these exercises are highly sensitive to elasticity of substitution between energy and other production factors. If the values of elasticity of substitution are low (an indication of a high degree of complementarity both in the short as well as medium term), a permanent 10% shock in the price of electric power would cause steady state GDP to fall between -0.3 and -0.4%, consumption to decline between -0.6 and -1.2%, and investment to drop between -1 (according to general equilibrium models) and -2% (according to micro data). If elasticities of substitution were higher, then the effects would be smaller.

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# GLOSSARY

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**Average interbank swap:** Derivatives contract between two parties, who carry out an exchange of flows at future dates, between a fixed rate, set at the time of executing the contract, and a variable rate. The variable rate corresponds to the interbank interest rate average, which, in turn, is derived from the average interbank index.

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

**CPIEFE:** CPI excluding food and energy prices; leaving 72% of the total CPI basket.

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

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

**Credit Default Swap (CDS):** Derivative instrument that amounts to an insurance against the risk of default on sovereign or corporate debt. Premiums implicit in the costs of this hedging (CDS spread) are normally used as sovereign or corporate risk indicators.

**Gasoline parity price:** Reference cost of gasoline imports, estimated from quotations of similar quality products to those available in Chile, in the relevant markets (Americas, Europe and Asia). It also includes maritime freight, insurance premiums, tariffs, and others.

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

**GDP, other:** Includes the following industries: agriculture/livestock and forestry; manufacturing industry; construction; wholesale and retail trade; transport and communications; financial and entrepreneurial services; housing property; personal services; and public administration.

**Growth of trading partners:** Growth of Chile's main trading partners, weighted by their share in total exports during two moving years. Countries considered are the destination of 93% of total exports, in average, for the 1990-2011 period.

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

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

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

**LCX:** Unit labor cost (ULC) excluding community, social, and personal services; electricity, gas, and water (EGW); and mining.

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

**M2:** M1 plus time deposits, time saving deposits, mutual fund shares with investments in debt instruments with a maturity of up to one year, and deposits with saving and loan cooperatives; less time deposits of the aforementioned mutual funds and saving 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, pension fund shares in voluntary savings (AFPs); less mutual fund and 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 2013: Argentina, Belgium, Bolivia, Brazil, Canada, China, Colombia, France, Germany, Italy, Japan, Mexico, the Netherlands, Peru, South Korea, Spain, Switzerland, the United Kingdom and the United States.

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

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

**Nominal TAB rate:** Asset Banking Rate. Weighted average deposit rate for indexed operations at 90, 180 and 360 days. It is calculated using the maximum deposit rate minus banks' reserve requirement cost.

**PMI:** Procurement manager index. A survey made to purchase or procurement managers at manufacturing and service-providing firms with respect to their outlook on the business and related issues, including purchase orders, inventories and employment. A value above (below) 50 indicates that the sector's activity is expanding (contracting).

**Prime deposit rate:** Interest rate offered by financial institutions to prime customers in order to attract short- and medium-term deposits.

**Prime-swap spread:** Difference between the prime deposit rate and the average interbank swap rate. Similarly to its equivalent measures in other markets (e.g. the Libor-OIS spread), it is used as a benchmark for the analysis of the banking industry's funding liquidity.

**RER:** Real exchange rate. It is a measure of the real value of the peso against a basket of currencies and is constructed using the currencies making up the MER.

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

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

**ULC:** Unit labor cost. Considers total nominal labor cost, actual salaried worked hours, salaried workers and total GDP.



**ULCX:** ULC including only salaried employment and wages; and product excluding natural resource related sectors.

**Volatility index (VIX):** Estimated by the Chicago Board of Trade, is the most commonly used index to gauge general market volatility at the international level. It measures the implied volatility being negotiated in option contracts over the S&P 500 index.

**World growth at market exchange rate:** Growth at market exchange rate. Each country is weighted by its GDP in dollars, as published by the IMF's World Economic Outlook (WEO, October 2013). The sample of countries represents around 90% of world GDP. For the remaining 10%, average growth is estimated at 1.7% for the 2012-2015 period.

**World growth:** Regional growth weighted by shares in world GDP at PPP as published by the IMF's World Economic Outlook (WEO, October 2013). World growth projections for the 2012-2015 period are calculated from a sample of countries that account for about 86% of world GDP. For the remaining 14%, average growth is estimated at 3.3% for the 2012-2015 period.

## ABBREVIATIONS

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**BCP:** Central Bank bonds in pesos

**BCU:** UF-indexed Central Bank bonds

**BLS:** Bank Lending Survey

**CPIEFE:** Consumer price index excluding foods and energy prices

**CPIG:** Consumer price index for goods

**CPINT:** Consumer price index for non-tradables

**CPIS:** Consumer price index for services

**CPIT:** Consumer price index for tradables

**EES:** Economic Expectations Survey

**FBS:** Financial Brokers Survey

**FSR:** Financial Stability Report

**IMCE:** Monthly Business Confidence Index

**IPEC:** Economic perception index

**MPR:** Monetary policy rate

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