

Monetary Policy Report







Monetary Policy Report* SEPTEMBER 2009



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 $^{^*\}slash$ The statistical closing date of this Monetary Policy Report was 10 September 2009.

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 make public 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.

On 20 August 2009, the Board decided to increase the publication frequency of the *Monetary Policy Report*. Starting with this issue, it will be published four times a year, in March, June, September, and December. The Report studies and 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. Several 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 11 September 2009 for presentation to the Senate on 15 September 2009.

The Board

Summary

International baseline scenario assumptions

	2008	2009 (f)	2010 (f)	2011 (f)				
	(annual change, percent)							
Terms of trade (ToT)	-15.0	2.5	2.3	-2.5				
Trading partners' GDP (*)	2.9	-1.1	3.1	3.9				
World GDP at PPP (*)	3.2	-1.0	3.3	4.2				
World GDP at market exchange rate (*)	2.0	-1.9	2.6	3.5				
External prices (in US\$)	11.9	-6.6	8.0	3.2				
LME copper price (US¢/lb)	316	230	260	250				
WTI oil price (US\$/barrel)	100	61	77	80				
Parity price of gasoline (US\$/m3) (*)	739	477	588	611				
US\$ libor (nominal, 90 days)	2.9	0.8	1.1	3.4				

(*) See glossary for definition.

Source: Central Bank of Chile.

Economic growth and current account

	2007	2008	2009 (f)	2010 (f)
GDP	4.7	3.2	-2.0 to -1.5	4.5 to 5.5
National income	7.1	3.8	-1.5	6.2
Domestic demand	7.8	7.4	-6.2	6.7
Domestic demand				
(w/o change in inventories)	8.2	7.9	-3.5	3.7
Gross fixed capital formation	12.0	19.5	-12.9	7.4
Total consumption	7.1	4.2	0.0	2.5
Goods and services exports	7.6	3.1	-4.7	4.9
Goods and services imports	14.9	12.9	-13.8	9.0
Current account (% of GDP)	4.4	-2.0	1.9	1.2
Current account	7,189	-3,440	2,900	2,200
Trade balance	23,635	8,846	12,400	13,100
Exports	67,666	66,455	50,600	56,500
Imports	-44,031	-57,610	-38,200	-43,400
Services	-975	-646	-500	-500
Rent	-18,595	-14,563	-11,500	-13,100
Current transfers	3,123	2,924	2,500	2,700

(f) Forecast.

Source: Central Bank of Chile

The inflationary pressures facing the Chilean economy have decreased since May's *Monetary Policy Report*. Y-o-y inflation in Chile has declined more than was foreseen four months ago, and will be in negative territory for the rest of 2009. Second-quarter output, deteriorated further and widened the output gap. The external scenario is showing some signs of stabilization. The macroeconomic scenario that was forecast by mid-year brought to light risks of inflation staying below the 3% target beyond the usual policy horizon.

Confronted with these risks, the Board increased the monetary stimulus in July by bringing the monetary policy interest rate (MPR) to its minimum level, 0.5%, and stated that it will keep it there for a prolonged period of time. To reinforce this decision and to align financial asset prices with the monetary stimulus, the Board also adopted complementary monetary policy measures.

In Chile, weak second-quarter output originated mainly in a substantial inventory depletion, partly associated with reduced manufacturing activity. April's performance was central to this result, because in May, June, and July, there were signs of stability or even a slight expansion. Thus, projections in this *Report*, as well as those from the market consensus, assume that the economy has resumed some dynamism during this semester, leading to positive q-o-q output growth, although y-o-y variations will continue to be negative for still some months.

There are external and domestical elements behind the projected improvement in short-term growth. World economic activity is showing signs of stabilization and some economies even posted growth in the second quarter. Various indicators of consumption and investment expenditure, firms' and consumers' expectations, trade flows, stock prices and commodities reflect improved prospects. Domestically, there is progressive dissipation of the sudden and deep uncertainty that affected households and firms in late 2008, which shows in better expectations of firms and consumers, in some durable sales indicators and new home sales. Perception of excess inventories has tended to decline gradually. The labor market has worsened throughout the year, although latest figures show that employment has ceased to drop and the increase in unemployment has moderated. All this combined, together with the unprecedented boost currently being provided by Chile's monetary and fiscal policies, will allow, in the most likely scenario, for a rebound of output and demand.

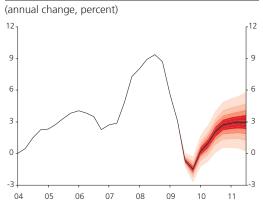
Inflation

	2008	2009 (f)	2010 (f)	2011 (f)
A CDU: GU:	0.7	1 47	1 45	1
Average CPI inflation	8.7	1.7	1.5	
December CPI inflation	7.1	-0.8	2.8	
CPI inflation in around 2 years (*)				3.0
Average CPIX inflation	8.4	2.8	1.0	1
December CPIX inflation	8.6	-1.2	2.6	
CPIX inflation in around 2 years (*)				3.0
Average CPIX1 inflation	7.8	2.8	1.2	
December CPIX1 inflation	7.7	-0.6	2.6	
CPIX1 inflation in around 2 years (*)				3.0

(f) Forecast. (*) Inflation projected to the third quarter of 2011

Source: Central Bank of Chile.

CPI inflation projection (*)



(*) 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 basline scenario are included. These intervals summarize the risks on inflation as assessed by the Board. The projection scenario incorporates as a methodological assumption that the MPR will be kept at its minimum for a prolonged period of time, and will later resume a normalization path comparable to the one that can be inferred from financial asset prices in the two weeks prior to the statistical closing of this Report. This suggests that this process might begin toward the second quarter of

Source: Central Bank of Chile

However, from the standpoint of inflationary pressures and thus of monetary policy, a key factor is the performance of the economy over the next two years, not only the immediate future. Even if there is a fast expansion of output and demand during the second half of this year, it may not necessarily result in a sustained reduction of the output gap and, therefore, in prospects of higher inflation. The sharp adjustment of demand for inventories, that has explained part of the contraction of output and demand, may also be quickly reversed due to the current scenario of less uncertainty, but not necessarily will this mean a significant expansion of final demand in the medium term. Because Chile is a small, open economy, said dynamism will certainly be associated to the performance of the world economy.

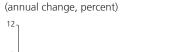
Despite the aforesaid positive signs, doubts persist on the speed of the recovery in the main economies, where unemployment has shown substantial increases. Credit intermediation in the developed world has not been fully restored and the deleveraging process will follow its course. Policy makers in the main economies of the world probably lack additional maneuvering room in case of a new episode of global economic slowdown, because of the substantial fiscal and monetary stimulus packages already in place.

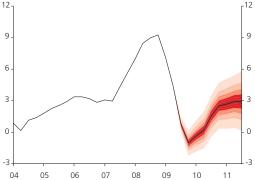
Growth projections for the U.S. show a bimodal distribution with similar fractions of agents expecting a recovery or a low growth rate. This Report's baseline scenario assumes that world economic activity will show a moderate rebound by 2010-2011, with an average annual growth of 3.8%. This is less than it was immediately before the crisis, partly due to financial constraints in the developed world and reduced trend global growth prospects owing to the sharp drop in investment.

Domestically, the strong monetary stimulus and the reduction in financial risk premiums around the world, have led to a sharp decline of the cost of funding for Chilean banks, both domestically and abroad. However, lending standards are still tight and the volume of credit fell in the first half of this year. This is a reflection of the financial system's cautious approach due to the effects of the cycle on credit risk, and reduced demand for loans due to the sharp adjustment of expectations. All of this has resulted in credit risk premiums showing some resistance to fall in some segments and in access to credit and lending standards becoming more stringent. To the extent that uncertainty continues to clear up, mainly because of more certainty regarding the pace of global growth, and the strong economic policy stimulus packages continue to operate, firms' and households' borrowing conditions can be expected to normalize.

In this environment, subject to substantial risks, the baseline scenario of this Report assumes that output will post a y-o-y change between -2.0% and -1.5% in 2009. This projection assumes that the output level will increase in the course of this semester, as is already apparent in the latest Imacec figures, with annualized quarterly growth rates above 6%. However, for some months output will continue to show negative variations with respect to yearago figures. For 2010, the baseline scenario assumes that the economy will continue to grow, with GDP increasing between 4.5% and 5.5% annually, prompting a steady—yet partial—closing of output gaps toward 2010-2011. This projection considers that trend GDP growth, relevant for inflationary pressures, will grow between 4.0% and 4.5% in the two-year period 2010-2011. This rate is smaller than the year-ago estimate, mainly because of the

CPIX inflation projection (*)





(*) 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 basline scenario are included. These intervals summarize the risks on inflation as assessed by the Board. The projection scenario incorporates as a methodological assumption that the MPR will be kept at its minimum for a prolonged period of time, and will later resume a normalization path comparable to the one that can be inferred from financial asset prices in the two weeks prior to the statistical closing of this Report. This suggests that this process might begin toward the second guarter of

Source: Central Bank of Chile.

effects of the drop in investment in 2009 over the capital stock. Into the longer term, however, the Chilean economy's potential growth is still deemed to be close to 5%. Domestic demand, meanwhile, will drop by 6.2% this year, and will increase by 6.7% in 2010. The importance of inventory depletion in this result reflects in final domestic demand—excluding inventories—that will drop 3.5% in 2009. The current account, due to the sharp adjustment in domestic expenditure, will post a surplus of 1.9% of GDP this year. These projections are consistent with a fiscal policy that is governed by the structural balance rule.

The drop in both headline and core inflation has been faster and stronger than was forecast in May. In August, y-o-y inflation became negative, and is projected to stay negative for the rest of the year. This fast decline in inflation is probably the result of two forces combined: on one hand, the weakness of demand and the current stage of the cycle and, on the other, a quick pass-through of the fall in international prices to domestic ones. This latter phenomenon was also strongly apparent in 2007-2008, albeit in the opposite direction. The exchange rate has remained close to its historical averages, unlike the way it reacted in past episodes of financial turmoil when it used to increase substantially providing a cost-push pressure and offsetting the deflationary effects of increased output gaps. This phenomenon is not exclusive to the peso, since it is replicated in a large number of currencies of emerging economies, and reflects also the relevant external scenario and the levels of solvency and liquidity of the Chilean economy. The real exchange rate (RER), although with fluctuations, is estimated to be in line with its longterm fundamentals. As a methodological assumption, the RER is assumed to remain over the long term near the levels it posted during the two weeks prior to the statistical closing of this Report. In line with the world economic recovery, the baseline scenario assumes that commodity prices, particularly for oil, will rise, while the dollar will depreciate further with respect to other currencies. However, the higher imported inflation in dollars will contribute marginally to increasing the domestic inflationary pressures.

Unit labor costs have continued on the rise, but at a slower pace than in 2008. This has gone hand in hand with the evolution of productivity measured with the path of output and employment. Nominal wages have posted declining y-o-y variation rates. The baseline scenario assumes that wages will be adjusted in line with increased capacity gaps and inflation dynamics. The path of inflation is based on the assumption that pricing decisions are based on inflation expectations in line with the target.

In the baseline scenario, the steady closing of output gaps and, to a lesser extent, the higher external inflation rate will push inflation up towards convergence to the target by 2011. Due to the higher persistence and the lagged effect of the cycle, core inflation indicators will post negative annual variation rates into mid-2010, to begin increasing and also reach 3% toward 2011. Market inflation expectations consider similar projections and remain around 3% toward the medium term despite low y-o-y figures for the coming months.

Another working assumption is that the MPR will be kept at its minimum for a prolonged period of time, and will later resume a normalization path comparable to the one that can be inferred from financial asset prices in the two weeks prior to the statistical closing of this Report. This suggests that this process might begin toward the second quarter of 2010.

The baseline scenario reflects the events that are considered to be the most likely with the information at hand when making the projections. Different situations will shape a macroeconomic scenario—and a monetary policy path—that will also differ. Based on its assessments, the Board estimates that the balance of risks for growth and inflation is unbiased. The aggressiveness of the measures implemented in the world over the past year, together with the expressed determination of policy makers to quickly control episodes of turbulence that might trigger generalized financial instability, make it unlikely for the volatility of September-October 2008 to occur again. Therefore, a major part of the risks is associated with the scenario of global growth and inflation. The risks of another acute fall in the world economy are smaller than they were in May, but it may be the case that the signs of stability or moderated deterioration are just another phase of market volatility and growth prospects worsen again. This could result in a slower than forecast recovery stage, or even in a new relapse of economic activity. Conversely, if this stabilization stage consolidates or improves, it could generate a faster and more widespread normalization of the world economy. This may entail higher inflationary pressures and major challenges to the administration of the large monetary and fiscal stimulus packages currently in place around the world. Accordingly, an earlier withdrawal of said packages cannot be ruled out. The risks associated to global imbalances are still latent. Although into the nearest future those imbalances have been checked, their potential persistence through a lack of adjustment of current accounts raises some concerns on exchange rates.

The Board will continue to assess the probability of these risks and their consequences on local inflation forecasts. The Board also reiterates that it will continue to use its policies with flexibility to ensure that projected inflation will stand at 3% over the policy horizon.

Monetary policy decisions in the last three months

Background: May 2009 Monetary Policy Report

By May, the global macroeconomic scenario had worsened beyond the projections in the January *Monetary Policy Report*, and its impact on the Chilean economy was also greater. The world economy was facing difficult times. The financial crisis in the developed markets had led to a global recession, and world activity fell for the first time in more than sixty years. Domestically, the fourth quarter of 2008 saw a significant reduction in output and, especially, in domestic demand, which weakened the labor market and reduced both actual inflation and the inflation outlook. Given this scenario and its risks, the Board increased the monetary stimulus, reducing the monetary policy rate (MPR) by 700 basis points between January and May, and retained the possibility of reducing it further.

Given the lagged effect of the low levels of output, consumption, and investment in late 2008, the economy did not post positive annual rates again until well into the second half of 2009. The increase in excess capacity was having significant effects on inflationary pressures and the inflation outlook. The baseline scenario considered that annual CPI inflation would continue to fall, reaching negative values between the end of the third quarter and the beginning of the fourth and closing 2009 at 0.6%. It would then increase gradually to reach 3% at the end of the projection horizon (the second quarter of 2011).

Meetings between June and August

In June, the Board felt that the desired magnitude of the MPR reduction was mainly determined by the lowest point of the cycle that was considered acceptable at that juncture. The MPR path implicit in the Monetary Policy Report projections was between 0.75 and 1.0%, which was consistent with the most plausible options at that meeting. The external scenario had improved slightly, but uncertainty was still high, the potential for global imbalances was still strong, and the developed economies were still vulnerable. Long-term rates had risen in the U.S., which could have reflected either a normalization of rate levels and expectations of a future recovery, or concerns for future inflation and the evolution of the fiscal accounts in industrialized countries. In Chile, output data for April and inflation data for May signaled low inflationary pressures. An important share of the estimated drop in domestic demand in the first half was explained by the unusual depletion of inventories. At that point, the MPR reductions had been partially, but not fully, transmitted to lending rates. The persistence of risk premiums kept financial conditions somewhat tight, and lending standards were still generally tighter than in the past. Long-term interest rates rose, which was consistent with external trends, the greater appetite for risk, and the significant increase in corporate bond issues. Although annual inflation had continued to fall fairly fast until it reached the target, it would not stay there long: in the most likely scenario, it would continue to fall, reaching very low levels toward the end of the year—levels that were both below the target range and lower than anticipated. Although there was no risk of deflation, there was a risk that inflation would remain below the target for longer than the policy horizon. In that context, monetary policy would have to be exceptionally expansionary to reach the inflation target of 3% within the two-year horizon. The international evidence, as well as data compiled by the Bank, indicated that the MPR's lower limit was closer to 0.5%. It was thus necessary first to affect its level and then, when it reached the lower limit, to maintain a prolonged stimulus to affect the entire interest rate structure. On this basis, the Board decided to lower the monetary policy interest rate by 50 basis points, from 1.25% to 0.75% (in annual terms), and it communicated that in the most probable scenario, it would be necessary to maintain the monetary stimulus for a longer period than implied in financial asset prices.

In July, the Board deemed that the required monetary stimulus was greater than projected at the last meeting. The increased excess capacity, the low inflation data, and the exchange rate appreciation all pointed to an inflation path that, given the monetary policy strategy contemplated in the May Report, would not converge to 3% in the usual horizon. The options under consideration were, first, whether the MPR's lower limit was 0.50 or 0.75% and, therefore, whether or not the MPR would be reduced by 25 basis points; and second, the advisability of using unconventional measures to validate holding the MPR at its minimum for a prolonged period. The recovery outlook for the world economy continued to be good, although the signs of a fast recovery had eased off in recent weeks. The most recent internal data confirmed that economic activity had been weak, reaching lower levels than projected, and reinforced the view that the second quarter had been quite slow. Nevertheless, the most permanent components of aggregate demand, such as consumption and fixed capital investment, showed signs of stability and suggested a break in trend. The domestic financial system continued to exhibit strengths, but a perception of high, generalized risk persisted. The lending supply remained selective

or tight, while demand was fairly moderate. Despite the passthrough of the MPR reduction, clients continued to face high interest rates, so the cuts were not generating the full stimulus needed under the circumstances. An MPR cut of 25 basis points would not be sufficient to guarantee the convergence of inflation to the target, given that the yield curve, which reflects market expectations, contemplated increases of 200 to 300 basis points in the MPR over the course of 2010. This contrasted with internal estimates suggesting that the rate should be held at low levels for some time to guarantee the convergence of inflation to the target. Thus, simply bringing the MPR to its lower limit would not guarantee that the expansionary monetary policy would be strong enough to ensure compliance with the inflation target. The fact that the MPR was approaching its minimum did not mean that monetary policy could not do anything further, but rather that it was necessary to look at different instruments. The range of unconventional monetary policy measures was fairly broad, and, in principle, none could be rejected outright. The natural tendency was to try to adjust the interest rate structure through open market operations, with a preference for actions oriented toward affecting risk-free interest rates on the shortest part of the curve. That would produce a direct effect on money market rates and, consequently, on the other market rates, fostering a significant increase in the monetary policy stimulus. To this end, it seemed sufficient to open a financing facility that would contribute to setting a rate level at or near the MPR for a maturity of up to 180 days, although the terms could be extended if necessary. Ensuring the availability of this facility for a specified period in and of itself would extend its effects over time, generate confidence in the MPR path, and contribute to dissipating the liquidity and financing risks that could be affecting money market interest rates and, in particular, bank lending rates. On this basis, the Board decided to lower the monetary policy interest rate by 25 basis points, to its minimum value of 0.5% (in annual terms). At the same time, it stated that the MPR would remain at this level for a prolonged period of time and adopted complementary monetary policy measures to reinforce this decision and align financial asset prices. The complementary actions were as follows: (i) a Term Liquidity Facility (Facilidad de liquidez a plazo, FLAP) was established to provide financing to banking firms at 90 and 180 days, at the effective level of the MPR; (ii) adjustments were made to the issue schedule for Central Bank discount promissory notes (Pagarés descontables, PDBC) with maturities of under one year; and (iii) the issue of debt securities with a maturity of one year or more was suspended for the rest of 2009, including twoyear nominal Central Bank bonds (BCP-2) and one-year Central Bank discount promissory notes (PDBC-360).

In August, the Board considered that, since the July decisions did not include an implicit strategy for subsequent monetary loosening, the main concerns for this meeting were analyzing the medium-term outlook and its risks and evaluating financial and credit conditions since the July measures were implemented. The most plausible options, therefore, were to maintain the current monetary policy stance or possibly to deepen it. The latter might

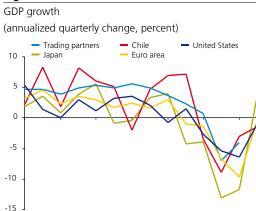
involve lengthening the terms being used under the current measures, implementing a program to repurchase Central Bank instruments with maturities of two years or longer, or intervening the exchange rate if an exceptional situation arose in that market. Externally, output data were beginning to show signs of stabilization, with an upward revision of the growth forecast and increases in stock markets and commodities prices. Domestically, the macroeconomic scenario had evolved in line with projections, and the need for a strong monetary stimulus was confirmed. The latest inflation data indicated that price pressures remained low, and the short-term outlook suggested that annual inflation would be negative at the end of this year. In the medium term, measures of inflation expectations indicated that inflation would stabilize around the target. Recent data gave a rough picture of a more stable output profile in the second quarter and expectations of recovery in the second half. The complementary measures adopted in July were succeeding in aligning financial asset prices with the prospect of the MPR remaining at its minimum for a prolonged period of time, given that the yield curve had fallen significantly, especially in segments of up to two years, but also in nominal instruments at all maturities. The interest rates charged by banks in their public operations had fallen relative to the peaks of late 2008, but monetary policy appeared to be having difficulties achieving the full stimulus needed under the circumstances. This reflected banks' perception of credit risk, the effect of high spreads or costs on rates in some segments, and low demand, especially household demand, which was being restricted by expectations and confidence factors. With regard to the decision to maintain or increase the monetary stimulus, one possibility was to expand the complementary monetary policy measures, to the extent that the risk of inflation staying below the target for too long increased. The natural alternative, however, was to wait and see, so as to assess the change in the macroeconomic scenario and the effects of the measures already adopted. In this context, the Board decided to hold the monetary policy interest rate at 0.5% (in annual terms) and to continue applying the complementary monetary policy measures adopted in July.

I. International scenario

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Figure I.1



Sources: Central Bank of Chile and Bloomberg

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

	Ave. 90-99	Ave. 00-07	2008 (e)	2009 (f)	2010 (f)	2011 (f)
World	2.9	4.1	3.2	-1.0	3.3	4.2
World at market NER	2.4	3.2	2.0	-1.9	2.6	3.5
United States	3.2	2.6	0.4	-2.6	2.3	3.3
Euro area	2.2	2.1	0.7	-3.7	0.6	1.4
Japan	1.5	1.7	-0.7	-5.4	1.3	1.8
China	10.0	10.1	9.0	8.3	9.3	9.5
Rest of Asia	5.5	5.0	3.0	-1.3	3.8	4.5
Latin America	2.7	3.6	4.2	-2.8	2.9	3.5
Commodities exports	2.7	3.1	1.0	-1.2	2.0	2.7
Trading partners	3.1	3.6	2.9	-1.1	3.1	3.9

(e) Estimate

(f) Forecast.

(*) See glossary for definition.

Source: Central Bank of Chile based on a sample of investment banks, Consensus Forecasts, and International Monetary Fund. This chapter analyzes the recent evolution of the world economy and the outlook for the next two years. It also describes the most likely external scenario relevant to the Chilean economy, as well as the main risks.

The global macroeconomic scenario has tended to stabilize in the last few months. Output data for the second quarter show a slower rate of contraction or even growth in some economies, which has improved the outlook for world growth since the May *Report*. The international financial markets are less volatile, and investors' appetite for risk has increased. Credit premiums have fallen, stock markets have risen, commodities prices have increased, and the dollar has depreciated.

World growth

Indicators for the past few months show signs that world activity is stabilizing, after a first quarter in which the rate of contraction deepened in a large number of countries (figure I.1). Consumer and business confidence is being restored, and the effects of the fiscal and monetary stimulus packages implemented around the world are being felt. Manufacturing stopped falling or turned upward, first in the emerging economies and then in the developed countries. Inventories are beginning to be rebuilt in some countries, and household spending and the external sector show improvements. The recovery process was particularly notable in the Asian countries, driven by China and India.

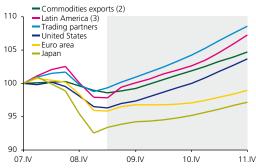
Market consensus expects world activity, measured in PPP terms, to fall somewhat less in 2009 than projected in May. A bigger recovery is forecast for 2010 and 2011, one that is generalized across countries. In particular, projections were revised upward for the United States and the Asian economies. This will drive a stronger recovery among Chile's main trading partners. The growth forecasts for the United States in 2010 are divided, with similar shares expecting a fast recovery versus low growth. The forecast data for world activity for the two-year period 2010–2011 are lower than in the years immediately prior to the 2008 financial-economic crisis, in part because of the financial restrictions in the developed world and the prospects of below-trend growth throughout the world as a result of the significant drop in investment (table I.1) (figure I.2).

Globally, the authorities have sustained or increased the monetary stimulus. Some of the central banks that implemented unconventional policies have extended the measures, increasing the amount of assets purchased in the long part of the curve and lengthening the maturities of short- and medium-term loans. Others have reiterated that the rate will remain low for an extended period or have expressly stated for how long it will be kept at that level. Central banks that still had room to cut their rates continued to do so. Market expectations have validated this

Figure I.2

World activity (1)

(index 2007.IV =100)

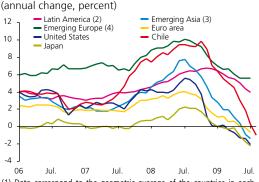


- (1) The gray area corresponds to projections.
- (2) PPP-weighted average of Australia, Canada and New Zealand.
- (3) PPP-weighted average of Argentina, Brazil, Mexico, Peru, and Venezuela.

Source: Central Bank of Chile based on investment banks, Bloomberg, and Consensus Forecasts.

Figure I.3

CPI inflation (1)

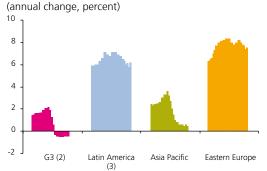


- (1) Data correspond to the geometric average of the countries in each region.
- (2) Includes Brazil, Colombia, Mexico, and Peru.
- (3) Includes China, Philippines, Malaysia, South Korea, Singapore, Thailand, and Taiwan.
- (4) Includes Hungary, Czech Republic, Russia, and Turkey.

Source: Central Bank of Chile based on Bloomberg

Figure I.4

Inflation expectations for 2009 (1)



- (1) Each bar represents the average annual inflation forecast by month since January 2008.
- (2) Geometric average inflation forecast for the United States, Japan, and Euro area.
- (3) Projected December-over-December change.

Source: Consensus Forecasts

scenario. Consequently, a rising rate cycle is not expected in the majority of the economies before the end of 2009, and it should not occur in the main developed economies before mid-2010. Moreover, the monetary stimulus is expected to be withdrawn gradually.

The main risks in the global scenario are related to medium-term growth and inflation. On one hand, the recovery phase could be slower than projected, and output could even contract again; this is the position advanced by almost half the market forecasts. This would result in lower inflationary pressures and the possibility of persistently low inflation, supported by low commodities prices. It could lead to a scenario in which the global confidence crisis that caused the economic meltdown in late 2008 is not alleviated. This risk increases considering that the labor market has worsened in many countries and the deleveraging process is still underway. Domestic demand could also weaken again, once the fiscal packages end or if the monetary measures are withdrawn early. On the other hand, inflationary pressures could be greater if the economies recover faster than predicted, with a significant increase in commodities prices; this is the other dominant standpoint considered in the projections. Excess capacity could be lower, considering that trend GDP estimates have been adjusted downward in some economies given the scope of the crisis¹/. This is an important point in assessing how and when to withdraw the strong monetary stimuli. There are also risks to the dollar parity trend, in terms of both the pending corrections of the global imbalances and the effect on confidence in the dollar as a safe haven. This is a particular concern given the high levels of U.S. public debt and the Federal Reserve's equity deficit.

World inflation

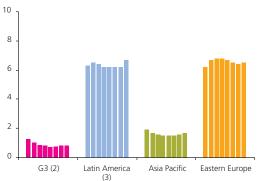
Global inflationary pressures are still low, given the large output gaps and despite of the increase in commodities prices. The developed economies have posted low or negative annual inflation rates (figure I.3). The risks of deflation have been dissipating in the face of fiscal and monetary stimulus measures, which is reflected in a greater stability in market consensus forecasts (figures I.4 and I.5). Between May and August, the CPI inflation forecast for 2009 in the United States, the euro area, and Japan practically did not change. In the emerging economies, headline and core inflation continued to fall. In Latin America and Eastern Europe, this has been accompanied by reductions in the inflation forecast, even after the incorporation of the oil price hikes since August. Emerging Asia, in turn, has recorded negative annual inflation rates, although the market consensus is that these will be temporary (table I.2).

In the baseline scenario of this *Report*, the external price index (EPI), which measures the external inflation relevant for Chile in dollars, is projected to record a negative annual change of –6.6% in 2009 (versus a projection of –5.7% in May). The adjustment obeys to lower real and expected inflation rates in local currency, which will be partially offset by a stronger depreciation of the dollar in external markets. For 2010, the forecast is for higher inflation in local currency and a sharper depreciation of the dollar than previously projected, which will cause the EPI to rise 8.0% in annual terms (versus 7.0% in May). The baseline scenario considers

 $^{^1}$ /According to estimates by the CBO (2009), the OECD (2009), and the European Commission (2009), potential GDP has been reduced for 2010 and 2011 by approximately 0.6 percentage point in the United States and around 1.0 percentage point in the euro area.

Figure I.5

Inflation expectations for 2010 (1) (annual change, percent)



- (1) Each bar represents the average annual inflation forecast by month since January 2008.
- (2) Geometric average inflation forecast for the United States, Japan, and Euro area.
- (3) Projected December-over-December change.

Source: Consensus Forecasts.

Figure I.6

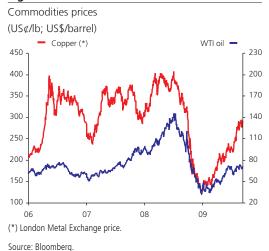
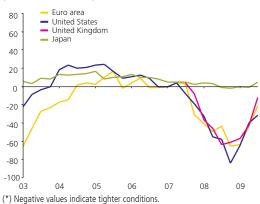


Figure I.7

Lending conditions for firms (*)

(balance of answers)



Sources: Bank of England, Central Bank of Europe, Central Bank of Japan, and U.S. Federal Reserve

that higher imported inflation in dollars will contribute marginally to increasing domestic inflationary pressures. For 2011, the EPI is expected to rise 3.2% annually, thus approaching the average of the first half of the present decade.

Table I.2

World Inflation

(average annual change in local currency, percent)

	Avg. 1990-99	Avg. 2000-05	2008	2009 (f)	2010 (f)	2011 (f)
United States	3.0	2.7	3.8	-0.4	1.8	2.0
Euro area	2.3	2.2	3.3	0.3	1.2	1.9
Japan	1.2	-0.5	1.4	-1.3	-0.9	0.6
China	7.8	1.2	5.9	-0.3	2.3	3.3
Australia	2.5	3.3	4.4	1.7	2.2	2.6
New Zealand	2.1	2.5	4.0	2.0	1.7	2.5
Argentina	253.7	8.8	8.6	5.9	7.1	8.8
Brazil	854.8	8.4	5.7	5.0	4.1	4.3
Mexico	20.4	5.7	5.1	5.5	4.5	3.7
EPI (*)	1.9	3.8	11.9	-6.6	8.0	3.2

(*) See glossary for definition.

(f) Forecast

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

Commodities prices

The more stable global scenario and the depreciation of the dollar have pushed commodities prices up since the last *Report*, most notably for copper, which has seen an increase in real and projected demand (figure I.6). In the baseline scenario, commodities prices will rise a bit further, which means that the Chilean economy will face somewhat higher prices in dollars.

The WTI oil price is around US\$70 a barrel, which is higher than it was on the statistical closing date of the last *Monetary Policy Report*. This increase has been accompanied by tight production in the main oil-producing countries, especially OPEC members, which have complied with their production quotas. Based on futures contracts in the ten business days prior to the statistical closing of this *Report*, the forecast WTI oil price is higher now than in May: US\$61 a barrel in 2009, US\$77 in 2010, and US\$80 in 2011.

The copper price has risen substantially since May and is currently near US\$2.90 a pound. One factor in this trend is the increased demand for copper stemming from fiscal packages in China, which include public lighting and infrastructure projects. Investment banks have revised their estimates of the long-term price to around US\$2.00 a pound in real terms. The baseline scenario incorporates higher prices than in May: US\$2.30 a pound in 2009, US\$2.60 in 2010, and US\$2.50 in 2011. This assumes that the fundamentals that have driven the price will be stable.

Financial markets

The situation in the international financial markets has been stabilizing. Liquidity conditions in the interbank market have continued to normalize rapidly at different maturities. The lower market volatility has generated a greater appetite for risk, resulting in strong increases in the stock markets, drops in risk premiums, and a depreciation of the dollar. It is unlikely that the volatility of September and

Figure I.8

Currency parities (1) (indices 02.Jan.08=100) Emerging (2) 160 Euro area JapanUnited States (3) 150 Commodities exports (4 140 Chile 130 120 110 100 90 80 70 Ian 08 May Sept Ian 09 Sept

(1) Parity with the U.S. dollar. An increase indicates depreciation.

(2) PPP-weighted average of the currencies of the following countries: Argentina, Brazil, China, Czech Republic, Hong Kong, Hungary, Indonesia, Malaysia, Mexico, Poland, South Korea, Russia, and Thailand.

(3) Considers the U.S. dollar relative to a basket of the currencies of the main trading partners of the U.S. An increase indicates depreciation of the dollar.

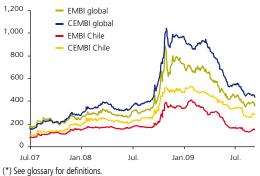
(4) PPP-weighted average of the currencies of Australia, Canada, and New Zealand.

Source: Bloomberg.

Figure I.9

Country risk premiums (EMBI) and corporate risk premiums (CEMBI) (*)

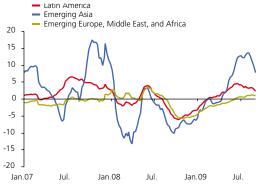
(basis points)



Source: JP Morgan Chase.

Figure I.10

Net flows of investment funds to emerging economies (US\$ billion, accumulated in four moving months, weekly data)



Source: Emerging Portfolio Fund Research.

October 2008 will return in the projection horizon, given the financial and bank restructuring measures and the authorities' willingness to quickly control any turbulence that might trigger generalized financial instability. Financing needs have been lower in some institutions, while others have posted operating incomes that exceed market forecasts.

Nevertheless, households and businesses continue to face stringent credit conditions and lending standards, whereas in most countries, the net fraction reporting tighter credit approval conditions in surveys has been falling (figure I.7). The situation continues to be difficult in some institutions, such as insurance companies, and in the commercial mortgage market. In addition, challenges remain in the regulatory sphere and in the removal of overvalued assets from bank balance sheets, among other issues.

Long-term interest rates have been highly volatile since May, reflecting expectations of a larger fiscal deficit and higher medium-term inflation and the adjustment of investors' portfolios. These rates remain near their historical lows. For example, comparing the ten business days prior to the closing dates of this *Report* and the May issue, the interest rates on ten-year government bonds increased around 30 basis points in the United States, fell about 10 basis points in Japan, and were practically stable in the euro area. Combined with the reductions in short-term rates, this has steepened the yield curve in various economies.

The dollar depreciated further against other currencies, approaching the levels seen in early October 2008. The depreciation of the dollar was felt most strongly by commodities exporters (figure 1.8).

Financial conditions have improved in emerging economies, and the cost of financing has fallen for the corporate sector and governments. Credit- and country-risk premiums have approached those seen before September 2008, and the Chilean country risk premium has even dropped below those levels (figure I.9). The lower risk has led to an increase in private sector bond issues in international markets and greater portfolio investment flows to emerging economies (figure I.10).

II. Financial markets

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

Monetary policy

The Board reduced the monetary policy rate (MPR) to 0.5% in July, which is considered the lowest level it can reach without interfering with the normal functioning of the money markets. Complementary measures were also implemented in July, to reinforce the decision to keep the MPR at its minimum for a prolonged period of time and to align financial asset prices with the new MPR path. Specifically, a Term Liquidity Facility (Facilidad de liquidez a plazo, FLAP) was established to provide liquidity to banking firms at 90 and 180 days, charging the current MPR rate at the time of financing. Another measure involved revising the issue schedule for Central Bank discount promissory notes (Pagarés descontables, PDBC) with maturities of under one year. In addition, the issuance of debt securities with a maturity of one year or more was suspended for the rest of 2009, including two-year nominal Central Bank bonds (BCP-2) and one-year Central Bank discount promissory notes (PDBC-360). These measures are still in place as of the closing date of this Monetary Policy Report.

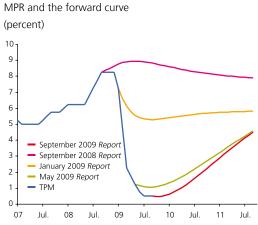
Based on these announcements and the output and inflation data of the past few months, the average market expectations assume that the MPR will remain at its current level through the second quarter of 2010, although opinions vary regarding how and how fast the monetary stimulus will be withdrawn (figure II.1). According to the Economic Expectations Survey (EES), the normalization of the MPR is expected to begin in 2010, with the rate reaching 1.75% at the end of that year. In two years, the MPR is expected to be at 4%.

The implicit projections in this *Report* are based on the working assumption that the MPR will be kept at its minimum for a prolonged period of time, and will later resume a normalization path comparable to the one that can be inferred from financial asset prices in the two weeks prior to the statistical closing of this *Report*. This suggests that this process might begin toward the second quarter of 2010.

Financial conditions

The monetary policy actions have made it possible to substantially reduce the cost of funding for banks. Thus, for example, the 30- and 360-day peso TAB rates (the *tasa activa bancaria*, calculated by the SBIF) fell from 9.6 and 8.4% annually, respectively, in early January 2009 to 0.8 and 1.6% annually at the time of writing. These are the lowest levels on record for these rates. Deposit rates followed a similar trend (figure II.2).

Figure II.1



Source: Central Bank of Chile.

Figure II.2

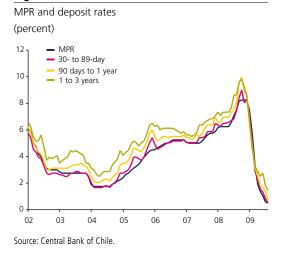


Figure II.3

MPR and interest rates on Central Bank of Chile instruments

(weekly averages, percent)

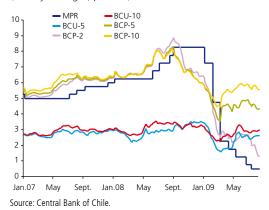


Figure II.4

MPR and lending rates





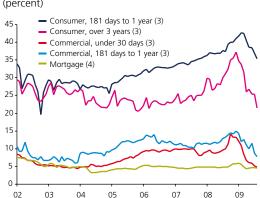
(*) Weighted average rates. Figures for August 2009 are provisional.

Source: Central Bank of Chile

Figure II.5

Lending rates (1) (2)

(percent)



(1) Considers lending rates with the largest share in the total in 2008, by type of loan.

- (2) Weighted average rates of all operations carried out in the month.
- (3) Nominal rates
- (4) UF rates.

Source: Central Bank of Chile

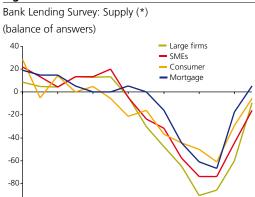
The interest rates on Central Bank instruments, especially at the longer terms, are similar to the average of the last five years and are in line with external rates discounting country risk. A comparison of interest rates in the ten business days prior to the statistical closing dates of the May and September Monetary Policy Reports reveals that BCU interest rates have increased as much as 40 basis points, depending on the maturity, while five- and ten-year BCP rates have risen 25 and 17 basis points, respectively. Two-year BCP interest rates fell nearly 50 basis points relative to the last Report, in line with the monetary policy stance (figure II.3). This explains the steepening of the yield curve¹/.

In this context, the average interest rates that banks applied in their public operations in August fell significantly from the peaks recorded in late 2008 (figure II.4). The weighted average rate on commercial loans in pesos decreased from 15% in the last quarter of last year to 6% in August. Of these, the rates with the biggest drops were on the shorter loans. Rates on consumer loans, in turn, fell from levels near 36% to around 25% in the same period, although with not so sharp reductions in operations with terms of under a year. Interest rates on mortgage loans fell a little more than 100 basis points from their peak in late 2008 and early 2009, to levels similar to their average of the last five years (figure II.5). The spreads between lending and deposit rates remain high even though various indicators of the banking system's external funding risk, of global financial risk, and of sovereign credit risk have had significant reductions in the past few months. This reflects the higher levels of local credit risk, associated with the business cycle (figure I.9).

Despite the lower market interest rates, various sources report that access to credit and lending standards continue to be tight in terms of collateral requirements, loan maturities, and/or a more exhaustive review of loan applicants' credit history. This is particularly the case in sectors that have been more exposed to the drop in economic activity. Several indicators suggest that an important share of approved loans is accounted for by refinancing, rather than new operations. The Bank Lending Survey for the second quarter reveals that the net fraction of banks reporting tighter lending conditions fell relative to the previous quarter, implying a gradual stabilization of lending conditions, although they continue to be tight (figure II.6). In the case of businesses, the tighter conditions can be attributed to changes in the economic climate and its outlook and a less favorable assessment of clients' credit risk. Surveyed banks thus report that collateral requirements have increased, as have the spread over funding costs on commercial loans and the premium on riskier loans, while lines of credit have shrunk. In the case of consumer loans, surveyed banks indicate that the tight conditions reflect an increase in the credit risk of the consumer portfolio, which has led to a reduction in the size of approved loans. For mortgages, the survey reveals a loosening of conditions relative to the previous quarter, thanks to increased competition. At the same time, the survey points to a weaker demand for loans, in general, and a greater demand for mortgage loans, which is in line with the higher figures for home sales in the past few months (box II.1).

 $^{^{1}\!/\!}$ For a discussion of the possible factors behind the steepening of the yield curve, see box II.1, Monetary Policy Report, May 2009, page 27.

Figure II.6



(*) Average answers by quarter. Negative values indicate tighter

Source: Central Bank of Chile, Bank Lending Survey.

Figure II.7

-100-

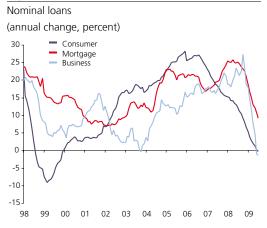
Personal and business loans

(annualized change in the moving quarter, seasonally adjusted series, percent)



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

Figure II.8



Sources: Central Bank of Chile and Superintendency of Banks and Financial Institutions

The continuation of tight lending standards is reflected in a contraction of the total loan stock in the first half of the year. In July, however, data from the Superintendency of Banks and Financial Institutions (SBIF) exhibit a reversal in several types of loans. In particular, consumer and business loans grew relative to the previous month (figures II.7 and II.8). Mortgage loans have also been recovering for several months. Data further indicate that operations that were very sluggish toward the end of last year, such as leasing or factoring, are being used more regularly. On the other hand, foreign trade loans continued to post a significant contraction since the end of last year, in line with the steep drop in international trade. To the extent that the uncertainty affecting individuals and firms in late 2008 continues to lift and the stimulus from economic policies continues to be felt, lending conditions can be expected to normalize for both individuals and firms.

The improvement in the cost of bank credit for large firms has coincided with a reduction in the use of alternative sources of financing. Corporate bond issues were very vigorous at the beginning of the year, accumulating a record level in 2009 to date. They have, however, been less dynamic in recent months. Corporate bond issues in international markets have recently picked up again, as is the case with firms in other emerging economies. This reflects not only the improved access to financing in those markets, but also the positive perception abroad of Chile's sovereign risk (figure II.9).

The local stock exchange has risen strongly, in line with trends in the external market and the greater appetite for risk. The IPSA has increased around 17% since May; the figure is close to 22% when measured in dollars and taking into account the appreciation of the peso in the period. This is somewhat less than in the group of Latin American exchanges, which recorded a 26% rise, but the basis for comparison is less depressed in the case of the local index (figure II.10).

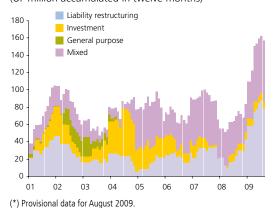
Reflecting the lower cost of money, both the monthly and annual growth rates of the monetary aggregates have increased. M1 grew an annual 16% in August, after posting annual rates on the order of 5% in late 2008 and early 2009. The broader aggregates, in turn, recorded their lowest annual growth rates in April of this year. Data for August show annual growth rates of around 20% and 15% for M2 and M3, respectively.

Exchange rate

The peso has continued to appreciate since May, which coincides with US dollar fluctuations in international markets, the rise in the international copper price, the Treasury's announcement that it would use an additional US\$4.0 billion from the Economic and Social Stabilization Fund (*Fondo de Estabilización Económica y Social*, FEES), and the net sale of dollars on the part of the pension funds as a result of the recovery in value of their external assets. The above has been partially offset by the increased activity of nonresidents, who have made net dollar purchases. The peso-dollar exchange rate thus averaged \$553 in the two weeks prior to the statistical closing date of this *Report*, which is equivalent to a little more than 5% appreciation since the same period in May (table II.1). The appreciation was lower in multilateral terms: 1.4% in the same period when measured through the multilateral

Figure II.9

Corporate bond issues, by objective (*) (UF million accumulated in twelve months)



Sources: Central Bank of Chile and Superintendency of Securities and Insurance.

Figure II.10

Stock market indicators



(1) Morgan Stanley Capital International world stock market index.
(2) Morgan Stanley Capital International Latin American stock market

Sources: Central Bank of Chile and Bloomberg.

exchange rate (MER) and 0.3% when the dollar is excluded (MER-X). The real exchange rate (RER) is within the range considered consistent with its long-run fundamentals. As a methodological assumption, it is expected that in the long run, the RER will not differ greatly from the levels recorded in the two weeks prior to the closing date of this *Report*.

Table II.1

Observed, multilateral, and real exchange rates

(OER: pesos per dollar, monthly average; MER, MER-5, and MER-X: 02.Jan.98=100; RER and RER-5: 1986=100) (1)

	i	i	1		1	
	OER	MER	MER -5	MER -X	RER	RER-5
Jan.09	623.01	120.86	159.99	115.09	102.42	89.55
Feb.09	606.00	115.28	152.95	109.24	97.79	85.53
Mar.09	592.93	112.16	148.99	106.09	94.15	82.49
Apr.09	583.18	112.21	147.32	106.66	95.27	81.77
May 09	565.72	111.25	145.68	106.34	94.75	81.36
Jun.09	553.08	110.01	144.33	105.46	94.65	81.12
Jul.09	540.42	107.74	141.70	103.35	93.41	79.72
Aug.09	546.88	110.22	144.26	106.05	95.65	81.35
Sept.09 (2)	553.64	111.56	146.80	105.56		

- (1) See glossary for definitions.
- (2) Average on 10 September.

Source: Central Bank of Chile.

Box II.1: Credit conditions in Chile

Changes in the monetary policy rate (MPR) are transmitted to the economy through various channels. One involves the credit conditions faced by households and firms, through the effect on the cost of money and changes in lending standards. This box describes the recent evolution of the factors that make up credit conditions and explains why they are currently tighter in Chile than they have been in several years.

Between January and July 2009, the MPR was reduced by 775 basis points, which constitutes a direct reduction in the cost to the Chilean banking system of the shortest-term funds¹/. How did lending rates behave in that period? First, it is necessary to bear in mind that the pass-through of changes in the MPR to the interest rates used by banks in their public transactions occurs with lags²/. Second, the level of lending rates depends on several factors in addition to the change in the MPR, including the risk involved in each transaction, operating expenses, and the outlook for the future MPR path (which is associated with the cost of longer-term funds). Third, the degree of competition in the banking industry has an effect on the pass-through of changes in the MPR to market rates³/.

After peaking in late 2008 and early 2009, interest rates have fallen for all types of loans, and they are currently even lower than they were a year ago (table II.2). There is, however, a great deal of heterogeneity in the magnitude of the rate reductions, depending on the financial institution involved and the characteristics of each loan, such as maturity, type of debtor, indexation, principal amount, and so on. Some types of loans saw their interest rate plunge nearly 1,500 basis points relative to their peaks.

Table II.2

Interest rate movements since July 2008

(percent

	Jul. 2008	Average	Actual	Current	Difference	
	(a)	Oct-Dec.	(c) (1)	(c) - (a)	(c) - (b)	
		2008 (b)		(basis	(basis	
				points)	points)	
MPR	7.25	8.25	0.50	-675	-775	
Lending rates (2)						
Consumer	31.2	36.2	24.6	-667	-1.166	
Commercial	11.4	15.1	6.0	-544	-907	
Deposit rates						
30-89 days	6.8	8.4	0.5	-636	-796	
90 days to 1 year	7.6	9.2	0.7	-684	-848	
1 to 3 years	8.6	9.2	1.4	-720	-776	
Lending rates (3)						
Consumer, 181 days to 1 year	37.7	40.4	35.3	-246	-510	
Consumer, over 3 years	30.0	35.9	21.5	-845	-1.437	
Commercial, under 30 days	9.7	13.5	4.9	-480	-865	
Commercial, 181 days to 1 year	13.0	14.5	7.8	-514	-667	
Mortgage	4.9	5.6	4.6	-31	-104	

⁽¹⁾ August 2009.

Sources: Central Bank of Chile and JP Morgan Chase.

How much of that corresponds to the change in the MPR? Becerra et al. (2009), who use weekly data to perform counterfactual simulations, show that a large share of the lending rate reductions is due to the drop in the MPR. If the MPR had been kept at the level of the start of the year, the lending rate on consumer loans with maturities over three years would be nearly 600 basis points higher than it is today, mortgage rates at the same maturity would be around 80 basis points higher, and the rate on 30- to 89-day business loans would be over 700 basis points greater (figure II.11). The authors also indicate that the MPR reduction has offset the increase in risk triggered by the global financial crisis late last year. Several of the factors that contributed to heightening risk are still present. This is especially important with regard to the cyclical component of these premiums, associated, for example, with default risk at a time when unemployment is high or rising. Other factors, such as external financing risk, have dissipated.

The second factor that determines lending conditions is the set of requirements that bank clients must meet to obtain loans. The Bank Lending Survey carried out by the Central Bank of Chile reveals tighter conditions since mid-2007. However, the results for the second quarter of this year show that the net fraction of banks reporting tighter lending conditions

¹/ For a discussion on how changes in the MPR affect the market interest rate structure, see box II.1, *Monetary Policy Report*, May 2009, page 27.

²/ For studies on interest rate pass-through in Chile, see Espinosa-Vega and Rebucci (2002), Berstein and Fuentes (2003), and Jaramillo *et al.* (2009).

³/ Fuentes (2009) reviews the literature on the relation between competition and interest rates in the banking market.

⁽²⁾ Weighted average.

⁽³⁾ Consumer and commercial rates are nominal. Mortgages are in UF.

fell relative to the previous quarter, for both business and consumer loans. In practice, the tighter conditions are evident in, for example, increased collateral requirements or other contractual conditions, a reduction in the amounts lended, and shorter loan repayment periods. A similar situation is found on comparing these results with the findings of lending surveys in other countries⁴/ (figure II.12).

The Bank Lending Survey also shows a weakening of demand, which reflects a cautious stance on the part of bank clients with regard to taking on new payment obligations.

Figure II.11a

Consumer lending rates, 3 years and over (weekly data, percent)



(1) Lending rate levels estimated using the Becerra *et al.* (2009) model. (2) Estimated lending rate level if the MPR had remained at 8.25%.

Sources: Central Bank of Chile and Becerra et al. (2009).

Figure II.11b

Commercial lending rates, 30 to 89 days (weekly data, percent)

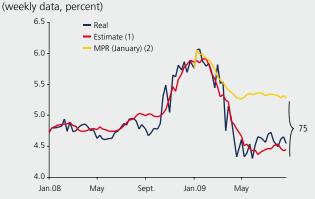


(1) Lending rate levels estimated using the Becerra et al. (2009) model. (2) Estimated lending rate level if the MPR had remained at 8.25%.

Sources: Central Bank of Chile and Becerra et al. (2009).

Figure II.11c

Mortgage rates, over 3 years



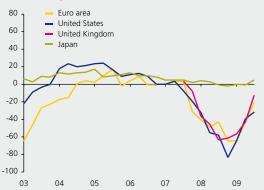
- (1) Lending rate levels estimated using the Becerra et al. (2009) model.
- (2) Estimated lending rate level if the MPR had remained at 8.25%.

Sources: Central Bank of Chile and Becerra et al. (2009).

Figure II.12

Lending conditions for firms (*)

(balance of answers)



(*) Negative values indicate tighter conditions.

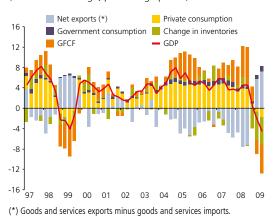
Sources: Bank of England, European Central Bank, Central Bank of Japan, and U.S. Federal Reserve.

¹/ Surveys from the following countries were reviewed: Canada, Colombia, Japan, Poland, Thailand, the United Kingdom, the United States, and the euro area.

III. Aggregate demand

Figure III.1

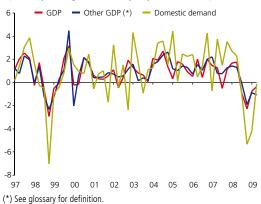
Contribution to annual GDP growth (real annual change, percentage points)



Source: Central Bank of Chile.

Figure III.2

GDP, other GDP, and domestic demand (quarterly change, seasonally adjusted series, percent)



Source: Central Bank of Chile.

This chapter reviews the recent evolution of domestic and external demand and their short-term prospects, in order to examine the possible inflationary pressures on goods and services markets and the most likely dynamics of economic activity.

Aggregate demand

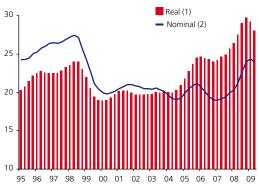
Economic activity, measured as the seasonally adjusted quarterly change, slowed less in the second quarter of 2009 than in late 2008 and the first quarter of 2009¹/. The drop was greater than projected in May, however, and it generated a larger-than-expected expansion of output gaps. April's performance was determinant in this result, given that May, June, and July recorded greater stability or even a slight expansion. Domestic demand contracted more than output between late 2008 and early 2009, but it stabilized in the second quarter. The annualized change in domestic demand was 10.6% in the second quarter of 2009. This is explained by the evolution of gross capital formation and durable goods consumption, and especially by a sharp depletion of inventories (figures III.1 and III.2). The importance of the inventory drawdowns is visible in the figure for final domestic demand (excluding the change in inventories), which fell 5.9%; being the second consecutive quarter with a negative annual rate (table III.1).

Both the baseline scenario of this *Report* and market consensus forecasts consider that the economy has become dynamic again in the current quarter, as evidenced in partial consumption and investment indicators. This is based on better external prospects, the progressive lifting of the uncertainty affecting firms and consumers, and a gradual reduction in the perception of excess inventories. These factors are further supported by the significant stimulus from fiscal and monetary policies. Nevertheless, domestic demand will continue to post negative annual rates in the second half, but it should improve steadily, reflecting an easing of inventory depletion, a slight growth in consumption at the end of the half, and a tough basis for comparison for gross fixed capital formation. Estimates for this year are that GDP post an annual rate of between -2.0% and -1.5%, while domestic demand will fall 6.2% in annual terms.

¹/ In accordance with the policy on the regular disclosure of the Quarterly National Accounts, the first GDP estimate for the second quarter of 2009 and a new GDP estimate for the first quarter of 2009 were published on 18 August.

Figure III.3

Gross fixed capital formation (percent of GDP, moving year)

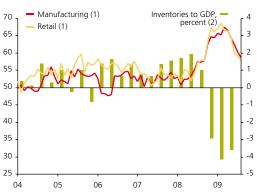


(1) At 2003 prices. (2) At current prices.

Source: Central Bank of Chile.

Figure III.4

Current inventory situation



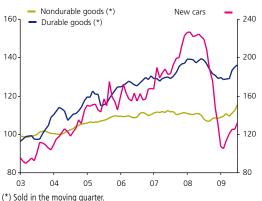
(1) A value over (under) 50 points indicates that the inventory level is too high (low).

(2) Seasonally adjusted quarterly series.

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

Figure III.5

Retail and new car sales (indices 2003=100, seasonally adjusted series)



Sources: National Automobile Association of Chile, Central Bank of Chile, (ANAC) and National Chamber of Commerce (CNC).

Table III.1

Aggregate demand

(weight in GDP; real annual change, percent)

	Weighted	2007	2007 2008							
	2008	Year	I	II	III	IV	Year	I	II	Half I
Domestic demand	111.2	7.8	8.1	11.6	10.7	-0.2	7.4	-7.7	-10.6	-9.2
Final demand (excl. inventories)	110.7	8.2	7.5	10.1	11.0	3.4	7.9	-2.5	-5.9	-4.3
FBCF	29.7	12.0	15.0	23.7	29.9	10.4	19.5	-10.0	-19.0	-14.8
M&AND	15.1	17.8	23.5	34.9	49.5	14.2	29.8	-15.8	-32.1	-24.8
C&O	14.7	7.4	8.3	14.1	13.2	6.7	10.5	-4.8	-5.6	-5.2
Rest	81.5	6.5	5.9	7.8	4.9	-3.7	3.6	-6.9	-7.6	-7.2
Private consumption	68.2	6.9	5.1	6.0	5.5	0.8	4.3	-1.1	-2.6	-1.9
Durables	8.0	12.0	11.4	13.5	8.6	-10.1	5.3	-18.5	-15.8	-17.0
Nondurables	30.2	5.8	3.9	6.3	7.2	4.3	5.4	3.4	-0.6	1.4
Services	30.1	6.8	4.8	3.9	3.0	0.1	2.9	-1.5	-0.8	-1.1
Government consumption	12.8	8.0	5.9	4.3	3.6	2.7	4.0	7.2	7.8	7.5
Inv. (% GDP) (*)	1.0	1.0	1.1	1.5	1.4	0.5	1.0	-0.9	-2.3	-2.3
Goods and services exports	39.8	7.6	2.6	0.1	6.9	3.4	3.1	-3.2	-5.4	-4.3
Goods and services imports	51.0	14.9	13.5	17.1	20.3	1.8	12.9	-14.9	-18.8	-16.9
GDP	100.0	4.7	3.4	4.6	4.6	0.2	3.2	-2.3	-4.5	-3.5

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

Source: Central Bank of Chile.

Domestic demand

Domestic demand recorded an average annual drop of 9.2% in the first half of this year, driven by durable goods consumption, inventories, and gross fixed capital formation. Most notably, machinery and equipment went from an annual growth rate of around 30% in 2008 to a 32.1% drop in the second quarter of 2009. In the moving year ending in the second quarter of this year, the investment-to-GDP ratio fell to 28.1% in constant prices and 23.9% in current prices, which is similar to the level in early 2008 (figure III.3).

Private consumption contracted 2.6% annually in the second quarter of 2009. In seasonally adjusted terms, the quarterly change was practically zero, following the recovery in the first quarter of almost all the drop of the last quarter of 2008. This is consistent with the trend for durable goods consumption, which bottomed out in the fourth quarter of last year and then started to improve, posting positive rates in the second quarter. Nondurables consumption has followed a much more stable path, with a smaller drop in late 2008, positive growth in early 2009, and stability thereafter.

Inventories continued to shrink in the second quarter, reaching a historically low level of -2.3% of GDP (measured over a moving year). The seasonally adjusted rate of contraction, however, was lower than in the first quarter. The drop in inventories coincides with trends in a number of important economies, and it could be related to firms' decision to draw down their stocks in response to the sharp increase in uncertainty, the worsening of the demand outlook, and the increase in financing costs. The Monthly Business Confidence Indicator (IMCE) shows that in late 2008, businesses suddenly began to feel that their inventories were substantially higher than they should be, largely because of the weak outlook for demand. The perception of excess inventories has tended to ease off, but it has not yet returned to the levels recorded before September 2008 (box III.1) (figure III.4).

Various consumption and investment indicators suggest that the previous fall slowed and even increased at the margin at the beginning of the third quarter

Figure III.6

New home sales (*)
(indices 2003=100, seasonally adjusted series)

Greater Santiago
National

National

National

National

National

National

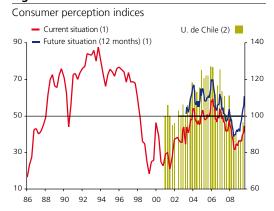
National

National

National

Sources: Central Bank of Chile and Chilean Chamber of Construction (CChC).

Figure III.7



(1) A value over (under) 50 points indicates optimism (pessimism). Before January 2003, the index was quarterly, after that date, it is published monthly

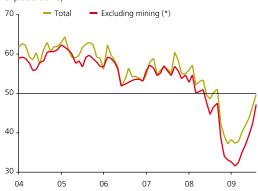
(2) Index March 2001 = 100

Sources: Adimark and Universidad de Chile.

Figure III.8

Business perception index

(a value over (under) 50 points indicates positive (negative) expectations)



(*) Weighted average of the manufacturing, retail, and construction sectoral confidence indicators.

Source: Icare/Universidad Adolfo Ibáñez.

(figure III.5). On the consumption side, retail sales of durable and nondurable goods, new car sales, supermarket sales by various sources, and consumer and durable goods imports stabilized or grew. On the investment side, new home sales continued to improve from the lows posted at the end of last year and the beginning of this one (figure III.6). The number of months that it would take to sell the existing inventory of new homes, adjusted for seasonality, fell to the levels recorded in mid-2008. According to the survey carried out by the corporation for Capital Goods and Technological Development *Corporación de Desarrollo Tecnológico y de Bienes de Capital* (CBC), the value of projects for the 2008–2011 period, which fell strongly at the start of the year, increased slightly in the June *Report*. At the same time, seasonally adjusted data for the current quarter show increases in cement sales, building permits, and effective sales of construction materials (figure IV.6). It is estimated that the second half of this year will see positive quarter-over-quarter changes for investment and, in the last quarter, consumption.

As in the rest of the world, expectations partially recovered at the domestic level. With regard to consumers, the Economic Perceptions Index (IPEC) and the University of Chile survey both improved, approaching the levels of early 2008, but they remain pessimistic. In the August survey, the outlook for the country's economic situation one year ahead was optimistic for the fourth consecutive month (figure III.7). Business expectations, measured through the IMCE, also recovered, nearing the neutral point of confidence both for the total and excluding the mining sector (figure III.8).

In June of this year, the Total Central Government had a general balance of -2.6% of GDP and accumulated savings of -0.3% of GDP, in a context of falling income and rising total expenditures. The gross debt of the Central Government shrank from 5.2% of GDP in December 2008 to 4.9% in June 2009. In budgetary terms, the accumulated annual balance of the Central Government reached -3.1% of GDP in July 2009, while saving was -0.3% of GDP. Income and expenditures thus stood at 63.4% and 57.2%, respectively. This means that total expenditures grew more than GDP, increasing 18.3% so far this year in real terms.

Net external demand

The fall in domestic demand was strongly reflected in imports. As a result, in the second quarter of 2009, net exports made a positive contribution to growth for the second consecutive quarter. Given this significant adjustment to domestic expenditures and the reduction in rents paid abroad, the current account of the balance of payments has been increasing in the last moving year. The accumulated trade balance closed the second quarter with a US\$5,728 million surplus.

The total value of exports was US\$12.4 billion in the second quarter of 2009 (with an accumulated US\$23.8 billion for the year to date). The drop in world demand continues to be reflected in export prices and quantities, although more moderately in the latter (figure III.9). The average price of exports fell 30.7% annually, with reductions in all categories (especially mining) led by the copper price (table III.2). Export volumes decreased 3.2% annually in the second quarter, following a sharp drop in the previous quarter. The largest drops were recorded in agricultural exports—due to early harvests of some products in the first quarter—and manufacturing, owing to a combination

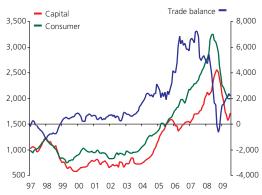
Figure III.9

Price and volume of Chilean exports (annual change, percent)



Figure III.10

Trade balance and capital and consumer goods imports (US\$ million accumulated per quarter, seasonally adjusted series)



Source: Central Bank of Chile.

of supply and demand factors. Forestry exports also shrank in response to lower external demand, while salmon and trout exports were down due to ongoing supply problems.

Table III.2

Foreign trade

Exports

	Value	Annual o	Annual change, percent										
	US\$	Total			Mining	ı		Manufa	cturin	g	Agricu	lture	
	million	Value V	ol. Pri	ce	Value '	Vol.	Price	Value	Vol. Pi	rice	Value	Vol. I	Price
2006	58,680	42.2	2.2 3	9.1	59.7	-1.4	61.9	20.3	5.0	14.6	9.6	6.0	3.3
2007	67,666	15.3	7.1	7.7	16.5	7.8	8.1	12.9	6.0	6.5	14.1	3.6	10.1
2008	66,455	-1.8	-0.9 -	0.8	-11.5	-4.0	-7.8	12.9	1.5	11.2	23.4	12.6	9.6
2008 I	19,277	16.3	-0.6 1	7.0	20.0	-0.6	20.7	6.8	-4.3	11.6	13.1	2.7	10.1
II	18,423	0.7	-6.6	7.8	-8.9	-13.8	5.7	15.6	2.5	12.8	26.2	14.4	10.3
III	16,419	1.1	4.3 -	3.0	-13.1	0.8	-13.8	25.5	8.7	15.4	32.0	14.4	15.4
IV	12,336	-25.5	-1.5 -2	4.4	-43.5	-3.2	-41.6	3.9	-1.8	5.8	39.6	48.0	-5.7
2009 I	11,411	-40.8	-7.5 -3	6.0	-57.4	-9.4	-51.7	-17.9	-9.9	-8.6	3.8	23.2	-15.5
II	12,361	-32.9	-3.2 -3	0.7	-42.7	3.3	-41.9	-23.3	-9.4 -	15.4	-21.0	-11.3	-10.9

Imports

	Value	Annual change, percent										
	US\$	Total	Consumer	Capital	Intermediate							
	million	Value Vol. Price	Value Vol. Price	Value Vol. Price	Value Vol. Price							
2005	32,735	32.0 21.2 9.0	24.9 21.8 2.5	59.3 56.3 1.9	30.2 14.6 13.6							
2006	38,406	17.3 11.6 5.3	25.3 22.4 2.4	1.7 0.4 1.3	18.6 10.4 7.5							
2007	47,164	22.8 17.5 4.4	23.1 20.3 2.3	17.8 16.3 1.2	24.7 17.1 6.5							
2008	61,903	31.3 15.0 14.2	19.2 12.1 6.4	31.2 28.6 2.1	35.0 11.7 20.8							
2008 I	14,004	38.9 17.0 18.7	27.1 17.7 8.0	27.4 23.8 3.0	47.9 16.2 27.3							
II	16,233	44.6 19.7 20.8	39.8 27.8 9.3	38.2 34.0 3.2	46.6 12.2 30.6							
III	17,786	44.5 22.8 17.7	24.0 13.4 9.3	51.9 48.9 2.0	49.1 18.3 26.0							
IV	13,880	2.5 2.6 -0.1	-7.9 -6.9 -1.1	12.3 12.2 0.1	2.2 1.4 0.8							
2009 I	9,568	-31.6 -19.6 -14.9	-28.1 -22.1 -7.6	-16.5 -16.8 0.4	-37.1 -20.4 -20.9							
II	9,789	-39.7 -22.3 -22.4	-39.4 -30.7 -12.3	-32.6 -30.6 -2.7	-43.0 -19.9 -29.0							

Source: Central Bank of Chile.

The total value of imports was US\$9.8 billion in the second quarter (with an accumulated US\$19.3 billion for the year to date). All categories of imported products posted drops in both volume and prices, which reflects the lower domestic demand. Consumer goods imports mirrored the behavior of inventories and private consumption, in particular durable goods spending. The contraction of intermediate imports is related to lower imports of non-fuel products and lower fuel prices. The most recent data on consumer and capital imports show stable or slightly increasing levels (figure III.10).

The outlook for a more favorable global macroeconomic scenario than projected in May and the increase in commodities prices underpin the forecast for an increase in the terms of trade (ToT) in 2009, instead of the drop projected in May. In the baseline scenario, the terms of trade are expected to increase 2.5% and 2.3% this year and next, respectively, versus drops of 13.5% and 3.8% estimated in May. This is explained by the increase in the forecast average copper price in 2009 (US\$2.30 in September, versus US\$1.80 in May) and the significant drop in import prices.

In the second quarter of 2009, the current account of the balance of payments had a positive balance of US\$1.13 billion, with an accumulated deficit of 2.4% of GDP in the moving year ending in that quarter. The baseline scenario of this *Report* projects that the current account will finish 2009 with a surplus of 1.9% of GDP, instead of the deficit forecast in May. This is largely due to the improved outlook for world demand, the increase in the copper price above expectations, and the greater estimated drop in domestic demand.

Box III.1: Evolution of inventories in the current cycle

A distinctive characteristic of the current Chilean economic cycle is the sudden and significant inventory depletion. In the second quarter of 2009, the accumulated change in inventories in one year represented –2.3 percentage points of GDP, whereas one year previous it equaled 1.5 percentage points. This trend is highly unusual compared with prior episodes of a downturn in the cycle. For example, in the late 1990s, domestic demand registered a similar drop, but inventories posted a smaller contraction¹/ (figure III.11). This trend in inventories has not been limited to the Chilean economy (figure III.12).

Figure III.11

Change in inventories to GDP and domestic demand (percent)



Figure III.12

Change in inventories (*) (percent of GDP)



(*) Seasonally adjusted series.. Source: CEIC Data.

¹/ This comparison must be interpreted with caution, considering that the inventory measure was significantly improved when the base year used in the National Accounts was updated from 1996 to 2003, especially at the quarterly frequency.

Several hypotheses, which are not mutually exclusive, could explain the behavior of inventories in recent quarters. First, the trend may reflect a drop in the demand outlook of each firm, given the sudden worsening of expectations experienced at the end of last year. Second, it could stem from the tighter financing conditions and their implication for the cost of maintenance. Finally, it could be the result of a prior overaccumulation.

With regard to the first point, data from the Monthly Business Confidence Indicator (IMCE) show a sharp increase in late 2008 of the perception that inventories were too high in the manufacturing and retail sectors (figure III.13)²/. In the case of manufacturing, the assessment of excess inventories coincided with the further deterioration of perceptions on current demand and its future outlook. Most recently, the assessment of excess inventories has tended to ease off in this sector, but only because of an improved future outlook and not because of a better judgment of current sales. With regard to retail firms, which behaved similarly at the start of the financial crisis, the most recent data show that the lower perceptions of excess inventories have been accompanied by a better current situation for demand³/.

With regard to the effect of the change in financing conditions on inventory accumulation, data on a set of firms in the manufacturing and retail sectors, obtained from the Uniform Codified Statistical Form (FECU), do not clearly establish a relationship between the change in inventories in early 2009 and the level of short-term debt held by the firms in the sample (figure III.14). This is not conclusive evidence, however, on the effect of financing conditions on inventories.

Finally, the depletion of inventories followed a strong prior accumulation. An exercise based on the perpetual inventory

²/ The IMCE is a survey carried out by Icare and the Universidad Adolfo Ibáñez, which polls a group of 610 firms in the mining, manufacturing, retail, and construction sectors about their assessment of the current and future outlook for variables such as sales, production, employment, and costs. The construction sector is not asked about inventories. Results are available at www.icare.cl/imce/. In general, they show that the firms tend to gauge that their inventories are too high.

³/ For more detail on these and other results, see Echavarría et al. (2009).

method⁴/ shows that inventories increased sharply as a share of GDP starting in 2006, and this trend was suddenly reversed in the recent episode (figure III.15).

In sum, the available data indicate that the sudden drawdown of inventories could be due to both a change in perceptions of demand and the strong prior inventory accumulation. The worsening of financing conditions is not shown to be a relevant factor, although the evidence is not conclusive. These findings suggest that the rate of inventory accumulation in the coming quarters will be tied primarily to the future outlook for demand.

Figure III.13a

IMCE: Current and future outlook for manufacturing (a value over (under) 50 points indicates optimism (pessimism))



Figure III.13b

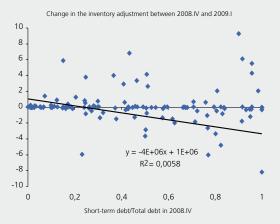
IMCE: Current and future outlook for retail (a value over (under) 50 points indicates optimism (pessimism))



Source: Icare/Universidad Adolfo Ibáñez.

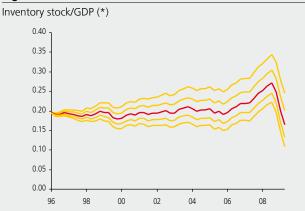
Figure III.14

Inventories and short-term debt of firms



Source: Central Bank of Chile.

Figure III.15



(*) Lines indicate different sensitivity tests for the annual inventory depreciation rate. The red line represents a 1.5% depreciation rate; the yellow lines indicate adjustments of \pm 0.5 and \pm 1.0%.

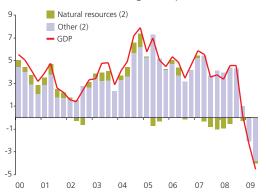
Source: Echavarría et al. (2009).

⁴/ This method allows for the indirect calculation of the capital stock (or inventories). It consists in aggregating historical inventory purchases, taking into account their useful lives (that is, depreciation).

IV. Output and the labor market

Figure IV.1

Gross domestic product (1) (contribution to annual GDP growth, percent)



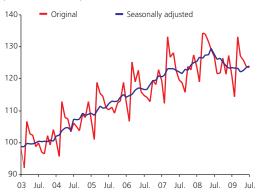
- (1) GDP at factor cost plus bank charges.
- (2) See glossary for definition.

Source: Central Bank of Chile.

Figure IV.2

Source: Central Bank of Chile.

Monthly indicator of economic activity (Imacec) (index 2003=100)



This chapter reviews the evolution of GDP based on sectors of origin and employment trends, with the purpose of evaluating price pressures in goods and factor markets, together with the short-term prospects for output.

Total GDP

The strong output contraction in late 2008 generated negative annual rates in the first half of 2009. Thus, in the first and second quarters, GDP fell 2.3% and 4.5%, respectively, in annual terms¹/. In levels, seasonally adjusted second-quarter GDP contracted substantially less than in late 2008 and early 2009. In May, June, and July, output was more stable or even slightly increasing. In any case, in the second quarter GDP was lower than projected in May, largely as a result of April's performance and the consequent expansion of excess capacity (figures IV.1 and IV.2).

Table IV.1

Gross domestic product

(weight in GDP; real annual change, percent)

	Weighted	2008				2009			
	2008	1	II	III	IV	Year	I	II	Half I
Agriculture, livestock,	I		1			ı	I	I	
and forestry	3.7	2.6	6.3	-3.0	2.5	3.0	9.7	-2.3	3.8
Fishing	1.2	-4.5	5.0	7.2	-9.4	-0.7	5.4	-27.3	-10.8
Mining	6.7	-4.1	-5.6	-5.3	-5.1	-5.0	-7.1	-2.5	-4.8
Manufacturing	15.8	0.9	0.6	2.1	-3.5	0.0	-10.3	-13.1	-11.7
EGW	1.8	-25.9	-10.9	19.4	12.3	-4.0	26.0	21.6	23.8
Construction	7.5	8.0	13.0	12.1	6.1	9.7	-3.8	-4.8	-4.3
Retail (1)	10.5	4.6	6.9	6.7	-2.7	3.8	-6.1	-7.1	-6.6
Transport	7.3	5.8	5.0	7.2	2.3	5.0	-4.2	-6.0	-5.1
Communications	2.8	12.1	11.5	10.1	8.0	10.4	5.2	5.3	5.2
Other services (2)	37.0	5.4	4.7	4.3	2.5	4.2	0.6	-0.7	-0.1
Natural resources (2)	9.7	-8.9	-5.2	0.0	-2.7	ı -4.3	0.5	-2.0	ı -0.7 ı
Other (2)	84.6	4.7	5.2	5.0	1.2	4.0	-2.4	-4.5	-3.5
Total GDP (3) Variation	100.0	3.4	4.6	4.6	0.2	3.2	-2.3	-4.5	-3.5
quarter/ quarter (4)		1.7	1.8	-0.9	-2.3		-0.8	-0.4	

⁽¹⁾ Includes restaurants and hotels

Source: Central Bank of Chile.

⁽²⁾ See glossary for definition.

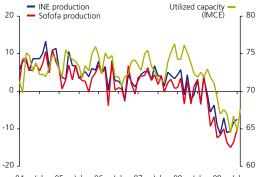
⁽³⁾ Total GDP is the sum of natural resources GDP, other GDP, net VAT collected, and import duties, less bank charges. (4) Quarterly change of the seasonally adjusted series.

¹/ In accordance with the policy on the regular disclosure of the Quarterly National Accounts, the first GDP estimate for the second quarter of 2009 and a new GDP estimate for the first quarter of 2009 were published on 18 August.

Figure IV.3

Annual growth of manufacturing production and utilized capacity

(percent)



04 Jul. 05 Jul. 06 Jul. 07 Jul. 08 Jul. 09 Jul. Sources: Icare/Universidad Adolfo Ibáñez, National Statistics Bureau (INE), and Manufacturing Development Association (Sofofa).

Figure IV.4

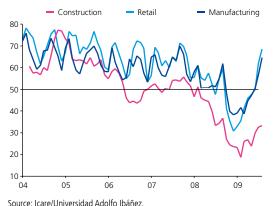
Retail sector indicators (*) (index 2002=100; US\$ million)



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

Figure IV.5

Sales expectations and the output level (IMCE) (value over (under) 50 indicates that it will rise (fall))



Both the projections in this *Report* and market consensus forecasts assume that the economy will become more dynamic this half, with positive quarter-on-quarter changes, although annual rates will continue to be negative for several months.

The baseline scenario assumes that output will post an annual rate of -2.0% to -1.5% this year. The assumption for 2010 is that the economy will continue to expand, with GDP growing between 4.5% and 5.5%. This will lead to a gradual, though partial, narrowing of output gaps within the projection horizon.

GDP for natural resources

In the second quarter of 2009, the natural resource sectors made a negative contribution to aggregate growth. Mining output fell 2.5% in annual terms, due to low ore quality and technical problems. Fishing contracted just over 27% annually as a result of the slump in commercial fishing and lower production in fish farming. Electricity, gas, and water (EGW) grew 21.6% in annual terms, based on the increased use of hydroelectric generation instead of thermal generation.

For the current half, mining performance is expected to improve as the technical problems are eventually solved. EGW will continue to grow based on the use of hydroelectric power sources, and fishing will continue to experience low production volumes, largely due to the low salmon production.

Other GDP

In the second quarter, the GDP of the non-natural-resource sectors continued to feel the effects of the negative macroeconomic scenario. Manufacturing and retail activity fell relative to the first quarter, although construction grew. Most recently, the majority of the partial indicators for these sectors indicate that output is stabilizing or even starting to rise.

Manufacturing

Manufacturing production continued to contract in the second quarter, relative both to one year ago and to the previous quarter. The lower output was seen in all branches of manufacturing, especially those oriented to the external market, those tied to investment, and those associated with the production of building materials, which were affected by project deferrals and suspensions in the construction sector. The INE's seasonally adjusted manufacturing production index recorded a slight uptick in June and July.

The baseline scenario projects that seasonally adjusted manufacturing output will continue to grow over the course of the second half. This is consistent with the outlook for global demand, the more optimistic expectations for production, and the improved capacity utilization (figure IV.3).

Retail

Retail activity fell in annual terms in the second quarter. It also fell relative to the previous quarter, although at a notoriously slower pace. The performance of wholesale trade, which was affected by lower investment, was a central factor in the aggregate sectoral performance, mainly due to the intensification of the decline in machinery and equipment sales and building materials. Retail trade

Figure IV.6

Construction sector indicators (*)
(indices 2003=100, seasonally adjusted series)

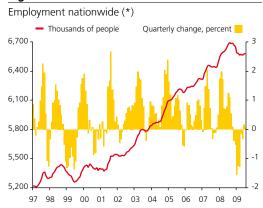
- Cement sales
- Construction materials
- Imacon

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Sources: Central Bank of Chile and Chilean Chamber of Builders

Figure IV.7

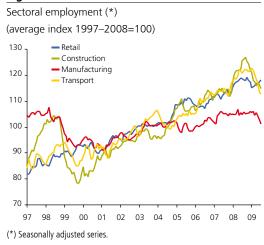
(*) Seasonally adjusted series.



(*) Seasonally adjusted series.

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

Figure IV.8



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

continued to fall in annual terms, but some partial consumption indicators suggest that activity is starting to rise (figures IV.4 and III.5).

The sales projections of firms in this sector, as captured by the IMCE, remained optimistic in August (figure IV.5). In addition, the perception of excess inventories has tended to gradually diminish.

Construction

The deferral of building investment projects was behind the negative performance of construction activity in the second quarter relative to a year ago. The deferrals are part of a process that began in the first quarter. In contrast, engineering works increased due to the materialization of large mining and energy projects, resulting in positive quarterly growth rates for the sector in the second quarter. Partial output indicators, such as construction materials and cement sales, are positive at the margin (figure IV.6). Demand indicators, such as new home sales, continued to improve relative to late 2008 and early 2009 (figure III.6). The projections of firms in this sector, as captured by the IMCE, remained pessimistic, although they have improved in the year to date.

According to the survey carried out by Capital Goods and Technological Development Corporation (*Corporación de Desarrollo Tecnológico y de Bienes de Capital*, CBC) in June, the value of projects for the 2008–2011 period, which fell strongly at the start of the year, increased slightly relative to the last survey.

Labor market

The labor market has weakened over the course of the year, although recent data show that employment has ceased to fall while the rise in unemployment eased off, with a shift from wage labor to self-employment²/. Seasonally adjusted INE data indicate that employment contracted between November of 2008 and July of this year, with over 88,000 jobs lost³/. A slight expansion is seen, however, in the moving quarters ending in June and July (figure IV.7).

Seasonally adjusted data from the Chilean Association for Occupational Safety and Health (AChS) report similar results for employment, although with differences in levels.

A breakdown by sector, using INE data, reveals that the drop in employment is mainly driven by construction, transport, and manufacturing (figure IV.8). Mining and agriculture also contracted, although they were less important at the aggregate level. Retail employment declined early in the year, but the drop has already been recovered. The AChS reports that as of July, annual employment rates fell 13.5% in construction, 7.7% in manufacturing, and 3.7% in retail.

By labor category, and using seasonally adjusted data, wage employment has fallen steadily since November 2008, whereas self-employment began to increase early in the second quarter. The shift was mainly concentrated in retail

²/ Jones and Naudon (2009) show that the current shift from wage labor to self-employment is similar to that of the late 1990s.

³/ More than 175,000 jobs were lost between September 1998 and July 1999.

Figure IV.9

Total participation rate and annual growth of the labor force

(percent)



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

Figure IV.10

Unemployment rate (percent)

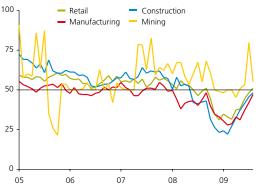


Sources: Central Bank of Chile and National Statistics Bureau (INE).

Figure IV.11

Source: Icare/Universidad Adolfo Ibáñez

Outlook for sectoral employment (IMCE) (value over (under) 50 indicates that it will rise (fall))



and in agriculture, livestock, and forestry. This contrasts with the late 1990s, when the shift occurred primarily in community services, manufacturing, and construction.

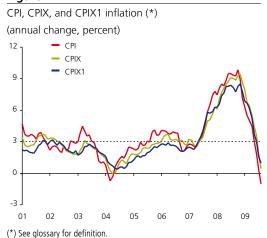
The labor force continued to post lower annual growth than a year ago, for both men and women. In levels, women were more dynamic than men, and the share of first-time job seekers rose. The participation rate has held steady at around 56% since the beginning of 2008 (figure IV.9).

INE data indicate that the national unemployment rate has increased since October, although at a slower pace in the most recent period. It was 10.8% in the moving quarter ending in July (10.1% in seasonally adjusted terms). INE data for the Santiago Metropolitan Region show that the unemployment rate reached 10.7% in the moving quarter ending in July (10.3% seasonally adjusted). The University of Chile's quarterly measure for Greater Santiago was 11.9% in June (12.1% seasonally adjusted), which is lower than in March of this year.

The employment outlook captured in the IMCE points to an improvement, in general, across sectors. The outlook for retail became optimistic at the margin, while mining remained neutral for the fourth consecutive quarter. The outlook for manufacturing and construction remains pessimistic, but to a lesser extent than previously (figure IV.11). Expectations captured in the IPEC paint a similar picture. An analysis of recruitment ads reveals that, in seasonally adjusted terms, job vacancies hit a low at the end of the first quarter but then began to grow steadily, although far below the levels seen through the middle of last year.

V. Prices and costs

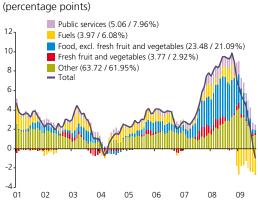
Figure V.1



Source: National Statistics Bureau (INE)

Contribution to annual CPI inflation (*)

Figure V.2



(*) Shares of the December 1998/2008 CPI basket in parentheses.

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

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

Recent trends in inflation

CPI inflation fell sharply from 4.5% annually in April to negative territory in August, at -1.0%. This is a larger drop than was projected in the May Monetary Policy Report. Core measures also declined faster than projected in May (figure V.1). Together with the expansion of output gaps, this trend increased the risk that inflation would remain below the 3% target beyond the policy horizon. The Board therefore continued to reduce the MPR until it reached its minimum in July, announced that the rate would be kept at that level for a prolonged period of time, and implemented complementary monetary policy actions. In the short term, annual CPI inflation is expected to continue falling, posting negative annual rates for the rest of 2009.

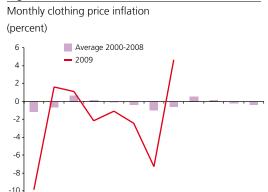
Annual CPI inflation began its sharp descent in October 2008, reaching negative rates in the most recent period. The factors that can explain this trend include the sharp, sudden drop in domestic demand since late 2008, the high basis for comparison from last year, the fast pass-through of lower international prices, and the prices of some specific products.

The weak demand has been reflected in the generalized reduction in prices. The number of items with prices that fall monthly rose from 124 in March to nearly 170 in August, after peaking at over 200 in July. Figures above 170 have not been seen since early 2007, although the numbers are not strictly comparable since the basket was changed from 483 to 368 items last January.

The high basis for comparison has to do with international commodities prices, which are substantially below their peaks of mid-2008. Since December, fuels have made a negative contribution to annual inflation, reaching levels around –2.5 percentage points (pp) between June and August. This coincides with the months in which oil peaked in 2008, when the WTI price hit US\$150 a barrel (figure V.2). The drop in inflation recorded in Chile is one of the sharpest in the world. As was the case when inflation was rising, this could be associated with the speed with which external prices are transmitted to the local market, given the very few distortions in the economy's pricing mechanism.

The contribution of fruits and vegetables to annual inflation is close to zero, thanks to the absence of shocks that occurred in the past, such as droughts and frosts. The contribution of public utilities is also less than one

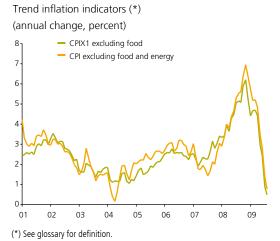
Figure V.3



Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sept. Oct. Nov. Dec

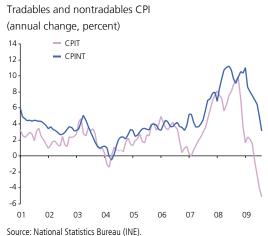
Source: National Statistics Bureau (INE).

Figure V.4



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

Figure V.5



percentage point, reflecting indexation to lower inflation rates. Finally, the contribution of food prices to annual CPI inflation has shrunk, in line with their evolution in international markets, to less than one percentage point at the close of this *Report*.

It must be kept in mind that the change in the methodology for measuring CPI, implemented by the INE at the beginning of this year, affects the yearon-year comparison of the index. In addition, the month-on-month changes in some basket components have become more volatile. For example, in the case of clothing, the new methodology basically stopped smoothing prices to highlight their seasonality. Estimates show that if the previous methodology for clothing had been maintained, then CPI inflation from January to August would have been 0.4 percentage point greater (figure V.3). At any rate, the effect of this change could be a function of the cyclical phase of the economy, in that the weak demand has been strongly reflected in the core components. Another channel through which the change in the CPI measure has had an effect is financing costs. The incorporation of the stamp tax in this price, and its temporary deduction at the start of this year, had an effect of -0.7 percentage point on annual CPI inflation. The INE will soon introduce new changes to the CPI basket, mainly to reflect that the index will begin to be measured at the national level. The effect of these changes in the inflation measure cannot be predicted.

Indicators of core inflation also fell sharply, although to a lesser degree than the CPI. The CPIX dropped from an annual rate of 5.5% in April to 0.4% in August, while the CPIX1 went from 5.3 to 1.0% annually in the same period. The inflation measure excluding food and energy prices (leaving in 67.2% of the CPI basket) dropped from an annual rate of 4.8% in April to 0.8% in August. The CPIX1 excluding food prices (leaving in 54.9% of the CPI basket) dropped from 4.4 to 0.5% annually in the same period (figure V.4). Annual tradables inflation (CPIT) reflected the contraction of demand and world trade and its effects on the prices of internationally traded goods: it has posted negative rates since May, with a drop of 5.1% in August. Nontradables CPI inflation (CPINT) was also lower than in April, with an annual rate of 3.1% in August (figure V.5). Similarly, goods inflation (CPIG) has fallen 6.5 percentage points since April, reaching an annual rate of -3.7% in August, while services inflation (CPIS) contracted less, to 2.7% annually. The core versions of the latter two indices replicate the pattern of large drops.

Trend inflation measures also fell, but less steeply than total inflation. This is consistent with the fact that their increase was also smaller. The trimmed mean CPI and the trim of the most volatile components (TMVC), which excludes the most volatile prices in each period, fell to 3.6% and 2.9% in August, after posting annual rates of 6% and 5% in April, respectively.

Inflation expectations

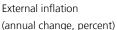
In line with the fast, steep drop in inflation and the increase in excess capacity, several indicators point to lower inflation expectations than in May, especially over shorter horizons. The Central Bank's Economic Expectations Survey (EES) shows that expected annual inflation for December of this year fell from 1.2% in the May survey to -1.0% in September. Expected annual inflation one year ahead recorded a smaller drop, from 2.5% to 2.1% in the same period. At longer horizons, expectations have not changed since

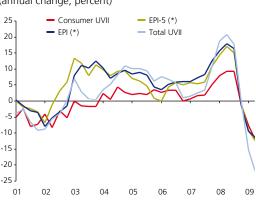
Figure V.6

Economic Expectations Survey: Inflation expectations (annual change, percent)



Figure V.7





(*) Quarterly average. See glossary for definition.

Source: Central Bank of Chile.

Figure V.8

PPI and WPI (annual change, percent)



December of last year. Survey respondents expect annual inflation to be 3% in the two-year policy horizon, which is consistent with the Central Bank's target (figure V.6). Private agents' negative view of inflation has also been receding. According to the IPEC consumer expectations survey, the percentage of respondents answering that inflation will rise "a lot" in the next twelve months was 39% in August, after staying a little above 40% since February. Business expectations, as reported by the Monthly Business Confidence Indicator (IMCE), have continued to be adjusted downward since late 2008: expected inflation one year out fell from 3.4% in April to 2.0% in August. The exception is the volatility of breakeven inflation, in line with the surprises in monthly inflation rates and the portfolio changes that this normally implies. Consequently, this trend may not represent genuine inflation expectations.

Cost pressures and margins

Imported cost pressures have continued to ease off in recent months, reflecting the lower actual inflation in a number of economies, the increased excess capacity at the world level, and the international depreciation of the dollar. Inflation in dollars, measured through the external price index relevant to the Chilean economy (EPI), fell 12% at the margin in annual terms. Similarly, in the first half, the total and consumer unit value import indices (UVII) deepened the annual drop begun in the last quarter of 2008. The total UVII recorded an annual change of -22.4% in the second quarter, which is larger than the drop experienced in the early 2000s, while the consumer goods UVII fell 12.3% in annual terms in the same period (figure V.7). It is important to bear in mind that beyond the evolution of the EPI, the behavior of inflation and the prices used to measure imported cost pressures is largely tied to the UVII, which better reflects the true cost of importing goods. In pesos, imported cost pressures have also been limited. Although the behavior of external goods prices has been mixed since the last Monetary Policy Report, they are all below their levels of 2008, when most external prices peaked. The peso, in turn, is more depreciated than in January-September 2008, but a little more than 5% appreciated relative to the average of the two weeks prior to the statistical closing date of the May Report. The baseline scenario assumes that this year, relevant external inflation in dollars will be -6.6% in annual terms, which is more negative than the May estimate and in line with the decrease in headline inflation in local currency and the international depreciation of the dollar. For 2010, external inflation will rise to an annual 8.0%, due to higher commodities prices, the projected recovery of the world economy, and the depreciation of the dollar.

The wholesale price index (WPI)—which includes the prices of both domestic and imported goods—, and the producer price index (PPI)—which includes the prices of domestic goods and services—, continue to post declining annual rates. The WPI plunged from 11.7% annually in April to –5.8% in August, while the PPI dropped all the way to –14.5% annually in August (figure V.8). The results of the IMCE business survey indicate that this trend may reverse or at least stop deepening. Projected costs three months ahead gradually started to recover in the second quarter and are currently growing for the first time since October 2008.

The baseline scenario of this *Report* assumes that inflation will continue to fall in the short term. The CPI is expected to post negative annual rates through

Figure V.9

Nominal wages (annual change, percent)

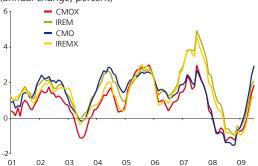


Sources: Chilean Association for Occupational Safety and Health (AChS) and National Statistics Bureau (INE).

Figure V.10

Wage growth and cost-of-living adjustments (*)

(annual change, percent)

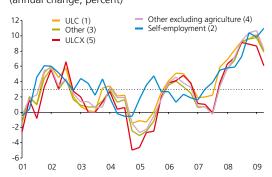


(*) For details on the construction of these indicators, see the January 2008 *Report*, box V.1. See glossary for definitions.

Source: Central Bank of Chile.

Figure V.11

Unit labor costs (annual change, percent)



- Includes total nominal labor costs, real waged hours worked, wage employment, and total GDP.
- (2) Same as Total, but replaces wage employment with national employment.
- (3) Includes other labor costs, other wage employment, other GDP (excluding EGW, mining, and fishing), and real waged hours worked.
- (4) Same as Other, but excluding the agricultural sector from other wage employment and from other GDP.
- (5) See glossary for definition.

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

the end of the year, and the CPIX1 through mid-2010. In the medium term, the macroeconomic policy stimulus will generate a progressive closing of output gaps, and imported inflation will end its negative contribution to cost pressures. Both the CPI and the CPIX1 will therefore increase, reaching 3% in 2011.

Wages

The cost pressures from the labor market have not changed significantly since the May *Report*. The annual growth rate of nominal wages has eased off since April, according to the INE and the AChS. This could indicate that the evolution is in line with what one would expect based on the usual indexation clauses and the current state of the cycle (figure V.9). By sector, manufacturing labor costs have continued the slackening trend observed through May, while wage costs in construction and retail appear to have stabilized. Real wages continue to rise, but below the peaks recorded in the past (figure V.10). The annual growth rate of wages, in general, is expected to continue contracting in the coming months, in line with the inflationary dynamic seen thus far¹/ and the current levels of excess capacity.

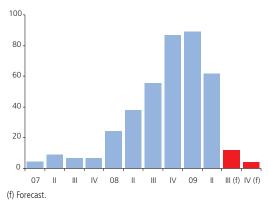
In general, the annual growth rate of unit labor costs (ULC) slowed somewhat more than nominal wages in the first half of this year, especially in the second quarter. This is consistent with output and employment trends. The exception is unit labor costs in the self-employment category, because growth of this employment category produces a fall in measured productivity given the output contraction (figure V.11). All told, the annual growth rates of ULC were between 6% and 11% in June of this year.

 $^{^{1}\!/}$ By law, wages are corrected for inflation only when the inflation rate is positive.

VI. Inflation scenarios

Figure VI.1

Percentage of countries with negative quarterly GDP growth (*)

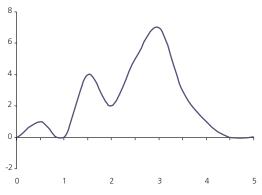


 $(\mbox{*})$ From 2007.1 up to 2009.1, considers 45 countries; in 2009.1I, 34 countries; in 2009.1II and IV, 25 countries.

Sources: Central Bank of Chile based on CEIC Data, Bloomberg and JP Morgan Chase.

Figure VI.2

Distribution of growth projections for the U.S. in 2010 (annual change, percent)



Source: Consensus Forecasts.

This chapter presents the Board's assessment of the prospects of the Chilean economy over the next two years, including the analysis and decision of the monetary policy meeting held on 8 September 2009. Projections of the most likely inflation and growth trajectories are provided, which are conditional on a set of events that make up the baseline scenario, so the Board's assessment of the balance of risks for output and inflation is also provided.

Baseline projection scenario

External scenario

The world economy has tended to stabilize in recent months, even posting improvements in GDP projections for this and next year. In the second quarter, several economies began showing q-o-q increases in their output levels. Consensus projections suggest that this behavior will extend to a significant number of countries in the second half: the percentage of economies expected to post GDP drops in the third and fourth quarters is significantly smaller than it was early in the year (figure VI.1). There are differences, however, in the assessment of the likely speed and form that the recovery will take in the world. Some agents point at a sustained increase in output while others consider the possibility of further declines. Growth projections for the U.S. in 2010 strongly reflect this bimodality in the market (figure VI.2). The baseline scenario assumes that, after falling 1% this year, the world economy will grow 3.3% in 2010 and 4.2% in 2011 (table VI.1). These rates are smaller than those immediately preceding the crisis of 2008 and partly reflect the financial constraints of the developed world and the fall in trend growth that is believed to have occurred in several economies.

Commodity prices, consistently with the relative improvement in projected world demand, have risen since the statistical closing of the May *Report*. The long-term copper price, considering prospects for global supply and demand, is estimated to be above earlier forecast: US\$2.0 per pound at today's price (US\$1.6 up to the previous *Report*). Its price is forecast to average US\$2.3 in 2009, US\$2.6 in 2010 and US\$2.5 in 2011. For oil, the working assumption is that its long-term price will not change, remaining at US\$75 per WTI barrel. Considering the future prices of the two weeks prior to the statistical closing of this *Report*, the price of crude WTI oil is forecast to average US\$61, US\$77, and US\$80 in 2009, 2010 and 2011, respectively (figure VI.3). The baseline scenario of this *Report* projects that the terms of trade (ToT) will increase by 2.5% this year and 2.3% in 2010, to be partly reversed in 2011, when they will fall 2.5%. The external price index that is relevant for Chile (EPI), measured in dollars, will drop 6.6% this year, and will increase 8.0% and 3.2% in 2010 and 2011, respectively.

Table VI.1

World growth (*)
(annual change, percent)

	Avg. 90-99	Avg. 00-07	2008 (e)	2009 (f)	2010 (f)	2011 (f)
World	2.9	4.1	3.2	-1.0	3.3	4.2
World at market						
nominal exchange rate	2.4	3.2	2.0	-1.9	2.6	3.5
United States	3.2	2.6	0.4	-2.6	2.3	3.3
Euro area	2.2	2.1	0.7	-3.7	0.6	1.4
Japan	1.5	1.7	-0.7	-5.4	1.3	1.8
China	10.0	10.1	9.0	8.3	9.3	9.5
Rest of Asia	5.5	5.0	3.0	-1.3	3.8	4.5
Latin America	2.7	3.6	4.2	-2.8	2.9	3.5
Commodity exports Trading partners	2.7	3.1 3.6		-1.2 -1.1	2.0 3.1	2.7

⁽e) Estimate.

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

Figure VI.3

Oil and copper prices (US¢/lb, LME; US\$/ barrel, WTI)

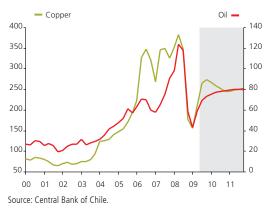


Table VI.2
Economic growth and current account

	1	1		
	2007	2008	2009 (f)	2010 (f)
GDP	4.7	3.2	-2.0 to -1.5	4.5 to 5.5
National income	7.1	3.8	-1.5	6.2
Domestic demand	7.8	7.4	-6.2	6.7
Domestic demand				
(w/o change in inventories)	8.2	7.9	-3.5	3.7
Gross fixed capital formation	12.0	19.5	-12.9	7.4
Total consumption	7.1	4.2	0.0	2.5
Goods and services exports	7.6	3.1	-4.7	4.9
Goods and services imports	14.9	12.9	-13.8	9.0
Current account (% of GDP)	4.4	-2.0	1.9	1.2
Current account	7,189	-3,440	2,900	2,200
Trade balance	23,635	8,846	12,400	13,100
Exports	67,666	66,455	50,600	56,500
Imports	-44,031	-57,610	-38,200	-43,400
Services	-975	-646	-500	-500
Rent	-18,595	-14,563	-1,500	-13,100
Current transfers	3,123	2,924	2,500	2,700

⁽f) Forecast.

Source: Central Bank of Chile

These ups and downs are the expected result of the foreseen commodity price increase and of the depreciation of the US dollar in world markets. The higher imported inflation in dollars will contribute marginally to increasing domestic inflationary pressures.

Aggregate demand, economic activity and external accounts

The Board foresees for the baseline scenario that, in 2009, Chile's y-o-y output growth will be in the range from -2.0 to -1.5% (table VI.2). Domestic demand will drop 6.2% annually, with a significant effect on this result from inventory depletion and a decrease in gross fixed capital formation. In fact, measured in 2003 prices, investment will show a drop to slightly above 26% of GDP, while in current prices it will fall to somewhat more than 20% of GDP. This projection assumes that the output level will rise during this half, as is already apparent in the latest Imacec figures, with annualized quarterly growth rates above 6%. Nonetheless, negative variations will be seen for still some months compared with year-ago levels. For 2010, the baseline scenario assumes that output will grow further, with y-o-y figures within the 4.5%-5.5% range. Domestic demand will also post significant growth, with an increase of 6.7% annually in 2010. The biggest contribution to this growth will come from replaced inventories and increased investment. However, investment over GDP, in both real and nominal terms, will show only a slight increase with respect to this year.

The Board considers that the trend growth rate of the Chilean economy, relevant for inflationary pressures, is lower than was estimated until the last *Report*. The fall in investment during this year and its effects on the capital stock will place trend growth between 4.0% and 4.5% annually in 2010-2011, less than the previous estimate of 4.5%-5.0%. However, the Board believes that, into the longer term, the Chilean economy's y-o-y potential growth rate will approach 5%. The already confirmed drop in the output level, even with this new assumption on trend growth, led to a widening of output gaps that largely explains the reduction in projected inflation (box VI.1). Over the projection horizon, the increase in the output level —that is forecast to begin during this half— will lead to a progressive, yet partial, closing of the output gaps. These projections are consistent with a fiscal policy that is governed by the structural balance rule.

Changes in quantities and the higher copper price result in the trade balance posting a surplus around US\$12.5 billion this year, nearly five times as large as was forecast in May. Accordingly, and despite the negative adjustment in rents due to the copper price increase, again this year the current account will show a surplus: 1.9% of GDP. This projection is very different from those in earlier *Reports*, which foresaw a deficit. For 2010, the current account would post a new surplus: 1.2% of GDP. Measured at trend prices, the current account deficit for 2009 and 2010 would stand between 3.0% and 3.5% of GDP¹/.

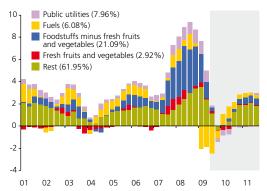
⁽f) Forecast.

^(*) See glossary for definition.

¹/ Considers corrections to prices, not to volumes. Long-term prices for copper and oil are US\$2 per pound and US\$75 per barrel, respectively.

Figure VI.4

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



(1) The gray area, as from third quarter 2009, depicts the breakdown of projected inflation in the baseline scenario.

(2) In parentheses, shares in the CPI basket of December 2008. Before that, built with weights in the basket of December 1998.

Sources: Central Bank of Chile and National Statistics Bureau.

Table VI.3

Inflation

	2008	2009 (f)	2010 (f)	2011 (f)
Average CPI inflation December CPI inflation CPI inflation in around 2 years (*)	8.7 7.1	1.7 -0.8	1.5 2.8	3.0
Average CPIX inflation December CPIX inflation CPIX inflation in around 2 years (*)	8.4 8.6	2.8 -1.2	1.0 2.6	3.0
Average CPIX1 inflation December CPIX1 inflation CPIX1 inflation in around 2 years (*)	7.8 7.7	2.8 -0.6	1.2 2.6	3.0

(f) Forecast

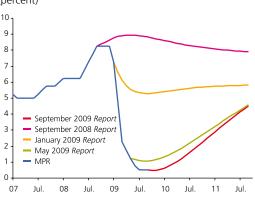
(*) Inflation projection to the third quarter of 2011.

Source: Central Bank of Chile.

Source: Central Bank of Chile

Figure VI.5

Monetary policy rate and forward curve (percent)



Inflation

In the baseline scenario, the gradual closing of output gaps and, to a lesser extent, the higher external inflation, will push inflation upward to make it converge to the target toward 2011 (figure VI.4). Due to its increased persistence, and the lagged effect of the cycle, core inflation indicators will post negative y-o-y variation rates until mid-2010, to later increase to also reach 3% toward 2011 (table VI.3).

Market inflationary expectations assume similar prospects and remain around 3% in the medium term, despite expected low y-o-y figures for the coming months. The baseline scenario, actually, considers that annual CPI inflation will remain negative for the rest of 2009, closing the year with an annual change of -0.8%. Core inflation indicators will also end the year with negative y-o-y variations.

Annual CPI inflation is projected to resume positive figures in the first quarter of 2010. It must be kept in mind, however, that the National Statistics Bureau, INE, will introduce new changes in the CPI basket early next year, mainly referred to measurements at the national level. The effect or sign of these changes in the inflation measurement can not be anticipated.

This scenario relies on other assumptions, aside from those already mentioned, about output gaps, external inflation and commodity prices. On one hand, the Board estimates that the level of the real exchange rate (RER) is consistent with its long-term fundamentals. Accordingly, it uses the methodological assumption that the long-term RER will not be very different from the levels observed in the two weeks prior to this *Report's* statistical closing. The baseline scenario assumes that nominal wages will be adjusted in line with wider output gaps and inflation dynamics. It also assumes that pricing decisions are based on inflation expectations that are aligned with the inflation target. Finally, it uses the working assumption that the MPR will be kept at its minimum level for a prolonged period of time, to later resume a normalization path comparable to the one that can be inferred from financial asset prices in the two weeks prior to the statistical closing of this *Report*. This suggests that this process might begin toward the second quarter of 2010 (figure VI.5).

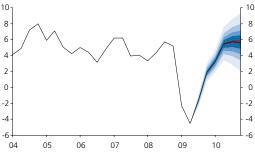
Risk scenarios

The baseline scenario reflects the events that are considered to be the most likely with the information at hand when making the projections. Different situations will shape a macroeconomic scenario —and a monetary policy path—that will also differ. Based on its assessments, the Board estimates that the risk balance for growth and inflation is unbiased (figures VI.6, VI.7 and VI.8).

Risks are varied, although mainly associated to the external situation. The baseline scenario assumes that the expansion that the Chilean economy has resumed over the course of this half will persist during 2010. Because Chile is a small, open economy, said dynamism will undoubtedly be related to the way the international economy behaves. This is very important, since for the purposes of inflation projections and, therefore, of monetary policy, not only the economy's performance in the immediate future is crucial; how it unfolds over the next two years also is. Therefore, it could happen that, even with a fast expansion of output and demand during the second half,

Figure VI.6

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



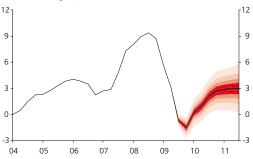
(*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% around the basiline scenario are included. These intervals summarize the risks on growth as assessed by the Board. The projection scenario incorporates as a methodological assumption that the MPR will be kept at its minimum for a prolonged period of time, and will later resume a normalization path comparable to the one that can be inferred from financial asset prices in the two weeks prior to the statistical closing of this *Report*. This suggests that this process might begin toward the second quarter of 2010.

Fuente: Banco Central de Chile.

Figure VI.7

CPI inflation projection (*)



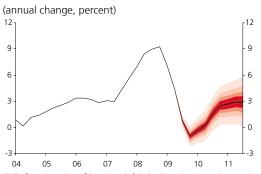


(*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% around the basiline scenario are included. These intervals summarize the risks on inflation as assessed by the Board. The projection scenario incorporates as a methodological assumption that the MPR will be kept at its minimum for a prolonged period of time, and will later resume a normalization path comparable to the one that can be inferred from financial asset prices in the two weeks prior to the statistical closing of this Report. This suggests that this process might begin toward the second quarter of 2010.

Source: Central Bank of Chile

Figure VI.8

CPIX inflation projection (*)



(*) 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 basiline scenario are included. These intervals summarize the risks on inflation as assessed by the Board. The projection scenario incorporates as a methodological assumption that the MPR will be kept at its minimum for a prolonged period of time, and will later resume a normalization path comparable to the one that can be inferred from financial asset prices in the two weeks prior to the statistical closing of this *Report*. This suggests that this process might begin toward the second quarter of 2010.

a sustained trend of output gap narrowing and consequently higher inflation prospects will not necessarily occur. The sharp adjustment of the demand for inventories that has explained part of the contraction of activity and demand, can also reverse rapidly because of the current reduced uncertainty. This may not necessarily entail a significant expansion of final demand in the medium term.

Internationally, despite positive signs that have appeared in recent economic indicators, doubts persist about the speed at which the main economies will recover. Credit intermediation has not been fully restored in the developed world, and the agents' deleveraging process will follow its course. Policy makers of the world's main economies probably lack additional maneuvering room in case a new episode of global slowdown hits, due to the large fiscal and monetary stimulus packages already in place. However, the aggressiveness of these measures and the expressed determination of the authorities to rapidly control episodes of turbulence that might trigger generalized financial instability, make it unlikely for the volatility of September-October 2008 to occur again within the projection horizon. Therefore, a major part of the risks is related to this scenario of global growth and inflation.

The probability of a new and acute fall in the world economy is smaller than it was in May, but it is still a possibility that the signs of stability or moderated deterioration are just another phase of market volatility and growth prospects could worsen again. This could result in a slower than forecast recovery stage, or even in a new relapse of economic activity. Conversely, if this stabilization stage consolidates or improves, it could generate a faster and more widespread normalization of the world economy. This may entail higher inflationary pressures and major challenges to the administration of the large monetary and fiscal stimulus packages currently in place around the world. However, an early withdrawal of said packages cannot be ruled out. The risks associated to global imbalances are still latent. Although into the nearest future those imbalances have been checked, their potential persistence through a lack of adjustment of current accounts raises some concerns on exchange rates.

The Board will continue to assess the probability of these risks and their consequences on local inflation forecasts. The Board also reiterates that it will continue to use its policies with flexibility to ensure that projected inflation will stand at 3% over the policy horizon.

Box VI.1: Changes in the baseline projection scenario in the past year

The macroeconomic scenario facing the Chilean economy has changed drastically in the last year, from a situation in which inflation was far above the 3% target, with a significant risk that it would stay there beyond the policy horizon, to a scenario of very low inflationary pressures. This box describes the main changes in the baseline projection scenario between this *Monetary Policy Report* and the September 2008 *Report*.

The main factor behind the change in the macroeconomic scenario is clearly associated with the effects on the world and Chilean economies of the intensification of the international financial crisis in mid-September 2008, just days after the publication of the Monetary Policy Report that month. The threats to the financial stability of the developed economies and the possible implications for the rest of the world led to sharp increases in interest rates and risk premiums, together with a generalized sense of uncertainty about the future availability of credit flows. In the case of the Chilean banking system, despite fears that external lines of credit could be affected, ultimately these flows were not interrupted. In addition, the Central Bank took measures to secure the supply of liquidity in pesos and dollars, such as auctioning financial instruments and ending the reserve accumulation program it had started in April 2008.

The threats to the financial stability of the developed economies began to subside in late October 2008. However, a strong sense of uncertainty about the future had emerged around the world, with steep, unusually synchronized drops in expectations indicators, spending, inventories, trade, and output. Commodities prices, which were an important source of inflationary pressure before the crisis, also fell sharply. The forecast for world growth in 2009 plunged from an annual rate of around 4% (which was just below the average for the years immediately preceding the crisis) to contractions not seen in decades. At the same time, the forecasts for copper and oil prices were revised downward substantially (table VI.4).

Domestically, the decline in spending and output in the fourth quarter of 2008 was not only unexpected but also substantial. The drop in the output level began in the third quarter of 2008 and continued through the second quarter of 2009, although the pace of contraction slowed in the first half of this year. The forecasts incorporated in the baseline scenario of this *Report* assume that output will grow in the current half. Even so, the

growth forecast for Chile in 2009 plummeted from a range of 3.5% to 4.5% in annual terms in September 2008 to -2.0% to -1.5% in this *Report* (table VI.5).

Table VI.4

Main assumptions for the international scenario

	Sept. 08	Nov. 08	Jan. 09	May 09	Sept. 09				
World GDP at PPP (annual change, percent)									
2009	9 3.7	2.3	1.2	-1.2	-1.0				
2010	4.4	3.2	1.2 3.3	-1.2 2.1	-1.0 3.3				
Trading partners' GDP (annual chang	e, percent)								
2009	3.1	1.9	0.4	-1.5	-1.1				
2010	3.8		0.4 2.7	-1.5 2.0	-1.1 3.1				
WTI oil price (US\$/barrel)			'						
2009	9 116	70	50	52	60				
2010	115	80	60	64	77				
LME copper price (US¢/lb)									
2009	310	165	150	180	230				
2010	300	190	160	185	260				
Terms of trade (annual change, perce	ent)								
2009	-7.2	-18.2	-19.1	-13.5	2.5				
2010	-4.3	-2.5	-2.0	-3.8	2.5				
External prices, in US\$ (annual change	e, percent)								
2009	3.3	0.5	-0.8	-5.7	-6.6				
2010	2.8	4.8	5.5	7.0	8.0				
Source: Central Bank of Chile.									

Table VI.5

Source: Central Bank of Chile

Economic growth and the current account in 2009

	Sept. 08	Nov. 08	Jan. 09	May 09	Sept. 09
		(aı	nnual chang	je, percent)	
GDP	3.5 - 4.5	2.0 - 3.0	2.0 - 3.0	-0.75 to 0.25	-2.0 to -1.5
Balance of output risk	Downward	-	Downward	Downward	Stable
Domestic demand	3.9	0.6	0.7	-4.7	-6.2
- Total consumption	4.3	-	2.5	0.2	0.0
- Gross fixed capital formation	2.9	-	-4.5	-14.3	-12.9
			(percent c	of GDP)	
Current account	-2.7	-4.5	-4.6	-1.8	1.9

Trend growth, which is important for estimating inflationary pressures, was revised downward from an annual range of 4.5% to 5.0% in September of last year, to 4.0% to 4.5% in this *Report*, due to the effect of lower investment on the capital stock. The large excess capacity is expected to partially close in the forecast horizon. This is the primary factor behind the significant reduction of the inflationary pressures affecting the Chilean economy and, therefore, the significantly lower inflation forecast in the policy horizon.

The evolution of imported costs has also been affected by the lower inflation forecast for this year. The main factor in this case is the drop in the oil price and its effect on domestic fuel prices (table VI.6). The current estimate of the average oil price is substantially lower the forecast a year ago.

Table VI.6

Changes in the average CPI inflation forecast for 2009 (percentage points)

	Jan. 09	Ma	y 09	Sept. 09
Initial projection (1)		6.9	4.5	2.3
Sources of changes in forecast:				
Fuels		-2.4	0.8	-1.1
Food excluding fresh fruit and vegetables		-0.9	-0.3	-0.2
Fresh fruit and vegetables		0.2	-0.2	0.0
Public utilities		0.5	-0.5	0.2
Other products		0.1	-2.0	0.5
Final forecast (2)	1	4.5	2.3	1.7

- (1) Forecast in the last Monetary Policy Report.
- (2) Forecast in the corresponding Monetary Policy Report.

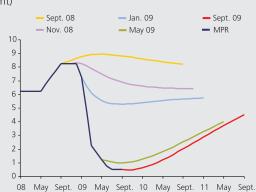
Source: Central Bank of Chile.

Monetary policy became considerably expansionary, in line with the macroeconomic scenario. In September 2008, the Board deemed that in the most probable scenario, it would continue to increase the monetary policy rate (MPR), even more than what could be inferred from financial asset prices at the time of publication of the *Monetary Policy Report*. Although inflation continued to rise sharply in September and October, the international financial crisis and its possible repercussions led

the Board to maintain the MPR at its then-current level at the October monetary policy meeting. Thereafter, the evaluation of inflationary pressures changed significantly based on all the information coming out. The bias of the future direction of the MPR was therefore changed in November and December. In January, once the scenario of lower inflationary pressures had been consolidated, the Board began reducing the MPR, until it reached its current level of 0.5% in July. That same month, the risk that inflation would stay below the target for too long led the Board to announce that the MPR would be kept at its minimum for a prolonged period of time. In addition, complementary monetary policy measures were adopted to align market expectations with the idea that the MPR would be kept at this rate for a prolonged period of time (figure VI.9).

Figure VI.9

Forward curve on the statistical closing date of the respective Report (*) (percent)



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

This appendix presents the current situation and forecasts for the main items on the Central Bank of Chile's financial statements and their relation to its policies.

In 2008, the favorable interest rate trend of the past few years was reversed. The international interest rate fell substantially, while the MPR was rising due to higher local inflation. Consequently, the gap between the average rate on asset yields (mostly international reserves) was 0.2 percentage point lower than the cost of liabilities (mainly promissory notes). The accrued interest on reserves was 3.4%, and the average nominal rate on monetary policy promissory notes rose from 8.5% to 10.7%, causing the cost of holding international reserves to rise.

Aside from short-term fluctuations, the trend path of the Central Bank's earnings and losses depends on the level and composition of its assets and liabilities. In June of this year, nominal income was temporarily in surplus because negative inflation had reduced the nominal cost of debt and, in addition, because this measure does not include the capital losses (from the exchange rate and parities) associated with international reserves (table A.1).

Nominal income includes nominal interest from local currency transactions and administrative expenses. It does not include changes in reserve prices, losses or gains from exchange rate fluctuations, or fixed asset revaluation. It also excludes earnings from interest on and indexation of assets, whose service program has not been defined.

The economic scenario in 2009 is very different from 2008. The significant cut in the MPR reduced costs more sharply than the decline in interest earned on international reserves. This difference will converge to the level of the long-term country risk premium, to the extent that both the world economy and Chile show signs of recovery and begin the process of normalizing interest rates.

In response to the deepening of the international financial crisis in September 2008, the Central Bank adopted a set of measures to secure dollar and peso liquidity in the local financial system. These include the following: (a) the sale of

dollar swaps, which correspond to a loan in foreign currency with a guarantee in pesos; (b) an increase in lines of credit in pesos; (c) the creation of the Term Liquidity Facility (*Facilidad de liquidez a plazo*, FLAP), which grants 90- and 180-day fixed-rate loans¹/; and (d) the suspension for the rest of 2009 of the issuance of debt securities with maturities of one year or more, which correspond to the BCP-2 and PDBC-360. These measures are reflected in the composition and size of the balance sheet, because new monetary policy instruments appear in assets and liabilities.

The Central Bank holds a net debit position in local currency and a net credit position in foreign currency, so its accounting income (loss) is sensitive to fluctuations in the exchange rate. For example, the peso-dollar parity rose 27% between year-end 2007 and year-end 2008, which translated into substantial capital gains. However, in 2009 to date, some of the unrealized foreign exchange earnings from 2008 have been reversed with the appreciation of the peso, which was 16% higher on 30 June 2009 than at year-end 2008.

The expected evolution of the balance sheet presented herein uses the forecasts in this *Report* as working assumptions. For example, the interest rate on reserves is assumed to be a function of the projected external interest rate, while the rate on promissory notes issued by the Central Bank depends on the projected evolution of the MPR and the BCU rate. The international reserves forecast in the second half of the current year includes the IMF's new allocation of special drawing rights (SDRs) to the Central Bank, in August and September 2009, for a total of approximately US\$1.08 billion.

It is further assumed that for the rest of 2009, the level of bank deposits with the Central Bank (standing depository facility) will be similar to the past few months. Moreover, the banks' demand for liquidity and, therefore, the balance of monetary policy instruments are expected to return to pre-crisis levels in 2010. General Treasury deposits are expected to remain at their current low levels. Additionally, the demand for the monetary

 $^{^1\!/}$ The guarantees required on these operations are similar to those on overnight loans.

base is assumed to follow a trajectory that is in line with macroeconomic fundamentals, and no exchange rate operations are projected in the forecast period (table A.2). Central Bank discount promissory notes (*Pagarés descontables*, PDBC) are used as the adjustment variable for addressing a surplus or deficit of funds. Finally, the balance sheet figures for year-end 2008 and the projections for this year and next incorporate the capital contributions already realized in accordance with the law on fiscal accountability.

Accordingly, the size of assets and liabilities on the balance sheet are expected to change marginally as a share of GDP in 2009 and 2010 (table A.1). The downward trend of the nominal deficit is expected to resume in 2009, as a result of the

shrinking of the internal and external interest rate differential. In addition, nonfinancial costs are expected to grow in line with nominal GDP.

In the current context, the greater demand for liquidity (monetary base and policy instruments in local currency) is explained by the deterioration of growth expectations and the greater risk associated with investments (tables A.1 and A.2). The Central Bank has responded to this increased demand by providing liquidity through different channels.

Finally, the expected variation in international reserves contemplates the capitalization of interests and the effect of exchange rate fluctuations (table A.2).

Table A.1

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

	2005	2006	2007	2008	Jun. 09	2009 (f)	2010 (f)
	1	1				I	1
Assets	20.4	17.8	12.8	20.6	18.6	19.7	18.9
International reserves	13.2	13.3	9.8	16.5	14.4	15.7	16.0
Fiscal promissory notes and other gov. loans	3.2	1.8	1.0	1.0	1.0	1.0	1.0
Monetary policy instruments	1.7	1.2	0.7	1.8	1.9	1.7	0.6
Other assets	2.4	1.5	1.3	1.4	1.3	1.3	1.3
Liabilities	24.1	20.5	15.3	19.9	20.3	21.3	20.8
CBC promissory notes tradable in the market	15.6	11.1	9.1	12.0	13.1	12.9	13.9
Policy instruments with banks	3.0	2.8	1.4	2.4	1.1	1.8	0.1
Other liabilities with banks	0.6	0.7	0.1	0.3	0.4	0.4	0.4
Other liabilities excluding monetary base	0.5	1.6	0.5	0.4	0.4	1.1	1.1
Monetary base	4.4	4.4	4.3	4.8	5.4	5.1	5.3
Equity (A + B)	-3.7	-2.8	-2.5	0.7	-1.7	-1.6	-1.9
A. Revaluated initial equity	-1.9	-3.2	-2.7	-2.7	0.9	0.7	-1.6
B. Net balance	-1.7	0.0	-0.3	2.9	-2.7	-2.3	-0.3
Non financial	0.0	-0.1	-0.1	-0.1	0.0	-0.1	-0.1
Net interest and UF fluctuation	-0.3	-0.6	-0.2	-0.5	0.1	0.0	-0.3
From exchange rate fluctuation	-1.4	0.6	-0.3	3.2	-2.7	-2.2	0.0
Capital revaluation	0.1	0.1	0.2	0.2	0.0	0.0	0.0
C. Capital contribution	0.0	0.4	0.5	0.5	0.0	0.0	0.0
Memorandum							
Nominal earnings (1)	-0.5	-0.2	-0.3	-0.7	0.1	-0.1	-0.4
Foreign currency position (2)	9.7	9.5	9.3	16.4	14.5	14.8	14.8
Foreign currency position with							
exchange-rate-indexed liabilities (3)	9.0	9.0	9.1	16.4	14.5	14.8	14.8

⁽¹⁾ Includes administrative expenses and net costs from interest and UF fluctuations. Does not include losses or gains from exchange rate fluctuations, or interest and UF fluctuations on assets whose service program has not been defined, or capital and fixed asset revaluation for monetary adjustment.

⁽²⁾ Assets minus liabilities payable in foreign currency.

⁽³⁾ Foreign currency position minus exchange-rate-indexed liabilities payable in local currency.

⁽f) Forecast.

Table A.2 The Central Bank's balance sheet flows (1) (Ch\$ billion)

	2005	2006	2007	2008	Jun.09	2009 (f) (4)	2010 (f)
International reserves	691	688	-2,045	2,691	-119	674	293
2. Policy instruments in local currency	3,130	654	333	-2,223	472	199	273
2a. of which: exchange rate indexed	1,327	81	230	196	0	0	0
3. Central Bank promissory notes in dollars	117	1,293	0	0	0	0	0
4. Other operations in local currency excl. the monetary base (2)	-92	-21	-109	-121	-63	-33	-20
5. Other operations in foreign currency (3)	-3,246	-2,137	2,051	180	130	-664	-293
Monetary base (change = 1+2+3+4+5)	599	477	230	527	419	177	253
Memorandum							
Foreign currency position (exchange operations = $1+3+5$)	-2,439	-156	6	2,871	11	11	0
Foreign currency position with exchange-rate-indexed							
liabilities (= 1+2a +3 +5)	-1,112	-75	236	3,067	11	11	0

⁽¹⁾ Foreign exchange flows. Where applicable, the balances are also affected by interests, inflation indexation, and price changes.
(2) Debt service on UF fiscal promissory notes, subordinate debt service, and other operations in local currency.
(3) Fiscal and bank deposits and other operations in foreign currency.
(4) In 2009, includes SDR allocation for the equivalent of US\$989.5 million.
(f) Forecast.

Appendix B: The management of international reserves

International reserves are the liquid assets in foreign currency held by the Central Bank of Chile to support its monetary and exchange rate policy. Reserve management seeks to efficiently provide secure access to international liquidity, while safeguarding the Bank's net worth, in accordance with the legal framework defined in Title III, Section 38, of its Basic Constitutional Act.

The Central Bank maintains an organizational division of responsibilities in the management of international reserves. This system is in line with international recommendations in this area, and it has been evaluated by the IMF. In addition, internal and external audits are periodically conducted on the international reserve management, with reviews of the different investment processes. This guarantees that the Central Bank's decisionmaking process and the internal assessment of reserve management are correctly defined.

The reserves are grouped into two portfolios: investment and liquidity. The investment portfolio includes both short-term foreign currency assets (bank deposits and money market instruments with maturities of up to one year) and long-term foreign currency assets (mostly nominal and indexed bonds with maturities of one to ten years). A minor share of this portfolio is managed by external administrators, encompassing long-term portfolios that incorporate the full gamut of eligible instruments. The liquidity portfolio covers the foreseeable short-term funding needs, and it is made up of bank deposits (overnight and term) and money market instruments.

The investment policy was reviewed on two occasions between September 2008 and August 2009. During these reviews, the benchmark, credit risk, currency composition, and duration of the investment portfolios were updated, so as to better address the volatility of the external financial markets and protect the Bank's assets. The main changes were the incorporation of a European inflation-indexed bond portfolio¹/; a shift in the portfolio composition from 65% short term and 35% long term to 60% and 40%, respectively; and the reduction of the benchmark composition

for banking risk from 30% to 20%, with a corresponding rise for country risk to 80%. In addition, the maximum deposit period for deposits with banks holding an A or A+ risk rating was reduced from six months to three months. The aggregate limit authorized for financial institutions with an A or A+ rating was increased from 5% to 10% of the internally managed investment portfolio. The currency composition was changed to 60% dollars and 40% euros, and the duration of the internally managed investment portfolio was extended from 14 months to 17 months, while the maximum and minimum allowable deviations were kept unchanged (tables B.1 and B.2).

Table B.1Investment portfolio reference structure, by risk and benchmarks

	Credit	Share	Benchmark
Structure	risk	current (%)	current
Short-term portfolio	Bank	20	Merrill Lynch indices: average US\$ and EUR six-month LIBID
	Sovereign, Agency, and Supranational	40	Merrill Lynch indices: U.S. Treasury bills, German gov. bill index
Long-term portfolio	Sovereign, Agency, Supranational, and Bank	34	JP Morgan bond index for different maturity tranches (1–10 years) in U.S. and Germany
	Inflation-indexed bonds	6	Barclays bond index for different maturity tranches (1–10 years) in U.S. and Germany.
Total portfolio	1	100	1

^{1/} Previously, this portfolio only existed for the United States.

 Table B.2

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

		US dollars		Euros		Total	
		Share (%)	Duration (months)	Share (%)	Duration (months)	Share (%)	Duration (months)
Short-term	Bank,	12.0	3.0	8.0	3.0		
portfolio	Sovereign, Agency, and Supranational	24.0	3.5	16.0	4.8		
	Subtotal	36.0	3.3	24.0	4.2	60	3.7
Long-term	Nominal bonds						
portfolio	Maturity tranches						
	1-3 years	11.4	22.4	7.6	21.3		
	3-5 years	4.9	46.8	3.3	42.8		
	5-7 years	2.0	64.3	1.4	63.6		
	7-10 years	2.0	84.8	1.4	84.5		
	Subtotal	20.4	38.7	13.6	37.0	34	
	Indexed bonds,						
	1- to 10-year						
	maturity tranches	3.6	28.6	2.4	26.4		
	Subtotal	3.6	28.6	2.4	26.4	6	
	Long-term subtotal	24.0	37.2	16.0	35.4	40	36.5
Total portfolio		60.0	16.9	40.0	16.7	100	16.8

Source: Central Bank of Chile.

To monitor the investment parameters and guidelines established by the Board, the Central Bank has a middle office that reviews compliance with the guidelines on a daily basis. The eligibility of sovereigns, supranationals, commercial banks, and agencies in which reserves can be invested is determined using variables such as risk ratings, institutional net worth, and debt ratios, among others. The investment division has developed other indicators to improve the oversight of the different positions managed, including daily positioning reports, CDS, and ratings.

In January 2009, the new computerized system for international reserve management, Wall Street Suite, entered into operation. This system meets the highest standards of quality in reserve management.

In the first half of 2009, the annualized return on reserve management was 3.88%, measured in foreign currency²/. The differential return relative to the referential structure was 0.50% (table B.3).

Table B.3

Absolute, benchmark, and differential returns on international reserves

6	n	۹	r	_	۵	n	t
V	μ	C	١,	U	С	11	ι

	In forex		In U.S.dollars		
Period	International	вмк	International	вмк	Differential
	reserves		reserves		
2009 (*)	3.88	3.38	2.67	2.17	0.50
2008	5.70	5.37	4.14	3.81	0.33
2007	4.81	4.78	8.86	8.83	0.03
2006	2.45	2.39	6.84	6.78	0.06
2005	2.90	2.85	-1.72	-1.77	0.05
2004	1.84	1.95	4.08	4.20	-0.11
2003	2.31	1.78	6.64	6.12	0.53
2002	5.25	4.69	9.34	8.78	0.57
2001	5.57	5.27	3.90	3.60	0.30
2000	6.88	6.65	4.84	4.61	0.22

(*) Annualized first-half returns.

Source: Central Bank of Chile.

On 30 June 2009, international reserves had increased US\$286 million since year-end 2008, totaling US\$23.448 billion. Of that amount, US\$22.505 billion corresponded to the investment portfolio and US\$632 million to the liquidity portfolio. In terms of the currency composition, 59.8% was invested in dollars, 37.6% in euros, and 2.6% in other currencies (table B.4 and figure B.1).

²/ As a function of the reference basket of the investment portfolio.

Table B.4Composition of international reserves

Investment portfolio Currency and deposits Do Eu Ot cu Securities Doc	pollar uro ther foreign urrencies pollar uro ther foreign urrencies pollar uro ther foreign	21,548 2,372 1,880 31	93.0 10.2 8.1 0.1	22,505 2,668 2,145 92	96.0 11.4 9.1 0.4
Currency and deposits Do Eu Ot cu	uro ther foreign urrencies ollar uro	2,372 1,880 31 10,357	10.2 8.1 0.1	2,668 2,145 92	11.4 9.1
Currency and deposits Do Eu Ot cu	uro ther foreign urrencies ollar uro	2,372 1,880 31 10,357	10.2 8.1 0.1	2,668 2,145 92	11.4 9.1
Eu Ot cu Securities Do	uro ther foreign urrencies ollar uro	1,880 31 10,357	8.1 0.1	2,145 92	9.1
Ot cu Securities Do	ther foreign irrencies ollar iro	31	0.1	92	
cu Securities Do	ollar uro	10,357			0.4
Securities Do	ollar ıro	10,357			0.4
	ıro	,	44.7	40.5==	
Eu	-	C 007		10,657	45.4
	ther foreign	6,887	29.7	6,667	28.4
cu	ırrencies	21	0.1	276	1.2
Total Do	ollar	12,729	55.0	13,326	56.8
Eu	ıro	8,767	37.9	8,812	37.6
	ther foreign				
cu	ırrencies	52	0.2	368	1.6
Liquidity portfolio	İ	1,301	5.6	632	2.7
Currency and deposits Do	ollar	1,277	5.5	623	2.7
Eu	ıro	0	0.0	8	0.0
	ther foreign				
cu	ırrencies	23	0.1	0	0.0
Total Do	ollar	1,277	5.5	623	2.7
Eu	ıro	0	0.0	8	0.0
	ther foreign				
l cu	ırrencies	23	0.1	0	0.0
Other assets		314	1.4	311	1.3
	ther foreign				
	irrencies	6	0.0	7	0.0
	ther foreign irrencies	57	0.2	57	0.2
	ther foreign	57	0.2	37	0.2
	ırrencies	168	0.7	168	0.7
Reciprocal credit					
agreements Do	ollar	83	0.4	78	0.3
Total	j	23,162	100.0	23,448	100.0
Do	ollar	14,089	60.8	14,027	59.8
Eu	ıro	8,767	37.9	8,820	37.6
	ther foreign	200	1.7	604	3.5
cu	ırrencies	306	1.3	601	2.6

Source: Central Bank of Chile.

Figure B.1

International reserves (*) (stock, US\$ million)

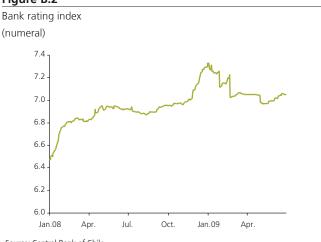


(*) Excludes other assets.

Source: Central Bank of Chile.

As of June 2009, US\$4.906 billion of the investment portfolio was in bank deposits, which represents an increase of US\$623 million relative to December 2008. Securities investments in the portfolio grew US\$334 million in the same period, closing the first half at US\$17.6 billion. At the close of June 2009, the majority of the bank deposit in the investment portfolio had a risk rating of AA—. The bank credit risk indicator³/ has improved over the course of this year (figure B.2). The liquidity portfolio, in turn, ended the period at US\$632 million.

Figure B.2



Source: Central Bank of Chile.

With regard to the exposure of the internally managed investment portfolio by type of risk and country, time deposits are somewhat diversified in terms of the home country of the financial institution's parent company. Sovereign investments are mostly in the United States and Germany (table B.5).

The Bank maintains two external management programs. Together, the two programs account for less than 5% of the reserves. The first is a long-term general mandate. The portfolio is similar to the internal long-term investment portfolio, except that it can invest in mortgage-backed securities (MBS). This program has two external managers, with portfolios of US\$300 million. The second program is a specialized mandate focused on MBSs, for US\$400 million⁴/.

 $^{^3}$ / Measured as the average of current deposits each day, weighted by a numerical index of risk rating. The index is constructed by assigning a value of 10 to a AAA rating, 9 to a AA+ rating, 8 to a AA rating, and so on down to 5 for an A rating.

 $^{^{\}prime\prime}$ The benchmark of this mandate is 85% MBS and 15% U.S. Treasury notes and bonds.

Table B.5

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

Country	Sovereign (1)	Bank (2)	Agencies	Supranational	Total
United States	5,433	25	1,803	1	7,261
Germany	4,865	253	1,003		5,118
Spain	886	785			1,671
Belgium	430	799			1,229
England	430	1,209			1,229
France	470	480			950
Holland	112	797			909
Ireland	723	28			751
Portugal	306	364			671
Italy	507	35			542
Greece	279				279
Japan	206	66			271
Sweden	226				226
Austria	200	21			220
Canada	92				92
Supranationals				65	65
Norway		25			25
Total	14,734	4,887	1,803	65	21,489

⁽¹⁾ Sovereign exposure includes the following institutions that have an explicit sovereign guarantee: Instituto de Crédito Oficial (Spain, 708), Oesterreichische Kontrollbank (Austria, 74), and KFW (Germany, 971).

Source: Central Bank of Chile.

In the case of the external managers, investment exposure largely corresponds to sovereign risk, mostly to the United States and Germany (table B.6). Banking risk is minimal, and agency risk mainly comes from the specialized MBS mandate.

Table B.6

Externally managed portfolio: investments by country and type of risk (US\$ million)

Country	Sovereign (1)	Bank (2)	Agencies	Supranational	Total
United States	291	18	440		749
Germany	152	26			178
France	34				34
Holland	23				23
Supranationals				15	15
England	7				7
Italy	5				5
Canada	4				4
Total	515	44	440	15	1,015

⁽¹⁾ Sovereign exposure includes the following institutions that have an explicit sovereign guarantee: Ginnie Mae (U.S., 22), Export Development Canada (Canada, 4), and KFW (Germany, 15). (2) Bank exposure in Germany corresponds to Pfandbriefe jumbo bonds; in the United States it is related to the current account balances of the external administrators.

⁽²⁾ Bank exposure in the United States corresponds to an overnight deposit in the U.S. Federal

Appendix C: Main measures of the Central Bank of Chile in 2009

January

08 By Board Resolution 1455-03-090108, the Central Bank of Chile approved its 2009 Debt Plan. From the reserve period beginning on 9 January 2009 through the reserve period beginning on 9 December 2009, the following self-issued bonds are to be issued in the primary market: two-year peso bonds (BCP-2) for up to \$360.0 billion; BCP-5 for up to \$264.0 billion; five-year UF bonds (BCU-5) for up to UF12.0 million; and BCU-10 for up to UF0.8 million.

08 In its monthly monetary policy meeting, the Central Bank Board decided to reduce the monetary policy interest rate by 100 basis points, that is, to 7.25% in annual terms.

15 By Board Resolution 1456-02-090115, Chapter IV.B.8 of the Central Bank's *Compendium of Financial Regulations* was modified, extending the groups of institutions or agents that can operate in the primary market for Central Bank debt instruments to include stock brokers and securities agents as defined in Law 18.045 on the Securities Market.

For this purpose, securities brokers, in their role of authorized primary market participants, must observe the established rules governing the Pension Fund Administrators (AFPs), Insurance Companies, and Mutual Fund Administrators, not only in terms of the setting and payment of the issue price, but also with regard to the issuance, delivery, and later redemption of the Central Bank debt instruments. Moreover, given that these brokers carry out third-party transactions as part of their business, it was established that such entities wishing to participate in the primary market in question must submit a bank guarantee bond for UF10,500 to the Issuing Agency, to cover the good-faith compliance with the terms of the agreement between the securities broker and the Central Bank.

This resolution was adopted taking into account the general orientation of the Government's economic policy, as laid out in the Finance Ministry's Ordinary Official Letter (*Oficio ordinario*) 787 of 8 August 2008, as well as the legal and regulatory reforms of the capital market, known as the Third Capital Market Reform, and Sections 3 and 34, N°s. 5 and 7, of the Central Bank's Basic Constitutional Act.

20 The Central Bank published the Operating Regulations for "Local Currency Liquidity Credit Line for Banking Firms with Collateral Security," discussed in Chapter II.B.1.1, Letter B, of the *Compendium of Financial Regulations*, recently amended by Resolution 1453-04-081224, and published in the *Official Gazette* on 30 December 2008. This new financing mechanism allows banking firms to arrange to open the new line of credit with the Bank and use it to carry out money credit operations, effective through 26 January 2010.

This decision—which fits into the set of additional measures to increase the flexibility of the local financial system's liquidity management, as announced by the Board in December—enables the provision of financing at maturities of over 28 days, and includes the possibility of submitting collateral security to the Central Bank for bonds issued by the General Treasury and bank time deposits, among other eligible guarantees.

22 The Central Bank interpreted the sense and reach of Board Resolution 1457-02-080807, numeral 2, regarding the general terms and conditions that must be applied to framework agreements on derivatives contracts recognized by the Central Bank to allow reciprocal compensation of liabilities incurred by the counterparties to the agreements, in the event of the forced liquidation of a banking firm established in Chile or the bankruptcy or liquidation of another institutional investor that is party to the contract.

In this context, it was determined that the provisions in this area do not impede banking firms and institutional investors, in their role as counterparties, from establishing an agreement on the grounds for accelerating the settlement of liabilities emanating from the respective operations. At the same time, the specific situations in which settlement will be suspended were defined; these are fundamentally tied to safeguarding the regulatory authority of the Central Bank and, in turn, to the exercise of the legal authority vested in the respective economic superintendencies to regularize the financial situation of the supervised entities, in accordance with their respective legislations.

22 By Board Resolution 1457-03-090122, which was adopted in agreement with Article 136 of the General Banking Law in

relation to Article 69 of the bankruptcy legislation, the Central Bank extended the aforementioned recognition of framework agreements on derivatives contracts approved by the Association of Banks and Financial Institutions of Chile A.G. to include General Conditions for Derivatives Contracts in the Local Market, which are consistent with the general terms and conditions set by the Central Bank regarding framework agreements on derivatives contracts recognized by the Central Bank.

Previously, in January 2008, the Central Bank had recognized the "1992 ISDA Master Agreements" and "2002 ISDA Master Agreements" on derivatives contracts between nonbank counterparties. That recognition was, in turn, extended to banking firms established in Chile or any other institutional investor in August of that year.

22 By Board Resolution 1457-04-090122, the Central Bank modified Chapter III.B.1.1 of the *Compendium of Financial Regulations* to allow the documentation of demand accounts using an account-opening contract made with the account holder via electronic signature. Before this contracting arrangement can be used, the banking firm's board of directors must have previously established the necessary policies, procedures, and systems to appropriately manage the corresponding legal and operating risks, with the goal of preventing and detecting, where appropriate, the possible use of these demand accounts in the commission of offenses associated with identity theft, asset laundering, terrorist financing, or other types of fraud or crime.

In addition, the Bank issued instructions on the minimum content and documentation of the aforementioned accountopening contracts, without overriding the authority of the Superintendency of Banks and Financial Institutions.

February

12 In its monthly monetary policy meeting, the Central Bank Board decided to reduce the monetary policy interest rate by 250 basis points, that is, to 4.75% annually.

26 By Board Resolution 1464-02-090226, the Central Bank Board accepted the amendments to the Execution Guidelines issued by the Finance Minister via Official Letter 168 of 23 February 2009, with regard to the annual compensation to which the Central Bank will have claim in its role of Fiscal Agent, as established in Fiscal Responsibility Law, for the management of the Economic and Social Stabilization Fund and the Pension Reserve Fund.

26 By Board Resolution 1458-03-090129 and 1464-03-090226, the Central Bank adjusted the minimum amounts that must be reported for specified foreign exchange operations that are subject to the reporting requirements, in accordance with Chapters II, IV, V and XIV of the Compendium of Foreign Exchange Regulations.

These modifications simplify the provision of additional foreign exchange information on external financing operations that firms and legal entities currently provide to the Central Bank. In accordance with the abovementioned Resolutions, the limit for the periodic reporting of commercial loans associated with foreign trade operations was increased from US\$5 million to US\$50 million, fob, on import or export operations.

For all credit operations under US\$1 million, it was ruled that additional information on the payment plan need not be provided. However, the obligation was upheld to channel all external credits over US\$10,000 (or the equivalent in other currencies) exclusively through entities on the Formal Exchange Market (FEM) and to report details on earnings and payments in accordance with the procedures established under the current regulatory framework.

These modifications will improve information quality by focusing data collection efforts on large transactions, without altering significant aspects of the current foreign exchange regime. In particular, the foreign exchange constraint requiring that financial operations be conducted in the FEM will still be applied, so as not to reduce the Central Bank's ability to analyze the respective capital flows, especially in the area of external financing and trade loans.

March

05 By Board Resolution 1465-03-090305, the Central Bank ruled to modify Chapter III.J.2 of its *Compendium of Financial Regulations*, in order to establish Special Operating Rules on the use of Secure Electronic Sites provided by the Issuer or Operator to carry out debit card transactions, which will facilitate electronic transactions.

09 By Resolution 1465-01-090305, the Board modified its rules of procedure to move up the disclosure of the data and discussion from the monetary policy meetings. Starting with the March meeting, all data based on publicly available information, which the Research Division submits to the Board two working bank days in advance of the meeting, will be available on the Bank's website at the close of the markets on the working bank day prior to regular monetary policy meetings. The one exception is when *Monetary Policy Reports* are to be disclosed, as these are released after the respective monetary policy meeting.

It was also ruled that the Research Division's presentation at the meeting, which is based on publicly available information, would be made available on the Bank's website at noon on the working bank day following the respective regular monetary policy meeting.

This presentation replaced the tables and figures in the data appendix, which until 5 March 2009 was published with the meeting minutes. At the same time, the lag in the publication

of the respective minutes was reduced to eleven working bank days after the corresponding monetary policy meeting.

09 By Board Resolution 1465-02-090305, the Central Bank accepted the role of Fiscal Agent entrusted to it through the Finance Ministry's Executive Decree 150, of 2009, published in the *Official Gazette* on 25 February 2009, to represent and act in the name of and on the account of the General Treasury, in the issuance and administration of bonds identified in that decree. Specifically, two new bonds (BTU-20 and BTU-30) are to be issued in the local capital market in 2009 by the General Treasury of the Republic, and the BTP-10 series (issued on 1 March 2008) is to be reopened, in accordance with Supreme Decree 122. The Bank will also be in charge of the associated services on their corresponding dates of maturity.

12 In its monthly monetary policy meeting, the Central Bank Board decided to reduce the monetary policy rate by 250 basis points, that is, to 2.25% annually.

19 By Board Resolution 1467-02-090319, the Central Bank accepted the Fiscal Agency function to act in the name and on the account of the General Treasury in the sale of foreign currency that will be transferred to it for this purpose, as entrusted to it through the Finance Ministry's Executive Decree 250, of 2009, together with specific instructions issued by the Ministry through its Official Letter 234 of 16 March 2009. In compliance with the entrusted mandate, the Central Bank, in its role of Fiscal Agent, will offer for sale a total of US\$3.0 billion in the local market via competitive auctions of US\$50 million a day, starting on 27 March 2009.

30 The Central Bank communicates that in accordance with the authority vested in it by Article 31, Letter (b), of Law 19.396 on the new treatment of Subordinate Liabilities, the Bank chose, in its capacity as creditor of the liability in question, to receive in cash the payment of the percentage of the *Banco de Chile*'s earnings in the 2008 fiscal year, which it is due as a result of the subordinate liability. Consequently, at the specified time, the *Banco de Chile* must transfer to the Central Bank its payment of the annual installment of approximately \$98.223 billion, which corresponds to 36.06% of the bank's earnings in the 2008 fiscal year.

April

07 By Board Resolution 1470-01-090402, the Central Bank extended the Transitory Regulations of Chapter III.A.1 of the *Compendium of Financial Regulations*, on the constitution of reserves in foreign currency, through 8 February 2010.

09 In its monthly monetary policy meeting, the Central Bank Board decided to reduce the monetary policy interest rate by 50 basis points, that is, to 1.75% annually.

16 By Board Resolution 1472-04-090416, Chapter III of the Central Bank's *Compendium of Foreign Exchange Regulations* was modified to establish requirements for legal entities other than banking firms that are interested in participating in the Formal Exchange Market (FEM), as provided for in Section 41 of the Central Bank's Basic Constitutional Act. To this end, it was established that entities other than stock brokers or securities dealers that wish to operate on the FEM must be legally incorporated either as an open corporation or as a closed corporation that agrees in its statutes to submit to the regulations governing open corporations. These entities must provide all records required by the regulatory framework, and they must have proof of registration in the SVS Securities Registry and a net equity of not less than UF12,000.

In addition, the following requirements for participating in the FEM will be applied to all nonbank entities:

- The provision of a specific guarantee for a minimum of UF8,000 in the form of a bank guarantee bond, to ensure the proper and complete fulfillment of their liabilities as FEM entities.
- Conditions on the fitness of the entity's major shareholders, directors, managers, and main executives, who, on the date of the petition to join the FEM, must not have participated in acts or negotiations that are contrary to the law or at odds with healthy financial or business practices.

Finally, currently authorized FEM operators and entities that filed to participate in the FEM prior to this Resolution were given a period of 120 days to comply with the above requirements, as provided for in the Transition Provisions that were incorporated into Chapter III of the *Compendium*.

16 The Central Bank Board, by Resolution 1472-01-090416, established the necessary rules and instructions for the Central Bank to comply with the provisions of the Law on Transparency in the Civil Service and Access to Government Information, contained in Article One of Law 20.285, on the issue of active transparency and the implementation of the public record provided for in the sixth article of that legislation, all in accordance with the provisions in the final paragraph of Section 65-bis of the Basic Constitutional Act governing it.

May

07 In its monthly monetary policy meeting, the Central Bank Board decided to reduce the monetary policy interest rate by 50 basis points, that is, to 1.25% annually.

20 By Board Resolution 1478-01-090520, the Central Bank set the applicable policy regarding the authorization of the exchange of ADRs for shares that are acquired by a

Chilean corporation in a takeover bid launched jointly in the national and international markets and which has been declared successful, subject to the conditions considered in that Resolution.

20 By Resolution 1478-02-090520, the Board modified Chapter XIV of the *Compendium of Foreign Exchange Regulations* to incorporate investments corresponding to the former Chapter XIX of Title I of the previous *Compendium*.

Foreign investors who signed a Foreign Exchange Agreement under the terms of the former Chapter XIX or whose investments are covered by that Chapter are granted the option of petitioning the Bank to have the respective investment covered by the general regimen of Chapter XIV of the current *Compendium*, provided it complies with the general requirements therein. This is in accordance with the authorization granted to the Bank under Article 15 of the Foreign Exchange Law, whose revised text was established in Executive Decree 471 of 1977, by the Ministry of Economy, Development, and Reconstruction.

June

11 By Resolution 1481-01-090611, the Board renewed the appointment of Mr. Francisco Mobarec Asfura to the Central Bank's Audit and Compliance Committee, for a period of three years starting on 16 June 2009.

15 By Board Resolution 1482E-01-090615, the Central Bank modified its debt program by suspending the issuance of five-year peso bonds (BCP-5), five-year UF bonds (BCU-5), and BCU-10 in the primary market, effective as from that date. At the same time, the Central Bank announced that it would buy back up to US\$1.0 billion of its own 5- and 10-year UF bonds. It further communicated that the measures described above are necessary to offset the impact on the fixed-income market of the Finance Ministry's announcement, on the same day, of a new issue of Treasury bonds for approximately US\$1.7 billion and a new program of foreign exchange sales totaling US\$4.0 billion, in the form of competitive auctions of US\$40 million a day.

16 In its monthly monetary policy meeting, the Central Bank Board decided to reduce the monetary policy interest rate by 50 basis points, that is, to 0.75% annually.

25 By Resolution 1484-03-090625, the Regulations on Central Bank Debt Instrument Auctions, contained in Chapter IV.C.1 of the *Compendium of Financial Regulations*, were modified to include the option of carrying out early redemption operations using the Central Bank's electronic trading platform (the Open Market Operations System, known as SOMA). These auctions

are open to institutions and agents that operate in the Primary Market.

An Administrative Directive (*Carta circular*) was issued on 30 June 2009 to provide market agents with information on the terms of the operating rules applicable to operations executed under the new procedure.

25 By Board Resolution 1484-02-090625, the Central Bank accepted the provisions of the Finance Ministry's Official Letter 649, of 16 June 2009, which modifies the Ministry's specific instructions regarding the Bank's Fiscal Agency to act in the name and on the account of the General Treasury in the sale of foreign currency transferred to the Bank for that purpose. The specific instructions were originally accepted by Board Resolution 1467-02-090319. According to the new modifications, the Fiscal Agent will sell an additional US\$4.0 billion, over and above the US\$3.0 billion authorized in March, through competitive auctions of US\$40 million a day beginning on 1 July 2009.

25 By Board Resolution 1484-05-090625, the Central Bank replaced Appendix 1 of Chapter III of the Forms and Procedures Manual of the *Compendium of Foreign Exchange Regulations*, which concerns the requirements and documentation applicable to legal entities other than banking firms that wish to operate in the Formal Exchange Market, in accordance with the modifications to Chapter III of the *Compendium* effected through Board Resolution 1472-04-090416.

At the same time, it was ruled that the compliance period provided for in the Transition Provisions of Chapter III of the *Compendium*, in accordance with Resolution 1472-04, would be in force as from the publication of Board Resolution 1484-05-090625 in the *Official Gazette*.

July

02 By Board Resolution 1486-03-090702, the Central Bank accepted the Fiscal Agency entrusted to it through the Finance Ministry's Executive Decree 677, published in the *Official Gazette* on 1 July 2009, to represent and act in the name and on the account of the General Treasury in the issuance and administration of the bonds identified in the decree. Specifically, three new Treasury bonds (BTU-05, BTU-10, and BTP-05) are to be issued in the local capital market in the second half of 2009, in accordance with Executive Decre 677. The Bank will also be in charge of the associated services on their corresponding dates of maturity.

09 In its monthly monetary policy meeting, the Central Bank Board decided to reduce the monetary policy interest rate by 25 basis points, that is, to 0.50% annually and to adopt

the following complementary monetary policy measures: (1) establish a Term Liquidity Facility (*Facilidad de liquidez a plazo*, FLAP) for banking firms, which will be used to supply liquidity at 90 and 180 days at the same rate as the current MPR; (2) adjust the issuance schedule for Central Bank discount promissory notes (*Pagarés descontables*, PDBC) with maturities of under one year, consistent with the previous decision; and (3) suspend, for the rest of 2009, the issue of debt securities with maturities of one year or more, which correspond to two-year Central Bank peso bonds (BCP-2) and one-year Central Bank discount promissory notes (PDBC-360).

09 By Board Resolution 1488E-01-090709, the Central Bank adjusted its debt plan as described. At the same time, it was decided to modify Chapters IV.B.6.2 and IV.B.8.5 of the Compendium of Financial Regulations along two dimensions. First, the percentage of the Central Bank's discretionary allocation in PDBC auctions was changed from an increase or decrease of 25% to 50%. Second, it was established that in the case of operations involving the Central Bank's purchase of credit instruments with a repurchase agreement (repos), with regard to debt instruments offered for sale by banking firms that have partial maturities within the period of the respective repo operation, the Central Bank will discount the latter at the time of the corresponding offer of sale and will move up the payment in the amount of the proceeds of the sale, to the financial institution whose offer of sale was accepted, together with the payment of the price of the initial purchase subject to the terms and conditions established in the respective Operating Rules.

15 The Central Bank communicated the modifications to the Operating Rules outlined in Administrative Directive 520 – Banks, in accordance with the modification to Chapter IV.B.8.5 of the *Compendium of Financial Regulations*, "Purchases of Credit Instruments with a Repurchase Agreement." The provisions, in the context of FLAP operations, include procedures for valuating securities that have partial maturities within the period of the repo operation and for replacing letters of credit sold with a repo that are subject to draws.

Consistently with the modifications to the aforementioned operating rules, Administrative Directive 522 – Banks was issued on 20 July to provide notification of the adjustments made to the valuation mechanism applicable to discounts or margins, with regard to operations involving the purchase of credit instruments with a repurchase agreement in the context of the Standing Discount Window (*Facilidad permanente de liquidez*, FPL) and the Intraday Discount Window (*Facilidad de liquidez intradía*, FLI) provided by the Central Bank to the banking system.

15 By Resolution 1489-02-090715, the Board substituted Chapter III.F.7 of the *Compendium of Financial Regulations*, on "Financial Regulations Applicable to the Unemployment

Funds Administrator, Considered in Law 19.728, Which Established Unemployment Insurance," taking into account the modifications to that Law contained in Law 20.328, published in the *Official Gazette* on 30 January 2009.

Rules were also established on the period for harmonizing these provisions with the provisions of the third transitory article of Law 20.328.

20 By Board Resolution 1490-03-090723, the Central Bank interpreted the sense and reach of the provisions outlined in letter A of Title III on "Card-Issuing Firms" of Chapter III.J.1 of the Compendium of Financial Regulations, in order to clarify that the phrase "banking firms" used in that regulatory framework also covers, for the purposes of that regulation, subsidiary companies involved in the delivery of financial services, as described in Article 70 letter (b) of the General Banking Act, and banking support companies that have the nature of a bank subsidiary, as described in Article 74 letter (b) of the same legal text, in the terms authorized by the Superintendency of Banks and Financial Institutions in accordance with its legal faculties.

August

6 By Board Resolution 1493-02-090806, the Central Bank established the nature, content, and frequency of the statistical information that the Central Bank must submit, in accordance with the provisions of Section 53 of its Basic Constitutional Act, as specified in the attached appendix, which is an integral part of this Board Resolution.

To this end, it was ruled that the Resolution will go into effect on 17 August 2009, and as from that date it will supersed Resolution 1110-02- 040122 on the same material and its later modifications.

20 With the goal of more frequently conveying the Board's view on the outlook for inflation, growth, and monetary policy, by Board Resolution 1495-01-090820, the Central Bank increased the frequency at which the Monetary Policy Report is issued and published, from three times a year to four. This measure will also allow a better synchronization of the communication of the monetary policy forecast both with the half-yearly release of the Financial Stability Report and with the publication of the quarterly revisions and updates of the National Accounts and the Balance of Payments. The Monetary Policy Report will be published in March, June, September, and December. The Financial Stability Report for the first half of the year will be released jointly with the June Monetary Policy Report, while the Financial Stability Report for the second half of the year will be published at the same time as the December Monetary Policy Report. The new publication schedule for these two Reports will be implemented this year.

The March and September Monetary Policy Reports will have the same structure as the current four-month reports. The June and December Reports, which coincide with the release of the half-yearly Financial Stability Reports, will be shorter, so as not to overload the public information released by the Central Bank. This change in the publication schedule represents another step toward a better communication of monetary policy decisions, together with the changes already implemented in terms of the early disclosure of the facts and data presented at the monetary policy meeting and a reduction in the delay in the publication of the respective minutes. These adjustments keep the Central Bank of Chile at the forefront of best practices employed by the world's main central banks. The Monetary Policy Report constitutes a central element in the communication of the Board's vision for the Chilean economy, and it is a fundamental instrument for decisionmaking in monetary policy.

The present Resolution does not imply any modification to institutional policy on disclosing information to the President of the Republic and the Senate.

20 By Board Resolution 1495-03-090820, the Board of the Central Bank of Chile has modernized, adjusted, and integrated its regulations on mortgage loans financed through the issuance of mortgage bills, while preserving the framework of safeguards that has historically been applied to these operations, in accordance with the General Banking Act. At the same time, this measure will allow these instruments to be offered under terms that are more competitive with other types of mortgage loans.

These regulations, which are contained in Chapter II.A.1 of the Compendium of Financial Regulations, incorporate the possibility of funding mortgage operations through the issuance of a new category of mortgage bill, which can finance loans representing more than 75% of the value of the mortgage collateral, up to a limit of 100% of this value, provided that the relevant regulatory safeguards are strictly observed. These safeguards include, among other stipulations, the requirement that mortgage bills in this new category can only be issued by banks with the highest solvency rating from the Superintendency of Banks and Financial Institutions and can only be granted to clients to whom the issuing bank has assigned the highest grade on the applicable credit rating scale. This modification should favor a reduction in the costs of financing, stemming from a reduction in the use of complementary loans to supplement mortgage loans.

At the same time, additional modifications were introduced and are applicable to all mortgage bills without distinction. The objectives of these changes include the following: to allow banks to offer their clients more flexibility in their loan repayments, to facilitate a greater degree of consistency between the loan payment simulations of mortgage bills and other mortgage financing arrangements, and to specify that this type of loan can be contracted with more than one fixed interest rate over the life of the loan, which could generate a reduction in credit costs for mortgage debtors, especially for loans contracted during periods in which the long-term market interest rates are in a downward cycle.

As part of this modernization process, the regulatory provisions were reinforced to improve the level of transparency in the use of mortgage bills to finance mortgage loans, thereby maximizing the available information on the terms offered and contracted, such as real interest rates, commissions charged, interest rates on endorsable mortgage loans, bill cashflows, and the expenses paid by the mortgage debtor, among others. This ensures the timely disclosure of the costs, expenses, rights, and obligations that these operations represent for mortgage debtors, as well as the legal and financial terms that are applied to investments in mortgage bills for financing mortgage operations in the capital market, as provided for in the banking legislation.

The implementation of the regulatory developments described above is accomplished through the adaptation, coordination, and systematization of the current regulations in this area, which are issued by the Central Bank of Chile and are contained primarily in Chapters II.A.1, II.A.1.1 and II.A.2 of the *Compendium of Financial Regulations*, to be replaced by the new Chapter II.A.1, "Regulations on Mortgage Operations using Mortgage Bills." At the same time, Chapter III.B.2 of the same *Compendium* preserves the limits on an institution's purchasing its own mortgage bills, while Chapter III.C.2 addresses the corresponding adjustments for this type of operation by Savings and Loans Cooperatives, as legally authorized.

The Superintendency of Banks and Financial Institutions will provide the necessary guidelines for applying the new regulatory framework and issue the corresponding accounting instructions, as well as monitor compliance.

The modification discussed herein will enter into force 45 days after the publication of the Board Resolution in the *Official Gazette*, which took place on 24 August. Mortgage loans granted prior to that date and involving the issuance of mortgage bills, together with the associated mortgage bills, will continue to be governed by the old regulations contained in the *Compendium of Financial Regulations*, which have now been modified.

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Glossary

- Latin America: Argentina, Bolivia, Brazil, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, and Venezuela.
- CMOX: Labor costs (CMO) excluding community, social, and personal services, EGW, and mining.
- Commodities exporters: Australia, Canada, and New Zealand.
- Corporate Emerging Market Bond Index (CEMBI): Indicator of corporate risk, calculated by JP Morgan. Corresponds to the difference between the interest rate paid on dollar-denominated bonds issued by banks and firms in emerging economies, and U.S. Treasury bonds, which are considered risk-free.
- CPIGX: Goods price index, which excludes fuels and fresh fruit and vegetables, leaving 45.6% of the total CPI basket (51.2% in the December 1998 basket).
- CPISX: Services price index, which excludes basic services and public transportation fares, leaving 36.8% of the total CPI basket (35.5% in the December 1998 basket).
- CPIX: Core consumer price index. CPI excluding fuels and fresh fruit and vegetables, leaving 91% of the total CPI basket (92% in the December 1998 basket).
- CPIX1: CPIX excluding fresh meat and fish, regulated tariffs, indexed prices, and financial services, leaving 73% of the total CPI basket (70% in the December 1998 basket).
- Emerging Market Bond Index (EMBI): The main country risk indicator, calculated by JP Morgan. Corresponds to the difference between the interest rate paid on dollar-denominated bonds issued by the Government and public firms in emerging economies, and U.S. Treasury bonds, which are considered risk-free.
- EPI: External price index, calculated using the wholesale price index (WPI)—or the CPI if the WPI is not available—expressed in dollars, of the countries relevant to Chile (that is, the countries used for the calculation of the multilateral exchange rate, MER), weighted according to their share of Chilean trade, excluding oil and copper.
- EPI-5: EPI using the price indices of Canada, the euro area, Japan, the United Kingdom, and the United States.
- **Expansion velocity:** For monthly data, the annualized change in the moving quarter in a seasonally adjusted series. For quarterly data, the annualized quarterly change in a seasonally adjusted series.
- **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 94% of total exports.
- **IREM:** Wage index. The average wage paid per hour, weighted by the number of regular hours worked.

Abbreviations

- BCP: Central Bank bonds in pesos.
- BCU: Central Bank bonds in inflation-indexed UFs.
- BTP: Treasury bonds in pesos.
- $BTU\mbox{\ensuremath{\text{T}}\xspace}\xspace$ Treasury bonds in inflation-indexed UFs.
- FLAP: Term Liquidity Facility (Facilidad de Liquidez a Plazo).
- PDBC: Central Bank discount promissory notes.
- MPR: Monetary policy rate.

- IREMX: IREM excluding community, social, and personal services, EGW, and mining.
- **GDP**, **natural resources**: Includes the following sectors: electricity, gas, and water (EGW); mining; and fishing.
- **GDP**, other: Includes the following sectors: agriculture, livestock, and forestry; manufacturing; construction; retail; transport and communications; financial and business services; home ownership; personal services; and public administration.
- **GDP**, **other services**: Includes the following sectors: financial and business services; home ownership; personal services; and public administration services.
- 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 2009, the following countries are included: Argentina, Belgium, Brazil, Canada, China, Colombia, France, Germany, Holland, Italy, Japan, Mexico, Peru, South Korea, Spain, Sweden, the United Kingdom, the United States, and Venezuela.
- MER-5: MER using only the currencies of Canada, the euro area, Japan, the United Kingdom, and the United States.
- MER-X: MER excluding the U.S. dollar.
- **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 MFR
- RER-5: RER using the MER-5 basket of currencies.
- Rest of Asia: Hong Kong, Indonesia, Malaysia, the Philippines, Singapore, South Korea, Thailand, and Taiwan.
- **TMVC** (trim of most volatile components): Trimmed mean CPI, excluding the items with the most volatile prices.
- **Trimmed mean CPI**: a CPI measure that excludes the items with the smallest and largest monthly price changes.
- ULCX: Unit labor cost (ULC) considering only wage employment, and wages and output excluding natural-resource-related sectors.
- World growth: Regional growth weighted by its share in world GDP at PPP, published in the IMF's *World Economic Outlook* (WEO, April 2009). World growth projections for 2009–2011 are calculated from a sample of countries that represent about 85% of world GDP. The growth of the remaining 15% is estimated at around 2.0% in the three-year period 2009–2011.
- World growth at market exchange rate: Each country is weighted according to its GDP in dollars, published in the IMF's World Economic Outlook.

Bibliographic references

Barclays. 2009. Global Economics Weekly. August.

Becerra S., L. Ceballos, F. Córdova, and M. Pedersen. 2009. "Traspaso de grandes cambios de la tasa de política monetaria: evidencia para Chile." Working paper 522. Central Bank of Chile. August.

Berstein, S., and J. R. Fuentes. 2004. "Is There lending Rate Stickiness in the Chilean Banking Industry?" In *Banking Market Structure and Monetary Policy*, edited by L. A. Ahumada and J. R. Fuentes. Central Bank of Chile.

Central Bank of Chile. Monetary Policy Report. Several issues.

Congressional Budget Office (CBO). 2009. A Preliminary Analysis of the President's Budget and an Update of CBO's Budget and Economic Outlook. March.

Consensus Forecasts. A Digest of International Forecast. Several issues.

Consensus Forecasts. 2008. Global Outlook: 2008–2018. October.

Deutsche Bank. 2009a. Global Economic Perspectives. July.

Deutsche Bank. 2009b. Focus Europe. August.

Deutsche Bank. 2009c. Emerging Markets Monthly. July.

Deutsche Bank. 2009d. Dollar Bloc Weekly. August.

Deutsche Bank. 2009e. Asia Economics Monthly. July.

Echavarría G., M. Ricaurte, and C. Soto. 2009. "Condiciones financieras y expectativas económicas." *Preliminary paper.* Central Bank of Chile. September.

Espinosa-Vega, M., and A. Rebucci. 2004. "Retail Bank Interest Rate Pass-Through: Is Chile Atypical?" In *Banking Market Structure and Monetary Policy*, edited by L. A. Ahumada and J. R. Fuentes. Central Bank of Chile.

European Commission. 2009. "Impact of the Current Economic and Financial Crisis on Potential Output." *Occasional paper* 49. Directorate-General for Economic and Financial Affairs. June.

Fuentes, M. 2009. "Revisión de la literatura sobre competencia y tasas de interés en el mercado bancario." *Preliminary paper.* Central Bank of Chile. September.

Furceri, D., and A. Mourougane. 2009. "The Effect of Financial Crises on Potential Output: New Empirical Evidence from OECD Countries." *Working paper* 699. OECD, Economics Department. May.

International Monetary Fund. 2009a. World Economic Outlook. April.

International Monetary Fund. 2009b. World Economic Outlook Update. July.

Jaramillo P., F. Ormazábal, and F. Villatoro. 2009. "Traspaso de tasas de interés en la banca chilena." *Technical note*. Superintendency of Banks and Financial Institutions. March.

Jones I., and A. Naudon 2009. "Flujos brutos de empleo y la evolución de la tasa de desempleo." *Preliminary paper*. Central Bank of Chile. September.

JP Morgan Chase. 2009. Global Data Watch. August.

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