

MONETARY POLICY REPORT

September 2016



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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 cutoff date of the *Monetary Policy Report* was 30 August 2016.

PREFACE

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

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

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

This *Report* was approved at the Board's session on 01 September 2016 for presentation to the Senate on 07 September 2016.

The Board

SUMMARY

In line with forecasts, annual CPI inflation continued to decline, reaching 4% in July. The figure reflected, mainly, the drop in goods inflation associated with the behavior of the exchange rate. The baseline scenario of this *Report* foresees inflation declining further, to converge to 3% a little sooner than was thought in June. This assumption estimates that, in the short term, the exchange rate will remain around its levels prevailing at this *Report's* statistical cutoff date, but obviously there are significant degrees of uncertainty. The exchange rate has operated in an external environment where, despite some recent reversal, financial conditions are better than projected in earlier *Reports*. This owes to the markets' perception that the monetary policies in the developed world will remain highly expansionary still for some time, a perception that has moderated after the latest announcements of boardmembers of the Federal Reserve. Services inflation—typically associated with non-tradables—shows no major changes and is expected to continue on its gradual deceleration path. Second-quarter output and demand indicators as well as their perspectives for this and next year show virtually no changes. In this context, the Board has decided to keep the policy rate unchanged, while announcing that any future changes will depend on the implications of domestic and external macroeconomic conditions on the inflation outlook.

In July, annual inflation returned to the tolerance range. As mentioned, the behavior of the exchange rate has played a key role in this process, as it permitted to leave behind the upward effects of the sharp depreciation experienced by the peso between 2013 and 2015. Considering its average for the ten days prior to the statistical cutoff, the dollar was somewhat below CLP670, equivalent to a nominal peso appreciation of around 4% with respect to the closing of the previous *Report*. The evolution of the exchange rate has had notorious effects on the goods component of core inflation (CPIEFE). The annual variation of that CPIEFE component went from around 5% early in the year, to 3.7% in its last measurement. Inflation of the services component of the CPIEFE has made a smoother adjustment, from 5% to 4.5% annually over the same time span, reflecting its indexation to past inflation and bounded output gaps. Thus, total CPIEFE has seen a reduction in its annual expansion rate, as expected. The more volatile elements of the basket posted dissimilar movements in the past three months: while annual food inflation rose, energy inflation fell.



INFLATION

	2015	2016 (f)	2017 (f)	2018 (f)
	(annual change, percent)			
Average CPI inflation	4.3	3.9	3.2	
December CPI inflation	4.4	3.5	3.1	
CPI inflation in around 2 years (*)				3.0
Average CPlEFE inflation	4.7	4.1	2.5	
December CPlEFE inflation	4.7	3.3	2.6	
CPlEFE inflation in around 2 years (*)				2.7

(f) Forecast.

(*) Corresponds to the projected inflation for the third quarter of 2018.

Source: Central Bank of Chile.

The baseline scenario of this *Report* assumes that annual CPI inflation will continue to approach to 3% in the coming months, closing 2016 at 3.5%. The CPlEFE will drop to 3% faster than headline CPI, and by early 2017 it will be below this figure. This scenario assumes that inflation will converge somewhat earlier than was expected in June, which partly relies on the exchange rate being relatively stable over the short term. As mentioned, this is subject to significant degrees of uncertainty, as illustrated by the fluctuations that the parity has shown in recent months. As a working assumption, the projections consider that the real exchange rate will fluctuate around its current levels over the projection horizon, in line with the assessment that today it is not far from what can be inferred from its long-term fundamentals.

Despite the reversal of recent weeks, external financing conditions facing emerging economies have outperformed those foreseen in the baseline scenarios of earlier *Reports*. This has been accompanied by the markets' perception that the expansionary monetary policies in the developed world will be more persistent. Changes in expectations regarding the Fed's monetary policy conduct have been particularly important because of both its influence on financial markets and the uncertainty surrounding it. The markets assume a more gradual normalization of monetary policy than that announced by the Fed. In any case, there are different assessments about how it will solve the tensions between the dynamics of the real sector, inflation and exchange rate conditions in the U.S. economy. In Japan, the UK and Europe, the markets expect monetary policies as expansionary or even more so, considering their weak economic growth rates and projected inflation falling short of their central banks' targets.

INTERNATIONAL BASELINE SCENARIO ASSUMPTIONS

	Avg. 00-07	Avg. 10-14	2015	2016 (f)	2017 (f)	2018 (f)
	(annual change, percent)					
Terms of trade	8.2	1.6	-4.5	-1.7	-0.3	0.3
Trading partners GDP (*)	3.6	4.2	3.1	2.8	3.2	3.4
World GDP at PPP (*)	4.2	4.0	3.1	3.0	3.3	3.5
World GDP at market exchange rate (*)	3.2	3.1	2.5	2.2	2.6	2.8
Developed economies' GDP at PPP (*)	2.6	1.6	2.0	1.5	1.7	2.0
Emerging economies' GDP at PPP (*)	7.4	5.7	4.1	4.1	4.6	4.7
External prices (in US\$)	4.6	3.0	-9.8	-2.2	1.6	1.7
	(levels)					
LME copper price (US\$/lb)	154	349	249	215	225	230
WTI oil price (US\$/barrel)	44	92	49	43	52	54
Brent oil price (US\$/barrel)	42	102	52	45	53	55
Gasoline parity price (U.S.\$/m ³) (*)	366	748	467	395	448	464
Libor US\$ (nominal, 90 days)	3.6	0.3	0.3	0.7	1.3	2.0

(*) For definition, see glossary.

(f) Forecast.

Source: Central Bank of Chile.

In this context, the fraction of fixed-income assets with negative rates has increased considerably. Thus, higher risk appetite and the search for yield has pushed the prices of risky assets up, squeezing sovereign spreads and appreciating currencies vis-a-vis the dollar. In any case, the intensity with which this change in financial conditions will impact activity or commodity prices is not so clear. In the baseline scenario, global activity projections are not changed significantly. For the 2016-2017 biennium average growth in the world economy is expected to stand at 3.2%, while Chile's trading partners should grow by 3.0%, that is, fairly unchanged from June. The terms of trade will deteriorate less over the projection horizon, although the trajectories foreseen for the prices of copper and oil are similar to those of June, expecting prices in 2018 of US\$2.3 per pound for copper and around US\$55 per barrel for oil.

Locally, second-quarter data for domestic activity and demand confirmed bounded economic growth. GDP posted lower annual growth than in the first quarter, but with a configuration where natural-resource-related sectors—particularly mining—showed less favorable performance and other GDP changed little, if anything. The total consumption component of demand continued to grow at around 2.5% in annual terms, while investment posted positive growth, boosted by specific factors associated with imports of machinery and equipment. On the other hand, during the second quarter investment in construction and other works showed a sharper than expected fall, with a still weak real estate sector.

In this context, this *Report's* baseline scenario assumes that GDP will rise between 1.5% and 2.0% this year, considering that the information reviewed for the first half of the year brings no big news about the course of the economy. For 2017, a range is projected for GDP between 1.75% and 2.75%, down from expectations in June. On one hand, and in line with forecasts, the labor market has been gradually deteriorating since the beginning of the year. On the other hand, both business and consumer expectations have remained pessimistic, all in a context where lending interest rates remain low. As a working assumption, the trajectory of public spending is projected to be consistent with the fiscal rule and with the Administration's announcements that it will follow a path of budget consolidation.

These projections consider that the low numbers for actual and expected investment have reduced the economy's trend and potential growth. On one hand, trend growth is at 3.2%, three tenths of a point less than estimated one year back. On the other, potential growth is foreseen to stand between 2.5% and 3% in 2016 and 2017, compared with the range of 3% to 3.5% estimated a year ago for the same period. Moreover, the data suggest that convergence to trend growth will take longer than anticipated. Still, the assessment of the current size of the output gap is not very different from the forecast of a year ago, because although since then the 2016 GDP growth forecast was corrected downward by a little more than one percentage point, at the same time the potential growth estimate was reduced, and, additionally, growth in 2015 was corrected upward (box V.I).

Thus, if the macroeconomic scenario that has been assumed in recent months consolidates, with external financial conditions that, though volatile, are better than anticipated in June, output gaps are bounded and inflation is returning somewhat sooner to the target, no need is foreseen to raise the MPR in the policy horizon. Accordingly, as a working assumption, it is considered that the MPR will be kept unchanged during the projection horizon. As always, the implementation of monetary policy and possible adjustments to the MPR will be conditional on the effects of incoming information on the projected inflation dynamic.

The reversal of improved international financial conditions is one of the main risks in the external scenario. As aforesaid, the path that the Fed will ultimately take to adjust the policy rate is critical. An increase in the fed funds rate is very likely within this year, and the markets' expectations show that subsequent adjustments will be very gradual. A more aggressive action by the Fed could trigger a significant increase in global volatility, affecting asset prices, capital flows and currencies. Brexit materialized one of the risks outlined in June but, to this date, its effects seem bounded. However, its final consequences are still in the making, so more repercussions in medium-term growth in the UK and in Europe cannot be ruled out. Add to this the concerns about the soundness of some European banks, particularly in Italy and Portugal. And there are also several open electoral processes around the world, whose results could cause a shift towards more protectionist policies.

ECONOMIC GROWTH AND CURRENT ACCOUNT

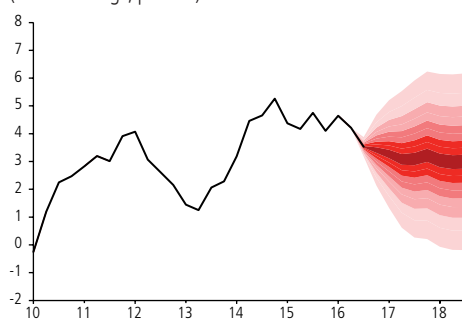
	2015	2016 (f)	2017(f)
	(annual change, percent)		
GDP	2.3	1.5-2.0	1.75-2.75
National income	1.3	1.3	1.9
Domestic demand	2.0	1.0	2.4
Domestic demand (w/o inventory change)	1.6	1.5	2.1
Gross fixed capital formation	-1.5	-1.5	0.7
Total consumption	2.5	2.4	2.5
Goods and services exports	-1.9	1.2	2.2
Goods and services imports	-2.8	-1.6	2.9
Current account (% of GDP)	-2.1	-1.6	-1.8
Gross national saving (% of GDP)	20.3	19.7	19.6
Gross national investment (% of GDP)	22.4	21.3	21.4
GFCF (% of nominal GDP)	22.7	22.1	21.8
GFCF (% of real GDP)	23.7	22.9	22.6
	(US\$ million)		
Current account	-4,761	-4,000	-4,650
Trade balance	3,494	3,600	3,900
Exports	62,232	58,800	61,800
Imports	-58,738	-55,200	-57,900
Services	-3,812	-3,200	-3,350
Rent	-6,194	-6,200	-7,100
Current transfers	1,750	1,800	1,900

(f) Forecast.

Source: Central Bank of Chile.

**CPI INFLATION FORECAST (*)**

(annual change, percent)



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

Source: Central Bank of Chile.

In the emerging world, the overall risk outlook has tended to moderate in the past few months. Accordingly, concerns about China have eased, while the Chinese impulse policies have stabilized its pace of growth. Significant risks remain, however, namely the doubts surrounding the sustainability of these measures over time, as well as about the Chinese financial system and real estate sector, among other factors. Moreover, a scenario in which the Fed's monetary policy becomes more aggressive may have important negative implications on China. In Latin America, beyond very recent improvements, adjustments to both public and private expenditure are still needed.

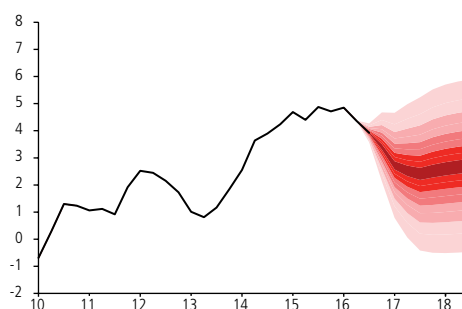
Domestically, short-term inflationary risks remain tied to the evolution of the exchange rate and thus to risks coming from abroad. In any case, inflation expectations two years ahead have remained near 3%. On the output side, the improved external financial conditions could affect growth more than previously estimated. Meanwhile, business and consumer expectations are still in pessimistic territory, which could hold back the recovery of consumption and investment, triggering a sharper deterioration of the labor market.

Having assessed these risks, the Board estimates that the risk balance is unbiased for both inflation and activity.

Inflation has decreased in line with forecasts, and its convergence to 3% will be somewhat faster than expected in June. The outlook for activity and demand shows no major changes. The external scenario continues to pose risks, even considering that its recent evolution has been more favorable than expected. The Board reiterates its commitment to conduct monetary policy with flexibility, so that projected inflation stands at 3% over the policy horizon.

CPIEFE INFLATION FORECAST (*)

(annual change, percent)



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

Source: Central Bank of Chile.

MONETARY POLICY DECISIONS IN THE LAST THREE MONTHS

BACKGROUND: JUNE 2016 MONETARY POLICY REPORT

The June *Monetary Policy Report* indicated that, in general, the macroeconomic scenario was in line with the forecast. Annual inflation had declined, primarily due to a slowdown in the goods component. This reflected the fact that although the exchange rate had fluctuated, it had not increased as sharply as it had between 2013 and 2015. Services inflation remained high, due in part to indexation to past inflation. Output gaps were still tight, and the labor market was marked by low unemployment rates and nominal wage growth of over 5.5%, despite the slow economy. In the first quarter, output and domestic demand had grown more than projected. The surprises were in the agricultural sector and in sectors tied to private consumption, a reflection of the gradual adjustment of this component of spending. The economy was expected to continue growing below its potential, affected by the weak performance of investment-related sectors. Internationally, the scenario continued to be marked by the U.S. Federal Reserve's decision on normalizing its monetary policy and the risks associated with the Chinese authorities' efforts to meet their growth targets. Market expectations on these situations had led to looser external financial conditions, albeit with a partial reversal, while world growth and commodity prices had not changed much relative to the forecasts. Commodity prices, in particular, remained below their long-term levels. In this context, the Board had held the monetary policy rate (MPR) at 3.5% over the past few months.

In the baseline scenario, the path of inflation was similar to the last *Monetary Policy Report*. Annual CPI inflation was expected to return to the target range in the third quarter of 2016. As a working assumption, the real exchange rate (RER) was expected to fluctuate around its then-current levels throughout the forecast horizon. Other factors affecting the convergence of inflation included an output gap that continued to widen and a labor market that would continue to adjust over the course of the year, which should contribute to an additional—albeit moderate—reduction in services inflation.

With regard to output, the GDP growth forecast for 2016 had been lowered to a range of 1.25 to 2.0% (versus 1.25 to 2.25% in the last *Report*). The data for the first quarter showed an improvement, but slower growth was expected for the rest of the year, especially in mining investment and construction. For 2017, the forecast range was still 2 to 3%, based on expectations of renewed growth of nonmining investment in line with an economic recovery. Confidence levels were also expected to slowly return to neutral territory. Chile's trading partners were expected to maintain their 2015 growth rates; international financial conditions would remain favorable, although tighter than in the recent past; and the terms of trade would stabilize in 2017. The forecast for public spending took into account the fiscal rule and the government's announcements that it would continue on a path of budget consolidation. Monetary policy would continue to boost the economy. As a working assumption, the MPR was expected to continue to be normalized within the projection horizon, but at a slower rate than forecast in the last *Report*.

The risks were similar to March. Internationally, the most critical factors were still the Fed's rate adjustment process and the situation in China, not only due to their effects on world growth, but also because they could trigger new episodes of financial volatility. Other key factors included a possible Brexit, the various electoral processes underway around the world, and the possibility of a shift toward more protectionist policies, which could all contribute to increased market turbulence. At the same time, the consolidation of growth in Europe and the United States could contribute to greater world growth. Latin America was still an important source of risk, despite signs of improvement in Brazil and Argentina. Domestically, the risks were tied to the persistence of high inflation. In the short term, the inflation trend continued to be closely tied to the evolution of the peso and thus to the external risks. For output, the main risks had to do with the evolution of the labor market and the world economy. Taking all these elements into account, the Board's balance-of-risk assessment for inflation and output was broadly balanced.



MEETINGS IN JUNE, JULY, AND AUGUST

In June, the data released after the publication of the last *Report* were in line with the baseline scenario. Annual CPI inflation was over 4%. Goods inflation had eased somewhat, especially in items more sensitive to the exchange rate, whereas there was little change in services inflation, due to indexation and bounded output gaps. Output data from April remained low, with a weak performance in sectors tied to mining investment. Financial markets continued to fluctuate in response to the expected path of the Fed's policy rate and the coming referendum on whether the United Kingdom would remain in the Eurozone.

The Research Division proposed one option: holding the MPR at 3.5%. On one hand, while the materialization of the identified external risks could generate higher inflation in the short term, the effects on forecast inflation two years ahead were not obvious and would depend on the persistence of the shocks and their effects on output and inflation expectations. On the other hand, the risks associated with prolonged high inflation—which in the past had justified the option of raising the rate as a preventive measure to avoid future hikes—had declined in recent months, due to the deterioration of the labor market, successive cuts in expected GDP growth, an RER in line with its fundamentals, and an easing of inflation, with two-year-ahead expectations remaining anchored at 3%. Going forward, raising the MPR would still be an option to ensure the convergence of inflation. The Board thus decided to hold the MPR at 3.5%.

For the July meeting, the collected data were still consistent with the baseline scenario in the last *Report*. Output remained undynamic, and inflation continued to follow a gradual downward trend. The main new development was the U.K. vote in favor of Brexit, which initially triggered sharp volatility. The markets quickly settled, however, as it became apparent that the negative effects on output would mainly be confined to the United Kingdom, while the central banks in developed countries responded by increasing the monetary stimulus. In this context, both long-term rates and risk spreads had come down for emerging economies, and their currencies had appreciated against the dollar. In Chile, the indicators followed these trends.

The effects of these developments on medium-term inflation were not obvious, since they depended on persistence of the exchange rate effects—which was subject to substantial uncertainty—and the impact on output. On one hand, the improvement in financial conditions for emerging economies had occurred in a context in

which their fundamentals had not changed significantly. On the other, the differences between the economic cycle in the United States versus other developed economies could put pressure on the dollar.

The Research Division again proposed a single option: holding the MPR at 3.5%. In addition to the high inflation and the uncertainty surrounding the effects of the events described above, the conditions for inflation convergence appeared to have improved. The short-term inflation forecast had come down, while two-year-ahead expectations remained anchored at 3%. The Board thus decided to hold the MPR at 3.5%.

In August, the global financial market trends described at the last meeting had intensified, so the conditions for emerging economies were expected to continue to improve. Relative to the June *Report*, the peso had appreciated about 5%. Internal data confirmed the main trends outlined in the June *Report*. Inflation had returned to 4% in July. Investment was still weak, due to a worsening in the construction component. The growth of consumption was slow but stable, in line with the gradual deterioration of the labor market and the lack of a recovery in confidence.

As in the last two months, the Research Division proposed one option: holding the MPR at 3.5%. Inflation was expected to converge somewhat faster than previously forecast, since the lower exchange rate would result in lower tradable goods inflation, although the forecast for nontradable inflation had not changed much. At the same time, there was still an underlying risk that external conditions could reverse. In contrast to previous episodes of a high risk appetite, the current situation seemed to be driven more by financial decisions than by an improved view of emerging market fundamentals. In fact, the outlook for global investment was still low, a sign that risk appetites had not improved at longer horizons. This also suggested that the better financial conditions would not have much effect on the recovery of Chilean output in the medium term.

The Research Division also recommended communicating that the trends outlined over the past few months made it prudent to postpone the normalization of monetary policy. This was in line with the evolution of market expectations, which currently indicated that the MPR would remain at 3.5% for longer than previously anticipated. The Board thus decided to hold the MPR at 3.5% and to issue a statement that it was no longer necessary to continue raising the rate.

I. INTERNATIONAL SCENARIO

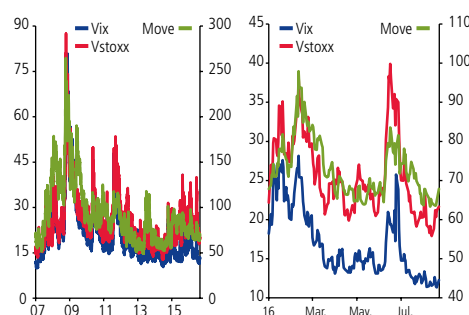
This chapter analyzes the recent evolution of the world economy and the outlook for the next two years. It also describes the main risks.

Since June, the main development in the international arena has been the configuration of more favorable financial conditions than projected in the last few *Monetary Policy Reports*. Risk appetites and the search for returns have increased in the global financial markets since late June, although this trend has eased in the last few weeks (figures I.1 and I.2). Asset prices have risen, especially in the emerging markets: interest rates and spreads have dropped, stock markets have picked up, and currencies have appreciated against the dollar. An important catalyst of these movements is the markets' opinion that the developed countries will continue to implement expansionary monetary policies for longer than previously expected, although the most recent announcements by the members of the U.S. Federal Reserve (the Fed) had a calming effect. This expectation gained traction following the United Kingdom's decision to leave the European Union (Brexit). Moreover, in China the strong monetary and fiscal stimulus has allowed the economy's growth rate to stabilize, with support from the improved international financial conditions. The possibility that these conditions will revert is one of the main risks of the external scenario.

The increased optimism in the financial markets contrasts with the expected trend for world growth, which on aggregate has not been revised in recent months (table I.1). Investment forecasts continue to point to low growth rates in most economies, and commodity prices have not benefited from the increased optimism in the financial markets. Taken together, the external boost to the Chilean economy over the next two years should be somewhat higher than previously expected, essentially due to the improved international financial conditions, as well as the terms of trade, which are now expected to deteriorate less over the course of the forecast horizon.

In late June, the passing of Brexit took the international community by surprise, realizing one of the market's worst fears in terms of risk scenarios. The initial reaction in the markets was as expected—volatility spiked, risk-free interest rates and risky asset prices fell, and the dollar appreciated. Within a few days, however, the willingness to take on risk had surprisingly increased. This reflected the absence of any financial accidents linked to Brexit, the assessment that the real effects would primarily be confined to the United Kingdom, and, in particular, the perception that the developed world would maintain an expansionary monetary policy for longer than previously estimated, something that was already developing in response to the low output and inflation.

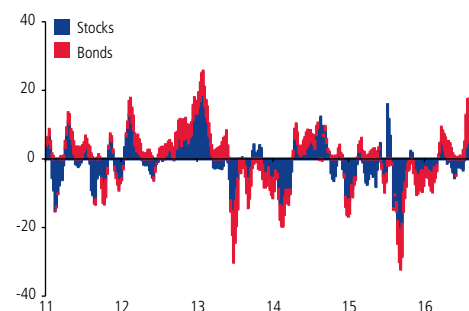
FIGURE I.1
Financial market volatility (*)
(percent)



(*) See glossary for definition of the indices.

Source: Bloomberg.

FIGURE I.2
Net capital inflows to emerging economies
(US\$ billion, moving month)



Source: Emerging Portfolio Fund Research.



TABLE I.1

World growth (*)
(annual change, percent)

	Avg. 00-07	Avg. 10-14	2015	2016 (f)	2017 (f)	2018 (f)
World at PPP	4.2	4.0	3.1	3.0	3.3	3.5
World at market FX rate	3.2	3.1	2.5	2.2	2.6	2.8
Trading partners	3.6	4.2	3.1	2.8	3.2	3.4
United States	2.6	2.1	2.6	1.5	2.2	2.3
Eurozone	2.2	0.7	1.7	1.5	1.4	1.6
Japan	1.7	1.5	0.5	0.5	0.8	1.2
China	10.5	8.6	6.9	6.5	6.2	6.0
India	7.1	7.3	7.6	7.5	7.5	7.6
Rest of Asia	5.1	5.0	3.5	3.5	3.7	4.0
Latin America (excl. Chile)	3.5	3.6	-0.5	-0.9	1.7	2.0
Commodity exporters	3.1	2.5	1.8	2.0	2.4	2.4

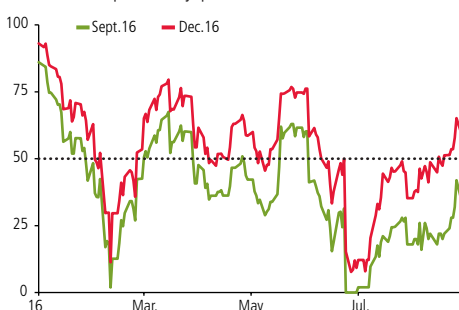
(*) See glossary for definitions.

(f) Forecast.

Sources: Central Bank of Chile, based on a sample of investment banks, Consensus Forecasts, IMF, and the statistics offices of each country.

FIGURE I.3

Expectations for the federal funds rate (*)
(accumulated probability, percent)

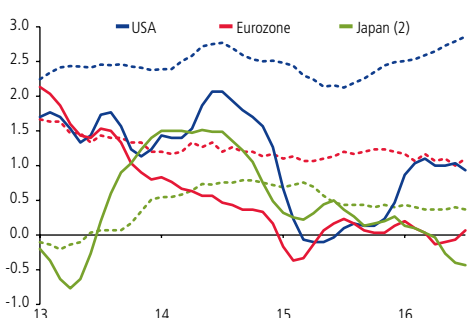


(*) The probability that the federal funds rate will increase to 0.75% on the indicated date. Probability implicit in federal funds rate futures.

Source: Bloomberg.

FIGURE I.4

Inflation in developed economies (1)
(3-month moving average, annual change, percent)



(1) Solid lines: total CPI; dotted lines: services CPI.

(2) Excluding tax effects.

Sources: Bloomberg and Japanese Statistics Bureau.

Expectations for the path that the Fed will take to normalize its policy interest rate are a key factor in the configuration of better external financial conditions for emerging economies, not only for its impact on global financial markets, but also for the associated uncertainty. For much of the first half, the markets believed that the Fed would implement at least one increase during the year. However, the publication of disappointing employment and output data for the United States mid-year, the lack of adjustments to the policy rate at the June and July meetings, and the new downward revision in the Fed's expectation for the rate path all contributed to shifting market expectations toward a belief that there would be no change for some time. Most recently, expectations again assign a high probability to an increase before the end of this year (figure I.3). Over and above the timing of the move, the markets assume that the monetary policy normalization will be more gradual than signaled by the Fed. Consequently, an important risk in the baseline scenario used in this *Report* is that the Fed will act more aggressively than the markets expect, as this could trigger substantial volatility at the global level, with effects on asset prices, capital flows, and currency values.

The different assessments of how the Fed will resolve the tension between the dynamics of the real sector, inflation, and foreign exchange conditions in that economy could explain the differences in expectations on which path the Fed will follow. Here, the possible negative effects of the appreciation of the dollar continue to be an issue of concern. At the same time, although the U.S. GDP data were lower than expected (with annualized quarterly growth rates of 0.8 and 1.1% in the first and second quarters of 2016), other data suggest that the economic recovery has strengthened. In particular, personal consumption has grown, driven by strong job creation rates in the labor market and positive consumer expectations. This contrasts with the contraction in investment, which mainly reflects the effect of the drop in oil prices on investment in the energy sector, whereas gross fixed capital formation excluding mining and energy has recorded positive growth rates. Additionally, while annual inflation has held at 1%, core inflation is closer to 2% and services inflation to 3% (figure I.4). Given all these trends, this year's growth forecast for the United States has been revised downward substantially in this *Report*, to 1.5% (1.9% in June).

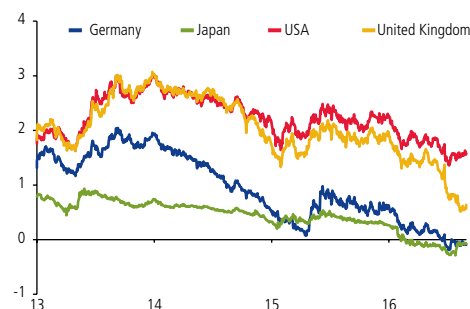
In this context, long-term interest rates in the United States have remained very low from a historical perspective. The ten-year rate is under 1.6%, and the two-year rate is close to 0.8% (figure I.5). This reflects both structural and short-term factors. The former are mostly demographic factors that have led to an increase in global savings and thus favored interest rate reductions over the past couple of decades. The latter factors include the strong monetary stimulus in the other developed economies, which has pulled a large share of government bond rates into negative territory and thus contributed to term spread compression around the world.

The authorities in England and, to a lesser extent, Japan took concrete actions in favor of more expansionary policy. The Bank of England reduced its policy rate to 0.25%, announced a new Term Funding Scheme for banks, and increased its asset purchase program, including the purchase of corporate bonds. The Bank of Japan, in turn, expanded its asset purchases and dollar liquidity measures, while the Treasury committed to a stimulus package and pushed back the entry into effect of the VAT increase, initially announced for 2017. The European Central Bank has not adopted any new measures, but has reiterated its willingness to increase the stimulus.

In China, the stimulus measures were successful in stabilizing the growth rate at 6.7% in the first half of 2016. Nevertheless, the stimulus has had the biggest effect on investment in infrastructure, whereas private investment remains sluggish (figure I.6). This has resulted in an interruption of the process of rebalancing the economy's growth, where services were increasingly carrying more weight than the industrial sector and consumption was increasing its share of GDP. Although the more favorable financial conditions reduce the possibility that the risks associated with the rebalancing of this economy will be realized, concerns remain regarding the financial system, in particular with regard to the increase in corporate debt (figure I.7). The same applies to the real estate sector, which—despite some adjustment—continues to be characterized by high prices in some regions and excess supply in others. The sustainability of the stimulus measures is also questionable, especially considering that the strengthening of the dollar in international markets could put pressure on the country's foreign exchange policy. In recent months, the authorities have allowed the renminbi to depreciate, while international reserves have stabilized after contracting significantly a few months ago. Expectations suggest that this economy could achieve a smooth adjustment toward sustainable growth rates in the long term, and the baseline scenario in this *Report* thus assumes an average growth rate of 6.3% in 2016–2018. As has been the trend, the gradual adjustment in China's growth will continue to have an impact not only on its main trading partners in southeast Asia, but also on other economies with strong ties to the country.

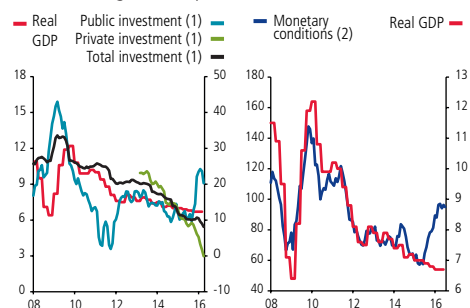
In Latin America, the general outlook has improved over the past few months, as international financial conditions have recovered and several country-specific issues have moved forward. Thus, in the baseline scenario in this *Report*, the growth outlook for the region has been revised upward by one-tenth for 2016 and two-tenths for 2017. A number of countries in the region still need to make significant fiscal and current account adjustments (figure I.8). By country, Brazil has experienced a notable recovery in consumer and business expectations, after several quarters of a steady downward trend. As a result, the growth outlook has stopped falling. In Peru, the dynamic mining sector is behind the recovery on the economic outlook, but the industrial sector still lags. In Colombia, the Central Bank again increased its policy interest rate, amid weaker output indicators and annual inflation bordering on 9%.

FIGURE I.5
Interest rates on 10-year government bonds
(percent)



Source: Bloomberg.

FIGURE I.6
Stimulus policies in China
(annual change; index; percent)

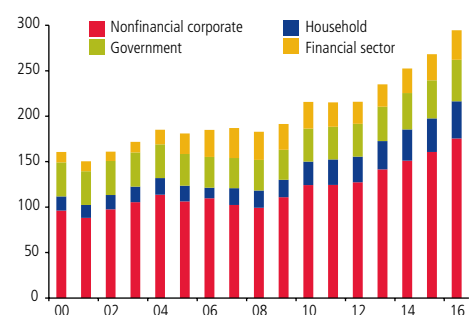


(1) Moving quarter.

(2) Bloomberg Intelligence Monetary Conditions Index.

Source: Bloomberg.

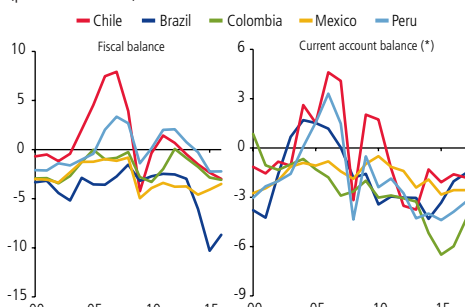
FIGURE I.7
China: total debt (*)
(percent of GDP)



(*) Data for the first quarter of each year.

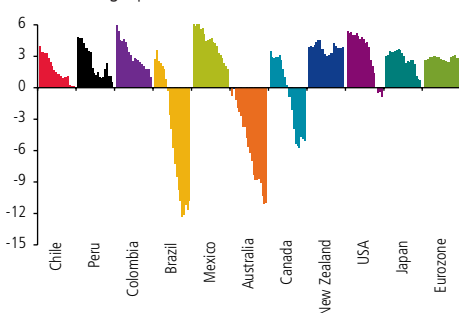
Source: Institute of International Finance.

FIGURE I.8
Latin America: fiscal and current account balances
(percent of GDP)



(*) Chile: baseline scenario forecasts in this Report; other countries: IMF.
Sources: Central Bank of Chile and International Monetary Fund.

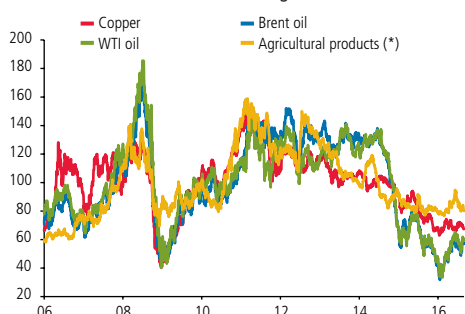
FIGURE I.9
Investment forecasts for 2016 (1)(2)
(annual change, percent)



(1) Gross fixed capital formation forecast, except USA, Japan, and Australia, which use private investment.
(2) Monthly forecasts since January 2015.

Source: Consensus Forecasts.

FIGURE I.10
Commodity prices
(fixe-base index: 2006–2016 average=100)



(*) Goldman Sachs aggregate index.

Source: Bloomberg.

Australia and New Zealand, both commodity exporters, face a somewhat different situation. In both cases, their central banks have reduced the monetary policy rate by a total of 50 basis points over the course of the year. In New Zealand, the authorities even announced that it would be necessary to continue reducing the rate to prevent exchange rate appreciation from further affecting inflation expectations. In Australia, where the currency depreciation since early 2013 has favored a rebalancing of the economy toward relatively stronger consumption, residential investment, and nonmining exports, the monetary authority expressed concern that the recent currency appreciation could complicate this process.

In sum, although the improved financial conditions will support the recovery of output in the medium term, they are not expected to provide much of a boost to world GDP. In contrast to previous episodes of a high risk appetite, the current situation seems to be driven more by financial decisions than by an improved view of emerging market fundamentals. As mentioned, the outlook for global investment remains low in both developed and emerging economies, a sign that risk appetites have not improved at longer horizons and that excess capacity is still significant (figure I.9).

Commodity prices have behaved unevenly in recent months (figure I.10). With the stabilization of growth expectations in China, the copper price has fluctuated between US\$2.10 and 2.30 a pound throughout much of the period, although it was a bit higher on the cutoff date for this Report. Chinese copper imports remain higher than the average of the last five years, while copper warehouse stocks on the exchanges have been fairly constant since June, as have supply conditions. The projection in the baseline scenario is the same as in the last Report: US\$2.15 for 2016 and US\$2.25 for 2017. For 2018, the price forecast is US\$2.30. Market analysts continue to diverge in their copper price projections, in particular for 2017, when some analysts predict a price drop and others an increase.

Oil prices have fluctuated substantially since the cutoff of the last Report. In July, WTI oil was trading below US\$40 a barrel, with Brent oil very close to that level. Subsequently, however, both prices recovered, trading between US\$45 and 50 a barrel. Some transitory factors that restricted supply in recent months have been resolved—namely, the fires in Canada and the production cuts in Nigeria. In addition, several U.S. platforms resumed production after suspending operations earlier in the year due to low prices. The speed with which these producers can enter and leave the market depending on prices is expected to help set a floor and ceiling on crude oil price fluctuations going forward. The baseline scenario in this Report is in line with the June assumptions for both WTI and Brent prices for 2016–2017. For 2018, the price forecast is close to US\$55 a barrel.

II. FINANCIAL MARKETS

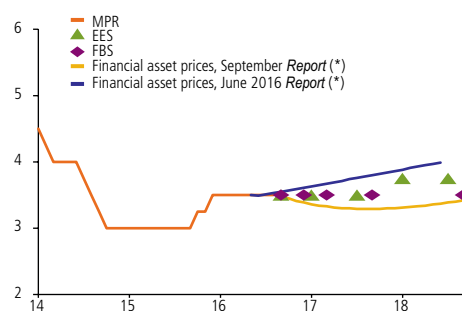
This chapter reviews the evolution of local financial markets in connection with the transmission of monetary policy.

MONETARY POLICY

In line with forecasts, annual CPI inflation continued to decline, reaching 4% in July. This mainly reflected lower goods inflation associated with the exchange rate trend. The baseline scenario of this *Report* projects that inflation will continue to come down until converging to 3% somewhat sooner than expected in June. This assumes that the exchange rate will be relatively stable in the short term. However, this scenario is subject to a substantial degree of uncertainty. The exchange rate path has evolved within an external scenario where, albeit with some reversal most recently, financial conditions are better than projected in past *Reports*. This has to do with the markets' perception that the developed world will maintain a highly expansionary monetary policy for a longer period, a perception that has been revised somewhat following the latest announcements by members of the Fed. Services inflation—typically associated with nontradables—has not changed significantly, and the gradual slowdown process is expected to continue. Second-quarter output and demand indicators as well as their perspectives for this year and next show virtually no changes. In this context, the Board has maintained the MPR at its current level and has announced that future changes will depend on the implications of internal and external macroeconomic conditions for the inflation outlook.

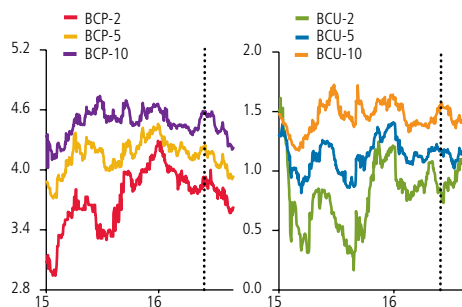
MPR expectations have been revised downward since the cutoff date of the June *Report*. The Financial Brokers Survey (FBS) for the second half of August indicates that the rate will be stable throughout the forecast horizon. Financial asset prices as of the statistical cutoff incorporate a temporary decrease before closing the forecast horizon at the current rate (figure and table II.1). The methodological assumption in the baseline scenario is that the MPR will stay at its current level through the end of the forecast horizon. In that case, the real MPR will fluctuate at values close to zero, making it one of the lowest rates in the emerging world.

FIGURE II.1
MPR and expectations
(percent)



(*) Constructed using interest rates on swap contracts up to 10 years.
Source: Central Bank of Chile.

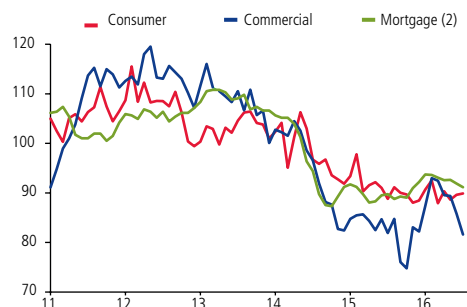
FIGURE II.2
Interest rates on Central Bank of Chile bonds (*)
(percent)



(*) The vertical dotted line indicates the cutoff date of the June 2016 *Monetary Policy Report*.
Source: Central Bank of Chile.

**FIGURE II.3**

Lending rates by type of loan (1)
(fixed-base index: 2011–2016=100)



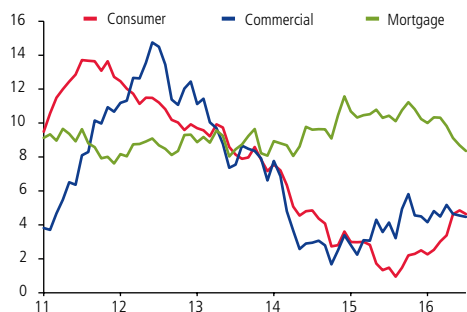
(1) Weighted average rates of all operations in the month.

(2) Mortgage interest rates are in UF.

Source: Central Bank of Chile, based on data from SBIF.

FIGURE II.4

Real annual growth rate of loans
(annual change, percent)



Source: Central Bank of Chile, based on data from SBIF.

TABLE II.1

MPR expectations
(percent)

	December 2016		One year ahead		Two years ahead	
	June Report	Sept. Report	June Report	Sept. Report	June Report	Sept. Report
EES (1)	3.75	3.50	3.75	3.50	4.00	3.75
FBS (2)	3.50	3.50	3.75	3.50	4.00	3.50
Financial asset prices (3)	3.61	3.39	3.74	3.29	3.99	3.42

(1) May and August 2016 surveys.

(2) Survey for the second half of May 2016 and the second half of August 2016.

(3) The June and September *Monetary Policy Report* use the average of the last ten business days as of 30. May. 16 and 30. Aug. 16, respectively.

Source: Central Bank of Chile.

Relative to the cutoff date of the June *Report*, nominal and real interest rates on Central Bank of Chile and Treasury securities decreased—by 15 to 35 basis points (bp)—in line with trends in the main financial markets. The only exception was two-year bonds denominated in UFs, which rose a little more than 10 bp, consistent with the decline in the inflation outlook in recent months (figure II.2).

FINANCIAL CONDITIONS

Domestically, financial conditions remain favorable from a historical perspective. In the last few months, lending rates continued to decline and thus remain at their lowest levels of the last five years (figure II.3). Interest rates fell around 40 bp in the most important segments of consumer loans (over three years; 44% of total consumer loans) and commercial loans (180 days to one year; 26% of loans in this segment), while mortgage rates declined slightly. The growth rate of consumer and commercial loans has gradually increased in recent quarters. In July, both grew at a real annual rate of around 4.5%. In contrast, the mortgage segment saw a reduction in its real annual growth rate since the end of last year (8.4% in July) (figure II.4).

Qualitative indicators, such as the Bank Lending Survey (BLS) for the second quarter and the *Business Perceptions Report* (BPR) for August, again point to weak demand for credit and tighter supply conditions in some sectors. On the demand side, the BLS shows a generalized weakening, while the BPR reports difficulties meeting lending targets in some cases. The executives interviewed for the BPR reiterated that various agents are reluctant to take on debt and are pushing back spending decisions. In the personal loan segment, this is mainly due to concerns about job security, while in the mortgage segment, it is exacerbated by difficulties in meeting the down payment requirements. On the supply side, the BLS indicates that lending requirements continue to follow a tightening trend. The BPR also signals tighter lending, particularly for clients with a riskier profile.

Other sources of financing also reflect lower demand. For example, bond issues have been gradually decreasing for a full year (figure II.5). Thus far in 2016, overseas corporate issues have declined the most.

Internationally, financial conditions are better than projected, although this trend has eased in the most recent period. In this area, the main development in the past three months was the passing of Brexit, which did not cause any major disruptions in financial markets after its initial impact. Rather, the economic stability in China—which is closely related to the implementation of stimulus policies—and the markets' perception that the developed world will continue to implement expansionary monetary policy for some time have contributed to relaxing global financial conditions. Long-term sovereign rates have declined, and several indicators point to a higher risk appetite than three months ago. Since the last cutoff date, volatility indicators fell in the main financial markets; stock indices and sovereign and corporate spreads improved; and capital inflows to emerging economies recovered (figures II.6 and II.7). In a large share of these economies, the currency appreciated against the U.S. dollar.

The improved scenario was especially notable in Latin America. This was due, in part, to the markets' positive reading of political and economic developments in the region, especially in Brazil. The stability of the Chinese economy, mentioned above, has also helped. In Chile, the stock market (IPSA) rose 5% in local currency since the last cutoff date, while sovereign spreads (five-year CDS) and corporate spreads (CEMBI) fell nearly 35 and 30 bp, respectively, reaching lower levels than a year ago.

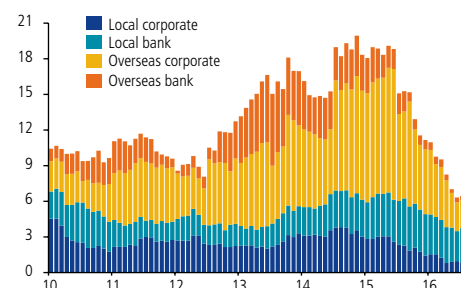
The annual growth rate of the different nominal monetary aggregates has declined since the cutoff of the June Report. In particular, M1 fell from 8.3% in April to 5.5% in July. As in the last Report, this trend is largely due to lower growth in checking accounts, demand deposits, and demand savings accounts, which is consistent with the weaker performance of the economy and the deterioration of the labor market.

EXCHANGE RATE

The peso has appreciated around 4%, with fluctuations, since the cutoff of the last Report (figure II.8). This is consistent with the external financial conditions described above. The volatility of the Chilean peso has also declined since the last cutoff date, as suggested by three-month options.

In general, other currencies also strengthened against the U.S. dollar, especially in some emerging economies and commodity exporters, most notably the Brazilian real (largely due to idiosyncratic factors), the South African rand, and the New Zealand dollar (figure II.9 and table II.2). In the latter case, there were also rate cuts. Consequently, the peso appreciated less in multilateral terms than against the U.S. dollar, with the MER rising about 3% since the June Report.

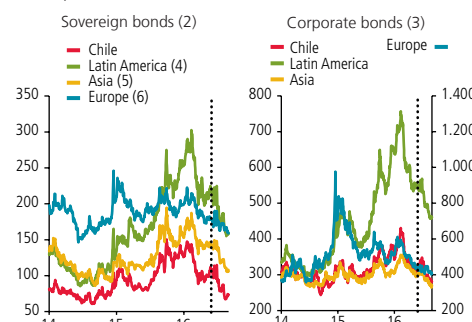
FIGURE II.5
Corporate and bank bond issues (*)
(US\$ billion in 12 months)



(*) Data for August 2016 are through the 19th.

Source: Central Bank of Chile, based on data from BCS and Bloomberg.

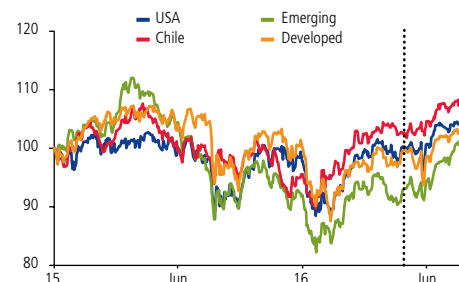
FIGURE II.6
Sovereign spreads in emerging economies (1)
(basis points)



(1) The vertical dotted line indicates the cutoff date of the June 2016 Monetary Policy Report. (2) Measured by five-year CDS spreads. Simple average of the countries in each region. (3) Measured by the CEMBI. (4) Includes Brazil, Colombia, Mexico, Panama, and Peru. (5) Includes China, Indonesia, Malaysia, Philippines, and Thailand. (6) Includes Bulgaria, Croatia, Czech Rep., Hungary, and Turkey.

Source: Bloomberg.

FIGURE II.7
Stock markets (1) (2)
(fixed-base index: 1 January 2015=100)



(1) The vertical dotted line indicates the cutoff date of the June 2016 Monetary Policy Report.

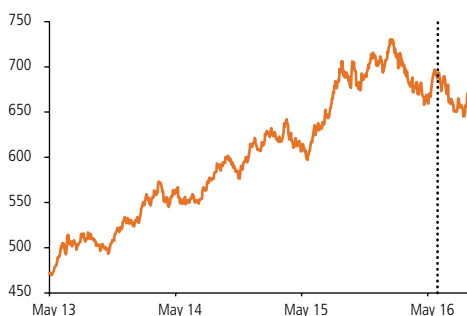
(2) USA: Dow Jones; Chile: IPSA; emerging and developed economies: MSCI regional stock indices, in local currency.

Source: Bloomberg.



FIGURE II.8

Nominal exchange rate (*)
(pesos to the U.S. dollar)

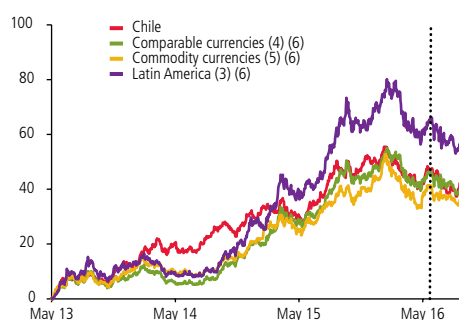


(*) The vertical dotted line indicates the cutoff date of the June 2016 Monetary Policy Report.

Source: Central Bank of Chile.

FIGURE II.9

Nominal exchange rate (1) (2)
(accumulated change, percent)



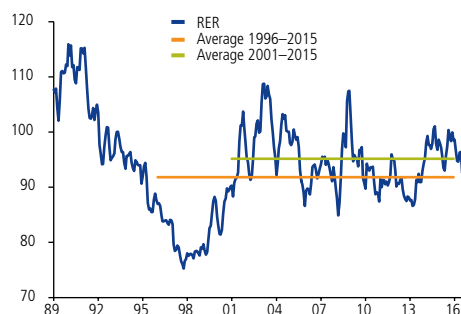
(1) The vertical dotted line indicates the cutoff date of the June 2016 Monetary Policy Report. (2) Change relative to the date on which the Chilean peso reached its lowest level in May 2013, the month in which the discussion on rate adjustments began in the United States.

(3) Includes Brazil, Colombia, Mexico, and Peru. (4) Includes Brazil, Colombia, Czech Rep., Israel, Mexico, Philippines, Poland, South Korea, and Turkey. (5) Includes Australia, Canada, New Zealand, and South Africa. (6) Constructed using the weights in the WEO April 2016.

Sources: Central Bank of Chile y Bloomberg.

FIGURE II.10

Real exchange rate (RER)
(fixed-base index: 1986=100)



Source: Central Bank of Chile.

TABLE II.2

Exchange rates against the U.S. dollars (1)
(percent)

	Change in NER		
	Sept.16/ Jun.16 Reports	In one year	Spot/Minimum, 2013
Russia	-2.2	-4.1	119.1
South Africa	-11.1	6.5	71.5
Turkey	-0.7	0.7	69.4
Colombia	-4.8	-6.9	67.3
Brazil	-9.3	-8.9	66.7
Latin America (2) (5)	-5.2	-2.1	57.8
Mexico	-0.1	9.3	57.1
Norway	-1.1	-0.4	53.0
Chile	-4.2	-4.9	42.9
Comparable currencies (3) (5)	-4.2	-1.9	41.4
Australia	-5.1	-5.1	41.1
Commodity currencies (4) (5)	-3.6	-0.7	38.5
Indonesia	-2.5	-5.5	37.9
Canada	-0.9	-2.0	33.2
Peru	0.1	2.4	33.2
Czech Republic	-0.7	0.1	30.2
India	-0.3	1.6	26.2
Thailand	-3.0	-2.9	20.7
New Zealand	-7.2	-10.3	19.6
South Korea	-5.7	-5.9	6.7

(1) A positive (negative) sign indicates a depreciation (appreciation) of the currency against the U.S. dollar. Spot rate is on the cutoff date. For the one-year comparison, the calculation uses the last ten business days in August 2015; for the rest, the average of the last ten business days prior to the cutoff of the indicated Report.

(2) Includes Brazil, Colombia, Mexico, and Peru.

(3) Includes Brazil, Colombia, Czech Republic, Israel, Mexico, Philippines, Poland, South Korea, and Turkey.

(4) Includes Australia, Canada, New Zealand and South Africa.

(5) Constructed using the weights in the WEO, April 2016.

Sources: Central Bank of Chile and Bloomberg.

In line with the multilateral appreciation of the peso and the local and international inflation trends, the real exchange rate (RER) decreased a little over 2% since the June cutoff, to nearly 93 in July (where 1986=100) (figure II.10). The baseline scenario in this Report assumes that the RER will fluctuate around its current level throughout the forecast horizon, in line with the assessment that it is currently not very far from the level predicted by its long-term fundamentals.

III. OUTPUT AND DEMAND

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

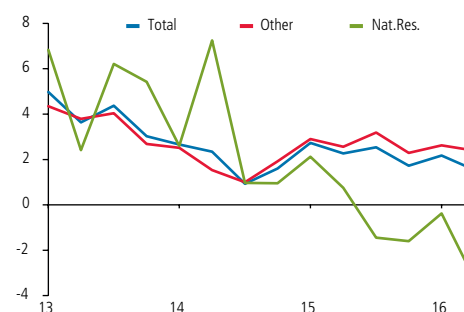
OUTPUT

In the second quarter of this year, output and domestic demand grew at an annual rate of 1.5 and 1.4%, respectively, in line with the limited growth of the economy. Output continued to be driven largely by consumption-related sectors and some services, while investment and natural resources, especially mining, remain weak. The annual growth of total consumption was stable, to the extent that the services and government components offset a worse performance in other segments. Investment in machinery and equipment grew 9.7% annual in the quarter, primarily due to some one-off factors associated with uncommon transport vehicle imports. The construction and works component weakened again, and its fundamentals point to a larger deterioration over the remainder of the year. With the publication of the output and demand data for the second quarter and the revision of the first-quarter data, an extraordinary revision of the 2015 data was also released, incorporating retail sales data that had not been included in the initial measures. This led to an upward revision of last year's growth by two-tenths, to 2.3% annual.

GDP in non-natural-resource sectors (other GDP) grew 2.4% annual in the second quarter, a similar performance to both the previous quarter and 2015. Personal services were particularly dynamic, again driven by education and health services. Retail trade also recorded a higher annual growth rate than in the previous quarter, as did public administration and transport. In contrast, some of the sectors that are typically tied to investment, such as business services and construction, recorded a decrease in their annual growth rate. The agriculture, livestock, and forestry sector was affected by lower production of annual crops. The decline in the annual growth rate of manufacturing steepened, due to lower production of drinks, tobacco, and food industry products.

In the natural resource sectors, GDP fell 3.3% annual in the second quarter. This is explained by a sharp drop in copper production, due to a lower ore grade in some mines. Electricity, gas, and water (EGW) also recorded a lower annual growth rate, as a result of a reduction in hydroelectric generation stemming from scarce hydro resources (figure and table III.1).

FIGURE III.1
Total and sectoral GDP
(real annual change, percent)



Source: Central Bank of Chile.

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

	Share 2015	2015				2016	
		I	II	III	IV	I	II
Agriculture, livestock, and forestry	2.9	8.4	7.4	6.1	-2.4	4.4	0.2
Fishing	0.6	-3.9	-6.6	1.5	-2.5	-2.3	3.9
Mining	9.0	3.2	1.5	-3.0	-2.3	-1.9	-5.5
Manufacturing	10.9	1.0	1.9	3.8	2.0	-0.5	-1.0
EGW	2.5	-2.3	-3.7	5.4	5.1	8.9	5.1
Construction	7.5	1.0	2.3	3.5	2.3	1.1	-0.1
Trade	8.7	1.3	1.8	3.3	0.9	4.1	5.0
Restaurants and hotels	1.9	2.6	2.8	3.4	2.9	1.0	0.6
Transport	4.9	5.2	2.4	3.2	1.8	4.3	4.8
Communications	1.5	9.0	9.7	9.8	3.3	1.1	-0.6
Financial services	4.9	3.2	4.0	5.2	4.7	4.1	4.1
Business services	13.8	1.0	1.6	2.3	3.3	1.7	0.9
Residential property	5.4	1.8	1.6	1.7	1.7	1.9	2.1
Personal services (1)	12.0	3.9	2.6	2.6	2.9	4.7	6.0
Public administration	4.8	3.4	4.2	4.6	2.9	3.7	4.1
Total GDP	100.0	2.7	2.3	2.5	1.7	2.2	1.5
Other GDP (2)	79.1	2.9	2.6	3.2	2.3	2.6	2.4
Nat. res. GDP (2)	12.1	2.1	0.8	-1.4	-1.6	-0.4	-3.3

(1) Includes education, health, and other services.

(2) See glossary for definitions.

Source: Central Bank of Chile.



TABLE III.2

Domestic demand

(share of GDP; real annual change, percent)

	Share		2015				2016	
	2015	I	II	III	IV		I	II
Domestic demand	100.3	1.0	2.0	3.7	1.4	1.1	1.4	
Domestic demand (excl. change in inventories)	100.6	1.1	0.4	3.3	1.6	2.5	2.6	
Gross fixed capital formation	22.7	-3.3	-5.5	4.3	-1.3	1.1	2.7	
Construction and works	15.1	-0.1	1.8	3.6	2.6	1.2	-0.2	
Machinery and equipment	7.6	-9.6	-19.3	5.7	-8.4	1.0	9.7	
Total consumption	77.9	2.5	2.2	3.0	2.4	2.9	2.6	
Private consumption	64.5	2.2	1.5	2.0	1.8	2.6	1.7	
Durable goods	6.4	-4.9	-1.1	2.0	2.4	4.0	3.1	
Nondurable goods	26.5	2.5	1.2	1.8	1.0	2.6	-0.1	
Services	31.7	3.4	2.3	2.2	2.4	2.3	2.8	
Government consumption	13.4	4.5	5.6	7.8	4.9	4.4	7.0	
Change in inventories (*)	-0.3	-0.8	-0.5	-0.4	-0.4	-0.7	-1.0	
Goods and services exports	30.0	1.1	-6.2	-1.4	-0.9	0.9	1.2	
Goods and services imports	30.3	-4.1	-7.3	1.7	-1.8	-3.2	0.6	
Total GDP	100.0	2.7	2.3	2.5	1.7	2.2	1.5	

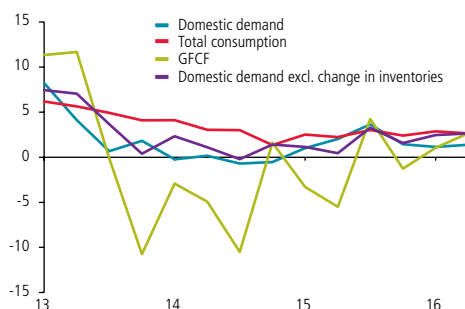
(*) Ratio of inventory change to GDP, at average prices of the previous year, accumulated in the last 12 months.

Source: Central Bank of Chile.

FIGURE III.2

Domestic demand and its components

(real annual change, percent)

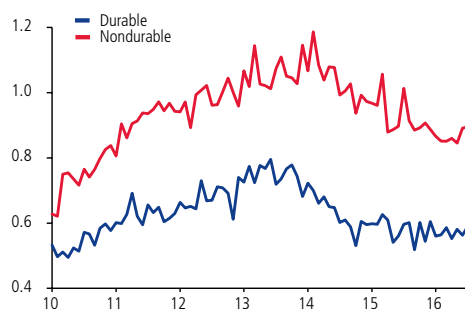


Source: Central Bank of Chile.

FIGURE III.3

Nominal consumer goods imports (*)

(US\$ billion)



(*) Seasonally adjusted series.

Source: Central Bank of Chile.

The August Economics Expectations Survey projects annual GDP growth rates of 1.6% for 2016 and 2.0% for 2017. The baseline scenario in this *Report* assumes that annual GDP growth for the remainder of this year will be in the range of 1.5 to 2.0% (versus 1.25 to 2.0% in June)^{1/} and 1.75 to 2.75% in the coming year (2.0 and 3.0% in June), with a broadly balanced balance-of-risk assessment. This forecast considers that the sectors associated with other GDP will perform similarly to the past few quarters and that natural resource sectors—in particular mining—will record higher annual growth rates moving into 2017, after falling for the past quarters.

DOMESTIC DEMAND

Domestic demand grew at an annual rate of 1.4% in the second quarter, which is a little higher than the previous quarter. The change in inventories reveals a larger drawdown relative to the previous quarter, mainly in relation to an increase in manufacturing exports. When the change in inventories is excluded, domestic demand increased 2.6% in annual terms. This was driven by higher annual growth of gross fixed capital formation (GFCF), where the machinery and equipment component more than offset the lower performance of construction and works in the quarter. Total consumption continued to record limited growth (figure and table III.2). Consumption fundamentals have not changed, essentially evolving in line with projections. The same is true of the determinants of investment, with the exception of residential construction, where the determinants point to a sharper slowdown in this segment.

Total consumption grew 2.6% annual in the second quarter, similar to 2015. However, the data point to a restructuring, with a recovery of government consumption and a slowdown in private consumption. With regard to the components of private consumption, nondurable goods consumption has slowed, which was partially offset by an increase in services and, to a lesser extent, durable goods.

The most recent data suggest that this scenario of slow consumption growth will continue. Nominal imports of consumption goods—seasonally adjusted—have increased marginally, although they remain at similar levels to a year ago (figure III.3). The main consumption fundamentals have not changed: consumer expectations (IPEC) are still pessimistic (figure III.4), and the labor market continues to adjust as projected.

The annual growth of real and nominal wages—averaging the different measures—showed little change in the second quarter, with the former just under 1.4% and the latter around 5.6%. Real wage growth continues to be below its historical averages, while nominal wages are growing at about

^{1/} In this *Report*, the growth range for this year is reduced from 75 to 50 basis points (see box V.1 in the *Monetary Policy Report*, March 2016).

the historical average. At the national level, job creation is low and has even weakened at the margin, and the annual growth rate of self-employed jobs continues to offset the weakening of wage jobs. Among employees, there has been an increase in the number of people who report that they are working part-time but they would prefer full time^{2/}. On aggregate, the real wage bill continued to grow at annual rates in line with the last *Report* (figure III.5).

The national unemployment rate has slowly increased, reaching 7.1% in the moving quarter ending in July (figure III.6). The increase is particularly noticeable among men between 25 and 54 years of age, whose unemployment rate is usually more closely tied to the economic cycle. Nevertheless, unemployment is still low from a historical perspective. By region, the unemployment rate is highest in the north. For Greater Santiago, both the National Statistics Institute (INE) and the University of Chile report an unemployment rate of 7.6% in their most recent measures.

GFCF grew 2.7% annual in the second quarter, which is higher than the previous quarter. This is largely explained by a 9.7% annual growth rate in the machinery and equipment component, primarily thanks to some one-off capital goods imports associated with uncommon transport vehicles. Excluding these items and adjusting for seasonal effects, nominal capital goods imports remain low based on data through July (figure III.7). This suggests that the machinery and equipment component will continue to record a slow performance in the coming months.

The construction and works component deteriorated again relative to the previous quarter, with a drop of 0.2% in annual terms. The performance of this segment continues to be strongly affected by low mining investment, but in the period there was a surprise in the form of a sharper slowdown in residential construction. This is consistent with the slow housing sales in Greater Santiago in the second quarter (according to *Cámara Chilena de la Construcción*, CChC data). The meager performance of a number of indicators—such as cement orders, authorized construction area, supplier sales, and annual job creation in construction—suggests that residential construction will continue to make a negative contribution to this area of investment. The June survey carried out by the Capital Goods and Technological Development Corporation (*Corporación de Desarrollo Tecnológico y de Bienes de Capital*, CBC) includes a downward revision in the amount of investment projects planned for this year, mainly due to cutbacks in mining projects, and an upward revision for the coming years.

Thus, the performance of the machinery and equipment component in the second quarter explains the smaller decline in the GFCF forecast for this year. The annual GFCF growth rate will continue to be affected by the low mining investment, which will be partially mitigated by the increase in investment in other sectors, especially in 2017 (figure V.5).

^{2/} Employees who typically work two-thirds of the 45 hours a week and who state that they are willing to work more hours (immediately or within the next 15 days).

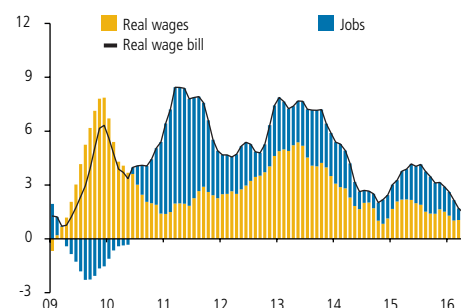
FIGURE III.4
IPEC: consumer expectations (*)
(index)



(*) A value over (under) 50 indicates optimism (pessimism).

Source: Adimark.

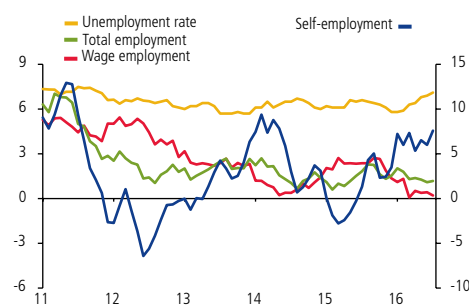
FIGURE III.5
Share in annual growth of the real wage bill (*)
(percentage points)



(*) Quarterly moving average.

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

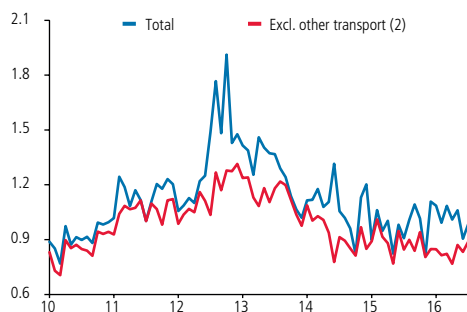
FIGURE III.6
Unemployment rate and job creation by occupational category
(percent; annual change, percent)



Source: National Statistics Institute (INE).

FIGURE III.7

Nominal capital goods imports (1)
(US\$ billion)



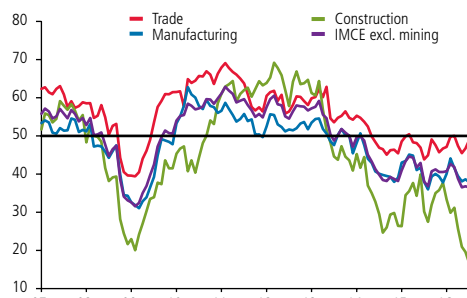
(1) Seasonally adjusted series.

(2) Excluding uncommon transport vehicles (airplanes, trains, helicopters, and ships).

Source: Central Bank of Chile.

FIGURE III.8

IMCE: Business perceptions (*)
(index)

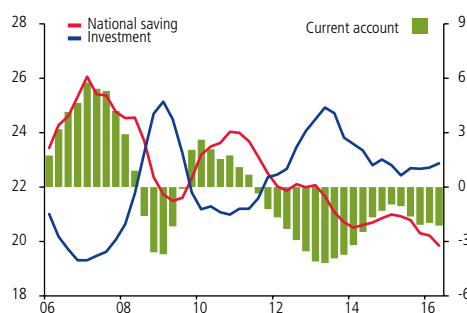


(*) A value over (under) 50 points indicates optimism (pessimism).

Source: Icare/Universidad Adolfo Ibáñez.

FIGURE III.9

Current account, national saving and investment
(percent of GDP, accumulated in a moving year)



Source: Central Bank of Chile.

Business expectations (IMCE), excluding mining, remain pessimistic. By sector, the outlook for trade recovered, moving closer to neutral territory, although it remains below the average of the last 10 years. In construction, expectations deteriorated substantially, falling to a new historical low (figure III.8). This latter trend is consistent with the lower outlook for the sector expressed in the August *Business Perceptions Report* (BPR). The interviewees predict a further slowdown in home sales, associated with the larger down payment required by banks and the increased job uncertainty, which, according to some of the people interviewed, could also increase withdrawals from signed real estate purchase commitments. In this context, several people indicated that the start of new projects has been suspended.

With regard to financial conditions, interest rates remain favorable from a historical perspective, with a greater decline in commercial loan rates and, to a lesser extent, mortgage rates. The real growth rate of credit is still somewhat higher than a year ago in the consumer and commercial segments. The annual growth rate of mortgage loans continues to follow a downward trend, which started toward the end of 2015. In line with these trends, the BLS for the second quarter again reported a weakening of demand—particularly in the mortgage and consumer segments—and somewhat tighter supply, especially for construction and real estate companies.

CURRENT ACCOUNT

With regard to the external sector, the volume of goods and services exports increased 1.2% in annual terms in the second quarter (0.9% in the previous quarter), which is largely explained by 0.6% annual growth in goods shipments. This reflects a strong performance of manufacturing exports (primarily chemical products), which was partially offset by the drop in mining shipments (mainly copper). Services exports grew 6.1% annual. The volume of goods and services imports increased 0.6% annual (–3.2% annual in the previous quarter) due to greater imports of metal products and machinery and equipment. Services imports recorded a smaller annual increase relative to the previous quarter. Export and import prices fell in annual terms, essentially affected by copper and fuel prices, respectively.

The positive balance in goods and services (US\$850 million) and current transfers (US\$365 million) was not sufficient to offset the negative income balance (US\$1.848 billion). The current account thus accumulated a deficit of 2.1% of GDP in the last moving year (2.0% in the previous quarter) (figure III.9). The baseline scenario assumes a current account deficit of 1.6% of GDP in 2016 and 1.8% of GDP in 2017, which is lower than projected in the June *Report*. This reflects the better performance of the trade balance, in particular non-copper shipments, and better prices.

IV. PRICES AND COSTS

This chapter analyzes the recent evolution of the main components of inflation and costs, identifying the current sources of inflationary pressure and their likely evolution in the future.

RECENT EVOLUTION OF INFLATION

In the most recent period, annual inflation has decreased in line with the forecast in the *June Report*, returning to the target range in July (4%) (figure and table IV.1). As mentioned, this is largely explained by the exchange rate, which is no longer increasing as sharply as between 2013 and 2015. This has facilitated a lower annual core inflation rate (CPIEFE), mainly due to the goods component. Annual CPIEFE services inflation decreased less, in line with indexation to past inflation and bounded output gaps, thus not contributing significantly to reducing inflationary pressures at this time. Going forward, annual CPI inflation is expected to continue its downward trend, converging to 3% somewhat faster than projected in June.

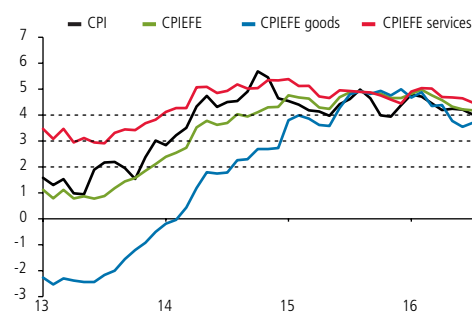
TABLE IV.1
Inflation indicators (*)
(annual change, percent)

		CPI	CPIEFE	Goods	Services	Foods	Energy
2015	Jan.	4.5	4.8	3.8	5.4	9.5	-8.1
	Feb.	4.4	4.7	4.0	5.1	8.8	-7.3
	Mar.	4.2	4.6	3.9	5.1	8.0	-7.6
	Apr.	4.1	4.3	3.6	4.7	8.0	-5.5
	May	4.0	4.2	3.6	4.7	7.7	-6.2
	Jun.	4.4	4.7	4.3	5.0	7.5	-4.5
	Jul.	4.6	4.9	4.8	4.9	7.5	-3.8
	Aug.	5.0	4.9	4.9	4.9	8.2	-1.5
	Sept.	4.6	4.9	4.8	4.9	7.1	-2.7
	Oct.	4.0	4.8	4.9	4.8	4.4	-3.8
	Nov.	3.9	4.7	4.8	4.6	4.7	-3.8
	Dec.	4.4	4.7	5.0	4.4	4.7	1.2
2016	Jan.	4.8	4.8	4.7	4.9	4.3	5.9
	Feb.	4.7	5.0	4.9	5.0	4.0	4.2
	Mar.	4.5	4.8	4.3	5.0	4.2	2.4
	Apr.	4.2	4.6	4.4	4.7	3.4	2.7
	May	4.2	4.3	3.8	4.7	4.2	3.5
	Jun.	4.2	4.2	3.5	4.6	4.7	2.9
	Jul.	4.0	4.2	3.7	4.5	4.9	0.5

(*) See glossary for definitions.

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

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

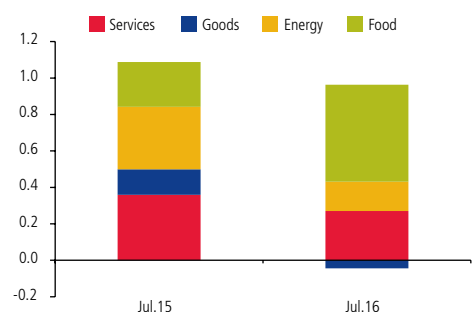


(1) See glossary for definitions.

(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).

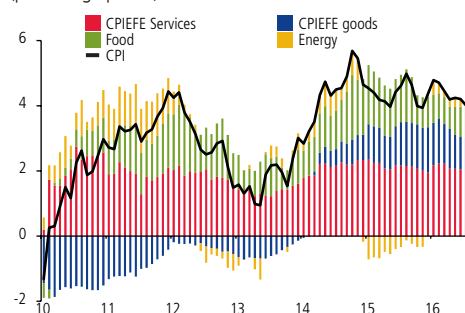
FIGURE IV.2
Contribution to inflation accumulated in three months
(percentage points)



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

**FIGURE IV.3**

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

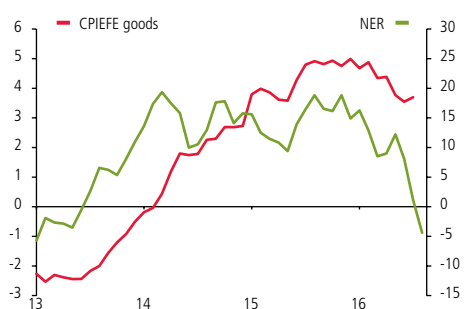


(*) Starting in January 2014, calculations are based on the new indices with base year 2013=100, so they may not be strictly comparable with earlier figures.

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

FIGURE IV.4

CPIEFE goods and the nominal exchange rate (*)
(annual change, percent)

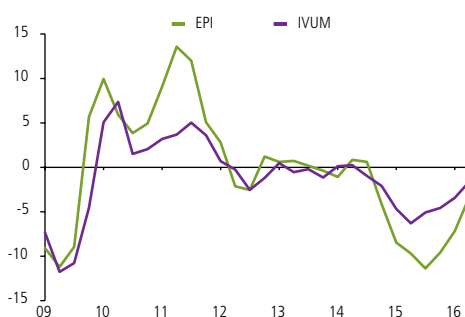


(*) For August, the monthly average of the nominal exchange rate includes data through the statistical cutoff date.

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

FIGURE IV.5

EPI and IVUM
(annual change, percent)



Source: Central Bank of Chile.

Between May and July, total inflation accumulated 0.9 percentage points (pp), less than in the same period of last year (1.1 pp) (figure IV.2). This reflects a decrease in the contribution of all items except food. In fact, CPIEFE goods inflation was negative thanks to the exchange rate, which rose sharply but temporarily at the start of the year but has since fluctuated below \$690 to the dollar. With regard to food products, the larger contribution in the quarter in question was mainly due to the fresh fruits and vegetables component.

In annual terms, CPIEFE inflation fell from 4.6% in April to 4.2% in July, resulting in a 0.3 pp decrease in its annual contribution (figure IV.3). Within the CPIEFE, the goods component contributed the most to the decrease in the inflation rate, reaching 3.7% annual in July (4.4% in April) (figure IV.4).

The August *Business Perceptions Report* (BPR) reveals an easing of concerns about the impact of the peso depreciation on business margins. According to some of the interviewees, margins have not changed significantly in recent months. This contrasts with survey results a year ago, when interviewees reported that the higher exchange rate was a key factor in cost increases and was putting pressure on margins, which already compressed. The August BPR further indicates that firms are less able to pass through higher costs to prices, mainly because they perceive a reduction in demand.

External prices, measured in dollars, have not contributed additional inflationary pressures. The external price index (EPI) and the imported price index for consumer goods (IVUM), measured in dollars, continue to record negative annual inflation rates as of the statistical cutoff of this *Report*, although less than in previous quarters (figure IV.5). This performance is due to low inflation among most of Chile's trading partners, with the exception of some countries in Latin America. Additionally, although most of our trading partners' currencies have strengthened in recent months, relative to a year ago they have still depreciated against the U.S. dollar. Given the outlook for a somewhat less strong dollar and gradually rising inflation worldwide, the forecast for the EPI continues to incorporate a slight increase within the policy horizon (around 1.6% on average for 2017 and 2018).

The services component of the CPIEFE slightly reduced its annual inflation rate in the past three months, reaching 4.5% in July (4.7% in April). This component of the basket is more inertial, on average, since it is affected by indexation to past inflation. Moreover, the output gap is deemed to be narrow, with a small direct effect on the inflation trend (box V.1).

With regard to costs, nominal wage inflation has fluctuated around its historical average (figure IV.6). The labor market continues to deteriorate gradually, with a slight increase in the unemployment rate.

Other sources of information point to lower cost pressures associated with the labor force. In the August BPR, the interviewees mentioned that while wages had adjusted in line with the CPI, there had been a decrease in the more variable component, such as some bonuses and sales commissions. They also reported that job applicants are asking for lower wages. In a context of greater labor supply, less workers switching jobs, and people are more careful to protect their jobs.

The most volatile items in the basket moved unevenly in the past three months. Annual food inflation increased (from 3.4% in April to 4.9% in July), while energy fell (from 2.7 to 0.5%). The former was largely due to price increases for fresh fruits and vegetables and, to a lesser extent, other food goods. According to the INE, this mainly reflects internal supply factors, such as lower production and/or higher costs. The international prices of other food goods, measured in dollars, continues to record negative annual inflation rates (figure IV.7). However, these prices have risen substantially in recent months, which affects the inflation forecast in the baseline scenario.

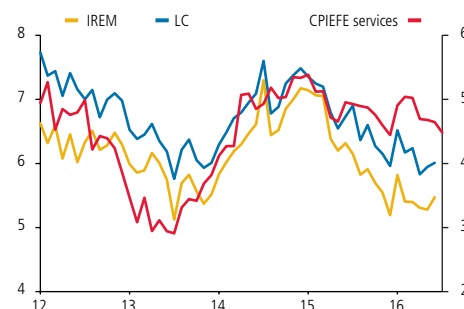
In energy, the lower annual inflation of electricity rates (from 14% in April to 8% in July) explains almost all of the drop in the annual contribution of this price component. The decrease reflects the fact that the basis for comparison is moving past the large price hikes of 2015. In June, the annual inflation rate returned to the single digits for the first time since February 2015 (16% average in that period). Fuel inflation was similar to April, with an annual decline of a similar magnitude, due to the annualized drop in the international gasoline price (figure IV.8). The exchange rate trend has also been a factor in recent months.

INFLATION OUTLOOK

Going forward, inflation is expected to continue declining, converging to 3% somewhat faster than projected in June. In the baseline scenario, annual CPI inflation closes the year at 3.5%. CPIPE inflation will come down to 3% faster than total CPI, and it should be below that level by early 2017. This is largely because nominal and real exchange rates have appreciated in recent months, and in the short term, the exchange rate is expected to stay around the levels recorded at the statistical cutoff of this *Report*. This scenario, however, is subject to a substantial degree of uncertainty. As a working assumption in the baseline scenario in this *Report*, the RER is expected to fluctuate around its current level throughout the forecast horizon, in line with the assessment that it is currently not far from predictions based on its long-term fundamentals. The downward will also play a role in the inflation trend. High basis for comparison for part of the third quarter and the disappearance of the increase in the stamp and duty tax implemented early this year.

FIGURE IV.6

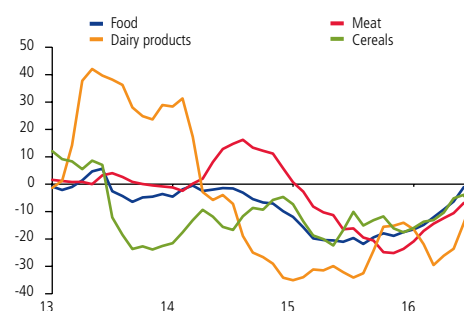
Nominal wages and CPIPE services
(annual change, percent)



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

FIGURE IV.7

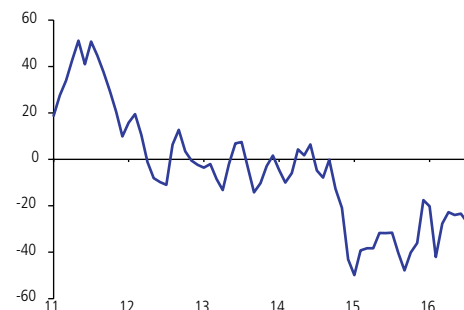
Food prices in dollars
(annual change, percent)



Source: United Nations Food and Agriculture Organization (FAO).

FIGURE IV.8

Gulf of Mexico gasoline price (*)
(annual change, percent)

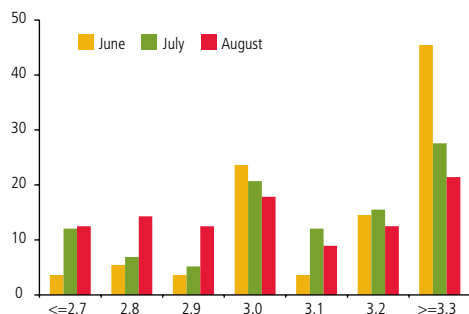


(*) For August, the monthly average includes data through the statistical cutoff date.

Source: Bloomberg.

**FIGURE IV.9**

EES: Distribution of inflation expectations one year ahead (percent)



Source: Central Bank of Chile.

Market expectations present a similar scenario for the coming months. The August Economic Expectations Survey (EES) still put expected inflation at 3.5% in December 2016, while the one-year-ahead forecast fell from 3.2 to 3.0% between the June and August surveys. In the survey, a larger share of interviewees expects inflation to be slightly below 3% (figure IV.9). The Financial Brokers Survey (FBS) has also lowered expected inflation one year out, from 3.1 to 2.8% between the second half of June and August, respectively. Inflation insurance puts inflation one year ahead near 2.9% as of the statistical cutoff of this *Report*. Two years ahead, the different expectations measures are around 3%.

V. INFLATION SCENARIOS

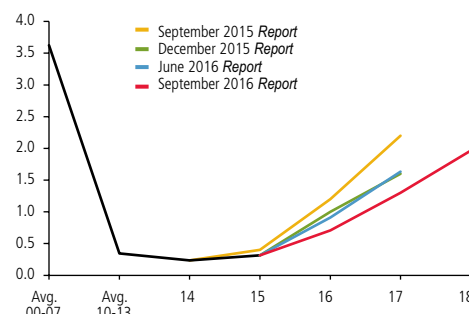
This chapter presents the Board's assessment on the Chilean economic outlook over the next two years. Projections are presented of the most likely inflation and growth trajectories. These are conditional on the assumptions in the baseline scenario; thus the Board's assessment of the risk balance for activity and inflation is also provided.

BASELINE PROJECTION SCENARIO

The macroeconomic scenario foreseen for the next two years shows no big changes from June. The impulse coming from abroad has increased somewhat, thanks to more favorable than anticipated external financial conditions and terms of trade. The exchange rate has posted no depreciations of the magnitudes seen between 2013 and 2015, easing the pressures on inflation. The assessment of the current level of output gaps is that they remain bounded as well as their effect on the inflation trajectory. In this context, the convergence of inflation to 3% is expected to occur somewhat sooner than thought in June. A key input in this result is core inflation—CPIEFE—declining to less than 3% as early as the first quarter of 2017.

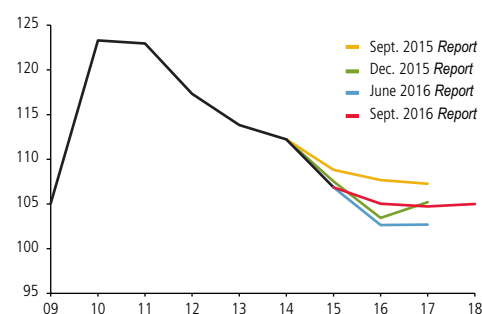
Despite a reversal in recent weeks, external financial conditions facing emerging economies are better than those foreseen in earlier *Reports* (figure V.1). This has been coupled with a market perception that the expansionary monetary policies in the developed world will be more persistent, a perception that has been forming after the Brexit: long-term rates have dropped, capital inflows have returned to emerging economies and currencies have appreciated against the dollar. Particularly important has been the change in expectations about the monetary policy conduct by the Fed, because of both its influence on financial markets and its related uncertainty. The markets assume a more gradual normalization of monetary policy than announced by the Fed. This, because there are varied views about how it will resolve the tensions between the dynamics of the real sector, inflation, and exchange rate conditions in the U.S. economy. In Japan, the UK and Europe, market expectations point to policies being as expansionary or even more so than before, considering inflation projections below the targets set by the respective central banks.

FIGURE V.1
Nominal 90-day Libor US\$
(percent)

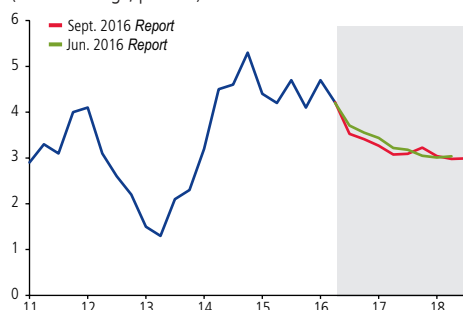


Sources: Central Bank of Chile and Bloomberg.

FIGURE V.2
Terms of trade
(index, 2008=100)

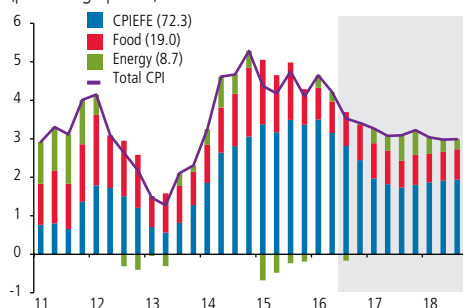


Source: Central Bank of Chile.

**FIGURE V.3**CPI inflation forecast (*)
(annual change, percent)

(*) Gray area, as from third quarter 2016, shows forecast.

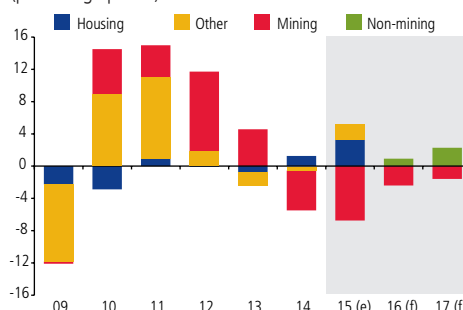
Source: Central Bank of Chile.

FIGURE V.4Contribution to annual CPI Inflation (1) (2)
(percentage points)

(1) Gray area, as from third quarter 2016, shows forecast.

(2) In parentheses, shares in CPI basket.

Source: Central Bank of Chile.

FIGURE V.5Real annual contribution to GFCF (*)
(percentage points)

(*) 2015 mining investment is estimated using available information from listed companies (FECU). Housing investment uses data from the Chilean Chamber of Construction and National Accounts by institutional sector. Other contributions use residues. For 2016 and 2017, Central Bank projection models and sectoral sources are used, including investment plans and Capital Goods Corporation surveys.

(e) Estimate.

(f) Forecast.

Source: Central Bank of Chile.

About trading partners' growth, the baseline scenario continues to assume an accelerating pace between 2016 and 2018, similar to the one foreseen in the past *Report*, although with some changes within the group. The United States shows the sharpest drop in projections for 2016 (-0.4 pp with respect to the June *Report*), because of weak output figures in the first half. In Europe, the change is only marginal (-0.2 pp from June) and concentrates in 2017, where the effects from Brexit will become more apparent. In the opposite direction goes Latin America, where prospects are improved for 2016 and 2017, although still growing below 2% annually on average in 2017-2018.

In the projection horizon, the terms of trade will deteriorate less than forecast in June, thanks to better manufacturing export prices, including for salmon and non-copper metals (figure V.2). In the baseline scenario the prices of copper and oil will remain below their long-term levels, and will be similar to those in the last Report. The copper price will stand at US\$2.15 per pound in 2016 and will average US\$2.3 in 2018. The oil price, considering the WTI-Brent average, should stand at US\$44 per barrel in 2016 and US\$55 on average in 2018. The external price index (EPI) will drop slightly less in 2016: 2.2% annually (3.8% in the June Report) and will increase 1.6% on average in 2017-2018.

Locally, annual CPI inflation evolved in line with forecasts, dropping to 4% in July. The baseline scenario of this Report assumes that annual CPI inflation will continue to approach to 3% in the coming months, closing 2016 at 3.5%. The CPIEFE will decline to 3% faster than headline CPI (figures V.3 and V.4). This scenario assumes that inflation will converge somewhat sooner than expected in June, which partly depends on the exchange rate being relatively stable over the short term. In any case, it is subject to significant degrees of uncertainty, as reflected in the parity's fluctuations of recent months. As a working assumption, projections consider that the real exchange rate will fluctuate around its current levels over the projection horizon, in line with the assessment that currently it is not far from what can be inferred from its long-term fundamentals.

The baseline scenario foresees that the labor market will continue to adjust this year, and the output gap will expand, contributing, although to a lesser extent, to ease inflationary pressures in the medium term. The regular September revision shows that the size of the gap is not very different from the forecast of a year ago, because while growth projections were revised downward in the last year, potential GDP growth has also decreased. In addition, the revised 2015 figures reduced the size of the gap over that year. Either way, the speed at which the gap has widened in recent quarters has increased, as will the time it will take for potential growth to approach the trend (box V.1).

For this year, the baseline scenario assumes GDP growth in the 1.5% to 2.0% range, and, for 2017, between 1.75% and 2.75%. This relies on activity in those sectors more closely tied to domestic demand (other GDP) performing

similarly to recent quarters, and on the natural resource sectors, particularly mining production, resuming higher growth rates toward 2017, after having fallen in annual terms in recent quarters.

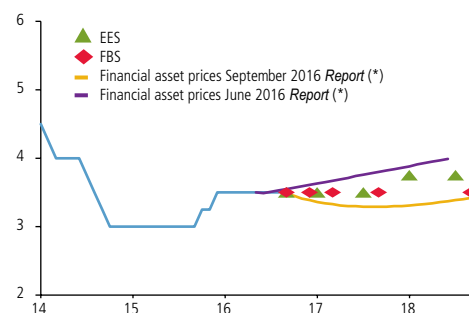
Domestic demand, excluding inventories, should maintain a modest recovery in 2017, at 2.1% annually, after growing 1.5% in 2016. In any case, the projected increase for this year is up from June, because a smaller drop in GFCF is expected (-1.5% versus -2.4% annually in the *June Report*), owing particularly to the behavior of machinery and equipment in the second quarter. Still, this is partially offset by the expected annual decline in construction and other works, where a debilitated housing sector stands out. For 2017, the projected growth in GFCF remains close to 1% annually, still affected by the decline in mining investment, counterbalanced by growth in investment in other sectors (figure V.5). As a percentage of GDP, GFCF in both real and nominal terms remains below its 2015 levels. Real GFCF will average 22.8% of GDP in the period 2016-2017 while nominal GFCF will average 21.9%. As for consumption, changes are smaller, and it is still projected to grow around 2.5% annually in 2016 and 2017, similar to its expansion in 2015.

The projections reflect that the fundamentals underlying domestic spending have not changed significantly in recent months. Imports of goods, discounting some specific factors, have posted limited growth, while consumer and business confidence has remained pessimistic. The labor market has seen gradual adjustments, and the baseline scenario expects a continuation. As a working assumption, it is also considered that the trajectory of public spending will be consistent with the fiscal rule and the Administration's announcements that it will follow a path of budgetary consolidation. Regarding monetary policy, the working assumption is that the MPR will remain unchanged during the projection horizon (figure V.6).

Regarding the external sector, the current account deficit will be smaller than projected before. It is expected to be at 1.6% of GDP this year (2.2% in the previous *Report*) and 1.8% of GDP in 2017 (2.1% in June). This revised projection owes to a better expected performance of the trade balance, particularly the annual growth forecast for non-copper shipments. Manufacturing exports showed improved performance already in the second quarter, also boosted by better prices. The current account deficit measured at trend prices⁷ also exhibits an improvement over June and should average about 1.5% in the biennium 2016-2017.

⁷ This measure adjusts the values of mining exports and fuel imports taking the deviations of the prices of copper and oil away from their long-term trends into account. It does the same with the rents and transfers associated with copper exports. Other exports and imports are valued using current prices. It does not correct any possible changes in quantities exported or imported due to movements in the prices of copper or oil. Estimates consider long-term prices of US\$2.7 per pound of copper and US\$70 per barrel of oil (see box V.2, *Monetary Policy Report*, September 2012; and box V.1, *Monetary Policy Report*, December 2015).

FIGURE V.6
MPR and expectations
(percent)



(*) Built using interest rates on swap contracts up to 10 years.

Source: Central Bank of Chile.

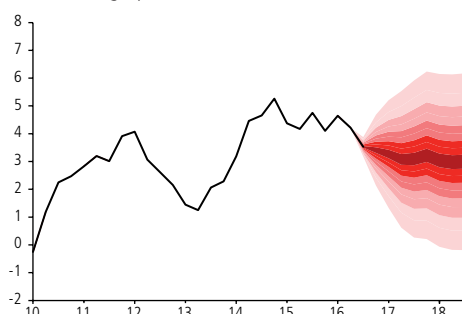
FIGURE V.7
Quarterly GDP growth scenarios (*)
(annual change, percent)



(*) 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 assumption that the MPR will be kept unchanged during the projection horizon.

Source: Central Bank of Chile.

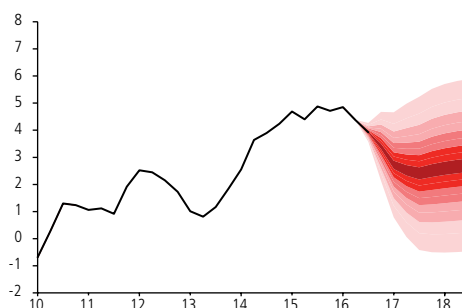
FIGURE V.8
CPI inflation forecast (*)
(annual change, percent)



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

Source: Central Bank of Chile.

FIGURE V.9
CPIEFE inflation forecast (*)
(annual change, percent)



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

Source: Central Bank of Chile.

RISK SCENARIOS

As always, the implementation of monetary policy and any possible adjustments to the MPR will be contingent on the effects of incoming information about the projected inflation dynamic (figures V.7, V.8 and V.9).

The reversal of improved international financial conditions is one of the main risks in the external scenario. As aforesaid, the path that the Fed will ultimately take to adjust the policy rate is critical. An increase in the fed funds rate is very likely within this year, and the markets' expectations show that subsequent adjustments will be very gradual. A more aggressive action by the Fed could trigger a significant increase in volatility around the world, affecting asset prices, capital flows and currencies. Brexit materialized one of the risks outlined in June but, to this date, its effects look bounded. However, its effects are still in the making, so more repercussions in medium-term growth in the UK and in Europe cannot be ruled out. Add to this the doubts about the soundness of part of European banks, particularly in Italy and Portugal. And several open electoral processes around the world, whose results could cause a shift towards more protectionist policies.

In the emerging world, the overall risk outlook has tended to moderate in the past few months. Accordingly, concerns about China have eased, while the Chinese impulse policies have stabilized the pace of growth. Significant risks remain, however, namely the doubts surrounding the sustainability of these measures over time, as well as about the Chinese financial system and real estate sector, among other factors. Moreover, a scenario in which the Fed's monetary policy becomes more aggressive may have important negative implications on China. In Latin America, beyond very recent improvements, adjustments to both public and private expenditure are still needed.

Domestically, short-term inflationary risks remain tied to the evolution of the exchange rate and, therefore, to the risks coming from abroad. In any case, inflation expectations two years ahead have remained near 3%. On the output side, the improved external financial conditions could affect growth more than previously estimated. Meanwhile, business and consumer expectations are still in pessimistic territory, which could hold back the recovery of consumption and investment, triggering a sharper deterioration of the labor market.

Having assessed these risks, the Board estimates that the risk balance is unbiased for both inflation and activity.

BOX V.1

TREND AND POTENTIAL GROWTH

This box updates the potential and trend GDP measures for Chile. As discussed in the September 2015 *Monetary Policy Report*, the former concept has to do with the GDP level consistent with stable inflation and is therefore adequate for measuring the output gap associated with short-term inflationary pressures. The latter is related to medium-term growth capacity. Whereas potential growth converges to the trend in the medium term, there are differences in the short term due to the presence of transitory elements that alter productive capacity, such as temporary shocks to productivity and limitations on factor use^{1/}.

The main results are as follows: trend GDP growth for the next five years—2017 to 2021—is 3.2%, three-tenths lower than estimated in 2015 for the 2016–2020 period^{2/}. The correction is mainly related to the lower expected growth of capital, due to lower investment. For potential GDP, the estimated growth rate is currently between 2.5 and 3.0%, which is lower than previously estimated. The evidence also suggests that it will take longer to converge to the trend level.

Trend growth of other GDP

As is customary, the estimation of trend growth distinguishes between natural resource sectors and non-natural-resource sectors (other GDP). For the latter group, the estimation is based on production function methodology, which assumes that trend growth can be decomposed as follows:

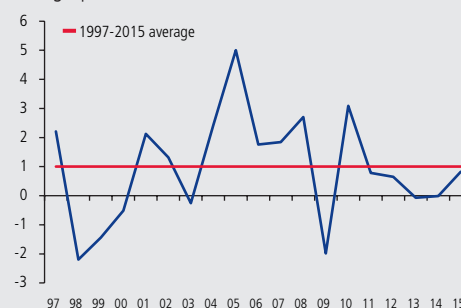
$$\Delta Y = \Delta TFP + \alpha \Delta L + (1 - \alpha) \Delta K,$$

where ΔY is the percentage growth of trend GDP, ΔTFP is the trend growth of total factor productivity, α is the share of labor in GDP, ΔL is the trend growth of quality-adjusted hours worked, and ΔK is the expected growth of capital.

For trend TFP growth of other GDP, the forecast remains 1% for the next five years, which is around the average growth rate of 1997–2015^{3/}. The estimation of trend productivity growth

is subject to a large degree of uncertainty, so this assumption should be carefully monitored, especially given that real TFP growth has been below the long-term estimate since 2011 (figure V.10). Deviations of this magnitude are not uncommon, due to both the cyclical behavior of productivity and the common measurement problems of the exercise, such as the difficulty of correctly measuring installed capacity utilization^{4/}.

FIGURE V.10
TFP growth
(annual change, percent)



Source: Central Bank of Chile.

The labor contribution is calculated using the same methodology as for the September 2015 forecast. The share falls marginally for the five-year period 2017–2021, due to convergence toward its long-term value. As documented in detail by Albagli et al. (2015), the aging of the population and the lower birth rate will cause the working-age population to grow 1%, while the secular trend toward reducing the number of hours worked will subtract around 0.4% from the growth of total hours. These effects will be offset by a higher participation of women and by job quality, which will add 0.2 and 0.7%, respectively. Thus, total quality-adjusted hours will contribute 0.8% to trend GDP growth.

^{1/} For a detailed explanation of the methodology, see boxes V.1 and V.2 in the September 2015 *Monetary Policy Report*.

^{2/} The committee of experts convened by the Finance Ministry also revised the trend growth estimate downward, with an average of around 3.2% for the period 2017–2021.

^{3/} Average growth in 1997–2014 was 0.97%. If we include estimated data on the capital stock in 2015, the average falls to 0.96%. On adding estimated data on the capital stock in 1990–1996, average TFP growth in 1991–2014 is 1.09%, while for the full period 1991–2015 it is 1.03%.

^{4/} De la Huerta and Luttini (2016) present a range of statistical arguments that support the use of average productivity as a reasonable estimate of trend TFP growth. Moreover, a growth rate of 1% seems reasonable from an international perspective: adjusting for job quality, that was the average TFP growth rate in OECD countries from 1987 to 2014 (OECD, 2015). To control for factor utilization during the cycle, in the construction of the TFP series presented in figure V.10, the deviation of electricity generation and the unemployment rate from their long-term values are used as a proxy for capital and labor utilization, respectively.



Finally, weak investment and the worsening investment outlook have led to a downward revision to the contribution of the growth of capital. A year ago, the non-natural-resource sectors were expected to record an average capital growth rate of 3.6% in 2016–2020; this has been reduced to 3.2% for 2017–2021. The downward adjustment is largely explained by the weak forecast for this year and the next in the new baseline scenario. This implies that the expected contribution of capital growth to trend GDP growth in the 2017–2021 period will be 1.5% (versus 1.7% a year ago for 2016–2020). Going forward, the recovery of growth rates to their trend level, combined with the low cost of capital utilization, should contribute to increasing capital growth rates to around the level of the previous forecast (Contreras and Luttini, 2016).

Trend growth of total GDP

To calculate the trend growth of total GDP, the estimation incorporates the growth forecast for the natural resource sectors, which include mining, fishing, and electricity, gas, and water (EGW). The forecast is based on data from the CBC survey (carried out by the Capital Goods and Technological Development Corporation), the Chilean Copper Commission (Cochilco), the National Energy Commission (CNE), and the Center for Economic Load Dispatch (CDEC), as well as an analysis of the historical evolution of copper ore grade. The results are the same as a year ago, at just under 3% (table V.1).

TABLE V.1

Trend GDP growth forecast for the next five years
(percent)

Period	Trend growth (*)			Contrib. to other GDP growth		
	GDP	Nat.res.	Other	TFP	Hrs. worked	Capital
Sep. 2015	3.5	2.9	3.6	1.0	0.9	1.7
Sep. 2016	3.2	2.9	3.3	1.0	0.8	1.5

(*) Natural resources account for 12.1% of total GDP. VAT and import duties grow at the same rate as other GDP. The share of labor in other GDP (α is 52%).

Sources: Albagli et al. (2015); Contreras and Luttini (2016).

Potential growth and output gaps

With regard to potential growth, the new estimates are lower than last year, at 2.5 to 3.0% (table V.2)^{6/}. When combined with the upward revision of other GDP growth in 2015, this implies that the output gap is similar to last year's projection, even though the 2016 growth forecast was adjusted downward by more than a percentage point in that period. Going forward, the gap is expected to widen faster than projected last year. Finally,

while the level to which potential growth is converging in 2020–21 is similar to last year's estimate, the speed of convergence will be somewhat slower^{6/}.

From a New Keynesian perspective, which relates the output gap to inflationary pressures—and which underlies some of the methodologies used in this section—the low potential GDP growth is consistent with the changes in the economic environment. Growth has been low for several years now and is forecast to continue along that trend, while inflation, especially services inflation, has decreased very gradually and is still over 4%. Moreover, the labor market has adjusted slowly, with little slack.

TABLE V.2

Estimation of potential growth and output gap for other GDP
(percent)

Period	Other GDP (1)(2)		Potential (2)		Output gap (2)	
	Sept. 2015	Sept. 2016	Sept. 2015	Sept. 2016	Sept. 2015	Sept. 2016
2015	2.3	2.7	2.9	2.6	-0.7	0.0
2016	3.0	2.0	3.1	2.5	-0.8	-0.5
2017	3.3	2.0	3.4	2.8	-0.9	-1.3

(1) Forecasts contained in the *Monetary Policy Report* in each year, taking the midpoint of the forecast range when the bias is neutral and the first quarter when the bias is skewed to the downside.

(2) Annual average.

Source: Central Bank of Chile.

The temporary reduction in potential growth is also in line with below-trend productivity growth (figure V.10). Furthermore, the adjustment is consistent with a decrease in the neutral interest rate, which is between 1.0 and 1.5% (Ceballos et al., 2016). This drop has occurred in a context of extremely low real rates globally, which reflect not only the highly expansionary monetary policies being implemented in the developed world, but also a secular trend downward that has been underway for several decades and from which Chile is no exception^{7/}.

Conclusions

This box has reviewed the trend and potential growth estimates for Chile. With regard to trend growth, the analysis confirms that the level is somewhat lower than previously estimated, which is mainly explained by the low estimated investment. Potential GDP growth is also lower than estimated last year, which partially explains the downward revision of growth forecasts in the past year. As a result, the output gap will widen faster than forecast, exceeding the levels previously considered for 2017. Even with the expansion, however, the estimated gap is still small.

^{6/} This is due, in part, to the fact that market expectations on the convergence of potential growth—a variable that enters as additional information in the FMV and MEP model—currently show lower growth going forward, in particular for potential growth, relative to the path considered in surveys a year ago.

^{7/} For example, Rachel and Smith (2015) show that, on average, global long-term interest rates have fallen on the order of 450 bp over the last thirty years.

^{5/} The models described in the September 2015 *Monetary Policy Report* and in Albagli et al. (2015) were reestimated. The results are consistent with alternative estimates of excess capacity based on business surveys and labor market variables.

BOX V.2

CHANGES IN THE BASELINE FORECAST SCENARIO IN THE PAST YEAR

In July, annual CPI inflation reached 4%, after several quarters above the target ceiling. It is expected to close the year at 3.5% and then continue declining to converge to 3%. This path is in line with the forecast in the September 2015 *Monetary Policy Report*. At that time, inflation was expected to end 2016 at 3.7% annual and then converge to 3% over the course of 2017. With regard to output, GDP growth in 2015 was in line with the forecast in September of that year, but the data and forecast for 2016 were revised significantly downward in December 2015 and March 2016, reflecting the lower external stimulus, the lower investment outlook, and the lack of recovery in confidence. From March to date, the forecast has not changed significantly.

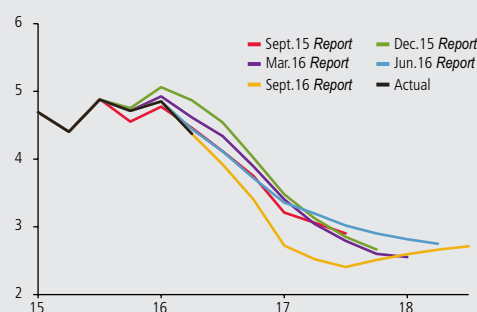
In the last year, monetary policy has continued to contribute to buffering the economic cycle, with the MPR below what is considered the neutral level, even after increasing 50 bp in late 2015. The real MPR⁷ is currently at 0.5%, after being below zero through the first months of 2016. Medium-term real rates have not changed significantly in the past year and remain around their historical lows.

Prior to the increase in the MPR in late 2015, a series of factors had modified the outlook for inflation convergence. Inflation had exceeded the forecast, and it was expected to stay above 4% for a considerable period, thus pushing back convergence to 3%. The strong peso depreciation was the main cause for the change in outlook, but the direct effects were strongly exacerbated by the indirect effects, deriving from indexation to past inflation among other factors. In addition, the relative resilience of the labor market, the high annual growth of wages, and the continued bounded output gaps, in part due to the sharp revision of potential GDP in September 2015, suggested that nontradables inflation would not contribute substantially to reducing inflation.

In this context, the short-term inflation risks were skewed to the upside. First, the risks of the external scenario had increased, which could trigger further depreciation. These risks included the normalization of monetary policy in the United States and the

doubts about China. Second, the persistence of high inflation was considered a risk for inflation expectations. The Board considered that inflationary pressures had increased and that it was therefore necessary to reduce the monetary stimulus somewhat to ensure convergence to the target. The reduction ended up being a little faster than expected, since the inflation risks were intensifying. The MPR rose 25 bp in October and December 2015, to 3.5%. In the December *Report*, the inflation scenario reflected these changes, in particular in the higher core inflation (CPIEFE) in 2016 (figure V.11).

FIGURE V.11
Annual CPIPE inflation forecast two years ahead
(annual change, percent)



Source: Central Bank of Chile.

The first quarter of 2016 brought new turbulence in the international markets, in the face of heightened fears about China and doubts about U.S. monetary policy. The peso-dollar exchange rate hit its highest nominal level in several years, commodity prices dropped to new lows, and the outlook for Latin America deteriorated again. Nevertheless, the periods of volatility were short-lived, though intense. Domestically, inflation was in line with the forecast. It was still high, mainly due to lagged effects of the peso depreciation, but the exchange rate had finally broken with the upward trend experienced between 2013 and 2015. At the same time, indexation to past inflation and bounded output gaps hindered a faster pullback of services inflation.

⁷ the difference between the current MPR and expected inflation one year ahead.



With regard to output, the first 2015 closure was released in March 2016, revealing a weaker economy than expected. Moreover, confidence levels had not recovered, and the external stimulus had slackened. Taken together, this lowered the GDP growth range for 2016 by 75 bp relative to December and put 2017 GDP growth between 2 and 3%. The latter range was below trend growth, but it considered a recovery in the growth rate toward the end of 2017. The labor market showed clearer signs of slowing down. Thus, the March *Report* projected that inflation would be somewhat lower than the December forecast, with CPIEFE falling below 4% toward the end of the fourth quarter of 2016 (figure V.11). The Board deemed that convergence to the target would require a partial withdrawal of the monetary stimulus, but it announced that the adjustment would be more gradual than predicted in December.

In June, the period of calm continued in the international financial markets. Nevertheless, the baseline scenario considered that external financial conditions could worsen, due to the high probability of new episodes of volatility. Domestically, the economy had performed in line with the March forecast. Inflation had declined to 4.2%, and the new forecasts indicated that it would return to the target range in the coming months. In the first quarter of 2016, some idiosyncratic factors had contributed to raising output above the forecast, but the outlook for the rest of the year was for lower growth, and the economy was expected to continue growing below potential. The labor market continued to weaken, especially in wage employment. The unemployment rate had gradually increased, in line with projections. Surveys and market prices indicated that the normalization of monetary policy would be slower than previously expected, which the Board incorporated as a working assumption in the June *Report*.

In late June, one of the risks considered in the *Report* was realized: Brexit. Although the general belief was that the passing of the referendum would have strong negative effects on global markets, the immediate reactions quickly gave way to a surprising improvement in global financial conditions. The basic reason behind the shift was the market's perception that monetary conditions in the developed world would continue to be as expansionary—or even more so—and for a longer time. The search for returns was therefore intensified, which, given the very low interest rates in developed economies, propelled capital inflows to emerging markets and currency appreciation. The baseline scenario in this *Report* contemplates better external financial conditions than projected in the first half of the year, while acknowledging the various associated risks. Even so, the growth of trading partners and commodity prices are expected to remain around their June levels.

The strong peso depreciation of the past few years has eased, allowing inflation to begin its descent in line with the forecast. There are still short-term inflation risks, however, in that any episode of global volatility could trigger a new peso depreciation. The 2016 growth forecast has been revised significantly in the past year (table V.3). This change largely reflects the downturn of potential growth (box V.1). The assessment of the output gap is not substantially different from a year ago, although the extraordinary revision of the 2015 national accounts—due to the incorporation of retail sales data that were not included in the initial measures—indicated that other GDP had grown more in the year, which contributed to narrowing the gap. Nevertheless, the gap is expected to remain open for some time, which will contribute to reducing inflationary pressures in the medium term.

On the spending side, the main adjustment in the last year was to investment. In September 2015, GFCF was expected to grow 1.9% this year, which has now been revised to –1.5% (table V.3). Underlying this change is a sharper slowdown in the construction and works component, mainly because mining investment has dropped more sharply than expected. In addition, after a strong increase in 2015, the outlook for residential construction has deteriorated sharply. Machinery and equipment recorded positive growth rates in the first half, buoyed by a number of one-off factors.

In this context, the Board has held the MPR at its current level and has announced that future changes will depend on the implications of internal and external macroeconomic conditions for the inflation outlook.

TABLE V.3
Economic growth for 2016
(annual change, percent)

	Sept. 15	Dec. 15	Mar. 16	Jun. 16	Sept. 16
GDP	2.5-3.5	2.0-3.0	1.25-2.25	1.25-2.0	1.5-2.0
Balance of risk to output	Skewed to downside	Skewed to downside	Broadly balanced	Broadly balanced	Broadly balanced
Domestic demand	3.1	2.6	1.5	1.0	1.0
Domestic demand (excl. inventories)	3.0	2.5	1.5	1.1	1.5
Total consumption	3.3	2.7	1.8	2.1	2.4
Gross fixed capital formation	1.9	1.7	0.5	-2.4	-1.5
Current account (% of GDP)	-1.5	-2.6	-2.5	-2.2	-1.6

Source: Central Bank of Chile.

Appendix A: The Central Bank of Chile's Balance Sheet

This appendix presents and analyzes the position and projections of the main items on the Central Bank of Chile's financial statements. It starts with a brief review of the evolution of the balance sheet in the first half of 2016 and then presents asset and liability forecasts for year-end 2016 and 2017.

The movements in any balance sheet account can be explained by (a) flows, which are related to settled liabilities and new transactions; (b) profits, which correspond to interest earned; and (c) adjustments, earnings, and losses associated with accounts indexed to movements in the exchange rate or inflation. Because around 97% of its assets are international reserves and 55% of its liabilities are policy instruments and promissory notes (debt), the Central Bank is a net debtor in domestic currency and a net creditor in foreign currency. Therefore, the bottom line of the balance sheet is determined by the evolution of the differential between international interest rates (profitability of reserves) and domestic interest rates (the cost of debt). Earnings and losses also depend on changes in the exchange rate of the peso against the currencies that make up the international reserves. Currently, the currency benchmark primarily comprises U.S. dollars (63.6%) and euros (16.8%), as well as other currencies such as the pound sterling, yen, Swiss franc, Chinese renminbi, South Korean won, Australian dollar, New Zealand dollar and Canadian dollar.

EVOLUTION OF THE BALANCE SHEET IN THE FIRST HALF OF 2016

In the first half of this year, the size of the Central Bank's assets and liabilities as a percent of GDP decreased relative to year-end 2015, while the equity deficit increased (table A.1).

TABLE A.1

Central Bank of Chile's balance sheet: summary of balances and earnings (percent of GDP)

	2013	2014	2015	Jun.16	2016 (f)	2017 (f)
ASSETS	17.2	17.4	18.0	16.7	16.8	16.2
International reserves	15.7	16.6	17.4	16.2	16.2	15.8
Fiscal promissory notes and other gov. credit	0.8	0.1	0.2	0.2	0.2	0.2
Monetary policy instruments	0.1	0.1	0.0	0.0	0.0	0.0
Other assets	0.6	0.5	0.4	0.3	0.3	0.3
LIABILITIES	20.0	19.8	19.2	18.9	18.8	18.2
Promissory notes with secondary market	9.5	8.7	8.6	9.2	9.1	8.6
Bank policy instruments	2.6	3.5	3.6	2.7	2.7	2.5
Other bank liabilities	0.6	0.5	0.4	0.4	0.4	0.4
Other liabilities excl. monetary base	0.8	1.5	0.9	0.8	0.8	0.8
Monetary base	6.4	5.5	5.8	5.7	5.7	5.9
EQUITY (A+B+C)	-2.8	-2.4	-1.3	-2.1	-2.0	-2.0
A. Initial equity	-3.3	-2.6	-2.3	-1.2	-2.1	-1.9
B. Net income	0.5	0.2	1.0	-0.9	-0.8	-0.1
Nonfinancial	-0.1	-0.8	0.0	0.0	-0.1	-0.1
Net interest	-0.2	-0.3	-0.2	-0.1	-0.3	-0.2
From changes in exchange rates and UF	0.8	1.2	1.4	-0.9	-0.5	0.3
C. Capital contributions	0.0	0.0	0.0	0.0	0.0	0.0
Position payable in foreign currency (*)	13.6	14.2	14.9	14.0	14.1	13.7

(*) Foreign currency assets minus foreign currency liabilities.

(f) Forecast.

Source: Central Bank of Chile.

Between 31 December 2015 and 30 June 2016, the size of the balance sheet decreased by Ch\$1.182 trillion, from 18.0 to 16.7% of GDP. On the asset side, international reserves contracted by Ch\$1.076 trillion, mainly due to a devaluation of reserve investments by Ch\$699 billion and a reduction in special drawing rights and IMF reserves by Ch\$356 billion. In the other asset accounts, there was a reduction in subordinated debt of Ch\$123 billion. On the liability side, PDBC debt increased Ch\$2.481 trillion, while long-term debt decreased Ch\$1.034 trillion. The use of the standing deposit facility decreased by Ch\$1.099 trillion and commercial bank deposits by Ch\$180 billion.



In terms of flows, the balance sheet changes described above explained the increase in the monetary base of Ch\$84 billion and in foreign exchange operations for operating purposes of Ch\$24 billion in the first half (table A.2).

TABLE A.2

Balance sheet flows Central Bank of Chile (1)
(Ch\$ billion)

	2013	2014	2015	jun.16	2016 (f)	2017 (f)
1. Net international reserves	-127	354	-120	81	81	0
2. Policy instruments in domestic currency	997	401	135	72	260	913
3. Central Bank promissory notes in dollars	0	0	0	0	0	0
4. Other domestic currency operations, excl. monetary base (2)	-136	-979	777	-12	36	-35
5. Other foreign currency operations (3)	130	-347	177	-58	-29	35
Monetary base (change = 1+2+3+4+5)	864	-571	969	84	349	914
Position payable in foreign currency (forex operations=1+3+5) (4)	3	6	56	24	53	35

(1) Exchange flows. The corresponding balances are also affected by interest, indexation, and price adjustments, where applicable.

(2) Service on Treasury promissory notes in UF, subordinated debt service, and other operations in domestic currency.

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

(4) Includes forex market operations deriving from policy decisions and forex operations for operational purposes of the Central Bank.

(f) Forecast.

Source: Central Bank of Chile.

The Bank's equity position went from -\$1.9758 trillion on 31 December 2015 (equivalent to -1.3% of GDP) to -\$3.4489 trillion on 30 June 2016 (-2.1% of GDP). This is mainly explained by losses associated with the appreciation of the peso against the reserve currencies, of Ch\$1.403 billion. The rest is due to losses deriving from the interest rate differential between the interest paid on debt and the interest earned on international reserves (\$42 billion) and administrative expenses plus the costs of issuing and distributing banknotes and currencies (\$27 billion).

BALANCE SHEET PROJECTIONS FOR 2016 AND 2017

The main working assumptions underlying the forecast are the following: (i) there will be no foreign exchange operations during the forecast period; (ii) the standing deposit facility will remain around the levels recorded at the close of the first half of 2016; (iii) the balance of monetary policy instruments, mainly repos and the liquidity line, will remain unused; (iv) Treasury deposits will remain at the level recorded on 30 June 2016; (v) the evolution of the monetary base will be consistent with the growth of the economy and inflation; and (vi) in the remainder of 2016, there will be issues of long-term debt (BCP) totaling Ch\$200 billion, in accordance with the debt plan published in January 2016. For 2017, the assumptions include maturity rollovers and coupons paid in the period, with the expected growth of the monetary base. PDBC operations are expected to be used to adjust for a deficit or surplus of funds.

The baseline forecast scenario assumes that over the remainder of 2016 and into 2017, the differential between local and international interest rates will decrease slightly relative to the close of the first half of the year. Based on these assumptions, equity losses are expected from net interest, with projections of approximately 0.3% of GDP in 2016 and 0.2% of GDP in 2017.

The balance sheet projections assume that parities will move in accordance with forward values at the statistical close of this *Monetary Policy Report*.

The inflation forecast in the baseline scenario is 3.5% in December 2016 and 3.1% in December 2017.

Based on these assumptions, projected losses from valuation changes are equivalent to 0.5% of GDP in 2016, with projected earnings of 0.3% of GDP in 2017.

Given the assumptions described in this appendix, the size of the balance sheet is projected to be 16.8% of GDP at year-end 2016. For 2017, the size of the balance sheet is expected to decrease to 16.2% of GDP. The equity deficit will reach 2.0% of GDP in 2016 and 2017.

Appendix B: International reserve management

International reserves are liquid assets in foreign currency that are held by the Central Bank of Chile to support its monetary and foreign exchange policies. Reserves are managed so as to provide efficient and secure access to international liquidity and to safeguard the financial equity of the Bank. Reserve management is based on the legal framework defined in Article 38, Title III, of the Basic Constitutional Act of the Central Bank.

The management objectives for the international reserves are as follows: (i) to hold foreign exchange reserves in highly liquid instruments, which can be called in the briefest period possible without incurring significant transaction costs; (ii) to invest in instruments that present limited financial risks, in order to limit the risk of generating capital losses and ensure the preservation of capital; (iii) to minimize the volatility of the value of the Bank's equity as a result of changes in the exchange rates of the investment currencies vis-à-vis the peso; and (iv) to reduce the cost of holding reserves at the margin.

In carrying out its international reserve management, the Central Bank maintains a clear separation of responsibilities at the hierarchical level, in line with international recommendations in this area. The Bank also undergoes periodic internal and external audits of its international reserve management, including a review of the different investment processes. This ensures that the decision-making process and management assessment within the Bank remain clearly defined and that the risks are mitigated.

The principle of separation of functions is applied to international reserve management. The International Markets Management participates in the definition of the investment policy, which is approved by the Board, and is responsible for implementing the policy in terms of defining, executing, and monitoring investment strategies. The Financial Services Management is responsible for improving investment operations, including the maintenance of the registry, the accounting, and the generation of all payment instructions and/or fund movements to ensure compliance with all contractual liabilities. Both Managements answer to the Financial Operations Division, which submits proposals to the Board regarding changes in investment policy.

The daily monitoring of compliance with the investment guidelines and parameters defined by the Board is carried out by the Financial Risk Assessment and Administration Management. In contrast to the above Managements, this one reports directly to the Central Bank's General Manager.

The credit risk associated with the investment of international reserves is managed through the definition of eligibility criteria and maximum exposure to countries, supranational entities, commercial banks and agencies. The variables used to monitor this risk include credit rating, institutional equity, market size, debt ratios and explicit guarantees.

TABLE B.1

Benchmark structure of the international reserve investment portfolio, by type of risk and benchmark

Structure	Credit risk	Share	Benchmark
Short-term liquidity portfolio	Sovereign	24%	Merrill Lynch: Treasury Bills Index (unhedged) 0–1 year duration (100%) (USD)
Medium-term liquidity portfolio	Sovereign	61%	Barclays Capital Global Aggregate: Treasury Bond Index (unhedged) 1–3 year duration (90%) 3–5 year duration (10%) (USD, EUR, CAD, AUD)
Diversification portfolio	Sovereign and Bank	15%	Barclays Capital Global Aggregate: Treasury Bond Index (unhedged) 5–7 year duration (70.6%) 7–10 year duration (9.4%) (USD, EUR, JPY, KRW, CHF, NZD, GBP) Bloomberg CGDRC: Customized index for CNH (20%)
Total portfolio		100%	

Source: Central Bank of Chile.

To achieve the management objectives, the benchmark structure defines three investment portfolios: (a) the short-term liquidity portfolio (24%); (b) the medium-term liquidity portfolio (61%); and (c) the diversification portfolio (15%). Together, these three funds make up the foreign exchange investment portfolio (table B.1). The international reserves portfolio further comprises the cash portfolio (transaction account balances held by the General Treasury, public companies, and banks) and the other assets portfolio (IMF special drawing rights, certified gold, and other assets).



The benchmark structure of the investment portfolio includes a total of ten currencies: U.S. dollars (63.60%), euros (16.75%), Canadian dollars (4.57%), Australian dollars (4.57%), Japanese yen (0.45%), Swiss francs (0.75%), pounds sterling (1.50%), South Korean won (3.00%), New Zealand dollars (1.80%), and Chinese renminbi (3.00%).

With regard to credit risk, the benchmark considers 97% in sovereign risk and 3% in bank risk, with the latter limited exclusively to deposits denominated in Chinese renminbi. The total interest rate risk of the investment portfolio, measured through modified duration, is approximately 23 months (table B.2).

To complement internal international reserve management, the Bank has had external management programs for a share of the reserves since 1995. The objectives of these programs are to provide an active benchmark for evaluating internal management, to add economic value, and to facilitate the transfer of knowledge and technology.

At the end of the first half of 2016, a share of the investment portfolio (2.98%) was under the independent management of two external companies: Pacific Investment Management Company (PIMCO) and BlackRock Institutional Trust Company N.A. (BlackRock). The latter firm received its management mandate in February 2016.

TABLE B.3
Absolute and differential returns on international reserve management (1) (2) (3)
(percent)

Period	In currency of origin		In dollars		Difference
	Int.Res.	BMK	Int.Res.	BMK	
2016	2.65	2.72	4.26	4.42	-0.16
2015	0.73	0.90	-3.74	-3.58	-0.16
2014	1.65	1.52	-2.94	-3.14	0.21
2013	0.26	0.21	-0.71	-0.77	0.05
2012	0.66	1.01	1.43	1.77	-0.35
2011	2.43	2.41	1.22	1.20	0.02
2010	2.10	2.19	-0.15	-0.06	-0.09
2009	2.15	1.65	3.34	2.85	0.50
2008	5.70	5.37	4.14	3.81	0.33
2007	4.81	4.78	8.86	8.83	0.03

(1) 2016 data are annualized returns for the first half of the year.

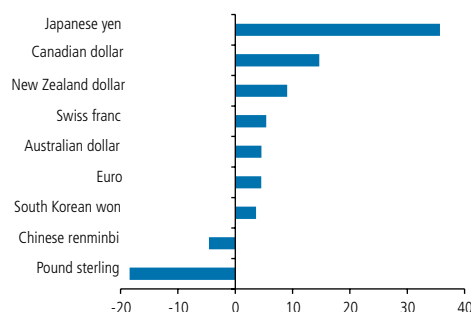
(2) Excluding monetary gold, special drawing rights, IMF reserve position, reciprocal credit agreements, and other reserve assets.

(3) Starting in 2014, the Bank reports the return measured in currency of origin, which does not incorporate the appreciation or depreciation of the currencies in the portfolio. From 2007 to 2013, an approximation of the return in currency of origin was used (called the foreign currency return), where the return was expressed in the benchmark currency basket and thus was equivalent to the return in currency of origin to the extent that the investments tracked the benchmark allocation.

Source: Central Bank of Chile.

In the first half of 2016, the annualized return from the internal international reserve management program was 2.65% measured in currency of origin, which does not take into account appreciation or depreciation of the currencies in the portfolio. Expressed in pesos, the annualized return was -9.22%; the difference is mainly explained by the appreciation of the local currency against the currencies in which the reserves are invested. Expressed in dollars, the annualized return was 4.26% (table B.3), which represents the sum of the yield on assets in local currency and the exchange rate effect on those assets. In this case, the return from interest rates and the return from exchange rate movements were both positive, given that the basket of currencies in which the international reserves are invested appreciated against the U.S. dollar (figure B.1). The annualized differential return attributable to reserve management was 16 basis points below the benchmark.

FIGURE B.1
Changes in U.S. dollar exchange rates (1) (2)
(percent)



(1) Annualized change of currencies in the first half.

(2) A negative (positive) sign is an depreciation (appreciation) of the given currency against the U.S. dollar.

Source: Bloomberg

On 30 June 2016, the international reserves totaled US\$39.6939 billion (figure B.2). Of the total, US\$34.3768 billion were allocated to the investment portfolio, US\$4.3077 billion to the cash portfolio, and US\$1.0094 billion to other assets. With regard to the currency composition, 65.6% of the total is invested in U.S. dollars, 14.5% in euros, and 19.9% in other currencies.

TABLE B.2
Benchmark currency, maturity and duration structure of the internally managed portfolio

		USD		EUR		AUD		CAD		CHF		GBP	
		Share	Duration (months)	Share	Duration (months)	Share	Duration (months)	Share	Duration (months)	Share	Duration (months)	Share	Duration (months)
Short-term liquidity portfolio (SLP)	Sovereign 0–1 year	24.7%	3.7										
	Subtotal SLP	24.7%	3.8										
Medium-term liquidity portfolio (MLP)	Sovereign Duration:												
	1–3 years	33.9%	21.9	14.1%	21.5	4.2%	21.3	4.2%	19.0				
	3–5 years	3.8%	45.5	1.6%	45.0	0.5%	43.6	0.5%	42.4				
	Subtotal MLP	37.7%	24.3	15.7%	23.9	4.7%	23.6	4.7%	21.3				
Diversification portfolio (DP)	Sovereign Duration:												
	5–7 years	2.22%	66.5	1.1%	66.8					0.6%	68.5	1.1%	63.8
	7–10 years	0.30%	90.4	0.2%	93.5					0.1%	96.7	0.2%	93.8
	Bank 0–1 year												
	Subtotal DP	2.51%	69.3	1.3%	70.0					0.6%	71.9	1.3%	67.3
Total portfolio		64.9%	18.2	16.9%	27.3	4.7%	23.6	4.7%	21.3	0.6%	71.9	1.3%	67.3
		JPY		KRW		NZD		CNY		Total			
		Share	Duration (months)	Share	Duration (months)	Share	Duration (months)	Share	Duration (months)	Share	Duration (months)		
Short-term liquidity portfolio (SLP)	Sovereign 0–1 year												
	Subtotal SLP									24.7%	3.8		
Medium-term liquidity portfolio (MLP)	Sovereign Duration:												
	1–3 years												
	3–5 years												
	Subtotal MLP									62.8%	23.7		
Diversification portfolio (DP)	Sovereign Duration:												
	5–7 years	0.3%	63.7	2.2%	58.9	1.3%	64.9						
	7–10 years	0.0%	90.2	0.3%	84.3	0.2%	87.1						
	Bank 0–1 year							2.5%	1.5				
	Subtotal DP	0.4%	66.9	2.5%	61.9	1.5%	67.5	2.5%	1.5	12.6%	54.0		
Total portfolio		0.4%	66.9	2.5%	61.9	1.5%	67.5	2.5%	1.5	100.0%	22.7		

Sources: Central Bank of Chile, Merrill Lynch, and Barclays, 30 June 2016.



FIGURE B.2
International reserve (*)
(stock, US\$ billion)



(*) Includes investment portfolio and cash portfolio; excludes other assets.
Source: Central Bank of Chile.

On 30 June 2016, the total value of the international reserves was US\$1.0514 billion more than at year-end 2015. This reflects an increase in the cash portfolio (US\$272.5 million), due to changes in the stock of deposits and account balances held at the Central Bank by the financial system, together with an increase in the investment portfolio (US\$1.2395 billion), explained by the appreciation of the basket of reserve currencies against the U.S. dollar and by capital gains associated with an increase in the value of fixed-income assets. Additionally, the investment portfolio received a contribution of US\$438.1 million associated with a purchase of special drawing rights (SDRs) with the International Monetary Fund (IMF), which was offset in other assets, which decreased US\$460.6 million in the period (table B.4).

With regard to the exposure of the internally managed investment portfolio by type of risk and country, at the close of this *Report*, there was an appropriate degree of diversification of the different types of risk in which the international reserves are invested. At the end of June 2016, investment in sovereign risk represented 90.1% of the investment portfolio, and it was concentrated in the United States (53.9%) and Germany (19.2%). Investment in supranational risk represented 5.5% and agency risk 0.2%. Bank risk, which represented 4.2% of the total investment portfolio, included banks in Australia, Belgium, Canada, China, France, Germany, Japan, the Netherlands, Singapore, Sweden, and Switzerland (tables B.5 and B.7). The portfolio was also exposed to a BIS Investment Pool (BISIP) denominated in renminbi (equivalent to US\$103.6 million), which is managed directly by the Bank for International Settlements (BIS). This instrument provides exposure to the Chinese onshore fixed-income market.

TABLE B.4
Composition of international reserves
(US\$ millions)

Portfolio	Currency	2015		2016	
		Dec.	%	Jun.	%
Investment portfolio		33,137.4	85.8	34,376.8	86.6
Currencies and deposits	U.S. dollar	704.0	1.8	756.3	1.9
	Euro	0.1	0.0	1.8	0.0
	Canadian dollar	0.1	0.0	0.1	0.0
	Australian dollar	0.0	0.0	0.0	0.0
	Other currencies	836.1	2.2	688.7	1.7
Securities	U.S. dollar	19,829.9	51.3	20,970.6	52.8
	Euro	5,559.5	14.4	5,742.8	14.5
	Canadian dollar	1,871.9	4.8	1,637.2	4.1
	Australian dollar	1,574.3	4.1	1,638.5	4.1
	Other currencies	2,761.6	7.1	2,940.8	7.4
Total	U.S. dollar	20,533.9	53.1	21,726.9	54.7
	Euro	5,559.6	14.4	5,744.6	14.5
	Canadian dollar	1,871.9	4.8	1,637.3	4.1
	Australian dollar	1,574.3	4.1	1,638.5	4.1
	Other currencies	3,597.6	9.3	3,629.6	9.1
Cash portfolio		4,035.1	10.4	4,307.7	10.9
Currencies and deposits	U.S. dollar	4,035.1	10.4	4,307.7	10.9
Other assets		1,470.1	3.8	1,009.4	2.5
Monetary gold	Other currencies	8.5	0.0	10.5	0.0
IMF SDRs	Other currencies	1,058.3	2.7	756.8	1.9
IMF reserve position	Other currencies	363.1	0.9	225.5	0.6
Reciprocal credit agreements	U.S. dollar	39.3	0.1	16.1	0.0
Currencies and deposits	U.S. dollar	0.8	0.0	0.6	0.0
Total international reserves		38,642.6	100.0	39,693.9	100.0
	U.S. dollar	24,609.2	63.7	26,051.2	65.6
	Euro	5,559.6	14.4	5,744.6	14.5
	Canadian dollar	1,871.9	4.8	1,637.3	4.1
	Australian dollar	1,574.3	4.1	1,638.5	4.1
	Other currencies	5,027.6	13.0	4,622.3	11.6

Source: Central Bank of Chile.

On 30 June 2016, the currency allocation of the investment portfolio was as follows: 63.4% in U.S. dollars, 16.6% in euros, 4.5% in Canadian dollars, and 4.5% in Australian dollars. The remaining 11.0% was invested in pounds sterling, Swiss francs, New Zealand dollars, Chinese renminbi, South Korean won, and Japanese yen (table B.6).

At the end of June, the two external managers, PIMCO and BlackRock, managed a total of US\$1.0239 billion, allocated to the diversification portfolio (table B.7).

TABLE B.5

Internally managed portfolio: Investments by country and type of risk
(US\$ million)

country	Sovereign (1)	Bank	Agency (2)	Supranational (3)	Total
Germany	5,904	58	31		5,993
Australia	1,510	53			1,564
Austria	231				231
Belgium		100			100
Canada	2,353	30			2,383
China	199	511			710
South Korea	855				855
Spain	184				184
United States	16,456				16,456
France	461	138			599
Netherlands	12	147			158
Ireland	352				352
Italy	96				96
Japan	142	161			303
Norway	10				10
New Zealand	497				497
Poland	185				185
United Kingdom	407				407
Singapore		93			93
Sweden		68			68
Switzerland	212	54			266
Supranational				1,821	1,821
Miscellaneous (cash)		23			23
TOTAL	30,064	1,437	31	1,821	33,353

(1) Sovereign exposure includes the following institutions with an explicit guarantee: Kreditanstalt für Wiederaufbau (KfW / Germany, 1.4517 billion), Export Development Canada (EDC / Canada, 792.4 million), and Oesterreichische Kontrollbank (OKB / Austria, 230.7 million). Sovereign exposure in the United States includes a total of US\$ 1.5 million held at the New York Federal Reserve (US\$1.0 million in overnight deposits and US\$0.5 million in transaction accounts). Sovereign risk also includes China (US\$103.6 million in the BISIP-CNY), which is directly managed by the BIS.

(2) Exposure to German agency risk corresponds to Landwirtschaftliche Rentenbank (US\$31.2 million).

(3) Exposure to supranational risk includes the following eligible issuers: Asian Development Bank (ADB, US\$6.2 million), European Investment Bank (EIB, US\$634.7 million), Eurofima (US\$4.1 million), International Finance Corporation (IFC, US\$60.1 million), and Bank for International Settlements (BIS, US\$1.115,9 million).

Source: Central Bank of Chile.

TABLE B.6

Investment portfolio by currency
(percent)

Currency	Share (1)
U.S. dollar	63.4
Euro	16.6
Canadian dollar	4.5
Australian dollar	4.5
Pound sterling	1.4
South Korean won	3.1
Japanese yen	0.5
Chinese renminbi	3.2
New Zealand dollar	1.9
Swiss franc	0.8
Other (2)	0.0
TOTAL	100.0

(1) Includes currency forward positions.

(2) Includes DKK, NOK, SEK, SGD, and CZK.

Source: Central Bank of Chile.

TABLE B.7

Internally managed portfolio: Investments by country and type of risk
(US\$ million)

Country	Sovereign (1)	Bank	Agency (2)	Supranational (3)	Total
Germany	51		4		55
Austria	61				61
Canada	15				15
China	17				17
South Korea	206				206
Spain	19				19
United States	218		32		250
France	4				4
Italy	20				20
Japan	57				57
New Zealand	105				105
United Kingdom	79				79
Czech Republic	5				5
Switzerland	35				35
Supranational				87	87
Miscellaneous (cash)		7			7
TOTAL	894	7	36	87	1,024

(1) Sovereign exposure includes the following institutions with an explicit guarantee: Kreditanstalt für Wiederaufbau (KfW / Germany, USD 34.9 million), Oesterreichische Kontrollbank (OKB / Austria, USD 61.4 million), Japan Bank for International Cooperation (JBIC, USD 18.9 million), and Export Development Canada (EDC, USD 15.0 million).

(2) Exposure to U.S. agency risk corresponds to the Federal Home Loan Mortgage Corporation (Freddie Mac, USD 32.3 million). Exposure to German agency risk corresponds to Landwirtschaftliche Rentenbank (USD 3.7 million).

(3) Exposure to supranational risk includes the following eligible issuers: African Development Bank (ADB, USD 10.0 million), European Investment Bank (EIB, USD 20.1 million), Inter-American Development Bank (IDB, USD 15.1 million), International Bank for Reconstruction & Development (IBRD, USD 10.0 million), International Finance Corporation (IFC, USD 27.4 million), and Nordic Investment Bank (NIB, USD 4.3 million).

Source: Central Bank of Chile.



Appendix C: Main measures taken by the Central Bank of Chile in 2016

JANUARY

7. The Central Bank of Chile reported that in the Board Meeting held on 17 December 2015, the Board approved the 2016 Debt Plan, which considers the scheduled expiration of securities equivalent to Ch\$2.860 trillion, of which Ch\$1.400 trillion will be absorbed by PDBC; and the issue of up to Ch\$800 billion in peso-denominated bonds that will mature in 2019.

The bonds will be issued in accordance with the stipulations of Article 104 of the Income Tax Law. The bond auction schedule could be subject to modifications in the event of significant changes in market conditions.

14. At its monthly monetary policy meeting, the Board decided to hold the monetary policy interest rate at 3.5% in annual terms.

28. Through Resolution 1955-08-160128, the Central Bank of Chile updated the list of foreign currencies that are generally accepted in international foreign exchange markets, whose exchange rates and parities are published in the *Official Gazette* under the terms specified in the second paragraph of Article 44 of the Basic Constitutional Act.

The objective of this revision was to incorporate the following currencies into the list: the Czech koruna, the Israeli new shekel, the Malaysian ringgit, and the Polish zloty. These currencies have been included in the set of eligible investment currencies for the Central Bank's international reserves.

FEBRUARY

11. At its monthly monetary policy meeting, the Board decided to hold the monetary policy interest rate at 3.5% in annual terms.

MARCH

17. At its monthly monetary policy meeting, the Board decided to hold the monetary policy interest rate at 3.5% in annual terms.

28. Through Resolution 1967E-01-160328, the Board—on considering the agreements adopted on 24 March by the Board of Shareholders of the *Banco de Chile*, with regard to the distribution of dividends and the increase in the bank's capital through the issue of fully paid-in shares equal to 30% of 2015 net income—mandated that the total amount of profits or surpluses which are due to the Central Bank as holder of subordinated debt, including the share of earnings proportional to the capitalization, shall be paid in cash.

This decision was adopted in accordance with the provisions of paragraph (b) of Article 31 of Law 19.396, on the new payment method for subordinated debt.

APRIL

4. The Central Bank of Chile announced the bond auction schedule to be held in accordance with the 2016 Debt Plan.

7. Through Resolution 1970E-01-160407, the Board accepted the fiscal agent role designated to the Central Bank of Chile via Executive Decree 2047, issued by the Ministry of Finance on 23 December 2015, to represent and act in the name and on the account of the General Treasury in the placement and the total or partial early payment of bonds representing direct public debt, which are specified in the Decree (henceforth, the bonds), as well as the administration thereof. This assignment may be implemented in one or more operations, in accordance with the amounts, mechanisms, rules, and dates to be determined by the Ministry of Finance. The applicable requirements will be established in the Operating Decrees. To this end, Executive Decrees 214 and 232 of 2016, issued by the Ministry of Finance and published in the *Official Gazette* on 26 April 2016, authorize the issue of the indicated bonds.

Following the adoption of Resolution 1970E-01, the General Manager of the Central Bank approved the Operating Rules applicable to this fiscal agency assignment, which are available on the Bank's website.

12. At its monthly monetary policy meeting, the Board decided to hold the monetary policy interest rate at 3.5% in annual terms.

MAY

17. At its monthly monetary policy meeting, the Board decided to hold the monetary policy interest rate at 3.5% in annual terms.

26. Through Resolution 1979-02-160526, the Board approved the announcement and application terms for the public call for nominees to be carried out by the Central Bank, for the appointment of a replacement to the vacant seat of Judge / Legal Counsel on the Competition Tribunal (*Tribunal de Defensa de la Libre Competencia*). The seat was vacated following the voluntary resignation of Mr. Enrique Vergara Vial, on his acceptance of appointment to President of the Tribunal, a position he assumed on 13 May.

JUNE

9 Through Resolution 1985-02-160609, the Board appointed Mr. Rodrigo Andrés Cerda Norambuena as a Member of the Technical Investment Council, and Ms. Catherine Carolina Tornel León as an Alternate Member of the Council, both for a period of four years starting on 11 June 2016, in accordance with Title XVI of DL 3500 of 1980. As specified in the Resolution, both appointments are a continuation of the original appointment for a second consecutive term, as allowed under Article 168 of DL 3500.

16. At its monthly monetary policy meeting, the Board decided to hold the monetary policy interest rate at 3.5% in annual terms.

16. Through Resolution 1985-01-160609, the Board ordered the creation of the Central Bank of Chile Ethics Committee, whose composition, functions, and duties will be governed by the Statute included in the Resolution.

28. Through Resolution 1983-01-160602, the Board appointed Mr. Jesús Caupolicán Riveros Gutiérrez as Member of the Audit and Compliance Committee of the Central Bank of Chile, for a period of three years starting on 17 June 2016.

JULY

14. At its monthly monetary policy meeting, the Board decided to hold the monetary policy interest rate at 3.5% in annual terms.

14. Through Resolution 1991-01-160714, the Board appointed Mr. Jaime Navón Cohen as Member of the Central Bank's Information Technology Advisory Committee, for a new period of three years starting on 1 August 2016.

AUGUST

11. At its monthly monetary policy meeting, the Board decided to hold the monetary policy interest rate at 3.5% in annual terms.

11. Through Resolution 1979-02-160526, the Board appointed Mr. Jaime Arancibia Mattar to the position of Judge / Legal Counsel on the Competition Tribunal (*Tribunal de Defensa de la Libre Competencia*), to replace Mr. Enrique Vergara Vial, who resigned on being appointed President of the Tribunal.

At the same time, the appointment was communicated to the Ministry of Economy, Development, and Tourism, for the purpose of issuing the corresponding decree of appointment, for the time remaining in the legal term originally held by Mr. Enrique Vergara Vial, that is, through 12 May 2018.

24. Through Resolution 1997-01-160825, the Board authorized the brokerage firm *Corredores de Bolsa SURA S.A.* to participate in the Formal Exchange Market.

GLOSSARY

CDS: Credit default swap. A derivative instrument that provides insurance against the credit risk of the issuer of a given underlying sovereign or corporate bond. The premium implicit in the cost of this coverage (the CDS spread) is commonly used as an indicator of sovereign or corporate risk.

CEMBI: Corporate Emerging Market Bond Index. A corporate risk index maintained by JP Morgan. Measures the differential return on corporate bonds in dollars issued by banks and corporations in emerging economies markets, relative to U.S. Treasury bonds, which are considered risk-free.

Commodity exporters: Australia, Canada, and New Zealand.

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

EPI: External price index for Chile, calculated using the wholesale price index (WPI)—or the CPI if the WPI is not available—expressed in dollars, of the main trading partners included in the MER.

Excess capacity: A broader set of indicators for measuring inflationary pressures, which includes not only the output gap, but also labor market conditions, electricity consumption, and installed capacity utilization in firms.

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; trade; transport and communications; financial and business services; residential property; personal services; and public administration.

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 about 93% of total exports, on average, for the 1990–2015 period.

IVUM: Import price index.

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

MER-X: The 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 2016, the following countries are included: Argentina, Belgium, Bolivia, Brazil, Canada,



China, Colombia, France, Germany, India, Italy, Japan, Mexico, Netherlands, Paraguay, Peru, South Korea, Spain, Switzerland, Thailand, United Kingdom and United States.

MOVE: Merrill Lynch Option Volatility Estimate. Index of the normalized implied volatility on U.S. Treasury options.

Output gap: A key indicator for measuring inflationary pressures, defined as the difference between the economy's actual output and its current production capacity in non-natural-resource sectors (other GDP).

Potential GDP: The economy's current production capacity. Also called short-term potential GDP.

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, Taiwan, and Thailand.

Trend GDP: The medium-term growth potential of the Chilean economy, where the effect of shocks that usually alter production capacity in the short term have dissipated and the productive factors are thus used normally. In this context, growth depends on the structural characteristics of the economy and the average growth of productivity, variables that, in turn, determine the growth of productive factors.

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.

VSTOXX: Stock volatility index, similar to the VIX but based on Euro Stoxx 50 index options contracts.

World growth at market exchange rate: Each country is weighted according to its GDP in dollars, published in the IMF World Economic Outlook (WEO, April 2016). The sample of countries used in the calculation represent around 90% of world growth. For the remaining 10%, average growth is estimated at 1.8% for the period 2016–2018.

World growth: Regional growth weighted by its share in world GDP at PPP, published in the IMF World Economic Outlook (WEO, April 2016). World growth forecasts for the period 2016–2018 are calculated from a sample of countries that represent about 86% of world GDP. For the remaining 14%, average growth is estimated at 3.4% for 2016–2018.

ABBREVIATIONS

BCP: Central Bank bonds denominated in pesos

BCU: Indexed Central Bank bonds denominated in UFs

NA: National Accounts

BLS: Bank Lending Survey

EES: Economic Expectations Survey

FBS: Financial Brokers Survey

IMCE: Monthly Business Confidence Index

CPIEFE: Consumer price index excluding food and energy

IPEC: Consumer Confidence Index

MPR: Monetary policy rate

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