

MONETARY POLICY REPORT

March 2014



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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.



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*/ The statistical closing date of the *Monetary Policy Report* was 26 March 2014.

PREFACE

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

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

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

This *Report* was approved at the Board's session on 27 March 2014 for presentation to the Senate Finance Committee on 31 March 2014.

The Board

SUMMARY

In the past few months, output and demand growth grew less than foreseen in the last *Monetary Policy Report*. This difference was particularly visible in investment-related sectors. Annual inflation has somewhat exceeded the forecast and is back to nearly 3%, largely driven by increases in energy rates that respond to both higher external prices and the depreciation of the peso. Inflation expectations at the end of the projection horizon are around 3%, despite minor increases in the short term. Internationally, the main change is the significant decline in the copper price, which has deteriorated the terms of trade relevant to Chile. Neither global economic growth nor the external financial conditions show any significant changes over the recent months. However, there have been some episodes of financial volatility in overseas markets and an overall depreciation of the currencies of emerging countries. The Chilean peso has depreciated substantially, even outpacing the average for emerging economies. In this context, the Board reduced the monetary policy rate (MPR) at its meetings of February and March, taking it to 4%. The Board also communicated that it will consider the possibility of making additional cuts to the policy rate in line with the evolution of domestic and external macroeconomic conditions and its implications on the inflationary outlook.

Output grew 4.1% annually in 2013, with a marked slowdown in the second half. One determining factor was the behavior of sectors other than natural resources, particularly those related to investment such as construction and part of trade and manufacturing. Among the components of demand, gross fixed capital formation posted the largest downward adjustment. Machinery and equipment showed negative annual growth rates in the last two quarters of 2013, while construction and other works significantly reduced its annual variation in the same period. Behind this lower-than-expected investment growth are several factors. Aside from the effect of the very low basis for comparison in the same months of 2012, which marked the annual change in imports of capital goods, there was the maturation of the mining investment cycle and the postponement of some projects. Another factor is the worsening of expectations as reflected in the business confidence survey and in our *Business Perception Report*. Finally, there is the drop in y-o-y public investment in the last quarter of 2013 and depreciation of the real exchange rate, that pushed capital goods prices up. All this has driven down private growth projections for this year. The Economic Expectations Survey (EES) of last March lowered 2014 GDP growth from 4.1% in November to 3.7% in March.

**ECONOMIC GROWTH AND CURRENT ACCOUNT**

	2012	2013	2014 (f)
	(annual change, percent)		
GDP	5.4	4.1	3.0-4.0
National income	4.6	3.4	3.3
Domestic demand	6.9	3.4	3.3
Domestic demand (w/o inventory change)	7.1	4.2	3.3
Gross fixed capital formation (GFCF)	12.2	0.4	0.8
Total consumption	5.6	5.4	4.1
Goods and services exports	1.1	4.3	3.2
Goods and services imports	5.0	2.2	2.4
Current account (% of GDP)	-3.4	-3.4	-3.6
National savings (% of GDP)	21.7	20.5	19.5
GFCF (% of nominal GDP)	24.0	23.6	23.1
GFCF (% of real GDP)	26.8	25.8	25.2
	(US\$ million)		
Current account	-9,081	-9,425	-9,520
Trade balance	2,508	2,131	900
Exports	77,965	76,674	74,800
Imports	-75,458	-74,544	-73,900
Services	-2,276	-2,903	-2,250
Rent	-11,503	-11,079	-10,200
Current transfers	2,191	2,426	2,030

(f) Forecast.

Source: Central Bank of Chile.

INTERNATIONAL BASELINE SCENARIO ASSUMPTIONS

	Average 00-07	Average 10-12	2013 (f)	2014 (f)	2015 (f)
	(annual change, percent)				
Terms of trade	8.2	4.1	-3.2	-0.9	-1.1
Trading partners' GDP (*)	3.6	4.6	3.4	3.7	3.9
World GDP at PPP (*)	4.2	4.0	3.0	3.5	3.8
World GDP at market exchange rates (*)	3.2	3.2	2.3	2.9	3.2
Developed economies' GDP at PPP (*)	2.6	1.9	1.1	2.1	2.2
Emerging economies' GDP at PPP (*)	7.4	5.9	4.5	4.6	5.0
External prices (in US\$*)	4.6	5.2	0.3	0.3	0.7
	(levels)				
LME copper price (US\$/lb)	154	367	332	300	285
WTI oil price (US\$/barrel)	44	90	98	96	88
Brent oil price (US\$/barrel)	42	101	109	106	101
Gasoline parity price (US\$/m ³) (*)	367	742	785	777	733
Libor US\$ (nominal, 90 days)	3.6	0.4	0.3	0.3	0.7

(*) For definitions, see glossary.

(f) Forecast.

Source: Central Bank of Chile.

The revisions to the Chilean growth outlook are in line with those of most emerging economies. The baseline scenario assumes that in 2014 this group of countries will underperform its average growth of recent years. One example is China, whose expansion forecast is even below the target of 7.5% expressed by its authorities. Other Latin American economies such as Brazil, Mexico and Peru have also made downward revisions to their projections. All this contrasts with the developed world where growth estimates for the year have been revised upward, albeit with different nuances. It is worth singling out the better performance of the United States and the clearer signs of recovery in the Eurozone. Taking into account all these developments plus their relative importance, forecast for Chile's trading partners growth is raised marginally for 2014 and 2015, on average, to a 3.8% (3.7% in December).

The financial conditions facing the Chilean economy show no significant change from December's forecasts, while the terms of trade show a decline. Nevertheless, in comparison with previous years, external conditions will be less favorable: on one hand, because international interest rates have risen, as has the risk aversion regarding emerging markets. On the other hand, because the copper price has posted a significant decrease in the past few months. In fact, the price of the metal was below US\$3 per pound at the statistical cutoff of this *Report*. The baseline scenario estimates prices of US\$3 in 2014 and US\$2.85 in 2015.

As for local inflation, the annual change in the CPI has returned to around 3% faster than foreseen. In recent months, the monthly CPI variation has been dominated by increases in energy rates that owe to the higher dollar price of fuels as much as to the depreciation of the peso. The impact of this depreciation on other goods in the basket has been in line with expectations. Core inflation—the CPIEFE, which excludes the prices of foodstuffs and energy—has also risen, although not as fast as headline inflation. Inflation expectations have remained at 3% in the forecast horizon, with a slight increase in the short term.

Given this context, this *Report's* baseline scenario lowers its GDP growth forecast for 2014. The Board believes that this year the economy will grow between 3% and 4% (3.75% to 4.75% in December). This reflects that this year's investment growth will be lower than projected earlier, with an annual variation which is now estimated at around 1% (4.1% in December). The estimates also use first-quarter information available as well as downward adjustments to investment in 2013 and early 2014 shown by the new survey of the Capital Goods Corporation (CBC). Another factor behind the slower growth expected for the near future is the upward correction of inventory levels, which implies that this source of growth will provide a lower impulse. The scenario also assumes that, as has been the trend in recent quarters, private consumption will show a moderate slowdown, grounded on the performance of labor income and a stable borrowing profile. The current account deficit is forecast at 3.6% of GDP in 2014, slightly larger than in 2013. This estimate inputs the reduction in the copper price expected for the year, which more than offsets the expected drop in the growth of domestic demand and imports. This implies that, measured at trend prices, the deficit will decrease further, approaching 3% of GDP. Regarding GDP, the rate of total investment will be slightly above 23% in nominal terms (just over 25% in real terms), while national savings will reach 19.5%.

In the baseline scenario, in 2014 the economy will grow less than in 2013 and below trend, which the Board continues to estimate at around 5%. This trajectory considers a stabilization of investment level, resulting from a number of converging elements. On one hand, the CBC survey shows an increase in investment in engineering works planned for the second half of 2014 and for the period 2015-2016. On the other, housing construction growth will keep the pace of last year, as the supply remains low, home sales are stable and financial conditions (i.e. credit cost and volume) remain favorable. It is also expected that the implementation of the 2014 fiscal budget will be more in line with historical patterns, implying an increase in public expenditure compared to 2013, especially in investment. Likewise, imports of machinery and equipment have stabilized in recent months. In addition, the somewhat higher growth of trading partners and the depreciation of the real exchange rate will also boost non-mining exports. Finally, there is the effect of the increased monetary stimulus that has been added to the economy.

As for inflation, the baseline scenario assumes that y-o-y CPI variation will increase temporarily to a 3.5% to 4% range^{1/}. In the immediate future, this increase reflects the direct pass-through of the peso depreciation to the prices of goods and services. In the baseline scenario, it is considered that the reduction in capacity utilization, that can be inferred from the behavior of economic activity, will mitigate inflationary pressures and the propagation of the direct effects of the depreciation. Thus, already at the end of 2014, headline inflation will come closer to 3%, where it will stay until the end of the projection horizon, the first quarter of 2016. Core inflation will hover around 3% over this same horizon.

Aside from the already mentioned trajectories foreseen for domestic growth and the external scenario, this projection uses as a working assumption that nominal wages will be adjusted in line with productivity and the inflation target. It also includes as a methodological assumption that the real exchange rate (RER) will remain near its current values, since it is now within the range of values that are considered consistent with its long-term fundamentals. Finally, the baseline scenario uses as working methodological assumption that the policy rate will follow a path comparable to what can be inferred from the prices of financial assets prevailing at the close of this *Report*.

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 downward biased for output and unbiased for inflation.

Abroad, one first risk has to do with the behavior of emerging economies, especially China. The latter risk has been present in several *Reports* already and has recently been exacerbated because of growing doubts posed by the fragility of the Chinese financial system and the overall increase in the risk perception

INFLATION

	2013	2014 (f)	2015 (f)	2016 (f)
	(annual change, percent)			
Average CPI inflation	1.8	3.4	2.9	
December CPI inflation	3.0	3.0	3.0	
CPI inflation in around 2 years (*)				3.0
Average CPIPE inflation	1.2	2.7	3.0	
December CPIPE inflation	2.1	2.8	2.9	
CPIPE inflation in around 2 years (*)				2.9

(f) Forecast.

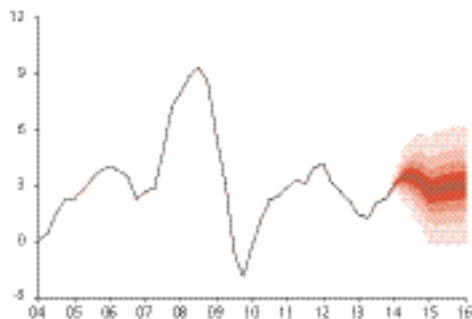
(*) Inflation forecast at the first quarter of 2016.

Source: Central Bank of Chile.

^{1/} The forecasts included in this *Report* use annual inflation based on the 2013=100 reference basket.

**CPI INFLATION FORECAST (*)**

(annual change, percent)

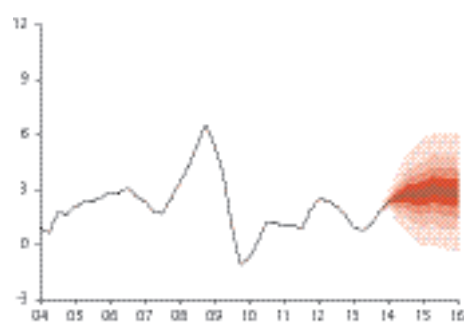


(*)The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% around the baseline scenario are included. These intervals summarize the risks on inflation as assessed by the Board. The baseline scenario uses as a working methodological assumption that the policy rate will follow a path comparable to the one that can be inferred from the financial asset prices prevailing at the statistical cutoff date of this Report.

Source: Central Bank of Chile.

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 core inflation as assessed by the Board. The baseline scenario uses as a working methodological assumption that the policy rate will follow a path comparable to the one that can be inferred from the financial asset prices prevailing at the statistical cutoff date of this Report.

Source: Central Bank of Chile.

of the emerging world. In particular, a deterioration in the Chinese economy would have first-order effects on Chile and the group of emerging economies, spreading through both real and financial channels. Of particular importance is its impact on the price of commodities, including copper, as well as on the growth of other important trading partners such as Latin American countries. Moreover, it cannot be ruled out that the vulnerabilities that some emerging economies have accumulated may generate new episodes of volatility.

It is also possible for the recovery process in the U.S. to end up being stronger than expected. The timing of its effects shows different signs. In the short term, the anticipated normalization of the monetary stimulus could lead to a worsening of financial conditions for the emerging world, inducing new episodes of volatility as in recent quarters. Going forward, the effect of increased external demand and higher commodity prices would prevail, with positive effects on economies like Chile that have solid fundamentals. Overall, the risk associated with the complex fiscal and financial situation in the Eurozone is still present, and moreover, heightening of geopolitical tensions in Ukraine could affect commodity prices, as well as confidence in Europe.

At the local level, an important part of the economic slowdown of recent quarters is due to a drop in investment. The baseline scenario assumes that this phenomenon will not deepen and for some components it will even be reversed. But there are risks, particularly since the drop in investment in late 2013 was sharper than expected. For example, it is possible that, due to its natural inertia, investment may remain weak for longer than foreseen. Another risk is that a deterioration of the global economy may pull down the copper price below its long-term level, deferring new projects and slowing economic growth.

Still locally, inflation of recent months, like the projections included in the baseline scenario, show limited pass-through of the peso depreciation to prices, in line with economic fundamentals. The consolidation of the inflation-targeting regime and the economic slowdown restrict the degree of propagation to final prices, wages and expectations, so the recent rise in inflation is believed to be transitory. However, it is necessary to watch for second-round effects to make sure they remain contained, particularly considering that margins have narrowed in some sectors due to increases in costs, such as energy, and that the labor market situation remains relatively tight.

The macroeconomic scenario shows economic slowdown beyond projections of a few months back, with inflation hovering around 3%. The external short-term outlook for Chile is less favorable than it was a year ago. In addition, further doubts have emerged regarding the performance of some of the big economies, especially China. In this context, the Board has enhanced the monetary stimulus, lowering the MPR by 100 basis points over the past six months. The Board will consider the possibility of making additional cuts to the policy rate in line with the evolution of domestic and external macroeconomic conditions and its implications on the inflationary outlook. At the same time, it reiterates its commitment to conduct monetary policy with flexibility, so that projected inflation stands at 3% over the policy horizon.

MONETARY POLICY DECISIONS IN RECENT MONTHS

Background: December 2013 Report

The evolution of the macroeconomic scenario had been in line with projections in the September *Report*. Domestic output and expenditure had gradually moderated, reducing accumulated pressures on the use of domestic resources and the current account deficit. Inflation had continued at low levels and expectations two years ahead remained around the target. The external impulse was much as expected, but prices of commodities, including copper, had dropped, contributing to reduce the already low international inflationary pressures. The materialization of the baseline scenario led the Board to reduce the Monetary Policy Rate (MPR) by 25 basis points (bp) in October and November, to 4.5%.

The Fed's decision to postpone the reduction of its asset purchases had eased external financial conditions, although they were still less favorable than earlier this year. The currencies of several emerging economies had depreciated against the dollar. The Chilean peso reached levels above \$520 per dollar and the real exchange rate (RER) was in its average of the last 15 to 20 years, and within ranges consistent with its long-term fundamentals.

In Chile, the slowdown in spending conjugated several factors: the maturation of the mining investment cycle, the absence of significant imports of transport material in the last quarter of 2012, a moderate slowdown in consumption and significant inventory depletion. In output, during the third quarter mining had shown high rates of annual change, encouraged by the start of production of major investments made in previous years. Mining exports had risen, helping to reduce the current account deficit. Sectors most closely linked to demand were still growing less than in 2012, which was also lower than expected. This led to a marginal adjustment in the projections for the year and for 2014: between 3.75% and 4.75% (4% and 5% in September).

Inflation had been lower than expected, mainly due to external fuel prices, offset by seasonal increases of some perishable foods and the peso depreciation. With this, inflation stood again temporarily below the tolerance range and its two-year term outlook anticipated a slower convergence to the target. The

baseline scenario used as a methodological assumption that the MPR would follow a similar path to that shown in the latest Economic Expectations Survey.

Risks on the external front were still linked to the performance of emerging economies, in particular given the effect that the process of withdrawing monetary stimulus in the U.S. would have on those economies that had accumulated macroeconomic imbalances and were more dependent on external financing. Concerns persisted about the fragility of the Chinese financial system and doubts were added by the evolution of its real estate prices. Risks in the Eurozone remained. Domestically, risks were identified regarding the pace of convergence of inflation to 3%, with factors like demand deceleration and depreciation of the peso that opposed each other. The Board considered that the balance of risks for output and inflation was unbiased.

Meetings of December, January, February, and March

In December, the external scenario was in line with forecasts. Internally, output grew somewhat below its trend, which reduced pressures on the use of installed capacity, but conditions in the labor market remained tight. Slowdown in domestic spending was widespread, including components with a more inertial behavior. The recent depreciation of the peso could mean higher inflation in the short term, but it would be a temporary phenomenon, which had not affected medium-term expectations to date.

The Research Division presented as relevant options to maintain the MPR at 4.5% or to cut it by 25bp to 4.25%. Keeping the MPR unchanged could be warranted because the economy's deceleration had been soft, and it was anticipated that it would follow a stable growth pace. The two cuts already made in the MPR continued to gradually affect the demand components most sensitive to financing costs. The real peso depreciation would help rebalance the sources of growth in line with changes in the external environment and maturation of the mining investment cycle. Meanwhile, lowering the MPR was consistent with the baseline scenario, which envisaged some additional monetary stimulus. However, making this decision at that time could give a signal of greater urgency regarding the weakness of the domestic



economy and lead to a further correction of the trajectory of expected market rates, which was not consistent with the baseline scenario. Thus, the Board decided to maintain the MPR at 4.5%.

In January, the external and internal news remained consistent with the baseline scenario. In that month, the main focus was on the start of the withdrawal of the long-term assets purchase program by the Fed and its effect on the markets. Domestically, the slowdown in output and demand continued. Outstanding was the greater deterioration of investment in machinery and equipment, which had resulted in lower growth of the industrial and associated services sectors. Inflation in December was above market expectations, hit by the price of perishable foods and energy. In addition, it reflected the depreciation of the peso. Anyway, no greater second-round effects of these shocks on other prices, wages and expectations were observed. Inflation expectations two years ahead remained around 3%, and there were only moderate increases in the short term.

The Research Division presented as relevant options to maintain the MPR at 4.5% or to cut it to 4.25%. The option of lowering it was consistent with the approach of the baseline scenario of December. Recent data showed that deceleration of the economy had deepened and, if this trend continued, output projections and inflationary pressures would be reduced in the medium term. Keeping the MPR unchanged could be justified by a gradual slowdown and the fact that recent cuts to the MPR were operating. The real depreciation of the peso would contribute to rebalance the sources of growth. The capacity situation of companies was narrow and in some sectors a recovery in inventories was expected. The Board decided to keep the MPR at 4.5%, but reported that in the coming months it could be necessary to add more monetary stimulus to ensure that projected inflation would stand at 3% two years ahead.

In February, external events were still, broadly speaking, consistent with the baseline scenario. However, some of the risks seemed worse, such as the possibility of further growth slowdown in China. External financial markets had shown more volatility given more weakened figures of this economy and a U.S. expansion lower than expected. Domestically, a deceleration in output and demand more intense than estimated in the *Report* had materialized. Inflation showed bounded records despite the significant depreciation of the peso, and expectations were around the target.

The Research Division presented as options to keep the MPR at 4.50% or to cut it to 4.25%. The option of holding it would be sustained because it would allow accumulating more information on output and inflation trends and on the impact of the cuts made to the MPR. Reducing it was consistent with what was stated in the last *Report*. For several quarters, output, and in particular sectors other than natural resources, had grown below their trend, which took pressure off the use of installed capacity and eventually would also be reflected in a relaxation of labor market conditions. Beyond the rise in fuel prices, rising inflation continued to reflect the impact of the peso depreciation on prices of importable goods, which was part of the adjustment process. The second-round effects of these shocks on other prices had been limited and could be expected to remain to the extent that the gaps in factor and final markets continued. Thus, the Board decided to cut the MPR by 25bp to 4.25%.

In March, the external outlook remained largely unchanged, except that the major concern for China had negatively affected the price of copper. Domestically, it was confirmed that output and final demand had grown less than expected. Negative surprises were linked to mining production and investment-related sectors. In addition, there were signs of a slowdown in private consumption, especially durable, consistent with a less dynamic behavior of its fundamentals and a deterioration of consumer confidence. All this pointed to slower growth in 2014 and, consequently, less use of internal resources. February's inflation was surprisingly upward, largely reflecting the impact of the peso depreciation and rising fuel prices. Still, expectations two years ahead remained around 3%.

The Research Division presented as options to keep the MPR at 4.25% or cut it to 4%. Keeping it unchanged could be justified in that it had already fallen by 75bp, credit continued to flow into households and businesses, short- and long-term rates had decreased and the RER stood above its historical averages. At the same time, inflation was around 3%. Lowering the MPR was consistent with the perception that the negative surprise in output and final demand could be more persistent, while the recent surprise in inflation was transitory. This could require a monetary stimulus additional to that foreseen in December, to ensure convergence of inflation to the target. In this context, it was important to continue to monitor that the second round effects remain bounded and aligned with the target. Accordingly, the Board decided to cut the MPR by 25bp to 4% and reported that it would consider the possibility of making additional cuts to the policy rate in line with the evolution of domestic and external macroeconomic conditions, and its implications on the inflationary outlook.

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.

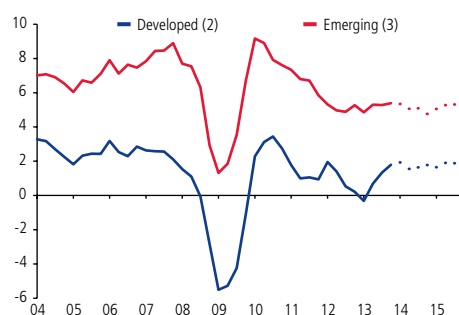
WORLD GROWTH

The outlook for the medium-term international activity shows no major changes from the end of last year and continues to point to a recovery in our trading partners' growth. However, the scenario considers a better performance of the developed world at the hands of U.S. and a gradual recovery in the Eurozone. Meanwhile, for the emerging world a more generalized slowdown is expected in 2014, both for China and for most of this group of economies, with growth below the average of recent years (figure I.1). A better performance of the developed world leads to an upward marginal revision of the growth of Chile's trading partners: one tenth of a point for 2014 and 2015 to 3.7% and 3.9%, respectively (table I.1).

The divergence in the evolution of growth projections between developed and emerging countries is also part of the international risks. On one hand, it is possible that a stronger U.S. recovery occurs, which would have opposite effects in the short and medium term. In the immediate future, negative effects inducing new episodes of volatility and an anticipated increase in interest rates. Over a longer term, it would have positive effects for increased external demand and commodity prices. On the other hand, it is possible that the emerging world outlook deteriorates further. Doubts about the fragility of the Chinese financial system have increased, as has the perception of risk in the emerging world (box I.1). Deterioration in China could lead to first-order effects on emerging economies, both by financial and real channels, with lower commodity prices. Furthermore, vulnerabilities accumulated by some emerging markets could cause new episodes of volatility. Additionally, there is the risk in the Eurozone and geopolitical tensions in Ukraine.

In the last quarter of 2013, the United States grew by an annualized quarterly rate of 2.6%, with a noteworthy contribution of personal consumption and net exports. With this, growth in 2013 reached 1.9%, above the average for the period 2010-2012. Prospects for recovery are based on a lower incidence of fiscal adjustments and a rebound in investment. Indicators for the first quarter have been mixed, although the recent adverse weather conditions could have negatively affected them. On the other hand, information such as job creation, personal income and retail sales were higher than expected by the market, while manufacturing and expectation levels have risen and some discussions on tax matters have been resolved, at least partially.

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



(1) The dotted line plots forecasts starting in the first quarter of 2014.
(2) Includes the United States, the Eurozone, Japan, the United Kingdom, Switzerland and Canada.
(3) Includes Mexico, Brazil, Argentina, Colombia, Ecuador, Peru, Venezuela, Bolivia, China, South Korea and Taiwan.

Source: Central Bank of Chile, on the basis of Bloomberg.

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

	Avg. 00-07	Avg. 10-12	2012 (e)	2013 (f)	2014 (f)	2015 (f)
World at PPP	4.2	4.0	3.1	3.0	3.5	3.8
World at market exchange rate	3.2	3.2	2.5	2.3	2.9	3.2
Trading partners	3.6	4.6	3.4	3.4	3.7	3.9
United States	2.6	2.4	2.8	1.9	2.7	2.9
Eurozone	2.2	1.0	-0.6	-0.4	1.2	1.5
Japan	1.7	2.0	1.9	1.6	1.5	1.1
China	10.5	9.1	7.7	7.7	7.3	7.2
India	7.1	7.1	5.1	4.5	5.4	6.3
Rest of Asia	5.1	5.3	3.8	3.9	4.1	4.5
Latin America (excl. Chile)	3.5	4.5	2.7	2.4	2.3	3.4
Commodity exporters	3.1	2.6	2.5	2.1	2.4	2.7

(e) Estimate.

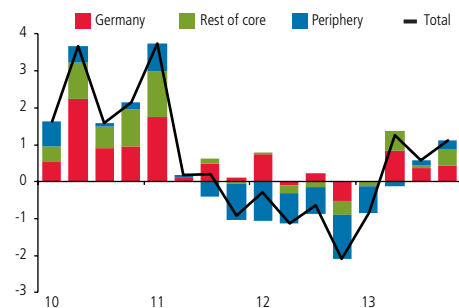
(f) Forecast.

(*) See glossary for definitions.

Sources: Central Bank of Chile, on the basis of a sample of investment banks, Consensus Forecasts, International Monetary Fund and the statistics office of each country.

**FIGURE I.2**

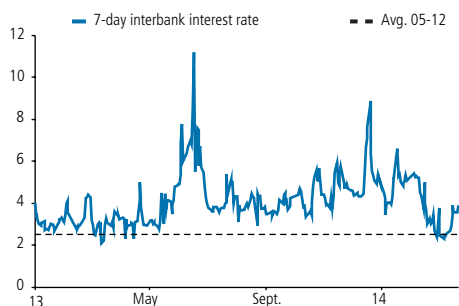
GDP growth in the Eurozone
(annualized quarterly change, percent)



Source: Central Bank of Chile, on the basis of Bloomberg.

FIGURE I.3

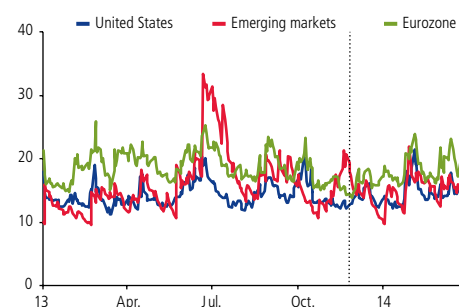
China: interbank interest rate
(percent)



Source: Central Bank of Chile, on the basis of Bloomberg.

FIGURE I.4

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



(1) The vertical dotted line marks the December 2013 *Monetary Policy Report*.

(2) For the United States, the VIX; for the Eurozone, the VSTOXX; for emerging markets, an estimate of the historical volatility of the MSCI index in dollars.

Source: Bloomberg.

The Eurozone is consolidating its gradual exit from recession, growing for the third consecutive quarter: 1.1% annualized in the last quarter of 2013 (figure I.2). Germany continues to contribute significantly to this result and most other members in the area are showing some improvement, even the most affected peripheral economies. However, the unemployment rate remains high and there are still risks associated with public and private leveraging, albeit to a lesser extent. Most recently, some progress in the willingness of authorities to move forward with plans for a banking union has been made. Thus, growth of 1.2% is forecast for 2014, two tenths of a point more than in the previous projection.

In Japan, output in the fourth quarter of 2013 expanded by and annualized quarterly rate of 0.7%, less than expected by the market. This was influenced by a marked reduction in public investment in the period, which is related to the intention of the Japanese government to reduce its high public debt. With the same purpose, an increase in consumption tax from 5% to 8% is scheduled for next April. This could be behind the drop in consumer confidence, which has been partly offset by some improvement in the labor market and a reduction in the unemployment rate. Partial indicators of the first quarter such as retail sales and manufacturing production have exceeded expectations. Manufacturing expectations, in turn, although moderated, remain high. In addition, the monetary authority continues its quantitative easing scheme and will further extend by a year its program to encourage bank lending. The growth forecast for 2014 was raised two tenths of a point to 1.5%, similar to the 2013 figure.

In emerging economies there is more concern about output slowdown, which has become more widespread. Attention has turned to the sources of vulnerability that hinder repeating the growth records of the past three years. In China, GDP grew 7.7% annually in the fourth quarter of 2013 (7.8% in the previous quarter). Most recently, economic activity has slowed and several indicators were lower than expected by the market; retail sales decelerated and consumer expectations moderated, as have housing prices. Industrial production in January and February grew less than previous records and expectations, while exports in February fell sharply and manufacturing expectations are below the pivot indicating expansion. Also, the risks related to its financial system have increased. To the caution regarding the size of credit outside the banks' balance sheets, is added that two companies declared default on their debt, which is not common in this market. Likewise, there is some evidence of solvency problems in some smaller regional banks. The interbank rate has stabilized in recent months, but there has been more volatility and depreciation of the yuan, together with an expansion of the floating band permitted by authorities (figure I.3). The baseline scenario projects growth of 7.3% for 2014, down from 7.7% in 2013.

In the emerging world, the largest correction in the growth forecast occurs in Latin America: 2.3% for 2014, six tenths less than in the previous *Report*. A combination of factors explains this revision. On one hand, a lower fiscal and monetary stimulus in Brazil, weak growth and higher taxes in Mexico, and a slowdown of investment and exports in Peru. On the other hand, growth projections for Argentina and Venezuela suffered significant adjustments for the year, around 2 percentage points less.

INTERNATIONAL FINANCIAL MARKETS

The last few quarters have been marked by increased volatility in international markets, greater risk aversion in the valuation of financial assets and in exchange rate movements (figure I.4). This, in a context combining announcements by the U.S. Federal Reserve (Fed) on its monetary policy, short-term indicators below expectations in some large economies such as China, and geopolitical tensions in Ukraine.

Thus, since the statistical closing of the previous *Report*, the outflow of capital from emerging economies has deepened (figure I.5). Their currencies have depreciated across the board. All this, while the developed world has received capital inflows and their currencies have appreciated. With this, long-term rates continued to rise in emerging economies and, albeit with fluctuations, in developed ones they stand near December levels (figure I.6). In this context, stock prices in developed economies posted marginal increases, and fell in emerging ones (figure I.7).

COMMODITIES

In recent months, commodity prices have had significant movements (figure I.8). Several factors are behind this trend, in particular extreme weather conditions in the northern hemisphere, geopolitical tensions in Ukraine, and growing concerns about China's performance.

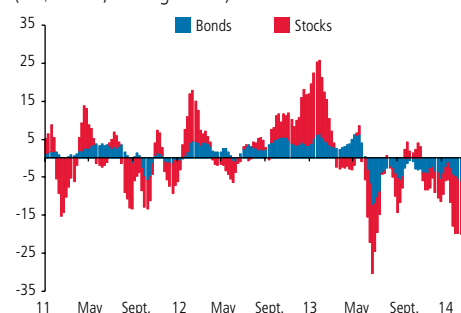
Although with fluctuations, the WTI oil price increased 9% since the statistical closing of the previous *Report*, while the Brent price was practically unchanged. The harder winter in the U.S. and some geopolitical conflicts in the Middle East reduced crude oil production and inventories. In turn, the increase in world growth projections corrected oil demand upward. In line with WTI, gasoline prices rose 4.5%. With the implied futures prices of the last ten working days prior to the statistical closing of this *Report*, a downward trajectory of fuel prices is still forecast, although at a higher level than expected earlier, due to the lagged effect of higher prices for the first half of the year.

Copper prices fell by 5% since December. Since then its value has ranged between US\$3.37 and US\$2.92 per pound, being traded below US\$3 per pound at the closing of this *Report*. This was fundamentally influenced by concerns over the Chinese demand for copper, because its imports of the metal fell most dramatically in February, and also by a moderation of the Chinese manufacturing expectations. Thus, the baseline scenario adjusted copper price projections downward for this and next year to US\$3 and US\$2.85 per pound, respectively.

The price of agricultural products rose 10% between the statistical closing of this and the previous *Report*. After recording a three-year minimum level in late January, prices rebounded sharply. The conflict in Ukraine played an important role because of its relevance as maize and wheat exporter. Also, this was influenced by the prolonged water shortage, lower quality of products in other major exporting countries and higher expected demand.

FIGURE I.5

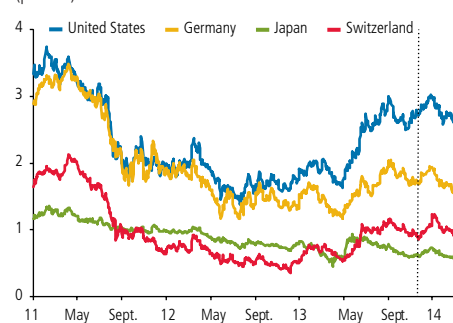
Capital inflows to emerging economies
(US\$ billion, moving month)



Source: Emerging Portfolio Fund Research.

FIGURE I.6

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

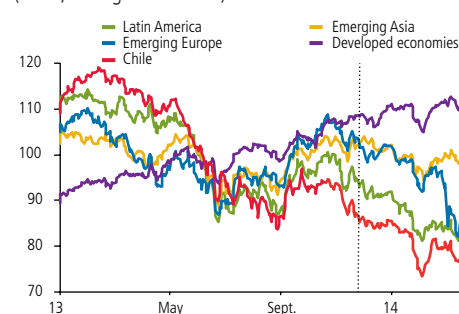


(*) The vertical dotted line marks the December 2013 *Monetary Policy Report*.

Source: Bloomberg.

FIGURE I.7

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



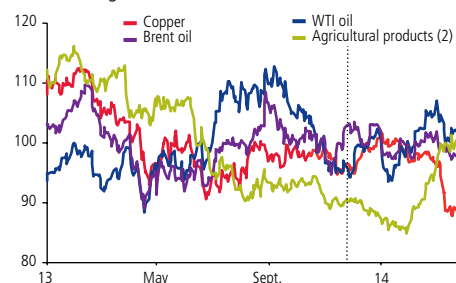
(1) The vertical dotted line marks the December 2013 *Monetary Policy Report*.

(2) Regional stock indices in dollars from Morgan Stanley Capital International. For Chile considers the IPSA measured in dollars.

Source: Bloomberg.

**FIGURE I.8**

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



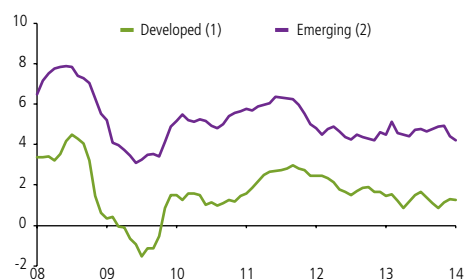
(1) The vertical dotted line marks the December 2013 *Monetary Policy Report*.

(2) Goldman Sachs aggregate index.

Source: Bloomberg.

FIGURE I.9

Regional inflation
(annual change, percent)



(1) Includes the United States, Japan and the Eurozone. Countries weighted by PPP.

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

Source: Central Bank of Chile, on the basis of Bloomberg.

INFLATION AND MONETARY POLICY

In the past six months, headline inflation declined marginally (figure I.9). This was mainly due to low inflation figures in the developed world, in part by persistently large output gaps, the fledgling recovery and the appreciation of their currencies. Thus, inflation expectations for this year have been slightly adjusted downward in these economies. Emerging countries, albeit with higher inflation levels, have also seen decreases in this variable. Nevertheless, expectations have remained stable, as the sharp depreciation of their currencies has contrasted the deceleration of their economies.

In this context, communication of monetary policy in the developed world continues to assert that it will keep benchmark interest rates at minimum levels for a prolonged period. So, in view of a rapid decline in the unemployment rate, the Bank of England changed its "forward guidance", eliminating this variable as the threshold for signaling a possible increase in the monetary policy rate. Similarly, the Fed stated that it will observe a wider range of information and not just the unemployment rate to determine future changes.

Regarding unconventional monetary stimulus, the Fed began in January a gradual reduction of its long-term asset purchase program: US\$10 billion per month, in line with expectations. It also said that only a drastic change in the economic outlook could alter the speed of this withdrawal. The central banks of England and Japan continue with their quantitative easing programs. In the Eurozone, low inflation records have raised expectations that its central bank will implement some additional monetary stimulus. In any case, there is considerable discussion about this possibility.

Regarding monetary policy in the emerging world, in most cases the policy rate remained unchanged. In others, it has been reduced in an attempt to boost activity in the face of ongoing slowdown. However, in some economies that have incubated vulnerabilities in the past and now face high inflation and dependence on external financing, monetary policy has been tightened, in a context of substantial currency depreciations. Moreover, in these countries international reserves have dwindled, reflecting interventions in the foreign exchange market. In other economies, although their policy rate has been lowered, longer-term rates increased suggesting some limitation in the transmission of monetary policy.

BOX I.1

VULNERABILITY OF THE CHINESE FINANCIAL SYSTEM

After the global financial crisis, domestic credit gained significant dynamism in China, as a way to support output growth primarily through investment. In order to promote this channel, lending standards were eased, significantly increasing the amount of funding available. From 2010, some restrictions on the supply of bank loans were reinstated, but credit growth did not yield. In particular, increasing intermediation of funds outside the banking system, known as "shadow banking" is of concern. This box describes the vulnerabilities of the Chinese financial system, as well as some of the palliatives it has available to deal with a crisis.

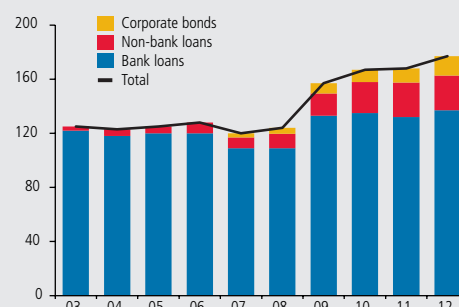
As noted, one of the biggest risks associated with strong credit growth is that an important part has come from shadow banking. While entities and banks' off-balance sheet operations are not new in China, the limits imposed by the authority to the maximum deposit rates and lending restrictions on some sectors of the economy have favored the expansion of these financing instruments which, according to some estimates, accounts for between 15 and 31% of total credit (figure I.10).

This has fostered a number of practices to circumvent financial constraints. On one hand, depositors have invested their funds in financial vehicles that offer higher returns. On the other hand, some sectors have agreed to more costly loans in non-banks with less stringent regulations, which facilitates risk-taking that otherwise would probably be avoided. Most recently, a smaller fraction of companies has declared to be unable to pay, either the principal and/or interest previously committed. Some estimates show that the real estate sector, small and medium-sized enterprises (SMEs), and local governments are the main users of the bank off-balance-sheet loans (figure I.11).

With regard to the real estate sector, the price increase and rising credit since 2008 led the Chinese authorities to impose measures to minimize risks that could lead to a collapse of real estate investment and prices, and their consequent impact on the non-banking credit market. Specifically, increased interest rates for the second home and a rejection of credit for a third one were established. With this, prices stopped their upward trend, although they have rebounded in the last year and a half.

FIGURE I.10
Bank and non-bank debt

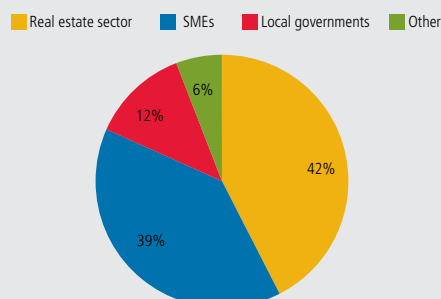
(percent of GDP)



Source: International Monetary Fund.

FIGURE I.11
Recipients of shadow banking

(percent of total credit)



Source: Financial Times (2013).

In SMEs, worth noting is their tendency to finance long-term projects with short-term funds. Stricter rules for non-bank financing could jeopardize operations and liquidity of these borrowers, preventing them from refinancing their loans and favoring bankruptcy. In line with this, a restructuring of the policy toward liberalization of deposit rates would boost the uptake of formal banks and could result in a lack of liquidity in shadow banking, further strengthening reliance on short-term debt.

Finally, the greatest risk in the debt of local governments is their high dependence on non-tax revenue, especially that resulting from the land sales, mostly intended for real estate projects. However, the adoption by the central government of measures to curb the dynamism of this sector became an important factor of concern, due to lower returns on the sale of land. Moreover, the transferability of fiscal responsibilities between central and local governments raises the risk that the latter get into debt beyond their ability to pay, since the central government can cover their obligations. With this, the public debt of China, considering the debt of local governments, is higher than that reported by the official data, which imposes less leeway to the State in case of financial-distress situations.

However, the risks of a financial crisis could be mitigated by several factors. The high involvement of the government in banking reduces the vulnerabilities related with off-balance sheet debt, because it is largely managed by entities controlled by the same banks. The governmental control of these grants implicit guarantees to deposits, giving greater solvency to banks in meeting their obligations. On the other hand, bank financing backed by local deposits and restrictions on capital outflows reduce the threat of potential bank runs. Likewise, fiscal solvency is high compared to international standards, even considering local governments' debt. Ultimately, the high accumulation of international reserves and foreign assets gives room to face adverse financial contingencies (figure I.12).

FIGURE I.12

International liquidity and fiscal solvency (1)
(percent of GDP, 2012)



(1) The number in parentheses on the bars indicates the percentile out of 170 countries.
(2) Public debt including local government debt.

Sources: World Bank and International Monetary Fund.

Nevertheless, given the scale of the Chinese economy, a financial crisis could trigger a sharp slowdown of it and, through real and financial channels, less expansion around the world, especially in emerging economies. In the aggregate, a strong positive correlation between the adjustment of projected growth in China and other emerging economies is observed. Among the latter, Asia stands out due to the fact that its business relationship is mainly through industrial and high technology products, and Latin America, which mainly exports commodities. It is estimated that a fall of one percentage point (pp) in China's growth, reduces output by around 0.25pp in emerging economies ^{1/}.

In addition, financial effects must be considered. It is estimated that a rise in long-term interest rates and risk premiums in the emerging world by an amount equivalent to that observed in most international volatility episodes, would reduce economic growth by a little over 1pp in Latin America ^{2/}. Along this line, Ahuja and Nabar (2012) note that the most affected countries of a slowdown in Chinese investment would be metal exporters with little export diversification.

The real channel would be the main transmission mechanism for Chile, because the lower external stimulus would have both direct effects—less trade with China—and indirect ones, due to slower growth of trading partners, whose tradable sector is highly sensitive to the performance of China, particularly Latin America. In addition, the high weight of copper in exports would significantly deteriorate the terms of trade. Still, should this crisis scenario materialize, the high degree of openness of the Chilean economy would be a mitigating factor, since it opens up space for foreign trade reorientation. On the financial side, an increase in borrowing costs abroad may have less impact, given the fundamentals of the Chilean economy and the policy tools available.

^{1/} See box "China: Current situation and possible effects on the global economy," September 2012 Report.

^{2/} Exercise based on a general-equilibrium model described in Blagrove et al. (2013).

II. FINANCIAL MARKETS

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

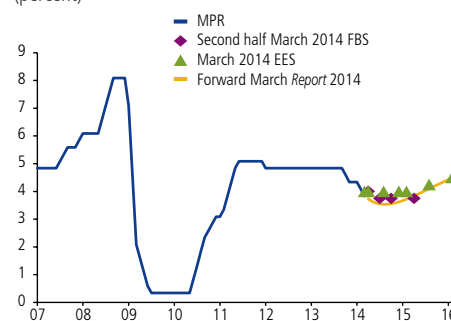
MONETARY POLICY

Data from recent months confirm that the slowdown in domestic activity and final demand has gone beyond projections in the December *Report*, while inflation is around 3%, as are inflation expectations in the projection horizon. On the external front, the biggest change is related to the deterioration of the terms of trade, given the falling price of copper. In recent months, capital outflows from emerging economies and the depreciation of their currencies were significant, although the level of funding premiums is close to where it was at the closing of the last *Report*. Considering the consolidation of the trends described, the Board reduced the Monetary Policy Rate (MPR) at its meetings in February and March, placing it at 4.0% annually, and has stated that it will consider the possibility of making additional cuts depending on the evolution of internal and external macroeconomic conditions, and their implications on the inflationary outlook.

After the Board's communication in January and the MPR reduction in February and March, expectations about the MPR trajectory, especially in the short term, were adjusted downward. Expectations deducted from financial assets prices locate the MPR at levels somewhat below 3.75% in the coming months. In turn, the median of the Financial Brokers Survey (FBS) for the second half of March foresees that the MPR will be lowered to 3.75%, although its distribution shows that a large percentage believes it could hit 3.5%. Meanwhile, the median of the Economic Expectations Survey (EES) of March indicates that the MPR will remain at 4%. As in the FBS, a relevant share of respondents estimated that there could be an additional reduction. Going forward, considering the various expectation measures, the MPR would be somewhere between 3.7% and 4% one year ahead (between 4% and 4.3% in the previous *Report*). Two years ahead, the MPR would be between 4% and 4.8% (between 4.3% and 4.8% in the previous *Report*) (figure II.1 and table II.1).

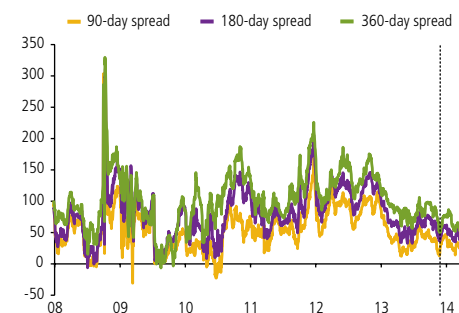
Despite the turbulence in the external financial markets, which particularly affected financial conditions of emerging economies, in Chile both the money and fixed-income markets continued to operate normally, and short-term

FIGURE II.1
MPR and expectations
(percent)



Source: Central Bank of Chile.

FIGURE II.2
Money market spread in pesos (1) (2)
(basis points)



(1) Measured through the average interbank prime-swap spread. See glossary for definition.

(2) The vertical dotted line marks the December 2013 *Monetary Policy Report*.

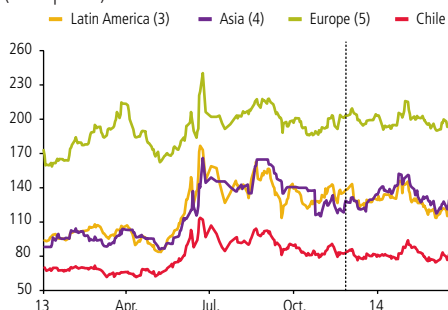
Source: Central Bank of Chile.

**FIGURE II.3**Interest rates on 10-year government bonds (1)
(percent)

(1) The vertical dotted line marks the December 2013 *Monetary Policy Report*.

(2) The median of Brazil, Mexico, Peru and Colombia. For Brazil, the five-year rate is used.

Sources: Central Bank of Chile and Bloomberg.

FIGURE II.4Emerging market spreads (1) (2)
(basis points)

(1) Five-year CDS spreads; simple average of the countries in each region.

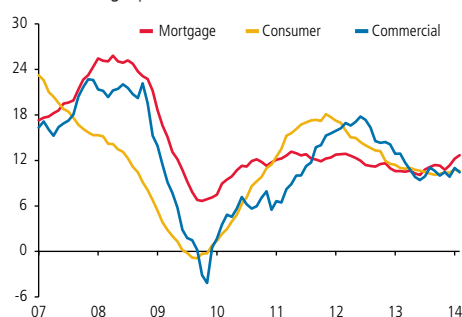
(2) The vertical dotted line marks the December 2013 *Monetary Policy Report*.

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

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

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

Source: Bloomberg.

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

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

TABLE II.1MPR expectations
(percent)

	December 2014		One year ahead		Two years ahead	
	December Report	March Report	December Report	March Report	December Report	March Report
EES (1)	4.25	4.00	4.25	4.00	4.50	4.50
FBS (2)	4.00	-	4.00	3.75	4.25	4.00
Forward curve (3)	4.30	3.78	4.29	4.00	4.80	4.76
Swap contracts (4)	3.99	3.65	3.99	3.72	4.29	4.25

(1) November 2013 and March 2014 surveys.

(2) Survey for the second half of November 2013 and the second half of March 2014.

(3) Constructed using the interest rates on swap contracts up to one year and the interest rates on BCPs.

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

Source: Central Bank of Chile.

interest rates continued to decline. In the money market, interest rates, following a slight increase towards the end of 2013—influenced by seasonal liquidity requirements—continued their downward trend. Thus, from the December *Report*, prime rates, peso rates of publicly traded deposits, and the banks' funding reference rate (TAB) decreased. Meanwhile, spreads between prime deposit rates and swap contracts at different terms, as well as spreads between external and internal foreign currency rates (on shore spread), remained low (figure II.2).

In the fixed-income market, as has been the trend in recent months, rates on Central Bank and Treasury instruments continued to decline, especially at the shorter terms. Thus, with respect to the statistical closing of the previous *Report*, 1- and 2-year BCP rates decreased in the order of 30 basis points (bp), while 5- and 10-year BCP rates increased slightly. The recent increase in nominal rates on longer-term instruments—especially BCP-5—has been influenced by changes in the portfolios of institutional investors towards lower term nominal instruments and indexed instruments. Rates on indexed instruments for 1, 2 and 5 years decreased, the reduction being more pronounced in those at shorter terms. This would also be explained by the short-term inflation surprises in recent months. However, comparing the evolution of long-term government bonds rates, it appears that they have remained relatively stable in Chile with respect to other emerging economies (figure II.3).

FINANCIAL CONDITIONS

Compared with a year back, the external financing conditions for Chile, as for other emerging economies, are less expansionary, but still favorable by historical standards. Amid a volatile international environment, Chile's 5-year sovereign risk premium—measured by the Credit Default Swap (CDS)—, has fairly unchanged from the previous *Report* and is below the average of other emerging economies. This, beyond its increase seen early this year, which fell back afterwards (figure II.4). Meanwhile, spreads on loans contracted by

Chilean banks abroad declined slightly from the previous *Report*. The banking system, on average, shows limited foreign debt (around 9% of its total assets).

The local banks' lending standards, for both individuals and companies, have shown no significant changes from the closing of the previous *Report*. In February, consumer loans increased by around 11% annually (10% in October) and their average interest rates remained fairly unchanged. Mortgage loans increased their annual expansion to nearly 13% in February (11% in October), while interest rates in this segment fell slightly (about 10bp) (figure II.5). In the Bank Lending Survey (BLS) of December, banks indicated that they restricted to some degree the lending conditions for consumer loans with respect to September. In turn, no changes in the demand for such loans were noted, while in the mortgage segment they perceived lower demand (figure II.6).

Annual growth in commercial loans remained virtually flat at around 10% between October and February. Interest rates fell about 30bp in the same period. The BLS of December continued to report tighter conditions for this segment, particularly for construction and real estate companies, while conditions for SMEs remained unchanged from September. On the demand side, banks continued to perceive a weakening in loan requests from real estate companies, while both large companies and SMEs continued to expand their demand for credit. The information collected from different sectors and regions under the *Business Perceptions Report* coincides in that no significant changes were seen in financial terms to companies, but agrees that in late 2013 financial background checks by banks became more stringent.

In terms of other sources of funding, bond issuance in the past six months by non-financial companies, both in local and foreign markets, was greater than in the first part of 2013 (figure II.7). Moreover, the external financing conditions remain favorable in historical terms.

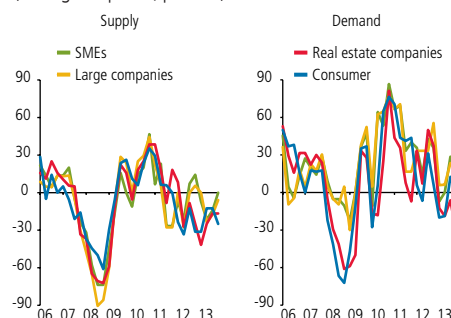
As for monetary aggregates, the information available to February shows that both M1—mostly composed of non-remunerated banking liabilities—and M3, slightly reduced their annual growth rate: 12.4% and 12.8%, respectively (13.9% and 13% in November). Meanwhile, M2, increased its growth rate to 13.3% annually (12.8% in November), particularly in term deposits.

FINANCIAL MARKETS

The local impact of increased volatility of international markets has been mainly on the stock and foreign exchange markets.

In recent months, the volatility of global stock exchanges was influenced by announcements and decisions of the Federal Reserve of the United States (Fed) relating to the tapering, short-term activity indicators lower than expected in some large economies like China, and geopolitical tensions in Ukraine. The latter has had different impacts on different economies, the hardest hit being the emerging European stock exchanges. With respect to the closing of the previous *Report*, stock markets of developed economies, as measured by the

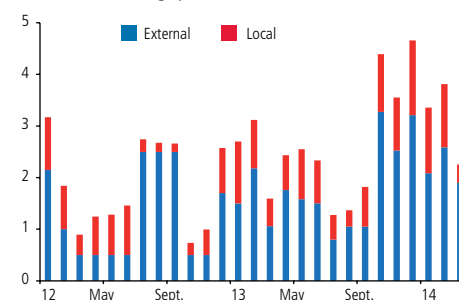
FIGURE II.6
Bank Lending Survey (*)
(average response, percent)



(*) Average response by quarter. Negative (positive) values tighter (looser) conditions than in the immediately prior quarter.

Source: Central Bank of Chile.

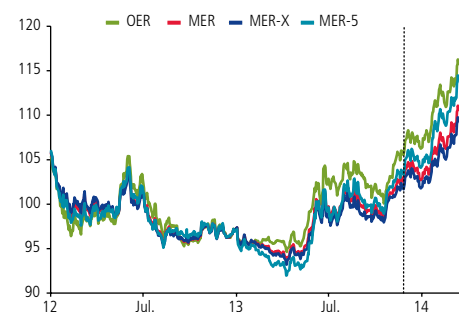
FIGURE II.7
Bond issues by non-financial corporations (*)
(Cumulative moving quarter, US\$ billion)



(*) Figure for March 2014 includes data through the 26th.

Source: Central Bank of Chile, on the basis of data from Bloomberg and the Santiago Stock Exchange.

FIGURE II.8
Nominal exchange rate (1) (2)
(index 03.Jan.11 - 26.Mar.14=100)



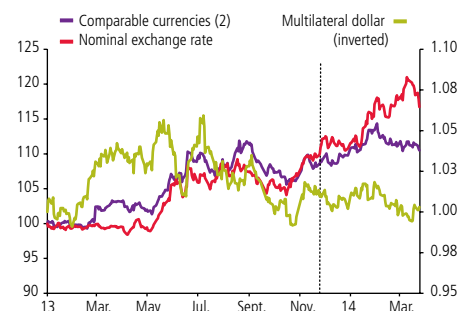
(1) See glossary for definitions.

(2) The vertical dotted line marks the December 2013 *Monetary Policy Report*.

Source: Central Bank of Chile.

**FIGURE II.9****Nominal exchange rate (1)**

(index 02.Jan.13=100)



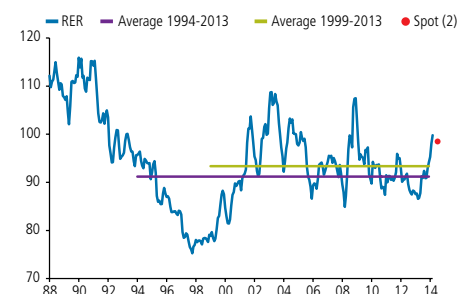
(1) An increase indicates depreciation.

(2) Brazil, Mexico, Colombia, South Korea, Philippines, South Africa, Czech Republic, Turkey, Israel and Poland. Weights are from the WEO (October 2013).

Sources: Bloomberg and International Monetary Fund.

FIGURE II.10**Real exchange rate (1)**

(index 1986=100)



(1) Figure for March 2014 includes data through the 26th.

(2) The RER is calculated using effective exchange rates on 26 March 2014.

Source: Central Bank of Chile.

MSCI index in local currency, increased on average by 1.9% (2.2% in dollars). Meanwhile, emerging markets declined on average 4% in local currency (5.8% in dollars). However, so far this year, similar movements of stock exchanges in different regions are observed (figure I.7).

In Chile, the stock exchange, as measured by the selective stock index IPSA, fell 2.6% in local currency and 10.4% in dollar terms, comparing the averages at the closing of this and the previous *Report*. Its behavior has been influenced by both the external factors mentioned above and elements of the local market, including its regional exposure in Latin America.

In the currency market, the peso depreciated significantly (figures II.8 and II.9). In the previous *Report*, the peso/dollar parity stood around US\$520, while at the closing of this *Report* it stood over US\$550, though in the meantime it went to close to US\$575 for a few days. In a floating exchange rate scheme like Chile's, it is not evident how to exactly explain movements in parities, but fluctuations in the exchange rate have been consistent with macroeconomic developments and the monetary policy.

The nominal depreciation of the peso has also resulted in an increase in the real exchange rate (RER). Considering the level of the nominal exchange rate and the parities prevailing at the closing of this *Report*, the average RER for March would be at 99.8 with base 1986=100. However, the nominal appreciation on the days prior to the statistical closing makes the spot RER lower (figure II.10). The baseline scenario in this *Report* uses as a methodological assumption that the RER will remain near its current levels, since it now stands within the range of values that are considered consistent with its long-term fundamentals.

III. OUTPUT AND DEMAND

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

SECTORAL ACTIVITY

In recent months, output continued to slow its expansion pace (figure III.1). This process was also more intense than forecast in the *Monetary Policy Report* of December. As measured in annual terms, GDP growth, in the last quarter of 2013, was the lowest in the year: 2.7% (an average of 4.6% between first and third quarter). Anyway, this rate showed considerable ups and downs throughout the year, mainly due to fluctuations in the natural resources sectors, which decelerated substantially in the last quarter. Nevertheless, the sustained slowdown shown by the rest of the sectors during 2013 was sharper in the second half of the year, particularly in investment-related industries (table III.1 and figure III.2). Partial data for the first quarter suggest that these have remained weak.

In the last quarter, the slower growth of the rest of the sectors—other than natural resources—was greatly caused by a poorer performance of investment-related industries, which have slowed down consistently with the cyclical progress of this expenditure component. Although wholesale and retail trade persisted as one of the expansion drivers of this group, its growth moderated drastically by late 2013. This was mainly due to a sharper deterioration of the wholesale subsectors related to investment. Preliminary indicators for the first quarter show their performance is still low and this couples with slower growth in retail sales. In turn, during the last quarter of 2013, construction evidenced practically no y-o-y change, after having expanded near 4% until the third quarter. Manufacturing industry continued to behave weakly, particularly in its investment-oriented lines. However, some productive export lines have improved lately (figure III.3). Other significant reductions took place in the hotels and restaurants, and transport industries; while the rest of the service sectors showed mixed and milder changes in their expansion rates.

Regarding the natural resources industries, mining grew by an annual 2.1% in the last quarter, which is lower than the rest of the year (an average of 7.7% between first and third quarters). The expansion of this sector in 2013 was shaped mainly by the technical and operating improvements in copper mining. Volumes of copper exports dropped by 1.9% annually in the fourth quarter of 2013 (+18.2% in the third quarter). At the beginning of this year, these exports

FIGURE III.1
Monthly Indicator of Economic Activity-Imacec
(annual change, percent)



Source: Central Bank of Chile.

TABLE III.1
Gross domestic product (1)
(share of GDP; real annual change, percent)

	Weight		2013				
	2013	2012	I	II	III	IV	2013
Agriculture, livestock and forestry	2.7	-2.0	6.0	3.2	4.5	3.9	4.7
Fishing	0.4	5.2	-14.7	-12.2	-10.1	-14.2	-12.7
Mining	11.1	3.8	9.8	3.9	9.4	2.1	6.1
Manufacturing	10.5	3.4	0.0	-0.4	2.8	-1.3	0.2
EGW	2.8	7.6	4.2	7.5	6.8	10.3	7.3
Construction	7.8	7.0	4.2	4.4	4.3	0.2	3.2
Trade	8.5	8.4	8.9	7.5	8.1	4.6	7.2
Restaurants and hotels	1.7	4.8	3.6	3.3	4.6	0.7	3.0
Transportation	3.9	5.5	4.2	3.1	4.7	1.0	3.2
Communications	2.0	8.9	6.8	5.3	4.0	3.7	4.9
Financial services	4.7	11.3	7.7	5.8	5.1	3.6	5.5
Business services	14.4	6.2	3.0	3.6	3.3	4.0	3.5
Housing services	5.1	2.9	3.4	3.4	3.4	3.4	3.4
Personal services (2)	11.3	4.1	4.1	3.3	3.2	3.7	3.6
Total GDP	100.0	5.4	4.9	3.8	5.0	2.7	4.1
Other GDP (3)	77.1	5.5	4.1	3.6	4.3	2.7	3.7
Natural resources GDP (3)	14.4	4.4	8.1	3.9	8.4	2.9	5.7

(1) Preliminary figures.

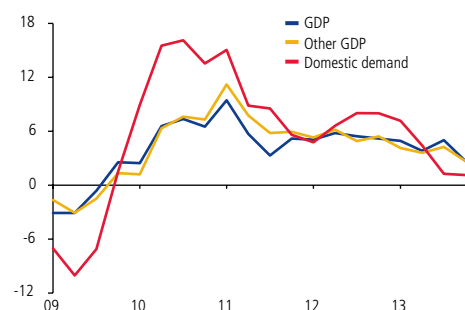
(2) Includes education, health and other services.

(3) See glossary for definitions.

Source: Central Bank of Chile.

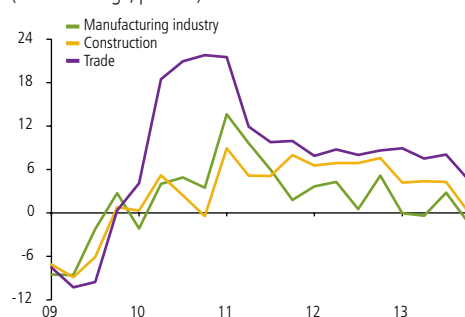


FIGURE III.2
GDP and domestic demand
(annual change, percent)



Source: Central Bank of Chile.

FIGURE III.3
Sectoral activity
(annual change, percent)



Source: Central Bank of Chile.

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

	Weight		2013					
	2013	2012	I	II	III	IV	2013	
Domestic demand	100.3	6.9	7.2	4.4	1.3	1.1	3.4	
Domestic demand (excl. change in inventories)	100.0	7.1	6.1	7.1	3.7	0.4	4.2	
Gross fixed capital formation	23.6	12.2	8.2	10.2	-1.5	-12.3	0.4	
Construction and engineering works	15.2	9.0	4.8	4.5	4.0	0.0	3.3	
Machinery and equipment	8.4	17.4	14.0	20.1	-8.3	-28.5	-4.2	
Total consumption	76.4	5.6	5.4	6.1	5.4	4.6	5.4	
Private consumption	64.0	6.0	5.7	6.4	5.4	4.9	5.6	
Durable goods	6.6	12.2	14.5	15.9	12.8	11.3	13.5	
Non-durable goods	26.4	4.9	5.1	7.0	5.7	4.7	5.6	
Services	31.1	5.6	4.5	4.2	3.6	3.8	4.0	
Government consumption	12.4	3.7	3.4	4.6	5.6	3.1	4.2	
Change in inventories (2)	0.3	1.2	1.4	0.7	0.2	0.4	0.4	
Goods and services exports	32.6	1.1	1.1	6.4	11.3	-0.9	4.3	
Goods and services imports	32.9	5.0	7.0	8.1	0.5	-5.3	2.2	
Total GDP	100.0	5.4	4.9	3.8	5.0	2.7	4.1	

(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.

lost strength, coincidentally with the port strike; however, once the strike came to an end, exports have recovered somewhat. The fishing industry continued its downward path in the last quarter of 2013, hand in hand with a reduced fish catch and a lower performance of salmon crops. In contrast, the electricity, gas and water sector (EGW) improved its performance, driven by the use of lower-cost inputs for upstream electricity.

Consequently, 2013 ended with annual 4.1% GDP growth. The baseline scenario projects that GDP will grow between 3% and 4% in 2014, lower than forecast in December (between 3.75%-4.75%). The Economic Expectations Survey's outlook has also been adjusted downwards in the last few months: 3.7% in March (4.1% in November).

DOMESTIC DEMAND

Incoming data since the last *Report* show that the slowdown of final demand—which excludes inventories—worsened during the second half of 2013. As measured in annual terms, it reduced its variation to 0.4% in the last quarter (3.7% in the third quarter and 6.6% on average in the first half of the year). Consistent with the general trend, the reduced dynamism stemmed mainly from investment, while moderation of consumption has followed a more gradual path. Considering the greater buildup of inventories compared to the third quarter, domestic demand continued to expand around 1% annually (table III.2).

The annual growth rate of investment turned even more negative in the fourth quarter of 2013, driven primarily by machinery and equipment. Apart from the exceptionally high basis for comparison recorded by capital goods in the last quarter of 2012, this behavior is largely compatible with the maturation of the mining investment cycle exhibited over the past few years. Therefore, the level of capital goods imports dropped during 2013 and this reduction ceased at the beginning of this year. Given the recent stabilization of this component, the negative annual growth rates are expected to lessen in the near future. Stock market information (IPSA), which shows a certain degree of anticipation to performance of capital goods imports, also suggests a recovery of this component at the margin (figures III.4 and III.5).

The construction and works component also had a lower performance in the fourth quarter. Likewise, this drop is largely attributable to normalizing growth rates of investment, consistent with the maturation of their cycle, and to the temporary or permanent suspension of several energy and mining projects, as already indicated in previous *Reports*. The lower forecasts for the copper price reinforce this trend. Thus, the December survey from the Capital Goods Corporation (CBC) lowered its estimate for investment in construction and engineering works for the last quarter of 2013 and the first part of 2014. Data gathered from different economic sectors in our business perception report *Informe de Percepciones de Negocios* (IPN) do not report any relevant investment initiatives for said period. Still, the CBC survey raised the investment projections for this year as a whole and, to a greater extent, for 2015-2016, due to the inclusion of housing projects. This increased momentum arises from the high levels that are being sustained by housing sales, which remained relatively

stable in the last quarter of 2013, as per their different measurements. On top of this, relevant financial conditions remain favorable. The Bank Lending Survey (BLS) for the fourth quarter showed no changes in the conditions for granting mortgage loans, although it indicates a certain fall in demand for this type of funds. However, the y-o-y change of these loans has risen in recent months.

Other construction-related indicators continued to weaken, in line with the sharper slowdown of this industry. Employment in this industry reduced its y-o-y expansion down to 5% in January, which is lower than the rate prevailing until the third quarter of last year. Sales of cement and concrete continued to deteriorate in the last months of 2013. Business confidence in the industry, as per the Indicator of Business Confidence (IMCE), remains in the negative area and has even decreased as compared to the previous *Report* (figure III.6). The Bank Lending Survey (BLS) reflects that the demand for loans by real estate companies has slowed down, while such demand by construction companies has strengthened, though mainly due to a substitution of sources of credit. On the supply side, financial conditions for these companies once again were tightened.

Unlike investment, private consumption has evidenced a more gradual slowdown. In the last quarter of 2013, it rose by 4.9% after having increased by an average of 5.8% during the previous three quarters. However, the sharpest adjustment was seen in the consumer goods component, both in its services and non-durable portions, although the latter has shown some fluctuations in recent months. As to durable consumer goods, preliminary first-quarter data on the car sector show a lower dynamism, particularly a declining y-o-y variation of car imports and sales (figure III.7). This was also reflected in a reduction in expectations about the right timing for purchases of cars (Economic Perception Index, IPEC) and a rise in perception of inventories (business confidence indicator, IMCE) in this industry in the past few months.

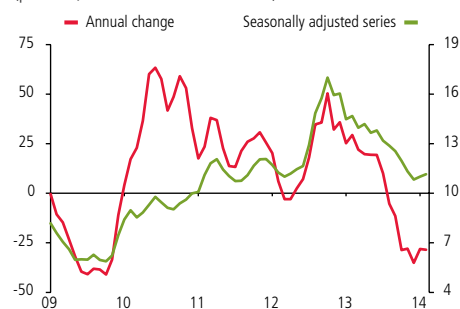
The gradual easing of private consumption has been consistent with fundamentals, growing at rates which are lower than those of the recent past. However, they remain at favorable levels, particularly labor income, growing at a somewhat slower pace, and unemployment rate, remains at a historically low level. Financial conditions do not evidence major changes, at least in terms of interest rates and credit growth. Notwithstanding the above, other indicators reflect a weaker support to this component of demand, particularly, rebalancing of employment, with higher self-employment at the expense of formal jobs. Vacancy figures have decreased, in line with a slower pace of job creation (figure III.8). The IPN report evidences that the labor market is showing some signs of greater gaps in certain industries and regions. According to these sources, this has translated into less difficulty in finding workers and reduced upward pressures on wages. Moreover, the BLS showed tighter lending standards for consumer loans in the fourth quarter.

Changes in inventories recovered in the fourth quarter and accumulated 0.4% of GDP in the last moving year (0.2% at the third quarter), and this ratio had an upward correction for the previous quarters as disclosed in the latest National Accounts figures. The perception of the desired inventory level, as per the seasonally adjusted Indicator of Business Confidence (IMCE), reflects an

FIGURE III.4

Capital goods imports (*)

(percent; hundreds of US\$ million)



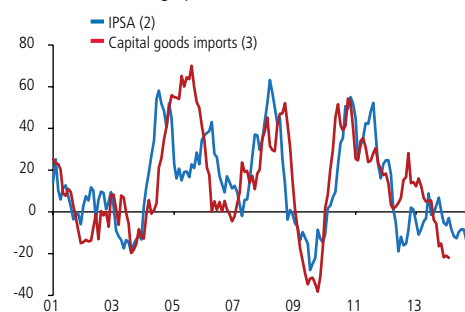
(*) Quarterly moving average.

Source: Central Bank of Chile.

FIGURE III.5

Capital goods imports and IPSA (1)

(nominal annual change, percent)



(1) Quarterly moving average.

(2) Nine months in advance.

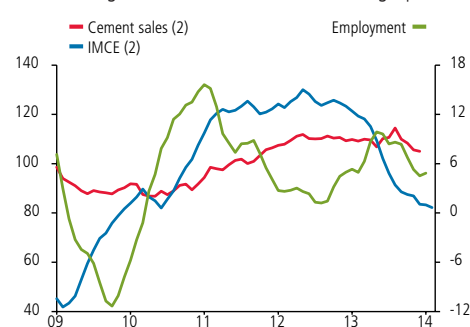
(3) Capital excluding transportation. Excludes airplanes and other uncommon transport vehicles (trains, helicopters, ships).

Sources: Central Bank of Chile y Bloomberg.

FIGURE III.6

Construction sector (1)

(index average 2009-2014 = 100; annual change, percent)



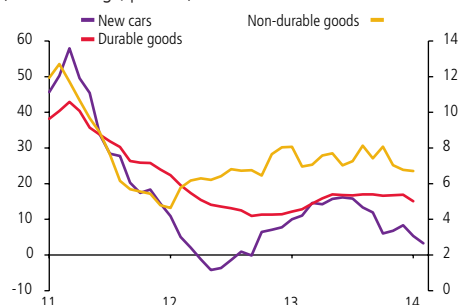
(1) Quarterly moving average.

(2) Seasonally adjusted series.

Sources: Icare/Universidad Adolfo Ibáñez, Instituto del Cemento y del Hormigón de Chile and National Statistics Institute (INE).



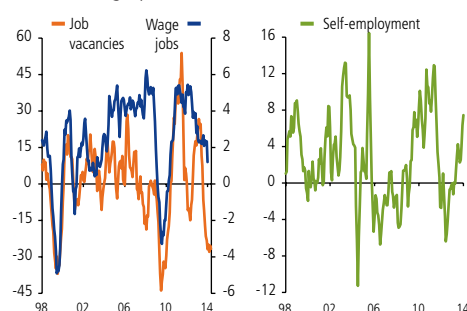
FIGURE III.7
Retail and new car sales (*)
(annual change, percent)



(*) six-month moving average.

Sources: National Car Association of Chile and National Statistics Institute (INE).

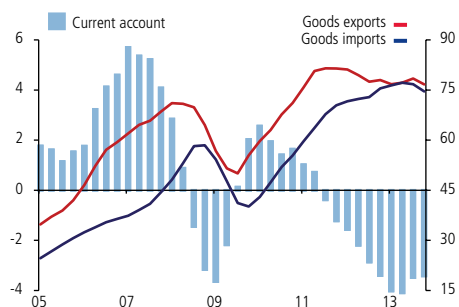
FIGURE III.8
Job vacancies and employment (*)
(annual change, percent)



(*) Original series are spliced maintaining historical variations.

Source: National Statistics Institute (INE).

FIGURE III.9
Current account and trade balance (*)
(percent of GDP; billions of dollars)



(*) Accumulated in a moving year.

Source: Central Bank of Chile.

increase in the manufacturing industry in recent months, while in wholesale and retail trade it remained high; both figures above the level considered as adequate.

The national savings rate dropped to 20.5% of GDP in 2013 (21.7% in 2012). This is largely explained by lower savings by the government. External savings remained at 3.4% of GDP. Regarding the total investment to GDP ratio, it fell to 23.9% in 2013 (25.1% in 2012), in nominal terms. On an industry basis, the greater adjustment was done to private fixed investment—particularly, mining and energy—accompanied by lower inventory buildup.

CURRENT ACCOUNT

The current account deficit slightly decreased during the last part of 2013. Thus, in the fourth quarter, it accumulated a negative balance of US\$2,430 million, equal to a 3.4% of GDP in the past moving year (3.5% in the third quarter) (figure III.9). This result was US\$247 million higher than in the same period in 2012. The difference was greatly attributable to the US\$447 million increase in the trade balance in said period. The reduced deficit pressures on the latter are consistent with the slower growth in domestic demand and imports of capital goods, which situation prevailed until the second half of the year. The baseline scenario projects that the deficit will increase to 3.6% in 2014. In this scenario, the expected reduction of the price of copper for the year more than offsets the slower expected growth of domestic demand and imports. This means that, as measured at trend prices, the deficit will drop again, coming closer to 3% of GDP (4% in 2013).

In the current juncture, emerging economies have evidenced a high level of cumulative deficit in their current accounts in recent years. In this context, the narrowing of Chile's current-account deficit in the past few quarters has contributed to reducing this risk as a source of external vulnerability.

IV. PRICES AND COSTS

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

RECENT INFLATION TRENDS

In recent months, annual CPI inflation rose back to around 3% (figure IV.1). This reversal towards 3% has been faster than forecast in the previous *Report*, mainly due to the rise in the price of fuels and in the exchange rate. The impact of the peso depreciation on other prices in the CPI basket was in line with forecasts. Core inflation —CPIEFE, that is, CPI less prices of energy and foodstuffs— shows a y-o-y variation under 3%, with no major differences as compared to the December forecast (table IV.1). In this scenario, inflation expectations towards the end of the projection horizon remain consistent with the target, while in the short term, they have been corrected slightly upwards.

TABLE IV.1
Inflation indicators (1) (2)
(annual change, percent)

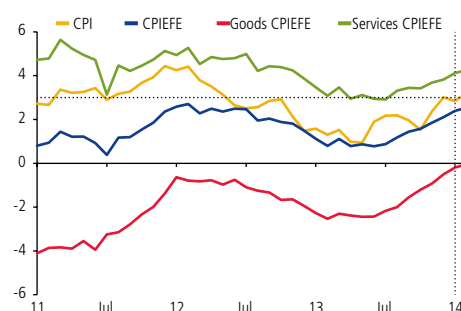
	CPI	CPIEFE	Tradable CPI	Non-tradable CPI	Goods CPI	Services CPI
2011 Avg.	3,3	1,3	2,2	4,8	2,1	4,8
2012 Jan.	4,2	2,6	3,6	5,1	4,0	4,6
Feb.	4,4	2,7	3,6	5,4	4,0	4,9
Mar.	3,8	2,3	3,0	4,7	3,7	3,9
Apr.	3,5	2,5	2,4	5,0	3,5	3,5
May	3,1	2,4	1,9	4,7	2,4	4,0
Jun.	2,7	2,5	1,0	4,8	1,8	3,6
Jul.	2,5	2,5	0,6	4,9	1,6	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
Nov.	2,4	1,8	1,3	3,7	1,4	3,5
Dec.	3,0	2,1	2,4	3,8	2,5	3,7
2014 Jan.	2,8	2,4	1,9	4,1	2,0	3,7
Feb.	3,2	2,5	2,4	4,3	2,6	3,9

(1) See glossary for definitions.

(2) Starting in January 2014, calculations are based on the new indices with base year 2013=100, so they may not be strictly comparable with earlier figures.

Source: National Statistics Institute (INE).

FIGURE IV.1
Inflation Indicators (1) (2)
(annual change, percent)

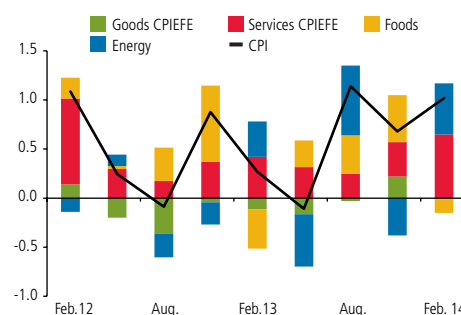


(1) See glossary for definitions.

(2) Starting in January 2014, calculations are based on the new indices with base year 2013=100, so they may not be strictly comparable with earlier figures.

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

FIGURE IV.2
Contribution to monthly CPI inflation (*)
(accumulated in three months, percentage points)

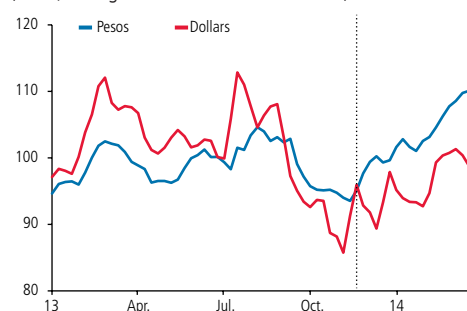


(*) For the last column (December 2013 to February 2014), calculations are based on the new indices with base year 2013=100, so they may not be strictly comparable with earlier figures.

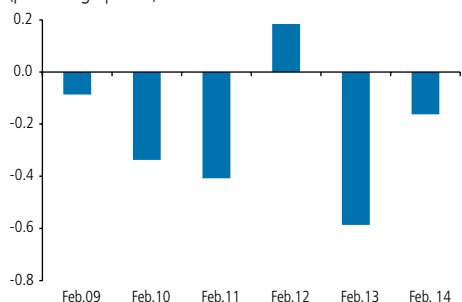
Sources: Central Bank of Chile and National Statistics Institute (INE).

FIGURE IV.3
Weekly gasoline prices (*)

(index, average 07.Jan.13–24.Mar.14=100)


(*)The vertical dotted line marks the December 2013 *Monetary Policy Report*.

Source: National Energy Commission.

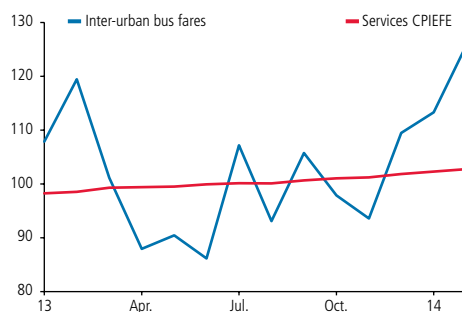
FIGURE IV.4
Contribution of fresh fruits and vegetables to monthly CPI inflation, November to February (*)


(*) For the last column, calculations are based on the new indices with base year 2013=100, so they may not be strictly comparable with earlier figures.

Source: National Statistics Institute (INE).

FIGURE IV.5
Inter-urban bus transportation services

(index 2013=100)



Source: National Statistics Institute (INE).

As from January this year, the National Statistics Institute (INE) updated the basket of goods and services that it used to measure the change in the CPI. As usual, this change updates the average family's spending pattern. On one hand, this means a change in weighting factors and the inclusion and/or deletion of goods and services in the basket. On the other hand, it also considers changes in the measuring method (box IV.1). For the purposes of computing the annual changes considered in this chapter, the same as in previous basket changes, the analysis is based on the benchmark basket 2013=100.

The evolution of the monthly inflation from December 2013 through February 2014 was mainly determined by the prices of the services included in the CPIEFE and of energy (figure IV.2). The latter had a greater contribution in said period, due to the already mentioned increase in the external price of gasoline and the increase in the peso/dollar parity (figure IV.3). Perishable and non-perishable foods reduced inflation in these months, unlike what was observed at the closing of the former *Report*. Anyway, this negative contribution was milder than usual, given the seasonal variation of fruits and vegetables in summer, due to the effect of the drought, diseases and frost affecting certain crops (figure IV.4).

The CPIEFE accumulated a month-on-month variation similar to the previous three months, not so its components. The inflation of services in this indicator increased its contribution due to the rise in the prices of interurban transport caused by the seasonal effect of the year-end celebrations, combined with the increase in its costs caused by the rise of fuel prices in pesos in recent months (figure IV.5). On the other hand, the goods CPIEFE inflation reduced its contribution as compared with September, October and November combined, and it even accumulated a slightly negative incidence. The drop in prices of wearing apparel and footwear derived from end-of-season sales was partially thwarted by the rise in prices of new cars derived from exchange rate increases.

In terms of the annual incidence by group, CPIEFE for food and services continued to contribute positively to annual inflation, though at a greater degree. However, as from January, the increase in this last item could be reflecting its higher weight in the new basket. In turn, energy showed a positive incidence, unlike its behavior in October. The CPIEFE goods represented practically no contribution to annual inflation, in contrast with the previous *Report*, when its annual incidence was negative (figure IV.6).

The increase in annual inflation in the past few months can be attributable to certain specific and transitory factors. In the case of energy, annual growth was greater than in 2013, due to the above mentioned behavior of fuels (figure IV.7).

Another factor underlying the rise in annual inflation is the increase in some prices included in the CPIEFE for goods. As noted, the contribution of this item grew from negative to nearly zero. Part of this behavior could be attributable to its higher weight in the new basket and to the depreciation of the peso. In the fourth quarter of 2013, prices in pesos of imported consumer goods increased from the previous quarter. This is partly explained by the depreciation of the peso, since prices in dollar terms remained relatively stable, with ups and downs (figure IV.8).

Moreover, annual inflation of CPIPEE services has also increased, from 3.4% to 4.3% annual benchmark between October and February, mainly due to the base effect of the stamp tax rebate in January 2013.

Foodstuffs also showed an increased y-o-y variation. This is can be attributable to the evolution of prices of fruits and vegetables, which in the last few months fell less than they normally do in the summer season. Besides, the price of meat has risen slightly as a result of higher international prices and the exchange rate increase. The y-o-y variation of the Producer Price Index (PPI) of the agriculture item—which only includes prices of domestic goods and services—has increased since mid last year. As of February, its annual growth was 35.1% (26.1% in October 2013, an average 8.3% in the first half of 2013). In turn, the contribution of non-perishable foods is now smaller than it was at the statistical closing of the previous *Report*. Thus, the path of future prices at the global level was revised upwards from the *Report* of December, mainly due to geopolitical tensions in Ukraine and worsened weather climatic conditions in the U.S. and Brazil.

Inflationary pressures arising from the cost of labor have moderated as compared with the previous *Report*. Real wages reduced their y-o-y variation rate, consistently with the increase in inflation and, as of January, they range from 2.7% to 3.2%, depending on their volume (between 3.8% and 4.3% in September) (figure IV.9). This is consistent with the data gathered through our business perceptions report *Informe de Percepciones de Negocios* (IPN), which shows, in different sectors and regions in the country, a not-so-tight labor market as compared with previous periods. This change is quite incipient in the opinion of most respondents, but it has at least stopped the upward pressure on wages. Real unit labor costs have continued on their declining path, while the annual growth rate of nominal wages has remained practically unchanged.

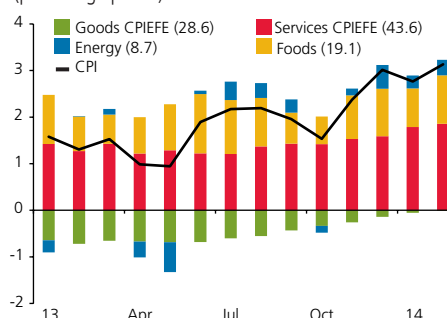
Margins, as per different measurements, have evidenced a certain compression at an aggregate level and at some specific sectors as well. Unlike the previous *Report*, the relationship between the CPIPEE and the unit labor cost as adjusted by productivity has dropped in recent months.

INFLATION OUTLOOK

As already mentioned, private expectations in the medium term have remained around 3%. On the other hand, they have been revised upwards in the short term, mainly due to the increased price of gasoline in external markets and the depreciation of the peso (figure IV.10).

Private expectations for inflation two years ahead have remained at 3%, as per the Economic Expectations Survey (EES). In turn, the Financial Brokers Survey (FBS) rose from 2.8 to 3.0% between late November and late March. At a one-year term, the EES rose to 3.0% (2.8% in the previous *Report*) and the FBS to 3.0% (2.5% in December's *Report*). Expectations derived from surveys of consumers and companies also show increases, although mild ones.

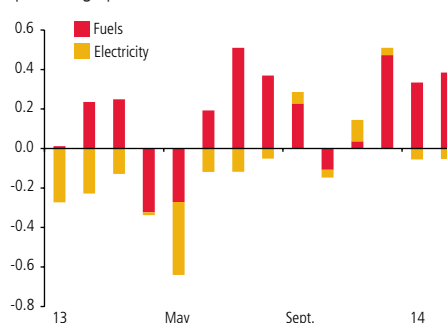
FIGURE IV.6
Contribution to annual CPI inflation (1) (2)
(percentage points)



(1) Share in the new CPI basket is in parentheses.
(2) Starting in January 2014, calculations are based on the new indices with base year 2013=100, so they may not be strictly comparable with earlier figures.

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

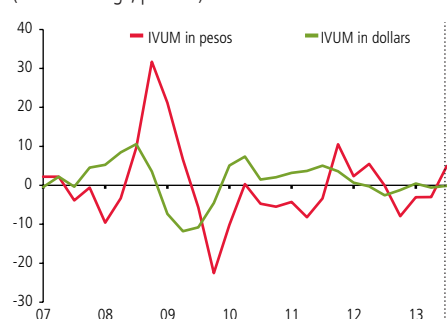
FIGURE IV.7
Contribution of energy to annual inflation (*)
(percentage points)



(*) Starting in January 2014, calculations are based on the new indices with base year 2013=100, so they may not be strictly comparable with earlier figures.

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

FIGURE IV.8
Prices of imported consumer goods
(annual change, percent)

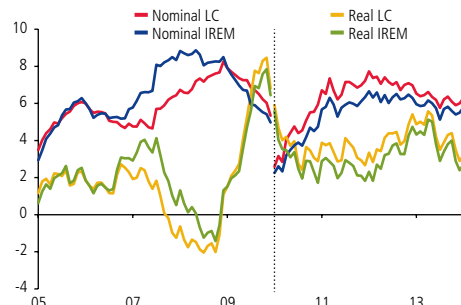


(*) The vertical dotted line marks the December 2013 *Monetary Policy Report*.

Source: Central Bank of Chile.

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

(annual change, percent)



(1) Starting in January 2014, calculations are based on the new indices with base year 2013=100, so they may not be strictly comparable with earlier figures.

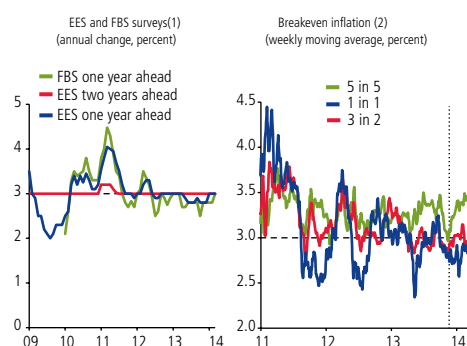
(2) See glossary for definitions.

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

The expected one-year inflation of the Monthly Business Confidence Index (IMCE) rose to 3.2% in February (3.0% in December's *Report*). The percentage of people who think that inflation will "rise a lot in the next twelve months", as measured by the Economic Perceptions Index (IPEC), remained practically unchanged, although with fluctuations.

At different terms, the breakeven inflation rate derived from the average interbank swap rate has ranged from 2.9% to 3.4% (2.8% to 3.0% in the December *Report*).

In the baseline scenario, the Board estimates that the y-o-y variation of the CPI will increase transitorily towards figures between 3.5% and 4%^{1/}. In the immediate term, this increase reflects the direct pass-through of the peso depreciation towards prices of goods and services. The baseline scenario assumes that the reduced use of installed capacity, as inferred from the behavior of output, will mitigate inflationary pressures and propagation of the direct effects of depreciation. Thus, as from the end of 2014, headline inflation should return to figures closer to 3%, where it will remain until the end of the projection horizon, i.e., the first quarter of 2016. Core inflation shall fluctuate around 3% throughout said horizon.

FIGURE IV.10**Inflation expectations**

(1) The FBS corresponds to the survey for the first half of the month, except for March 2014, which corresponds to the second half.

(2) Forward breakeven inflation based on swap rates. The vertical dotted line marks the December 2013 *Monetary Policy Report*.

Source: Central Bank of Chile.

^{1/} In the projections included in this *Monetary Policy Report*, annual inflation based on the benchmark basket 2013=100 is considered.

BOX IV.1

THE NEW CPI BASKET

In January this year, the National Statistics Institute (INE) started to measure the CPI with a new basket and a new computation method, based on 2013=100. This box describes the main changes in the new measuring method and some of its possible implications on the inflation estimate. The projections and analysis included in this *Report* use annual inflation as measured based on benchmark basket 2013=100.

Since 2009, in compliance with international recommendations and as one of the commitments undertaken with the OECD, the CPI basket is updated every five years. Basically, this reduces the biases that gradually appear in measuring the CPI when consumers' preferences and relative prices change.

One of the major aspects regarding the composition of the new basket is that the weight of the expenditure in services has been raised and expenditure in goods, reduced. By groups, education, healthcare and alcoholic beverages increased their relevance. Importance of food has been raised as well, albeit to a lesser extent. Additionally, the number of items included in the new basket has been brought from 368 down to 321, among which are 16 new products (table IV.2).

When comparing the new weighting factors with those that were implicit⁷ in the former basket, there have been no big changes, except for an increased weight of the wearing apparel and the recreation and culture categories, and a decreased weight of transport and food.

Changes have also been made to the computation method. For instance, the new method leaves aside all re-settlements of regulated services, because they affect the income level of households, not the price level for regulated utilities. Regarding education services, changes in value shall only be disclosed in March, when the service starts to be rendered, instead of December and March as it used to be. For measuring prices of electronic appliances, hedonic models are now used to better capture changes in quality. Finally, the methodological change that has been applied to wearing apparel since July 2013 will continue to be used and, for comparison purposes, it will be applied to the complete benchmark year (2013).

It is still too early to assess the inflationary dynamics resulting from this new method for measuring the CPI as compared to the old method. However, some preliminary conclusions may already be drawn.

TABLE IV.2
New and old weights, by division
(percent)

Division	2009	Division	2013
Foods and non-alcoholic beverages	18.9	Foods and non-alcoholic beverages	19.1
Alcoholic beverages, tobacco and drugs	2.0	Alcoholic beverages, tobacco and drugs	3.3
Clothing and footwear	5.2	Clothing and footwear	4.5
Lodging, water, electricity, gas and other fuels	13.3	Lodging, water, electricity, gas and other fuels	13.8
Furniture, housewares and regular home maintenance	7.5	Furniture, housewares and regular home maintenance	7.0
Health	5.4	Health	6.4
Transport	19.3	Transport	14.5
Communications	4.7	Communications	5.0
Recreation and culture	7.5	Recreation and culture	6.8
Education	6.0	Education	8.1
Restaurants and hotels	4.4	Restaurants and hotels	4.4
Miscellaneous goods and services	5.8	Miscellaneous goods and services	7.2

Source: National Statistics Institute (INE).

⁷ The implicit weighting factor of CPI is equal to the fixed weighting adjusted to the relative price change of said weighting of total CPI; thus making it possible to measure the final incidence of each component of the CPI change in a given period.

Regarding the changes in implicit weighting factors, it should be noted that the new basket includes weighting factors which are smaller than those implicit in the old basket (table IV.3). Therefore, any sudden changes in these prices should have milder effects on the month-on-month inflation. In contrast, this involves an increase in the weighting of the services component of the CPIPEF, which, theoretically, would imply a greater persistence of inflation, given the dynamics inherent to prices of services.

TABLE IV.3

New and old weights, by CPIPEF breakdown
(percent)

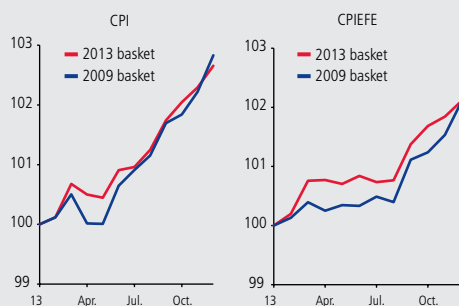
		Base 2009, 2009=100 weight 2009	Implicit weight 2013 (base 2009)	New base 2013=100 weight 2013
CPIPEF		72.4	69.4	72.3
	Goods	33.3	27.1	28.6
	Services	39.1	42.3	43.6
Foods		18.9	21.1	19.1
	Fresh fruits and vegetables	2.9	3.7	2.9
	Other	16.0	17.4	16.1
Energy		8.7	9.5	8.7
	Electricity	2.7	2.0	2.7
	Fuels	6.0	7.6	6.0

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

A further issue involves the changes in the benchmark basis during 2013. Although variations accumulated during last year are practically identical in both baskets (2009 and 2013), a change in the profile of inflation can be seen (figure IV.12).

FIGURE IV.12

Comparison of CPI and CPIPEF by basket for 2013
(base index, January 2013 = 100)

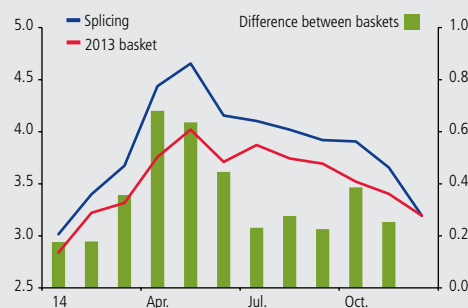


Sources: Central Bank of Chile and National Statistics Institute (INE).

The new benchmark basket does not include the monthly April and May volatility from re-settlements derived from changes in electricity rates, which will in turn bear an impact on the profile of the y-o-y variation of inflation during the second quarter. Monthly projections based on inflation hedging insurance show that the differences between both computation methods intensify in the second quarter, and they gradually disappear towards year end, when the y-o-y variation is computed based on the same basket (figure IV.13). The main factor underlying said difference in the second quarter is the methodological change in the treatment of re-settlements.

FIGURE IV.13

Annual CPI inflation in 2014 (*)
(annual change, percent)



(*) Constructed on the basis of monthly changes, except for March to December 2014, which use inflation insurance on 18 March 2014.

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

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.

BASELINE PROJECTION SCENARIO

In the baseline scenario, the international context facing the Chilean economy will be less favorable than it has been in past years. Compared with the latest *Report*, the normalization of the terms of trade will occur somewhat faster than was thought in December, due to the sharp decline in the copper price. Meanwhile, financial conditions and world growth are fairly unchanged from December (table V.1).

The 2014 growth outlook for emerging economies has been adjusted further downward, while risks have increased, especially regarding the performance of China. The baseline scenario foresees the Chinese economy growing 7.3% this year. The largest revision to growth projections are in Latin America: 2.3% for 2014, six tenths of one point less than in the previous *Report*. This is explained by the effects of the consolidation of the Chinese slowdown plus some idiosyncratic factors. In particular, the weaker fiscal and monetary stimulus in Brazil, poor growth and higher taxes in Mexico and a slowdown in investment and exports in Peru. There is also the downward adjustment of growth for Argentina and Venezuela, of the order of two percentage points this year.

By contrast, prospects for developed economies have improved. In the baseline scenario, U.S. growth is up one and two tenths of one point in 2014 and 2015, respectively. For the Eurozone and Japan, the revision amounts to two tenths for 2014 and one for 2015. Considering the whole of the changes described and their relative weights, the projection for our trading partners' growth is revised upward by one tenth of a point, to 3.7% in 2014 and 3.9% in 2015.

As already noted, the biggest adjustment in the external scenario affects the terms of trade. In the past year, commodity prices have fluctuated substantially. In some products, however, such as metals, demand factors have dominated, triggering a significant drop in both actual and expected prices. This is the case of copper that, coinciding with the higher risk perceived on the performance of the Chinese economy, dropped to less than US\$3 per pound as of the close of

TABLE V.1
Economic growth and current account

	Average 00-07	Average 10-12	2013	2014 (f)	2015 (f)
	(annual change, percent)				
Terms of trade	8.2	4.1	-3.2	-0.9	-1.1
Trading partners' GDP (*)	3.6	4.6	3.4	3.7	3.9
World GDP at PPP (*)	4.2	4.0	3.0	3.5	3.8
World GDP at market exchange rates (*)	3.2	3.2	2.3	2.9	3.2
Developed economies' GDP at PPP (*)	2.6	1.9	1.1	2.1	2.2
Emerging economies' GDP at PPP (*)	7.4	5.9	4.5	4.6	5.0
External prices (in US\$*)	4.6	5.2	0.3	0.3	0.7
	(levels)				
LME copper price (US\$/lb)	154	367	332	300	285
WTI oil price (US\$/barrel)	44	90	98	96	88
Brent oil price (US\$/barrel)	42	101	109	106	101
Gasoline parity price (US\$/m ³) (*)	367	742	785	777	733
Libor US\$ (nominal, 90 days)	3.6	0.4	0.3	0.3	0.7

(*) For definitions, see glossary.

(f) Forecast.

Source: Central Bank of Chile.

TABLE V.2
International baseline scenario assumptions

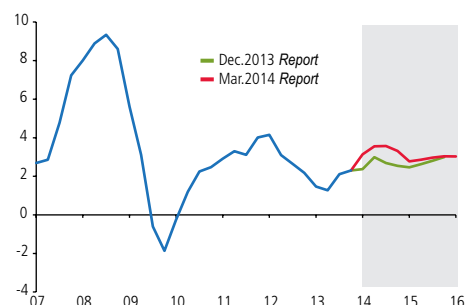
	2012	2013	2014 (f)
	(annual change, percent)		
GDP	5.4	4.1	3.0-4.0
National income	4.6	3.4	3.3
Domestic demand	6.9	3.4	3.3
Domestic demand (w/o inventory change)	7.1	4.2	3.3
Gross fixed capital formation (GFCF)	12.2	0.4	0.8
Total consumption	5.6	5.4	4.1
Goods and services exports	1.1	4.3	3.2
Goods and services imports	5.0	2.2	2.4
Current account (% of GDP)	-3.4	-3.4	-3.6
National savings (% of GDP)	21.7	20.5	19.5
GFCF (% of nominal GDP)	24.0	23.6	23.1
GFCF (% of real GDP)	26.8	25.8	25.2
	(US\$ million)		
Current account	-9,081	-9,425	-9,520
Trade balance	2,508	2,131	900
Exports	77,965	76,674	74,800
Imports	-75,458	-74,544	-73,900
Services	-2,276	-2,903	-2,250
Rent	-11,503	-11,079	-10,200
Current transfers	2,191	2,426	2,030

(f) Forecast.

Source: Central Bank of Chile.

FIGURE V.1

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



(*) Gray area, as from first quarter 2014, shows forecast.

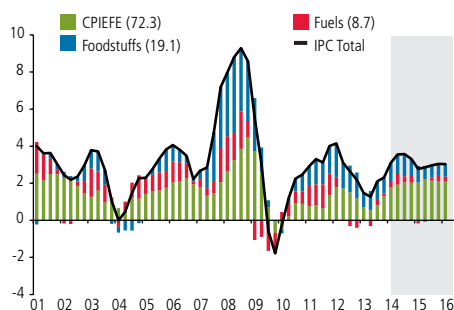
Sources: Central Bank of Chile and National Statistics Institute (INE).

this *Report*. Furthermore, prospects suggest that it will converge to its long-term levels faster than previously forecast. This marks a difference with oil, where supply factors have prevailed in the market, leading it to surpass the price projected in December. However, its trajectory continues to be downsloping throughout the projection horizon. Thus, the baseline scenario assumes that average prices will be lower for copper and higher for oil, so Chile's terms of trade will be adjusted faster than was expected in the last *Report*.

The baseline scenario foresees that GDP will grow between 3.0% and 4.0% in 2014 (table V.1). This range is below the December forecast. The main factor behind this correction is the slowdown that began in late 2013 and is visible in the data from earlier this year, especially in the investment-related components of output and demand. Another factor is the upward correction of the previously known inventory levels, which implies that this source of growth will provide a lower impulse. Accordingly, the expansion of domestic demand is also reduced for 2014: 3.3% (4.8% in December). The annual variation of gross fixed capital formation (GFCF) is estimated at around 1% (4.1% in December), driven by the significant downward adjustment of the machinery and equipment component. The baseline scenario also revises down consumption, though not as sharply as investment. So, private consumption is still foreseen to post a moderate slowdown. This is in line with fundamentals that are growing less than they did in the recent past, such as labor income, but which remain favorable. Thus, the total investment rate will reach 23.1% of nominal GDP and national savings will amount to 19.5% of GDP.

FIGURE V.2

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



(1) Gray area, as from first quarter 2014, shows forecast.

(2) In parentheses, shares in CPI basket.

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

The larger-than-expected reduction in machinery and equipment investment also results in the current account deficit projected for 2014 falling somewhat below the December forecast: 3.6% of GDP (3.7% in December). There is also the impact of the real peso depreciation causes on net exports. However, the deficit foreseen for this year is somewhat larger than in 2013. This is the result of the reduction in the copper price expected for the year, which more than offsets the expected drop in the growth of domestic demand and imports. This implies that, measured at trend prices^{1/}, the deficit will decrease further, approaching 3% of GDP.

In the baseline scenario, in 2014 the economy will grow less than in 2013 and below trend, which the Board continues to estimate at around 5%. This trajectory considers a stabilization of investment levels, resulting from a number of converging elements. On one hand, the CBC survey shows an increase in investment in engineering works planned for the second half of 2014 and for the period 2015-2016. On the other, housing construction growth will keep the pace of last year, as the supply remains low, home sales are stable and financial conditions (i.e. credit cost and volume) remain favorable. It is also expected that the implementation of the 2014 fiscal budget will be more in line with historical patterns, implying an increase in public expenditure compared to 2013, especially in investment. Likewise, imports of machinery and equipment have stabilized in recent months. In addition, the somewhat higher growth

^{1/} This calculation considers revisions to prices, not volumes. Long-term prices of US\$2.85 per pound of copper and US\$82 per barrel of oil are assumed.

of trading partners and the depreciation of the real exchange rate will also boost non-mining exports. Finally, there is the effect of the increased monetary stimulus that has been added to the economy.

As for inflation, the baseline scenario assumes that y-o-y CPI variation will increase temporarily to a 3.5% to 4% range^{2/}. In the immediate future, this increase reflects the direct pass-through of the peso depreciation to the prices of goods and services. In the baseline scenario, it is considered that the reduction in installed capacity utilization, that can be inferred from the behavior of economic activity, will mitigate inflationary pressures and the propagation of the direct effects of the depreciation. Thus, already at the end of 2014, headline inflation will come closer to 3%, where it will stay until the end of the projection horizon, the first quarter of 2016. Core inflation will hover around 3% over this same horizon (figures V.1 and V.2, and table V.3).

Aside from the already mentioned trajectories foreseen for domestic growth and the external scenario, this projection uses as a working assumption that nominal wages will be adjusted in line with productivity and the inflation target. It also includes as a methodological assumption that the real exchange rate (RER) will remain near its current values, since it is now within the range of values that are considered consistent with its long-term fundamentals. Finally, the baseline scenario uses as working methodological assumption that the policy rate will follow a path comparable to what can be inferred from the prices of financial assets prevailing at the close of this *Report* (figure 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 downward biased for output and unbiased for inflation (figures V.4, V.5 and V.6).

Abroad, one first risk has to do with the behavior of emerging economies, especially China. The latter risk has been present in several *Reports* already and has recently been exacerbated because of growing doubts posed by the fragility of the Chinese financial system and the overall increase in the risk perception of the emerging world. In particular, a deterioration in the Chinese economy would have first-order effects on Chile and the group of emerging economies, spreading through both real and financial channels. Of particular importance is its impact on the prices of commodities, including copper, as well as on the growth of other important trading partners such as Latin American countries. Moreover, it cannot be ruled out that the vulnerabilities that some emerging economies have accumulated may generate new episodes of volatility.

^{2/} The forecasts included in this *Report* use annual inflation based on the 2013=100 reference basket.

TABLE V.3

Inflation

	2013	2014 (f)	2015 (f)	2016 (f)
	(annual change, percent)			
Average CPI inflation	1.8	3.4	2.9	
December CPI inflation	3.0	3.0	3.0	
CPI inflation in around 2 years (*)				3.0
Average CPIPE inflation	1.2	2.7	3.0	
December CPIPE inflation	2.1	2.8	2.9	
CPIPE inflation in around 2 years (*)				2.9

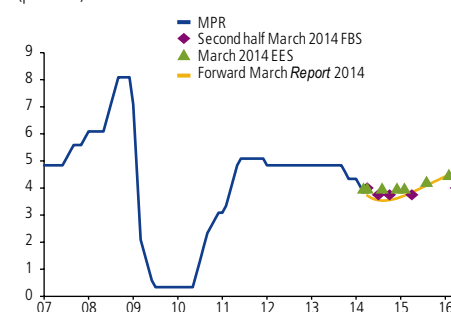
(f) Forecast.

(*) Inflation forecast at the first quarter of 2016.

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)

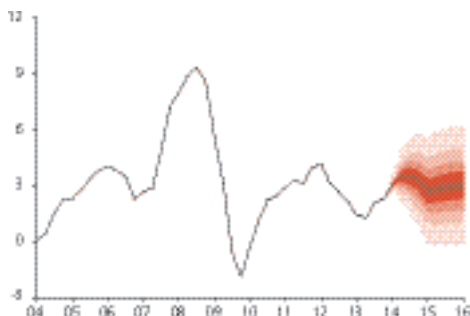


(*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% around the baseline scenario are included. These intervals summarize the risks on growth as assessed by the Board. The baseline scenario uses as a working methodological assumption that the policy rate will follow a path comparable to the one that can be inferred from the financial asset prices prevailing at the statistical cutoff date of this *Report*.

Source: Central Bank of Chile.

**FIGURE V.5**

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

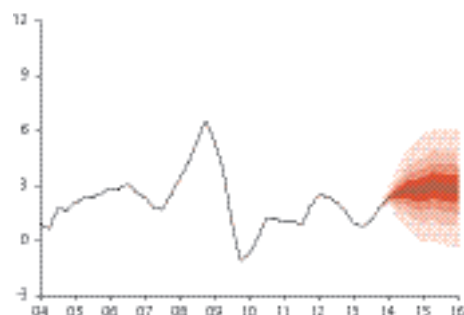


(*)The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% around the baseline scenario are included. These intervals summarize the risks on inflation as assessed by the Board. The baseline scenario uses as a working methodological assumption that the policy rate will follow a path comparable to the one that can be inferred from the financial asset prices prevailing at the statistical cutoff date of this Report.

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 core inflation as assessed by the Board. The baseline scenario uses as a working methodological assumption that the policy rate will follow a path comparable to the one that can be inferred from the financial asset prices prevailing at the statistical cutoff date of this Report.

Source: Central Bank of Chile.

It is also possible for the recovery process in the U.S. to end up being stronger than expected. The timing of its effects shows different signs. In the short term, the anticipated normalization of the monetary stimulus could lead to a worsening of financial conditions for the emerging world, inducing new episodes of volatility as in recent quarters. Going forward, the effect of increased external demand and higher commodity prices would prevail, with positive effects on economies like Chile that have solid fundamentals. Overall, the risk associated with the complex fiscal and financial situation in the Eurozone is still present, and moreover, heightening of geopolitical tensions in Ukraine could affect commodity prices, as well as confidence in Europe.

At the local level, an important part of the economic slowdown of recent quarters is due to a drop in investment. The baseline scenario assumes that this phenomenon will not deepen and for some components it will even be reversed. But there are risks, particularly since the drop in investment in late 2013 was sharper than expected. For example, it is possible that, due to its natural inertia, investment may remain weak for longer than foreseen. Another risk is that a deterioration of the global economy may pull down the copper price below its long-term level, deferring new projects and slowing economic growth.

Still locally, inflation of recent months, like the projections included in the baseline scenario, show limited pass-through of the peso depreciation to prices, in line with economic fundamentals. The consolidation of the inflation-targeting regime and the economic slowdown restrict the degree of propagation to final prices, wages and expectations, so the recent rise in inflation is believed to be transitory. However, it is necessary to watch for second-round effects to make sure they remain contained, particularly considering that margins have narrowed in some sectors due to increases in costs, such as energy, and that the labor market situation remains relatively tight.

The macroeconomic scenario shows economic slowdown beyond projections of a few months back, with inflation hovering around 3%. The external short-term outlook for Chile is less favorable than it was a year ago. In addition, further doubts have emerged regarding the performance of some of the big economies, especially China. In this context, the Board has enhanced the monetary stimulus, lowering the MPR by 100 basis points over the past six months. The Board will consider the possibility of making additional cuts to the policy rate in line with the evolution of domestic and external macroeconomic conditions and its implications on the inflationary outlook. At the same time, it reiterates its commitment to conduct monetary policy with flexibility, so that projected inflation stands at 3% over the policy horizon.

BOX V.1

PASS-THROUGH OF EXCHANGE RATE TO PRICES

During recent months, the peso has depreciated substantially. As it is typical of periods involving sudden changes in exchange rates, it is important to examine the extent of their impact on short- and medium-term inflation. Most recently, CPI annual inflation returned to 3% faster than expected, mainly as a consequence of higher external prices of fuel and an increased exchange rate. This depreciation passed through to the rest of the prices as expected and inflation expectations have remained at 3% over the policy horizon. The baseline scenario considers that this pass-through effect will continue to be limited and inflation, regardless of a transitory rise towards the highest portion of the tolerance range, will stand around 3% during most of the projection horizon. However, there are risks in both directions that could modify this pass-through process. This box analyzes the values observed for the exchange rate to prices pass-through ratio, its evolution in time and its relationship with the economy conditions.

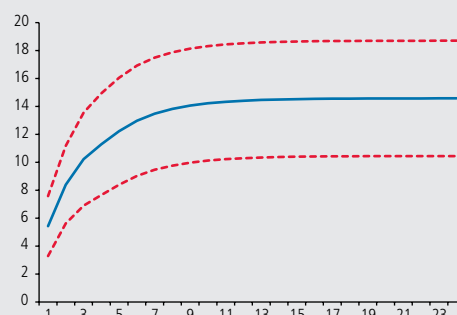
To start with, exchange rate flexibility is highly desirable in economies such as the Chilean one, where real shocks are frequent, for instance, in the terms of trade. Changes in the exchange rate help adjust relative prices, so as to make the necessary corrections in the allocation of resources, reducing the impact on output and employment. When a real shock merits a currency depreciation, its effects are magnified if the channel through which the exchange rate is being adjusted does not operate. Therefore, in a floating scheme, the exchange rate gains importance as an adjustment mechanism, which allows certain freedom to conduct the monetary policy.

Conceptually, the impact a currency depreciation on the CPI primarily reflects how the related effects pass through to the value of imported goods and, subsequently, to the value of the other goods and services included in the basket, as a consequence of direct (higher imported costs) or indirect effects (a change in inflation expectations or wage adjustments). The extent of these effects depends on structural aspects—such as the openness degree of the economy, business practices and monetary policy scheme—and on cyclic aspects: causes of the depreciation, state of gaps and margins, growth prospects and inflation level. For example, a depreciation induced by a drop of the terms of trade or by a weakening of the domestic demand will have less inflationary effects than one caused by an increase in external interest rates derived from an increased dynamism of the global economy. Likewise, if the monetary policy lacks credibility, foreign exchange movements may directly pass through not only to the prices of imported goods, but also to

the prices of locally manufactured goods, thereby generating generalized price changes and a greater pass-through effect.

For Chile, Bertinatto et al. (2014) estimate that the average pass-through ratio to the total CPI is between 0.1 and 0.2 in the medium term (figure V.7). As to the effect on core CPI (CPIEFE), the pass-through ratio is somewhat below 0.1 in the medium term (figure V.8). This lower effect as to the total CPI is attributable to the exclusion of the price of fuels in computing the CPIEFE. Regarding both the CPI and the CPIEFE, the effect of an exchange rate movement takes around three or four quarters to pass through to prices completely.

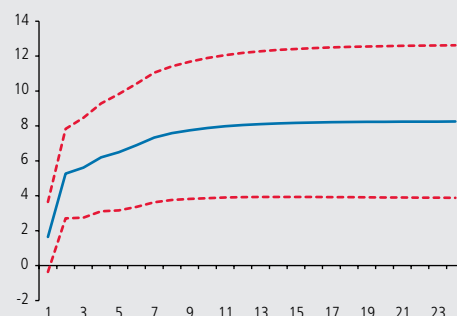
FIGURE V.7
Pass-through coefficient for the exchange rate to total CPI (*)
(percent)



(*) The accumulated effect on the CPI of a permanent change of 100% in the nominal exchange rate. The horizontal axis indicates the number of months.

Source: Bertinatto et al. (2014).

FIGURE V.8
Pass-through coefficient for the exchange rate to core CPI (*)
(percent)

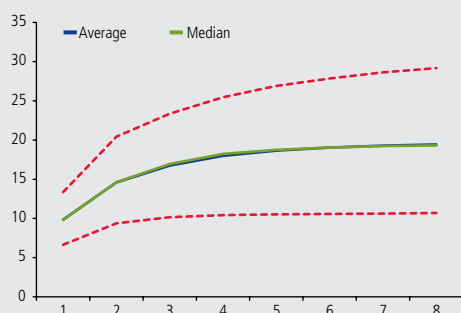


(*) The accumulated effect on the core CPI (CPIEFE) of a permanent change of 100% in the nominal exchange rate. The horizontal axis indicates the number of months.

Source: Bertinatto et al. (2014).

Computation through other estimation methods produces similar values. For example, estimations of the general equilibrium model (MAS) of the Central Bank show that the medium-term average ratio ranges from 0.15 to 0.20, but it varies according to the causes of the related depreciation (figure V.9). Other estimations based on the breaking down the pass-through effect into imported goods, domestic tradables, and non-tradables, produce values between 0.1 and 0.3. In all events, these estimations constitute benchmark values presenting relevant confidence intervals, as well as determinants that must be taken into account in developing projections.

FIGURE V.9
Pass-through coefficient for the exchange rate to total CPI (*)
(percent)



(*) The accumulated effect on the CPI of a permanent change of 100% in the nominal exchange rate. The horizontal axis indicates the number of quarters.

Source: Bertinatto et al. (2014).

Evidence for Chile shows declining pass-through coefficients over time. The estimation of the coefficient using sample windows shows that it began declining in the 2000s, and is currently below its levels prevailing in the 1990s (figure V.10).

FIGURE V.10
Pass-through coefficient for the exchange rate to total CPI in moving windows (*)
(percent)



(*) The accumulated effect on the CPI of a permanent change of 100% in the nominal exchange rate.

Source: Bertinatto et al. (2014).

The reasons for this change mainly arise from institutional factors: essentially, from the implementation of medium-term inflation targeting scheme and the policy of exchange rate flexibility. Mishkin (2008) reports similar results on a global basis, which is attributable to the consolidation of a low-inflation global scenario. However, some factors can make the pass-through ratio different. Firstly, estimations show that the pass-through effect is not the same with appreciations and depreciations of the peso; in fact, it is more sensitive to the latter. Neither is it linear, since more (less) considerable movements in the exchange rate imply a higher (lower) pass-through effect.

There are also other factors that may condition the extent of this pass-through, particularly: the current state of output gaps, the persistent or transitory nature of the foreign exchange movement and the exchange rate volatility. In this sense, the greater (smaller) the gaps, the smaller (greater) the pass-through effect. If the exchange rate movement is perceived as a persistent one, the pass-through effect will be greater. An assessment of a sample of countries confirms that the institutional factors are determinants of the size of the pass-through coefficient. Countries with inflation targeting schemes evidence a lower pass-through effect. Likewise, the more developed the economy, the milder the pass-through.

In short, evidence in Chile shows that the pass-through of the exchange rate to total inflation gradually decreased as the inflation targeting scheme was consolidated. However, there are risk factors on its magnitude. Firstly, it is conditioned by the size of output gaps, whose estimation is uncertain. In the current scenario, the output evolution has been different from the labor market situation, where unemployment is low by historical standards. A tighter labor market could encourage a greater propagation of temporary inflationary pressures through wages. The information from surveys on employment and vacancies, and from the IPN, shows that labor market tightening of some months ago has been easing.

The propagation of the effects of the peso depreciation to inflation is a relevant factor for the Board's decisions. An adequate operation of the inflation targeting scheme should allow accommodating a currency depreciation without durable consequences on the behavior of inflation, while keeping medium-term expectations aligned with the target.

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GLOSSARY

Average interbank interest rate swap (*promedio cámara*): Derivatives contract between two parties, who carry out an exchange of flows at future dates, between a fixed rate established when the contract is written and a variable rate (fixed-for-floating swap). The variable rate corresponds to the average interest rate in the interbank clearing house (*cámara*), which in turn is derived from the average clearing house index.

Commodity exporters: Australia, Canada and New Zealand.

CPIEFE: CPI excluding food goods and energy prices, leaving 72.3% of the total CPI basket.

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

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

GDP, natural resources: includes the following sectors: electricity, gas and water (EGW); mining; and fishing.

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

Global depositary notes (GDN): A debt security that emulates the terms and conditions of its underlying local fixed-income assets. GDNs are issued, held in custody and traded overseas, while the underlying assets are held in custody in the local market.

Growth of trading partners: The growth of Chile's main trading partners, weighted by their share in total exports over two moving years. The countries included are the destination for 93% of total exports, on average, for the 1990–2012 period.

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

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

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

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

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

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

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

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

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

MER: Multilateral exchange rate. A measure of the nominal value of the peso against a broad basket of currencies, weighted as for the RER. For 2014, the following countries are included: Argentina, Belgium, Bolivia, Brazil, Canada, China, Colombia, France, Germany, Italy, Japan, Mexico, Netherlands, Paraguay, Peru, South Korea, Spain, Switzerland, United Kingdom and United States.

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

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

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

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

VIX: Stock volatility index calculated by the Chicago Board of Trade, and the most commonly used measure of general market volatility at the international level. Measures the implicit volatility in S&P 500 options contracts.

World growth at market exchange rate: Each country is weighted according to its GDP in dollars, published in the IMF's World Economic Outlook (WEO, October 2013). The sample of countries used in the calculation represent around 90% of world GDP. For the remaining 10%, average growth is estimated at 1.7% for the period 2012–2015.

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

ABBREVIATIONS

BCP: Central Bank bonds denominated in pesos.

BCU: Central Bank bonds denominated in UFs.

BLS: Bank Lending Survey.

CPIEFE: CPI excluding food goods and energy prices

EES: Economic Expectations Survey

FBS: Financial Brokers Survey

IMCE: Monthly Business Confidence Index

IPEC: Economic Perceptions Index

MPR: Monetary policy rate

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