

# Monetary policy Report





BANCO CENTRAL DE CHILE

# Monetary Policy Report<sup>\*</sup> MAY 2009



<sup>\*/</sup> This is a translation of a document originally written in Spanish. In case of discrepancy or difference in interpretation the Spanish original prevails. Both versions are available at www.bcentral.cl.

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<sup>\*/</sup> The statistical closing date of this *Monetary Policy Report* was 7 May 2009, except for some financial asset prices on the local market, which closed on 8 May 2009, and the Economic Expectations Survey, which closed on 11 May 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.

The Monetary Policy Report is published three times a year, in January, May, and September. It 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 May 2009 for presentation to the Senate Finance Committee on 13 May 2009.

The Board

# Summary

The world economy has been enduring difficult moments, The financial crisis of developed markets unfolded into a global recession, and world output will see its first fall in over sixty years. The global macroeconomy has weakened beyond forecasts in the baseline scenario of January's *Monetary Policy Report* (the *Report*) and, furthermore, the Chilean economy has been hit harder than was then projected. In the fourth quarter of 2008, there was a major reduction in output and especially of domestic demand, debilitating the labor market and bringing down both headline inflation and inflationary projections. The Board, attuned to this macroeconomic scenario and related risks, has boosted the monetary impulse, cutting 700 basis points off the monetary policy rate (MPR) between January and May, and has not ruled out the possibility of further reductions.

The adverse external outlook has hurt the Chilean economy through several channels. On one hand, the demand for our exports has seen a steep drop. Growth prospects for Chile's trading partners went from an average of 1.6% for the two-year period 2009-2010 last January, to 0.3% in this Report's baseline scenario, affecting the prices of the products Chile sells to the world. The terms of trade, as was anticipated in January, have fallen strongly, eroding the national disposable income. Still, the drop in commodity prices had an immediate positive effect on household income, particularly through the reduction in prices of fuels and other imported goods. Chile's export volumes, mainly associated to natural resources, have so far avoided a major fall, reflecting that price adjustments have allowed to hold on to international markets. This is quite different from the situation of countries that export manufactured products, whose markets saw a sharp, severe and widespread collapse. This has coincided with some sectors of the national manufacturing industry suffering difficulties in their external markets. The baseline scenario assumes that the world economy will pick up during the second half of this year, resulting in a 1.2% drop for the year 2009, and an increase 2.1% in 2010.

Another channel through which the global crisis has been transmitted has been the effects on domestic financial markets of the worsened financial conditions in developed economies and the change in the global risk perception. Despite the diminished stress of the past several months, the international financial scenario is still cause for concern. Overall, the conditions faced by Chilean banks and firms trying to obtain loans abroad are better than for other emerging economies, with external fund inflowing and with a significant impulse of the local bond market. The country's needs for external financing have been met with no big difficulty and the narrowing of the current account deficit has reduced future requirements. The absence of tensions in this area reflects on the trend of the Chilean sovereign risk, in the upgrade in the country's risk rating applied a few months back and in the interest rates in foreign currency within the local market. Beyond all this, the change in the perception of risk and global financial conditions caused a tightening of internal lending conditions, which has been offset by monetary policy actions and liquidity provision. The monetary impulse is being passed through to the market, with a substantial decline in interest rates on loans to households and firms. However, the level of the interest rates is still above the one that would prevail with no change in risk perception. In addition, internal credit has slowed and, although marginally less restrictive, it reflects on March's financial conditions survey—backed by various indicators—with tight lending standards at banks and reduced consumer demand.

#### International baseline scenario assumptions

	2007	2008 (e)	2009 (f)	2010 (f)				
	(annual change, percent)							
Terms of trade	1.5	-15.0	-13.5	-3.8				
Trading partners' GDP (*)	5.0	3.0	1.5	2.0				
World GDP at PPP (*)	5.2	3.2	-1.2	2.1				
World GDP at market exchange rate (*)	3.8	2.2	-2.3	1.4				
External prices (in US\$)	8.5	12.0	5.7	7.0				
LME copper price (US¢/lb)	323	316	180	185				
WTI oil price (US\$/barrel)	72	100	52	64				
Parity gasoline price (US\$/m3) (*)	597	739	395	452				
Libor US\$ (nominal, 90 days)	5.3	2.9	1.0	1.1				

(\*) See glosary for definition(e) Estimate.(f) Projection.

Source: Central Bank of Chile.

A corollary of the changed global macroeconomic scenario has been the sharp worsening of expectations and increased uncertainty about the future conditions of the world economy. Income prospects of firms and households are now more uncertain, while problems in world financial markets could have been resolved faster to clear up the panorama about the true solvency of several global financial institutions. These factors have naturally increased the risk associated to economic activities and decisions, contributing to a steep drop in spending by the end of 2008 and a revision to consumption, investment, and production plans around the globe. This may explain a large portion of the fall in Chile's level of domestic demand, significantly outweighing the performance of GDP, which cannot be fully attributed to the evolution of the typically analyzed macroeconomic variables. This is most visible in the components that are more sensitive to the business cycle and future prospects, including durable consumption, inventories and gross fixed capital formation in machinery and equipment. The evolution of indicators of consumers and entrepreneurs' expectations-namely IPEC and IMCE-shows the aforesaid deterioration of expectations in Chile, albeit with marginal data timidly turning upward.

The drop in domestic demand also responds, although to a lesser extent, to a cyclical adjustment. Up to the third quarter of 2008, domestic demand grew at y-o-y rates above 10% for several quarters, especially boosted by investment and durable consumption. Output, meanwhile, showed clearly lower growth rates, because a significant part of the demand was deviating to imports. As the financial crisis in developed markets became more severe, this cyclical adjustment became faster and deeper. The reduction in domestic demand has been visible especially in a drop in imports, narrowing the current account deficit. This behavior of foreign purchases was heightened during the first quarter of 2009, with a notorious fall in capital goods imports.

Thus, the world economy's impulse and the response of domestic demand to the prevailing uncertainty will expectedly be negative this year, although part of it will be offset by expansionary monetary and fiscal policies. The dynamics of the effects of these policies, together with the gradual fading of the aspects associated to the global economy that continue to be uncertain, should allow for a gradual increase in domestic demand and output. Therefore, during the first quarter of this year the level of activity dropped less sharply than in late 2008, and the recovery in quarterly growth rates should begin to be more visible this quarter. However, the negative carry over effects of the weakened production, consumption and investment levels as of the end of 2008, indicate that the economy will continue to post negative annual growth rates during all of the present quarter. In the course of the second half of 2009 and throughout 2010, annual growth will return to positive readings, closer to trend values, in line with the strong monetary and fiscal stimulus and the solid fundamentals of the Chilean economy. For the whole of 2009, GDP growth will stand within a range from -0.75% to 0.25%, while domestic demand will fall 4.7%, pushing the current account deficit to 1.8% of GDP in the year, quite less than forecast in January. It is important to note again that the present level of uncertainty is higher than usual and any behavior of domestic demand and output in the nearest future will have first-order effects on the average growth rate that will be ultimately reached this year.

The labor market is already showing signs of the macroeconomic downturn. Employment, controlling for the usual seasonal patterns, shows a decline in recent months while the unemployment rate has started to rise. Considering the normal statistical relationships between the output gap and employment, it seems likely that labor market conditions will deteriorate further in the months to come, with unemployment rising despite an early recovery of the economy. Still, the measures contained in the National Agreement for Employment (*Acuerdo Nacional por el Empleo*), recently announced by the Goverment, could cancel out part of the increase in unemployment.

#### Economic growth and current account

	2006	2007	2008	2009 (f)				
	(annual change, percent)							
GDP	4.6	4.7	3.2	-0.75 to 0.25				
National income	7.1	7.1	3.8	-2.8				
Domestic demand	6.8	7.8	7.4	-4.7				
Gross fixed capital formation	2.3	12.0	19.5	-14.3				
Total consumption	7.0	7.1	4.2	0.2				
Goods and services exports	5.1	7.6	3.1	-1.7				
Goods and services imports	10.6	14.9	12.9	-10.6				
Current account (% of GDP)	4.9	4.4	-2.0	-1.8				
		(US\$ 1	million)					
Current account	7,154	7,189	-3,400	-2,700				
Trade balance	22,780	23,365	8,900	2,600				
Exports	58,680	67,666	66,500	46,100				
Imports	-35,900	-44,031	-57,600	-43,500				
Services	-631	-975	-600	-300				
Rent	-18,401	-18,595	-14,600	-7,000				
Current transfers	3,406	3,123	2,900	2,000				

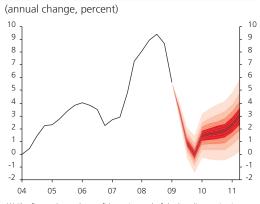
(f) Projection.

Source: Central Bank of Chile.

The increase in output gaps has had important effect on inflationary pressures and prospects in the vast majority of the economies. A large number of countries, including Chile, have seen a rapid decline in inflation beginning in the last months of 2008. To a large extent, this owes to the drop in commodity prices, particularly for oil and its derivatives. Thus, annual CPI inflation dropped from its peak of 9.9% in October 2008 to 4.5% in April. The baseline scenario of this Report assumes that y-o-y inflation will continue to decline in the coming months, with large swings around the turn of next year, explained by changes in the basis for comparison that are related to the high inflation rates of May to October 2008 and the below zero ones that accumulated from last November to last February. Thus, in the baseline scenario, annual CPI inflation will be negative between the third and the fourth quarter of this year, to close 2009 at 0.6%. It is expected to increase gradually up to 3% by the end of the projection horizon, in this case the second quarter of 2011. The annual variation rate of core indicators has also declined, a trend that will prevail through the first half of 2010, to then begin gradually increasing and—in the baseline scenario—also hit 3% at the end of the policy horizon.

The foreseen inflation trajectory relies on a number of assumptions. On one hand, import costs will not be an additional source of inflationary pressures. Commodity prices will expectedly post minor increases over the next two years, in line with the slow recovery forecast for the world economy. The peso has appreciated with respect to the statistical closing of January's *Report*. As a methodological assumption, the real exchange rate (RER) for the long term will be in similar levels to those prevailing in the two weeks prior to this *Report's* statistical closing. On the other hand, the annual variation in unit labor costs has increased in the past few quarters, due to big changes

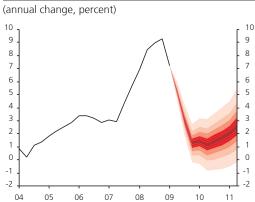
CPI inflation projection (\*)



(\*) 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 monetary policy interest rate will, in the short run, follow a path similar to the one that can be inferred from financial asset prices of 8 May 2009. However, towards the end of the projection horizon, this interest rate trend runs below the one deduced from said prices.

Source: Central Bank of Chile.

#### 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 monetary policy interest rate will, in the short run, follow a path similar to the one that can be inferred from financial asset prices of 8 May 2009. However, towards the end of the projection horizon, this interest rate trend runs below the one deduced from said prices.

Source: Central Bank of Chile.

in measured productivity based on the trends of output and employment. The increase in nominal wages, after peaking around 8% annually, began to decline. These dynamics suggest a behavior consistent with usual indexation clauses and the stage of the cycle. The baseline scenario assumes that these wages will be adjusted to match the decline in inflation, the wider output gaps and employment dynamics.

#### Inflation

(annual change, percent)

	2008	2009 (f)	2010 (f)	2011 (f)
Average CPI inflation	8.7	2.3	1.5	
December CPI inflation	7.1	0.6	2.3	
CPI inflation in around 2 years (*)				3.0
Average CPIX inflation	8.4	3.7	1.1	
December CPIX inflation	8.7	0.5	2.2	
CPIX inflation in around 2 years (*)				2.9
Average CPIX1 inflation	7.8	3.8	1.0	
December CPIX1 inflation	7.9	1.0	2.2	
CPIX1 inflation in around 2 years (*)				3.0

(f) Projection.

(\*) Inflation projection to the second quarter of 2011.

Source: Central Bank of Chile

Another working assumption is that the monetary policy interest rate will, in the short run, follow a path similar to the one that can be inferred from financial asset prices of 8 May 2009. However, towards the end of the projection horizon, this interest rate trend runs below the one deduced from said prices.

This scenario, as usual, reflects the events that are believed to be most likely to occur with the information available at this Report's statistical closing. Naturally, different outcomes will lead to a macroeconomic scenario that will differ from this one. On this occasion, the level of uncertainty is higher than usual and, after evaluating the probabilities of alternative scenarios, the Board considers that the balance of risks for growth is biased downward. The main risks are associated, once again, to the complex global economic outlook. In the past few weeks, some signs of a stabilization of the crisis in developed economies have begun to show up, with a marginal recovery of manufacturing output, exports and expectations in different economies, particularly in Asia. These signs may be just another stage in the volatility shown by the markets in the past several quarters, and new stressful situations may arise that could deepen the deterioration of the already precarious situation of the world economy. Meanwhile, if the rebound of stock markets and the reduced risk aversion are solid indications that uncertainty is fading out, a more widespread recovery of global output and demand may be seen in the short run. The materialization of some of these risks would have important implications on the domestic economy, mainly consumer and entrepreneurial expectations possibly taking longer than foreseen to improve, or the economy quickly recovering from its present state.

Aside from risks inherent to the short-run performance of the economy, there are doubts regarding the medium-term effectiveness of the measures adopted to try to resolve the international crisis, the potential protectionist actions by governments and a possible deflation in developed economies that may delay decisions to consume and invest. There is even the risk of high global inflationary pressures in the medium term if the large fiscal and monetary stimulus packages in the developed world are not properly managed. Overall, global imbalances referred to in previous *Reports* are still latent.

The degree of synchrony that the crisis has reached among very heterogeneous economies is proof of how hard it is to achieve differentiation in order to avoid the instant impacts of such an acute catastrophe. Nonetheless, macroeconomic policies can build a solid base, that can help cushion the effects of the external downfall with countercyclical measures to mitigate them, thus making room for an early and sustained recovery. The moodiness and deterioration of expectations globally is due to the change in macroeconomic conditions. However, it is clear that in Chile this situation has a limit, thanks to the good health of the national economy, with solid macroeconomic fundamentals, and which is capable of adopting and sustaining policies to moderate the impact of the external scenario. The national financial system, unlike that of other countries, has suffered no dislocations that might compromise its solvency. The fiscal policy has a strong expansionary impulse. Inflation has quickly decreased and medium-term expectations are consistent with the target. The Board has aggressively reduced the monetary policy interest rate, and does not rule out further reductions. Thus it reaffirms its committment to conduct monetary policy so that projected inflation will stand at 3% over the policy horizon.

# Monetary policy decisions in the past three months

# *Monetary Policy Report* baseline scenario as of January 2009

By January the macroeconomic scenario had drastically changed. The outlook for world growth was worse, commodity prices had fallen sharply and global credit conditions were even tighter. This was also true in Chile and, together with gloomier expectations, had lead to a more significant slowdown in economic activity than had been envisaged in the November *Forecast Update*. Annual inflation had dropped in recent months, mainly because of the substantial drop in fuel prices, but it continued high and far above the inflation target. Core and trend inflation still revealed the propagation of past inflationary shocks. In January the process of monetary easing began with a reduction of the Monetary Policy Rate by 100 basis points to 7.25%.

In the most likely scenario, the change in macroeconomic conditions would bring inflation quickly in line with the target of around 3% in the second half of 2009. Inflation would then remain around this level until the end of the projection horizon, the average between fourth-quarter 2010 and first-quarter 2011. The risk scenario for inflation was balanced: the most likely scenario being that Chilean economic growth would be between 2% and 3% this year. However, the greater degree of external uncertainty meant less likelihood of economic growth falling within this one percentage point range. Moreover, there was a greater possibility of alternative scenarios being more negative thus the risk balance tended downwards. The convergence of inflation on target levels was based on several assumptions, among them that spare capacity would reduce inflationary pressures. The Board considered that, in the most likely scenario, the process of monetary easing would continue at a pace dependent on inflation expectations.

# Meetings between February and April

By February the macroeconomic scenario had again worsened to the extent that the Board determined on a rapid adjustment of the Monetary Policy Rate to bring it to levels more in keeping with the state of the economy and the prevailing risks. In February's Board Meeting the most plausible reductions of 100, 200 and 300 basis points were discussed. The Board considered

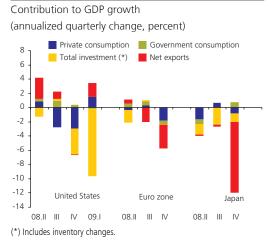
that a drop of more than 100 basis points was required because there was a stronger risk of a worse situation and falling inflation than had been foreseen in January. Information in recent weeks revealed that the negative risk scenario for economic activity was in fact materializing. The international scenario was markedly deteriorated and emerging economies were turning seriously recessive. On the home front, data revealed a sharp drop in internal demand and substantially weaker activity, thus ample spare capacity eliminating inflationary pressures in the medium term. A sharp adjustment would represent a reaction to the drop in consumer and investor expectations. This was particularly true, bearing in mind that Chile was not experiencing any reduction in access to credit, that the Chilean financial system was healthy and well capitalized and that mechanisms were in place to isolate the economy from fluctuating copper prices. Faced with this scenario, both the Board's own forecast and private inflation expectations had been corrected downwards. The Monetary Policy Rate was widely expected to be lowered and the scenarios for activity and inflation were on a downward trend so a gradual adjustment strategy was not advisable. Despite the previous month's rate cut, the Monetary Policy Rate was still very high as evidenced by its real level. Even though the rate cuts under discussion might appear drastic, given international standards of the past year, it had to be borne in mind that, due to the substantial inflation of 2008, the rate in Chile was considerably higher than in other countries. Bringing forward the process of reducing the rate should accelerate its passing through to market rates. Cutting the Monetary Policy Rate by 200 or 300 basis points had the advantage of being proactive options in the sense that, if the economy were to deteriorate further, the Bank would be able to make additional timely cuts in order to guarantee inflationary convergence within the usual policy horizon. It was recognized that the market was not expecting such a large rate cut and could be surprised, thus generating a degree of uncertainty but, at the same time, the market was expecting significant and substantial cuts over the coming months so it should assimilate the move fairly quickly. The Board therefore decided to lower the Monetary Policy Rate by 250 basis points considering that, in the most likely scenario, the rate would continue at a lower level than that foreseen in the Monetary Policy Report's base scenario, converging in the short term to levels comparable with those implicit in financial asset prices at mid-year.

In March, the Board considered that the most plausible options were rate cuts of 200 or 250 basis points, the main factors being: i) the monetary policy message implicit in the previous month's communiqué; ii) the current situation; and iii) the market's reaction to the communication of monetary policy. It was evident from the past month's data that the Monetary Policy Rate had to continue to be aggressively adjusted to bring it into line with the new macroeconomic scenario of weak activity and plummeting inflation. The external panorama continued bleak and there was an upsurge of tensions in developed financial markets, while domestic national accounts figures for the fourth quarter of 2008 revealed a weaker situation than had been expected and confirmed a drop in demand particularly with regard to the most cyclical components. Employment was sluggish and unemployment on the increase. Evidence showed that Monetary Policy Rate cuts were effectively passing through to the cost of banking system loans. Annual inflation had dropped significantly and various measures of expectations revealed this trend. The Monetary Policy Rate was still high in the light of inflationary expectations. The outlook was worse and there was a consequent drop in demand. The risk balance was clearly negative and, unlike what was happening in economies with weaker fundamentals, there were no relevant macroeconomic restrictions on monetary policy action. The wide range of opinions as to the Board's decision meant that the market would readily assimilate either option. The Board therefore decided to again cut the Monetary Policy rate by 250 basis points leaving it at 2.25% a year. Furthermore, it declared that further rate reductions could be required but they would be of a more usual size and frequency.

In April, the monetary policy message implicit in the previous decision, market expectations and the relevant data available lead the Board to consider rate cuts of 25, 50 or 75 basis points. Events of the past month confirmed the trends already detected, attesting to the adversity of the macroeconomic scenario, the validity of the monetary policy decisions taken and showing that there was still room for further monetary action. Internationally, the situation continued weak but the latest figures on economic activity and prices of financial assets and commodities hinted that the world recession could be bottoming out or at least that the slumps of the past two quarters were not being repeated. It was still too soon to be over-optimistic because grounds for a sustained recovery were yet shaky. Agreements reached at the G-20 meeting, albeit far from what the world would like to hear, did reveal a greater willingness to overcome the crisis. On the domestic front, February's data confirmed the weakness of both activity and domestic demand, mainly due to the behavior of the sectors or components most sensitive to the cycle and to credit availability. Domestic spending had been substantially adjusted so that, even with open access to external financing, the current account had not been greatly affected. Financial markets were reflecting the significant Monetary Policy Rate cuts which should allow for a more sustained recovery in the second half of the year. The latest inflation figures were coherent with a reduction in inflation over the coming months. For the most part, the market was expecting a 50-basis point cut. A 25-point cut would be too little in the light of the macroeconomic scenario the Chilean economy was still facing and yet a 75-point cut could hardly be considered usual. The Board therefore decided to lower the Monetary Policy Rate by 50 basis points bringing it to an annual 1.75% and indicated that additional future rate reductions could be necessary.

# I. International scenario

#### Figure I.1



Sources: European Central Bank, Bureau of Economic Analysis, and Cabinet Office.

#### Figure I.2

GDP growth of Chile's trading partners (annualized quarterly change, percent)



Sources: Central Bank of Chile 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.

### World growth

The outlook for world growth has weakened beyond the predictions in the baseline scenario of the January *Report*. The effects of the global financial crisis have been strongly transmitted to the real sector, creating a scenario in which world output will fall this year for the first time in decades. The focus has slowly been shifting toward when and how fast a world recovery will materialize. This will depend on how the different fiscal and monetary policy, financial-bank restructuring, and regulatory measures manage to stimulate economic activity, and how fast consumer and business expectations improve.

Starting in the fourth quarter of 2008, economic activity contracted in developed and emerging economies with an unprecedented degree of simultaneousness (box I.1). A significant share of this contraction was associated with the halting of expenditures, given the deterioration of business and household expectations around the world in the face of tightening financial conditions. The volume of international trade fell drastically, accompanied by a sharp drop in manufacturing production, a significant worsening in the labor market, and a contraction of consumption (figure I.1). Among the emerging economies, manufacturing exporters-especially those that export machinery and equipment parts and pieces to developed markets (as is the case for some Asian exporters)—have been more strongly affected than those exporting intermediate products or whose export base is more tied to natural resources (as is the case in Latin America). Thus, world growth in the fourth quarter of 2008 contracted somewhat more than 4% in annual terms, while the growth of Chile's trading partners contracted a little over 8% (figure I.2).

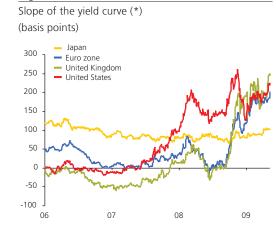
Economic indicators for the past few months are showing some particular nuances for a large number of countries. Output data indicate that the contraction has halted or, if it continued, it did so at a slower pace than in the previous quarter. In several countries, mostly in Asia, exports and manufacturing are recovering at the margin. A similar pattern is seen in consumer confidence and manufacturing sector indicators, although these

#### Table I.1

Fiscal stimulus plans (*)	
(percent of GDP)	
	2009
	2000
Russia	4.1
South. Korea	3.9
Saudi Arabia	3.3
China	3.1
Chile	2.8
Japan	2.4
Australia	2.1
United States	2.0
Canada	1.9
South Africa	1.8
Germany	1.6
Mexico	1.5
Argentina	1.5
United Kingdom	1.4
Indonesia	1.3
France	0.7
India	0.6
Brazil	0.6

Source: International Monetary Fund.

Figure I.3



(\*) Difference between two-year and ten-year nominal government bonds. Source: Bloomberg.

remain at low levels (figures I.14 and I.15). Investors are demonstrating a greater appetite for risk, resulting in higher asset prices, an upswing in the stock markets, increases in commodities prices, reductions in risk premiums, and, in general, a depreciation of the dollar against other currencies.

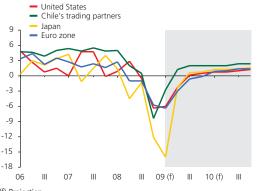
The recovery of the world economy depends on the resolution of the problems in the developed financial markets, among other factors. In the United States, the Treasury is implementing a public-private investment program with the goal of cleaning up the financial system's balance sheet. The agreements reached at the G20 meeting propose new regulatory measures for the financial market. The fiscal and monetary authorities have taken important actions to stimulate the economy and improve household and business expectations, facilitating the flow of credit. Several governments have announced broad fiscal stimulus packages (table I.1), and central banks have intensified or implemented an expansionary monetary policy. Some of the main central banks—like the Federal Reserve and the banks of Japan, England, Switzerland, and Canada—have implemented or announced unconventional monetary policy strategies to stimulate output and avoid deflationary scenarios (figure I.3). Market expectations are that monetary policies will continue to be expansionary for some time.

Consensus forecasts consider that output will continue to contract in the main developed economies in the first half of this year, albeit at a slower pace than in the last quarter of 2008. Output will start to grow slightly in the fourth quarter of 2009, and the rate will increase in 2010 (figure I.4). This implies an average annual growth rate of less than 1% in 2010 for the main developed economies. A faster improvement is projected for the emerging economies, based on the normalization of financial flows (given the absence of systemic problems in their financial markets) and the expectation that investors will increase their appetite for risk. In particular, economies with solid macroeconomic fundamentals are expected to recover quickly. In addition, a large share of the improvement in world trade is based on commodities' price trends. Emerging Asia will post the fastest recovery, given China's importance in intraregional trade, which will also benefit other developed economies. While China's growth rates have fallen from their earlier peaks, the economy continues to record annual figures above 6%. Thus, Chile's trading partners will also recover faster than the developed country average. Forecasts indicate that the country's trading partners will see increased activity starting in the current quarter, with moderate growth rates in the second half of 2009 and 2010. World output, measured in both PPP and market prices, is expected to have positive annual growth in 2010 (table I.2).

#### Figure I.4

#### World growth

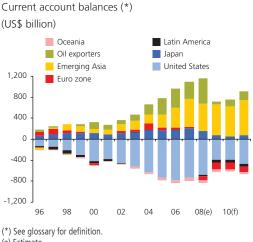
(annualized quarterly change, percent)



(f) Projection.

Sources: Central Bank of Chile, based on a sample of investment banks, Consensus Forecasts, and Bloomberg.

#### Figure I.5



(e) Estimate.

(f) Projection.

Source: International Monetary Fund

#### Table I.2

World growth (\*)

(annual change, percent)

	Average 90-99	Average 00-05	2007	2008 (e)	2009 (f)	2010 (f)
World	2.9	3.8	5.2	3.2	-1.2	2.1
World at market NER	2.4	2.9	3.8	2.2	-2.3	1.4
United States	3.1	2.5	2.0	1.1	-3.0	0.5
Euro area	2.2	1.9	2.7	0.9	-3.5	0.4
Japan	1.5	1.6	2.4	-0.6	-7.2	0.9
China	10.0	9.4	13.0	9.0	6.5	7.5
Rest of Asia	5.5	4.8	5.9	3.0	-1.9	1.4
Latin America	2.7	3.0	5.7	4.2	-2.0	1.5
Commodities exporters	2.7	3.1	3.2	1.0	-1.7	0,9
Trading partners	3.0	3.1	5.0	3.0	-1.5	2.0

#### (e) Estimate. (f) Projection.

(\*) See glossary for definitions

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

The drop in domestic demand in a wide range of countries will generate significant current-account adjustments, together with a reduction in global imbalances (figure I.5). While the immediate risks in this area are easing off, they still have the potential to erupt, because the global imbalances are still large and the application of the many fiscal stimulus packages could yet encounter significant challenges. This is particularly the case in countries that are already carrying a significant deficit or where demographic factors produce an increasing drain on the fiscal funds.

As usual, this scenario is not exempt from risks. Given the current uncertainty, however, most of these risks are considered to be low. In recent weeks, there have been signs that the crisis in the developed economies may be stabilizing, although this may be just another phase of the market volatility of recent quarters. There could thus be a return of stress scenarios that intensify the downturn of the world economy. Other possibilities are that the measures taken to solve the international crisis will not be adequate to improve household and business expectations, that the recession will be long, that governments will adopt protectionist measures, or that the developed economies will experience a deflation that will delay consumer and investment decisions. There is even a risk of strong global inflationary pressures in the medium term if the huge monetary and fiscal stimulus packages in the developed world are not managed appropriately. On the other hand, it is possible that the problems in the financial markets will be resolved swiftly, consumer and business expectations will improve sharply, and the world economy will begin a quick recovery. This would introduce new challenges, in terms of withdrawing the strong stimulus on world activity that is currently being generated by economic policies. Chapter VI of this Report presents a more detailed analysis of the scope of these risk scenarios for the Chilean economic outlook.

Figure I.6



(1) Each bar represents the average annual inflation projection by month since January 2008.

(2) Geometric average of projected inflation for the United States, Japan, and Euro zone.

(3) Projections for the December-to-December change

Source: Consensus Forecasts.

#### Table I.3

# World inflation

(average annual change in local currency, percent)

		Avg. 2000-05	2007	2008	2009 (f)	2010 (f)
United States	3.0	2.7	2.9	3.8	-0.7	1.2
Euro zone	2.3	2.2	2.1	3.3	0.6	1.3
Japan	1.2	-0.5	0.1	1.4	-0.6	-0.3
China	7.8	1.2	4.8	5.9	-0.5	2.1
Australia	2.5	3.3	2.4	4.4	2.1	2.4
New Zealand	2.1	2.5	2.4	4.0	2.0	2.0
Argentina	253.7	8.8	8.9	8.6	6.3	7.4
Brazil	854.8	8.4	3.6	5.7	4.7	4.1
Mexico	20.4	5.7	4.0	5.1	5.9	4.0
EPI (*)	1.9	3.8	8.5	12.0	-5.7	7.0

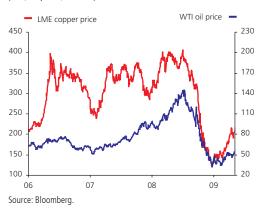
(\*) See glossary for definition.

(f) Projection.

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

#### Figure I.7

Commodities prices (US¢/lb, US\$/barrel)



# World inflation

The stark deterioration in the outlook for world growth, the projected increases in excess capacity, and the lower commodities prices, especially oil and food prices, have reduced real inflation and alleviated inflationary pressures at the world level. Even so, the different economies display a range of experiences. In Chile, the lower external prices have quickly passed through to local prices—as also occurred when the international prices of these goods increased—and Chile has recorded one of the biggest drops worldwide since October (box I.2).

Inflation forecasts have quickly adjusted to this new scenario. The outlook for the developed economies assumes that they will post low annual inflation rates, with negative movements for some time. The economic authorities in some countries have signaled that the prospect of deflation is central to their projections. According to Consensus Forecasts, CPI inflation projections for 2009 were one percentage point lower in April than in January for the United States and the euro zone and 1.4 percentage points lower for Japan. The outlook for the emerging economies has also been adjusted downward, especially in the case of emerging Asia, although the inflation forecast for these countries is for positive annual rates (figure I.6).

In the baseline scenario of this *Report*, the external price index (EPI), which measures external inflation relevant for Chile in dollars, is projected to record an annual change of -5.7% in 2009, versus January's projection of -0.8%. This adjustment is explained not only by lower real and expected inflation rates in local currency, but also by the appreciation of the U.S.dollar in the international markets in the first two months of the year, which was not considered in the baseline scenario of the January *Report*. For 2010, the dollar is expected to undergo a sharper depreciation than previously forecast, causing the EPI to fall by 7.0% (versus 5.5% forecast in January) (table I.3).

# **Commodities prices**

Given the lower prospects for global demand and growth, commodities prices continued to fall in the first few months of the year, although at a lower pace. In the past few weeks, prices have generally increased, following the improved economic and confidence indicators, together with the depreciation of the dollar (figure I.7).

The WTI oil price has risen since January, reaching US\$57 a barrel in the week prior to the close of this *Report*. This is substantially higher than at the close of the last *Report*, when the price held at US\$45 a barrel. Mediumterm price forecasts remain somewhat higher. The most likely scenario thus assumes, based on futures contracts in the ten days prior to the statistical closing date of this *Report*, that the WTI oil price will be somewhat higher than projected in January: US\$52 a barrel in 2009 and US\$64 in 2010.

The copper price has increased significantly since the January *Report*; and is currently trading at over US\$2 a pound on the London Metal Exchange (LME). This is largely the result of increased demand from China and a

#### Figure I.8

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



(\*) Spread between the Libor and the overnight index swap rate. See glossary for definition. Source: Bloomberg.

#### Figure I.9



 Parity against the U.S. dollar. An increase indicates depreciation.
 Weighted average of the following countries' currencies, at PPP: Argentina, Brazil, China, Czech Republic, Hong Kong, Hungary, Indonesia, Malaysia, Mexico, Poland, South Korea, Russia, and Thailand.

(3) The dollar measured against a basket of currencies of the main U.S. trading partners. An increase indicates depreciation.

Source: Bloomberg.

#### Figure I.10

Net investment fund flows to emerging economies (US\$ billion, accumulated moving half, weekly data)



recovery of expectations in the main copper-consuming countries, which is reflected in lower inventories. The medium-term outlook foresees that supply will continue to be tight, given the lower ore quality and the delay of mining investment projects. Demand will partially recover, as a result of growth in emerging Asia. The baseline scenario thus considers higher prices than projected in January, with averages of US\$1.80 in 2009 and US\$1.85 in 2010.

Basic food prices, which were one of the main sources of high inflation in Chile and other emerging economies in 2007 and 2008, fell until the beginning of this year. They have since increased somewhat. Based on futures data and the outlook for world growth, the baseline projection scenario considers that these prices will continue to rise in the short term, although at much lower rates than in the recent past.

### **Financial markets**

Conditions in the international financial markets remain tight, although some loosening is apparent at the margin. While liquidity and risk premiums are lower and less volatile than during the peaks recorded at the end of last year, they continue to sit above their July 2007 levels, before the subprime crisis erupted in the United States (figure I.8). This reflects the continuing uncertainty about the real value of assets and the solvency position of the financial institutions. At the close of this Report, the results of the bank stress tests carried out as part of the U.S. Supervisory Capital Assessment Program were released. The results indicate that 10 of the U.S. economy's 19 main banks will need approximately US\$75 billion in additional capital. These results underpinned the positive movements in the stock markets and the lowering of the banks' risk premiums. Long-term interest rates have been more volatile, reacting to the authorities' various bond purchase programs and the prospect of debt being issued to finance the fiscal deficit. Even so, these rates remain near their historic low levels (figure II.10). A comparison of the last ten business days before the statistical closing dates of this Report and the previous Report reveals that long-term interest rates increased around 80 basis points in the United States and just over 20 basis points in the euro zone and Japan.

The dollar is hovering around the levels observed in January. It continued to appreciate against the other major currencies through most of the first quarter, but the trend was reversed in the last few weeks, in response to investors' increased preference for risky assets. The one exception was that the dollar continued to depreciate against the yen (figure I.9).

Economic authorities in emerging economies have continued to apply measures oriented toward ensuring dollar liquidity in their markets. Most recently, the multilateral organizations have established new measures to provide financial resources to countries with a solid macroeconomic performance. Sovereign and corporate risk premiums have fallen, and stock market indicators rose in response to the increased appetite for risk. This has been reflected in portfolio investment inflows to emerging economies in recent weeks (figure I.10).

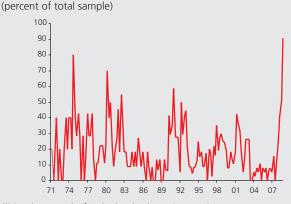
Source: Emerging Portfolio Fund Research.

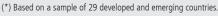
# Box I.1: Simultaneousness in the world economic cycle

The unfolding of the global crisis has been characterized by a high degree of simultaneousness in the output contraction among countries. In the last quarter of 2008, not only did output fall in Chile's main trading partners (figure I.2), but GDP growth became increasingly correlated among countries worldwide, displaying a degree of simultaneousness not seen in years (figures I.11 and I.12)<sup>1</sup>/. A similar trend is found with consensus forecasts for world growth in 2009, which are lower than a few months ago for all countries (figure I.13).

#### Figure I.11

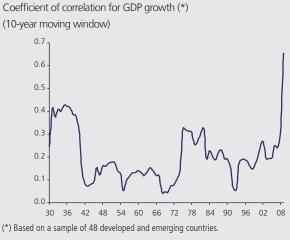
Countries posting a quarterly drop in real GDP in the fourth quarter of 2008  $({}^{\star})$ 





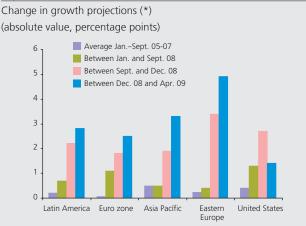
Source: González et al. (2009).

#### Figure I.12



Source: González et al. (2009).

#### Figure I.13



(\*)Consensus Forecasts projections in the indicated periods.

Source: Consensus Forecasts.

#### Figure I.14

Business confidence (\*) (diffusion indices) United States Japan 70. 140 Euro zone Mexico China Chile 60 120 100 50 40 80 30 60 20 40 May 07 May Sept. 08 May Sept. 09

Sources: Bloomberg and Icare/Universidad Adolfo Ibáñez.

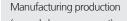
The critical events in the international financial markets in September and October of last year increased the level of uncertainty about the outlook for the world economy, which was almost immediately reflected in a significant worsening of business and household confidence indicators around the

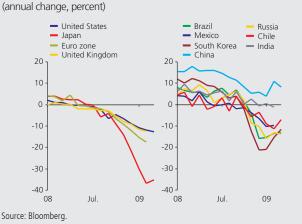
<sup>&</sup>lt;sup>1</sup>/ For a discussion on the growth simultaneousness, see González *et al.* (2009).

<sup>(\*)</sup> Buyers' confidence surveys in Brazil, China, United States, Japan, and Euro zone. In Chile, the IMCE survey; in Mexico, the general manufacturers survey; in South Korea, the manufacturing confidence survey. All indices have a pivot value of 50, except for South Korea, where the pivot is 100.

world (figure I.14). Demand, inventories, and GDP all adjusted very quickly, with a significant effect on manufacturing and world trade (figures I.15 and I.16). The speed with which the volume of international trade is dropping is highly unusual, and it may even exceed that of the Great Depression<sup>2</sup>/.

#### Figure I.15





### Figure I.16

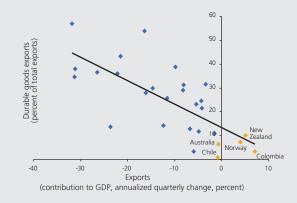


Source. Eichengreen and O Rourke (2009).

Exports are suffering in a large number of countries. Manufacturing producers have been especially hard hit, following the sudden cancellation of purchase orders. This is not surprising given that capital goods and consumer durables are more sensitive to the tightening of financial conditions, the worsening of expectations, and the revenue outlook. Countries that export commodities or natural resource products—like Chile—have not seen their export volumes collapse, but they have recorded a drop in the price of their export products. The impact of the reduced exports on GDP has thus been relatively minor for these economies, unlike countries that mainly export capital goods or consumer durables (figure I.17).

#### Figure I.17

Share of durable goods in total exports and contribution of exports to quarterly GDP growth in the fourth quarter of 2008



Source: González et al. (2009).

The financial origin of the crisis, together with the simultaneous contraction of economies around the world, could mean that the depth and duration of this phase of the cycle will be greater than in other recent episodes<sup>3</sup>/. The baseline scenario of this *Report* assumes that the emerging economies will recover more quickly than the developed economies, although world growth will still be much lower in 2010 than in recent years.

<sup>&</sup>lt;sup>2</sup>/ Eichengreen and O'Rourke (2009).

<sup>&</sup>lt;sup>3</sup>/ Chapter 3 of the *World Economic Outlook* (April 2009) discusses how the causes of the drop in GDP in an economic cycle affect the nature of the cycle's recovery phase.

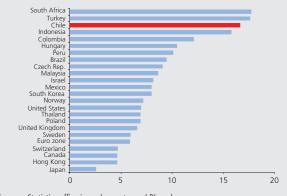
# Box 1.2: The response of inflation in the current cycle

Through the third quarter of 2008, the world economy experienced a significant inflationary trend. Commodities prices reached historic peaks, and a large number of countries, especially emerging economies, adjusted their monetary policy rate upward to cope with the increased inflation caused by both the pass-through of these price hikes and the propagation of the price shocks to the rest of the economy. At that time, the developed economies were essentially the only economies demonstrating the larger effects of the financial crisis, and although they also suffered an increase in inflation, this was secondary to the problems in their financial markets and the possible impact on the real sector.

The sharp increase in fuel and food prices worldwide was rapidly passed through to the domestic market. Chile was one of the economies with the highest inflation rates between January 2007 and October 2008 (figure I.18). The higher food prices had a particularly strong effect on inflation in emerging economies, given the weight of these goods in the CPI basket. Consequently, some countries applied price controls or other barriers to block the pass-through from external prices to their local markets. Such measures were not adopted in Chile. Moreover, domestic inflation was accentuated by idiosyncratic shocks such as the drought and natural gas restrictions, which combined with the high oil price to generate substantial increases in energy prices. All of these factors contributed to the strong propagation of inflation beginning in May 2008.

#### Figure I.18

Accumulated change in the CPI between January 2007 and October 2008 (percent)



Sources: Statistics office in each country and Bloomberg.

As from September 2008, the steep drop in commodities prices undid a considerable share of the accumulated price hikes. Inflation fell in many economies (figure I.19), with Chile recording one of the largest drops between October 2008 and April 2009. Again, this reflects the strong pass-through of the lower external prices to the domestic market, as a result of the absence of price-fixing mechanisms (figure I.20).



(\*) Figures are the geometric average of the countries in each region. Latin America includes Brazil, Chile, Colombia, Mexico and Peru. Emerging Asia includes China, South. Korea, Indonesia, Malaysia, Singapore, Thailand, and Taiwan. Emerging Europe includes Hungary, Czech Republic, Russia, and Turkey.

Source: Central Bank of Chile, based on Bloomberg.

#### Figure I.20

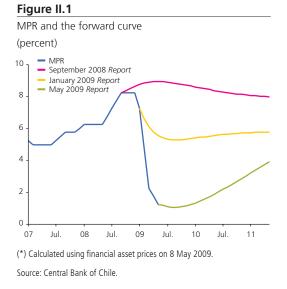
Accumulated change in the CPI between October 2008 and April 2009 (\*) (percent)



(\*) April data for Brazil, Chile, Colombia, Indonesia, Mexico, Peru, South Korea, Switzerland, Thailand, and Turkey. March data for all other countries.

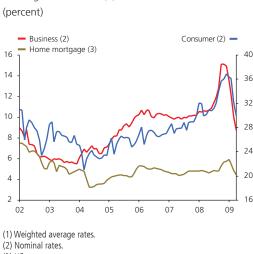
Sources: Statistics office in each country and Bloomberg

# **II. Financial markets**





Lending interest rates (1)



(3) UF rates.



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

### Monetary policy

The global macroeconomic scenario has worsened beyond the projections of the last *Monetary Policy Report* in January, and its impact on the Chilean economy has been greater than expected at that time. In the last quarter of 2008, output and domestic demand fell significantly, weakening the labor market and sharply reducing inflationary pressures in the medium term. Real and expected inflation have fallen rapidly in recent months and are expected to continue dropping in the months to come. Given this scenario, the Board decided to step up the process of relaxing monetary policy begun in January, engaging in a clearly expansionary monetary policy. The monetary policy rate (MPR) was thus reduced by 250 basis points in the February and March meetings and an additional 50 basis points in April and May. Taken together, the reductions in the MPR totaled 700 basis points between January and May, and further reductions may be necessary.

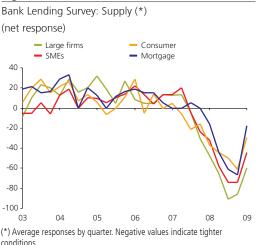
Market expectations on the MPR trend have taken into account the consistency of the Board's actions and the forecasts for a rapid drop in inflation. After the process of monetary loosening was set in motion in January and especially after the February decision, private agents began to incorporate the idea that the MPR would undergo substantial reductions over the course of the year. The minimum level that it would reach in the present cycle was gradually adjusted downward, and today the different measures of expectations mostly put it around 1% (figure II.1).

The projections used in this *Report* are based on the working assumption that, in the short term, the MPR path will be similar to what can be inferred from financial asset prices on 8 May 2009. However, toward the end of the projection horizon, the MPR path will be lower than the trend being signaled by these prices.

# **Financial conditions**

The evolution of financial conditions in the developed markets and the increased perception of global risk caused domestic financial conditions to tighten. While global risk continues to be a determining factor, market interest rates are reflecting the impact of the greater monetary stimulus and the liquidity provision measures adopted by the Central Bank. The

#### Figure II.3

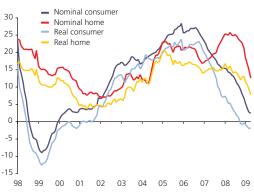


Source: Central Bank of Chile, Bank Lending Survey.

#### Figure II.4

Personal loans (\*)

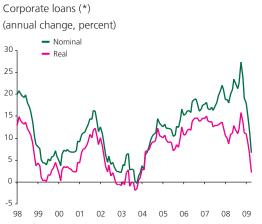
(annual change, percent)



(\*) Data for April 2009 are provisional.

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

Figure II.5



<sup>(\*)</sup> Data for April 2009 are provisional. Sources: Central Bank of Chile and Superintendency of Banks and Financial

MPR reductions have clearly passed through to the interest rates applied by banks. The interest rates on consumer loans with maturities of over three years have fallen from around 37% (their peak in late 2008) to 26% in April, while mortgage rates fell more than 100 basis points in the same period. Business loan rates have recorded a similar trend (figure II.2). The months-long upward trend in credit card rates continued through February, although they fell in March relative to the previous month.

Market rates exceed the level they would have attained given the monetary stimulus under normal conditions. This stems from a series of factors, including provisions, operations risk assessment, operating expenses, and the cost of funds for the banks. Debtors are being assessed a higher risk premium because of the lower output levels and because default is rising, albeit slightly. At the same time, the cost of funds for banks in the local market has fallen as a result of the reduction in the MPR and because liquidity—which was tight in both pesos and dollars beginning in early September of last year—has been restored and the market is now operating normally. Because changes in the MPR do not pass through instantaneously, market interest rates should continue to come down in response to the most recent MPR cuts<sup>1</sup>/.

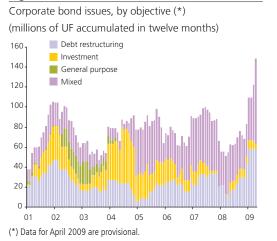
Despite the reductions in market rates, the trend in the volume of loans has not yet improved, an indication that lending standards remain tight and that demand for loans remains slack. The Bank Lending Survey carried out by the Central Bank in March reflects this, although the share of banks reporting tighter conditions fell relative to the previous quarter (figure II.3). This situation is attributed to the worsening economic environment and outlook and the increase in credit risk, which in turn are reflected in higher collateral requirements, higher risk premiums, larger spreads over the cost of funds, and a reduction in the amount and length of loans, among other things. The lower demand stems from a reduction in investment in tangible assets in the case of businesses and a worsening in clients' income situation in the case of individuals. Other factors also point to tighter lending conditions, especially in riskier sectors, together with a lower demand for loans given the public's cautious stance in response to the economic situation. The latter would explain why the loans being granted are largely for refinancing, rather than new operations.

The nominal stock of personal loans has been stable in recent months. Nominal consumer loans continue to record positive annual growth rates, although the rates are falling. To date they are averaging 4% this year, compared with 15% in the same period of last year. Loan velocity is negative. The stock of home loans has been leveling off in recent months; velocity continues to be positive, although at increasingly lower rates (figure II.4).

Institutions (SBIF).

<sup>&</sup>lt;sup>1</sup>/ Jaramillo *et al.* (2009) argue that, in aggregate terms, the pass-through of changes in the MPR to market rates is comparatively greater and faster in Chile than in other countries. This would be 74% at the end of one month, while the full pass-through would take two and a half months to materialize.

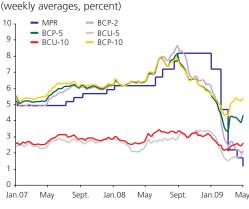
#### Figure II.6



Sources: Central Bank of Chile and Superintendency of Securities and Insurance (SVS).

#### Figure II.7

MPR and interest rates on Central Bank of Chile instruments



Source: Central Bank of Chile

With regard to businesses, the stock of commercial and foreign trade loans has been shrinking in recent months (figure II.5). Lending conditions remain tight for these operations, with higher collateral requirements, shorter maturities, and a more rigorous qualification assessment. The drop in lending is also consistent with the reduction in foreign trade and output in general and with firms' more cautious stance toward making new investments. A look at the other sources of financing available to businesses reveals that stock issues did not increase in the last period, and external financing conditions are tight but still more favorable than for other emerging economies. The local bond market has been very active: so far this year, corporate bond issues have reached 80% of their historic peak in 2001. Some of these issues are in response to the tighter conditions that Chilean companies face abroad, which have led firms to issue on the local market at lower prices (figure II.6). The trend is projected to hold, based on announcements from various firms and taking into account bonds that are currently in the process of being registered with the Superintendency of Securities and Insurance (SVS). Interestingly, the new issues include a bond from a foreign company (a so-called "huaso bond"). In addition, various firms are issuing pesodenominated bonds in the current context of lower inflation. In general, the initial spread on corporate bonds has shown a decreasing trend, so firms are not facing an increase in the cost of financing despite the recent increases in long-term interest rates.

The change in the macroeconomic scenario has affected the interest rate path of Central Bank instruments. Through February, these rates fell at all maturities, but especially on the shortest instruments (figure II.7). Consequently, the yield curve regained a positive slope for the first time in several months. Beginning in mid-March, the shift in long-term interest rates was partially reversed, a trend that could have several explanations. The rising yield curve, which has also been observed in other economies, could reflect the market's perception that the current degree of expansionary monetary policy is transitory, since the MPR level is already sufficient to allow a recovery of the economy's growth rates, a reduction in excess capacity, and compliance with the inflation target. Other factors could include portfolio adjustments based on the prospects of an active local market for corporate bonds and adjustments by institutional investors. Another hypothesis is that the increased volatility of inflation could be raising the risk premiums on long-term instruments (box II.1). At any rate, the volatility of interest rates in recent months is within the range of normal for these markets. Since January, and comparing the average of the last ten business days prior to the closing date of each Report, the rates on peso- and UF-denominated instruments have fallen between 50 and 430 basis points, depending on the maturity and indexation, and they are currently positioned near their historic lows (figure II.11).

The most traded stock price index IPSA has recovered since the closing date of the January *Report*. On a peak-to-trough basis, the increase was 15% measured in pesos and 30% measured in dollars. Dollar yields are higher than the aggregate for Latin America, due to the appreciation of the peso this year to date. Despite measures in local currency, some Latin American stock exchanges have experienced much larger increases than the Chilean market in the same period (figure II.8).

#### Figure II.8



Sources: Central Bank of Chile and Bloomberg

#### Table II.1

Observed, multilateral, and real exchange rate (1) (OER: pesos to the U.S. dollar, monthly average; MER and MER-X: 02 Jan. 1998 = 100; RER 1986 = 100)

	OER	MER	MER-X	RER
Sept.08	530.17	110.32	107.56	96.72
Oct.08	618.39	121.96	117.16	105.01
Nov.08	651.51	125.91	120.29	106.87
Dec.08	649.32	126.05	120.57	107.11
Jan.09	623.01	120.85	115.57	103.25
Feb.09	606.00	115.32	109.70	98.71
Mar.09	592.93	112.17	106.54	96.46
Apr.09	583.18	112.24	107.11	97.60
May 09 (2)	573.41	111.61	104.86	

(1) See glossary for definition.(2) Average at 7 May.

Source: Central Bank of Chile.

The broadest monetary aggregates continue to record a declining annual growth rate. M3 fell from an annual rate of 19.1% last December to 14.3% in April, while M2 dropped from 18.6 to 7.6% in the same period. In the last two months, M1 has seen a reversal of its previous downward trend.

### Exchange rate

In the past few months, the peso has been influenced by movements in the dollar in international markets, as well as by idiosyncratic factors (figure I.9). The fluctuations in the peso-dollar exchange rate since the close of the last Report coincided with the increase in the copper price, the Finance Ministry's announcement in the second half of February that it would use US\$3 billion from the Social and Economic Stabilization Fund (FEES) to finance the fiscal stimulus plan, and, most recently, the opening of bidding on those resources. The reduction in the hedging positions of the pension funds renewed the upward pressure on the peso. In the two weeks prior to the close of this Report, the peso averaged \$584 to the dollar, which is equivalent to an appreciation of 7.6% since the same period in January. This appreciation is somewhat greater when measured through the multilateral exchange rate (MER), which reached 9.1% in the same period—or 7.6% if the dollar is excluded (MER-X) (table II.1). The real exchange rate (RER) is within the range of values that are estimated to be consistent with its long-run fundamentals. As a working assumption, the real exchange rate is expected, in the long term, to be at levels similar to those observed in the two weeks prior to the statistical closing date of this Report.

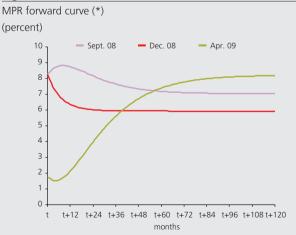
# Box II.1: Long-term interest rates on Central Bank and Treasury bonds

The structure of market interest rates plays an important role in the transmission of monetary policy changes. The monetary policy rate (MPR) set by the Central Bank marks the starting point on the yield curve. In the absence of distortions, based on the MPR level and the Board's policy message (or bias), the market forms expectations that determine the slope of the riskfree yield curve, since long-term interest rates correspond to expectations regarding short-term rates. This slope is important because consumption and investment decisions are more correlated with longer-term interest rates than with short-term rates. Thus, the effects of a change in the MPR (or its bias) on output, excess capacity, and ultimately inflation largely depend on changes in the longest rates.

Despite the magnitude of the surprise monetary easing—between January and May the MPR was reduced 700 basis points—the change in the interest rate structure reflects agents' belief in the credibility of monetary policy, in terms of consistency with meeting the inflation target. The impact of the policy decisions has been strongest in the shorter part of the curve, or the next 24 months (figure II.9). This box puts the current level of longterm interest rates into perspective and reviews some hypotheses that could explain its movements over time.

A first explanation of the shift in long-term interest rates is based on an assessment of the expansionary monetary policy

#### Figure II.9



(\*) Calculated the week after the Monetary Policy Meeting in the indicated month. Source: Central Bank of Chile and compliance with the inflation target. As indicated earlier, under the expectations hypothesis, long-term rates can be understood as the weighted average of the current short-term rate and its expected values, plus a risk premium<sup>1</sup>/. The shortterm interest rate is known and is tied to the MPR, while its expected values are very sensitive to monetary policy actions and the communication of its bias. The path of long-term rates is thus influenced by current conditions and the forecast for inflation and output, which in turn determine future changes in the MPR. From this perspective, the recent increase in long-term interest rates could indicate that the market perceives the current degree of expansiveness of the monetary policy as transitory, since the MPR level is already sufficient to allow a recovery of the economy's growth rates, a reduction in excess capacity, and compliance with the inflation target.

Another set of hypotheses that can explain the long-term interest rate trend is related to the adjustment of supply and demand in the market for these instruments. The high level of uncertainty surrounding the economy could lead agents to prefer risk-free, fixed-income instruments. This would explain the reduction in interest rates on these instruments, beyond what can be explained by the change in macroeconomic conditions and the communication of monetary policy. This happened toward the end of 2008 and the beginning of this year, and, in contrast to similar episodes in the past or in other economies with a more fragile financial situation, the increased uncertainty coincided with a significant drop in risk-free rates in Chile. The drop in inflation expectations probably reinforced this trend in shorterterm, peso-denominated instruments.

The behavior of institutional investors could be an example of the above. Over the course of 2008, the pension funds had to adjust their portfolios significantly in response to the loss in value of external assets and the shifting of affiliates among funds. They therefore increased their holdings of Central Bank and Treasury instruments—basic bonds—and reduced their demand for variable-income assets (table II.2).

On the supply side, the sources of private and public sector financing—and, therefore, the supply of debt instruments

<sup>&</sup>lt;sup>1</sup>/ In other words, under this hypothesis, short-term rates and the risk premium take values such that the investor is indifferent between buying and holding the bond to maturity or making a series of short-term investments.

issued—change over time. A well-known example is the considerable activity on the corporate bond market this year. As of April, issues of these instruments had reached nearly 80% of the peak of 2001 (figure II.6). Thus, for constant demand prices fall, and rates necessarily react upward for both corporate bonds and the risk-free Central Bank and Treasury securities. Moreover, more corporate bond issues are expected from both domestic firms and foreign companies ("huaso bond"). Finally, the share of private bonds in the total value of the pension funds has increased markedly since the end of 2008 relative to December 2007 levels. While a private bond is not a perfect substitute for a basic bond, the increased relative demand for corporate bonds, which pay a higher return, could be partially causing the higher rates on basic bonds in recent months.

#### Table II.2

Composition of Pension Fund assets

			Dec. 08 US\$ million % fund		Mar. 09 US\$ million % fun	
Total basic bonds	5,775.1	5.2	8,169.2	11.0	9,668.4	11.7
Total private bonds	16,878.7	15.2	14,985.9	20.2	18,036.4	21.9
Total variable income	59,551.1	53.7	30,966.3	41.6	31,123.4	37.9
Other	28,832.1	25.9	20,191.3	27.2	23,397.7	28.5
Total assets	111,037.0	100.0	74,312.7	100.0	82,225.9	100.0

Source: Superintendency of Pensions.

Another hypothesis suggests that the increased volatility of inflation could be increasing the risk premiums on long-term nominal instruments.

The above hypotheses are consistent with the interpretation that because the Chilean economy is financially integrated in the world economy, local interest rates are dependent on foreign bond rates. Given uncovered interest rate parity, to the extent that different financial instruments are substitutes, their prices (and thus their yields) will be related through risk-adjusted arbitrage conditions, such as the sovereign spread (reflected in the EMBI Chile) and the volatility of the markets (like the VIX) (figure II.10). Empirical studies have traditionally shown that one of the key variables affecting the path of long-term interest rates in Chile is the international long-term rate<sup>2</sup>/. Recent reviews of these studies<sup>3</sup>/ confirm this trend: after controlling for other variables, changes in U.S. bond rates are correlated with long rates in Chile with a pass-through coefficient ranging from 0.2 to 0.4, depending on the indexation and maturity of the bond. However, the most recent data show that, in contrast to the period before the financial crisis erupted in September, increases in the risk measures have been associated with drops in long-term interest rates in Chile. This validates the hypothesis that Central Bank and Treasury securities have served as a refuge for investors and individuals in the face of severe uncertainty. More recently, the partial dissipation of this global uncertainty may have contributed to raising the rates on these instruments.

Looking beyond all the hypotheses put forth, it is important to bear in mind that the current long-term interest rate level is near its historic lows. Consequently, despite the most recent changes in these rates, the stimulus that monetary policy is delivering to the economy is of considerable magnitude and in line with the current macroeconomic scenario and its risks.

#### Figure II.10

VIX and risk-free rates: Chile and the United States (monthly averages, percent)



(\*) See glossary for definition.

Sources: Central Bank of Chile and Bloomberg.

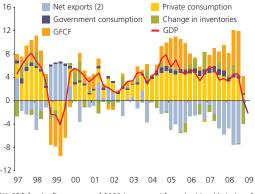
<sup>&</sup>lt;sup>2</sup>/ Selaive and Silva (2007).

<sup>3/</sup> Becerra and García (2009).

# III. Aggregate demand

#### Figure III.1

Contribution to annual GDP growth (1) (real annual change, percentage points)

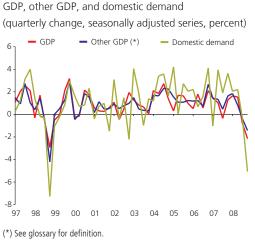


(1) GDP for the first quarter of 2009 is averaged from the Monthly Index of Economic Activity (Imacec).

(2) Goods and services exports less goods and services imports.

Source: Central Bank of Chile.

#### Figure III.2



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

The impact of the downturn in the global macroeconomic scenario on the Chilean economy has been greater than projected in January. In the last quarter of 2008, domestic output fell significantly, causing excess capacity to expand accordingly. GDP ended the year with 3.2% growth<sup>1</sup>/, but with almost zero annual growth in the fourth quarter, largely because of the lower value added in sectors that are more sensitive to changes in demand. Domestic demand was precisely the area that recorded the strongest adjustment in late 2008 (figures III.1 and III.2, and table III.1). The steep drop in global demand affected the prices of exports, generating a significant reduction in the terms of trade (TOT) and, therefore, in national disposable income. The disturbance in the developed financial markets and the heightened perception of global risk caused domestic financial conditions to tighten, which has been offset by monetary policy measures and the provision of liquidity. In addition, the significant increase in uncertainty about the future path of the world economy has made the income prospects of businesses and families more uncertain, thereby increasing the risk associated with spending decisions. In Chile, this could be a significant factor behind the drop in the level of domestic demand, which cannot be explained solely based on the trends in the usual macroeconomic variables. To a lesser extent, the normal evolution of the business cycle was also a factor in reducing demand, a process that was accelerated and intensified in response to the worsening financial crisis in the developed countries.

For this year, GDP is projected to range from -0.75 to 0.25%, with a net risk that is biased downward. This projection is based on a significant reduction in domestic demand, in particular in those components that are most sensitive to the cycle, such as durables consumption, investment, and inventories. This trend will be compounded by the worsening of expectations, only moderate credit growth, the weakening of the labor market, and the effect of the drop in the terms of trade on private disposable income.

<sup>&</sup>lt;sup>1</sup>/ In accordance with the policy on the regular disclosure of the Quarterly National Accounts, the first GDP estimate for the fourth quarter of 2008 was published on 18 March and a new GDP estimate for the first quarter of 2009 was published on 18 May.

#### Table III.1

Aggregate demand

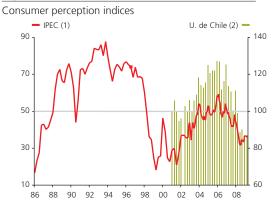
(weight in GDP, real annual change, percent)

	Weight.	2007	2008				
	2007	Year	I	Ш	Ш	IV	Year
Domestic demand	111.2	7.8	8.1	11.6	I 10.7	I -0.2	7.4
Final demand							
(excl. inventories)	110.7	8.2	7.5	10.1	11.0	3.4	7.9
GFCF	29.7	12.0	15.0	23.7	29.9	10.4	19.5
M&E	15.1	17.8	23.5	34.9	49.5	14.2	29.8
C&O	14.7	7.4	8.3	14.1	13.2	6.7	10.5
Other	81.5	6.5	5.9	7.8	4.9	-3.7	3.6
Private consumption	68.2	6.9	5.1	6.0	5.5	0.8	4.3
Durable	8.0	12.0	11.4	13.5	8.6	-10.1	5.3
Non durable	30.2	5.8	3.9	6.3	7.2	4.3	5.4
Services	30.1	6.8	4.8	3.9	3.0	0.1	2.9
Government consumption	12.8	8.0	5.9	4.3	3.6	2.7	4.0
Inv. (%GDP) (*)	1.0	1.0	1.1	1.5	1.4	0.5	1.0
Goods and services exports	39.8	7.6	2.6	0.1	6.9	3.4	3.1
Goods and services imports	51.0	14.9	13.5	17.1	20.3	1.8	12.9
GDP	100.0	4.7	3.4	4.6	4.6	0.2	3.2

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

Source: Central Bank of Chile.

#### Figure III.3



(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.4

Business perception index

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



<sup>(\*)</sup> The weighted average of the manufacturing, retail, and construction sectoral confidence indicators.

Source: Icare/Universidad Adolfo Ibáñez.

### **Domestic demand**

As indicated above, the detonation of the financial crisis in the developed markets, the uncertainty surrounding the future evolution of the world economy, and the tightening of financial conditions, among other factors, have made income prospects less certain, leading families and businesses to be more cautious than usual in their spending decisions. Reduced expectations are also apparent domestically. The Economic Perceptions Index (IPEC) and Universidad de Chile's survey have both fallen and are approaching their lowest levels of the last seven years (figure III.3). Business expectations, measured through the Monthly Business Confidence Indicator (IMCE), have recovered somewhat in the most recent period, but they too are pessimistic (figure III.4). There are several indications that investment projects are being postponed and/or suspended in all sectors. According to the Capital Goods and Technological Development Corporation (Corporación de Desarrollo Tecnológico y de Bienes de Capital, CBC), projects that have been suspended indefinitely as of March totaled US\$16 billion (or 12% of the total value of projects included in the survey in December 2008), while projects that have been deferred or are under review came to US\$4.6 billion (3% of the total in the December survey). An additional US\$42 million in minor projects have also been cancelled (figure III.5).

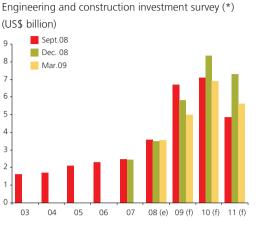
While the drop in global demand has had an impact on Chilean exports, generating a reduction in the TOT and in private disposable income, it is important to bear in mind that the lower copper price has a limited and not necessarily permanent effect on private disposable income (although this is not the case for national income)<sup>2</sup>/. Moreover, the lower fuel prices have had immediate favorable effects on households and businesses. The baseline scenario of this *Report* projects that the TOT will fall 13.5% this year and 3.8% in 2010; the January estimates were for reductions of 19.1% and 2.0%, respectively. The adjustment is explained by the increase in the average forecast copper price in 2009: US\$1.80 in May versus US\$1.50 in January. Excluding the copper price, the terms of trade would increase 4.9% in 2009 and fall 4.7% in 2010, which are very similar to the rates projected in January (figure VI.5).

To a lesser extent, the steep drop in demand reflects the evolution of the cyclical component. Durable goods consumption, gross fixed capital formation, and inventories grew faster than GDP for several years (figure III.6). Durables consumption grew 20%, on average, between 2004 and 2007, resulting in a substantial build-up of inventories of this type of goods and rapid growth in the ratio of durables to nondurables consumption. Consumption growth slowed in 2008, with the strongest decline occurring in the fourth quarter.

Annual gross fixed capital formation grew 16%, on average, between 2004 and 2008, peaking at 30% in the third quarter of last year. Among the

<sup>&</sup>lt;sup>2</sup>/ Box III.1 in the January 2009 *Monetary Policy Report* discusses the effects of the copper price trend on the Chilean economy.

#### Figure III.5

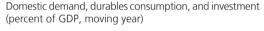


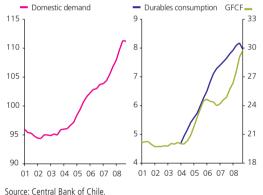
(\*) Excludes real estate, telecommunications, and manufacturing sectors. (e) Estimate.

(f) Projection

Source: Capital Goods and Technological Development Corporation (CBC).

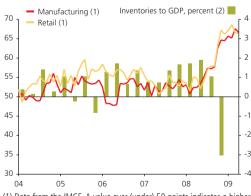
#### Figure III.6





#### Figure III.7





<sup>(1)</sup> Data from the IMCE. A value over (under) 50 points indicates a higher (lower) level than desired.

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

different components of investment, machinery and equipment grew the fastest, as reflected in capital goods imports. The annual change in capital goods imports fell in the last quarter of 2008 and became negative in the first quarter of this year.

Inventories, in turn, fell drastically in the fourth quarter of 2008, when drawdowns represented 3% of GDP in seasonally adjusted terms. The sharp reduction in inventories was consistent with the decline in several classes of imports and with the assessment reported in the IMCE regarding the level of inventories that firms considered sufficient in the last quarter of 2008. IMCE data for the first quarter of 2009 continue to indicate that the current level of inventories is higher than businesses would like and that imports continue to shrink, which could be a sign that inventories will drop again (figure III.7).

The available data for the first quarter of 2009 indicate that the drop in domestic demand has been protracted. Sales of consumer durables and overall imports are generally at lower levels than at year-end 2008. However, some partial indicators show increases at the margin, in particular new home sales (figure III.8).

The baseline projection scenario assumes that domestic demand will fall 4.7% in annual terms this year, based on a drop in investment. This scenario foresees that domestic demand will follow a growth trend over the course of the year, supported by an improvement in the macroeconomic situation, expansionary monetary policy, and the boost from the fiscal stimulus plan that was announced in January and that is currently being implemented. The stimulus plan includes an increase in government consumption equivalent to 0.1 percentage point of GDP, an increase in public investment of 0.5 percentage point of GDP. The baseline scenario of this *Report* also takes into account that, as announced by the fiscal authority, the structural fiscal rule will temporarily be reduced this year, from 0.5% to 0% of GDP.

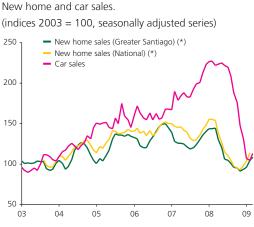
### Net external demand

The worldwide drop in output and demand is strongly affecting world trade, which is contracting at an unprecedented rate. The significant reduction in global demand has been felt most intensely in economies whose exports have a large durable or capital goods component, which is not the case in Chile (figure I.17).

The volume of Chilean exports, which is largely made up of natural resource products, has not been strongly affected. The price of these exports, however, has fallen substantially, leading to a significant drop in the value of shipments (figure III.9 and table III.2). Some classes of exports, especially manufacturing products, have been affected. In the fourth quarter of 2008, the volume of these shipments fell 1.8% in annual terms. In the first quarter of this year, the total value of exports was US\$11 billion (–43% annually).

<sup>(2)</sup> Seasonally adjusted quarterly series.

#### Figure III.8

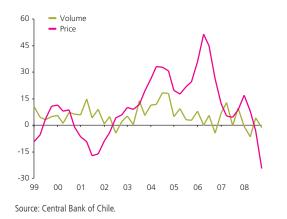


(\*) Sold in the moving quarter.

Sources: National Automobile Association of Chile (ANAC), Central Bank of Chile, and Chilean Chamber of Builders. (CChC).

#### Figure III.9

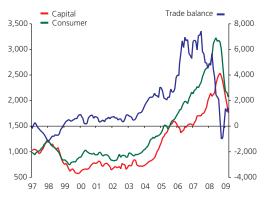
Price and volume of Chilean exports	
(annual change percent)	



# Figure III.10

Trade balance and imports of capital and consumer goods

(US\$ million accumulated by quarter, seasonally adjusted series)



Source: Central Bank of Chile.

Consistently with the adjustment in domestic demand, all classes of imports recorded a sharp decline beginning in October 2008. In the fourth quarter of last year, consumer goods imports fell in annual terms, while the annual change in capital goods remained positive despite a rise in imports. These contractions became even sharper at the beginning of this year. In the first quarter of 2009, cif imports amounted to US\$9.8 billion (an annual change of -30%) (figure III.10).

#### Table III.2

Foreign trade

Exports

слро														
		Value	Annual change, percent											
		US\$	Total			Mining	1		Manufa	octurii	ng	Agricu	lture	
		million	Value	Vol.	Price	Value	Vol.	Price	Value	Vol.	Price	Value	Vol.	Price
2005		50.000	10.0		20.4	50.7		<i>c</i> 4 <i>o</i>						
2006	Year	58,680	42.2	2.2	39.1	59.7	-1.4	61.9	20.3	5.0	14.6	9.6	6.0	3.3
2007	Year	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	Year	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
2007	1	16,571	19.7	6.9	12.0	18.3	3.9	13.8	26.1	13.7	10.9	15.8	10.3	5.0
	11	18,292	18.9	12.9	5.3	22.5	17.9	3.9	11.4	4.7	6.3	20.1	6.2	13.1
		16,237	4.4	-0.2	4.6	2.9	-2.3	5.4	4.3	2.1	2.2	31.0	7.2	22.2
	IV	16,567	19.2	9.6	8.8	24.1	12.0	10.8	12.2	6.9	4.9	-16.1	-22.4	8.0
2008	1	19,277	16.3	-0.6	17.0	20.0	-0.6	20.7	6.8	-4.3	11.6	13.1	2.7	10.1
		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
		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	-24.4	-43.5	-3.2	-41.6	3.9	-1.8	5.8	39.6	48.0	-5.7
2009	1	11,032	-42.8			-59.6			-17.9			3.9		

Imports

iniporto -														
		Value Annual change, percent												
		US\$	Total	Total		Consumer			Capital			Intermediate		
		million	Value	Vol.	Price	Value	Vol.	Price	Value	Vol.	Price	Value	Vol.	Price
2006	Voar	38,406	173	11.6	5.3	253	22.4	2.4	1.7	0.4	1.3	18.6	10.4	7.5
		1 '												
2007	Year	47,164		17.5		23.1	20.3	2.3		16.3		24.7	17.1	6.5
2008	Year	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
2007	1	10,084	11.7	10.0	1.5	20.0	19.3	0.6	7.6	6.6	1.0	9.2	7.0	2.1
	11	11,228	19.7	16.7	2.5	16.8	14.8	1.7	19.1	17.6	1.3	22.2	18.0	3.5
		12,306	23.2	19.3	3.3	29.1	26.7	1.9	12.1	10.8	1.2	25.4	19.9	4.6
	IV	13,545	35.3	22.2	10.7	25.3	19.4	5.0	30.6	28.8	1.4	41.4	21.6	16.4
2008	1	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
	11	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
		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	1	9,791	-30.1			-28.0			-16.5			-37.3		

Source: Central Bank of Chile

The trade balance thus closed 2008 with a US\$8.8 billion surplus, less than half that posted in 2007. In the first quarter of 2009, the trade balance reached US\$1.9 billion. As a result of the strong adjustment of domestic spending, the current account of the balance of payments closed 2008 with a US\$3.44 billion deficit, equivalent to 2.0% of GDP. This figure is slightly lower than the deficit projected in January (2.6% of GDP). Given the expected drop in domestic spending, it is estimated that the 2009 current account deficit will be lower than projected in the last *Report:* 1.8% of GDP versus 4.6% forecast in January.

# IV. Output and the labor market

#### Figure IV.1





(1) GDP at factor cost plus bank charges.

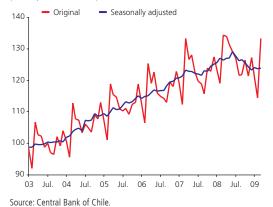
(2) Mining, fishing, and EGW sectors.

(3) GDP for the first quarter of 2009 is averaged from the Monthly Index of Economic Activity (Imacec).

Source: Central Bank of Chile.

#### Figure IV.2

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



### **Total GDP**

The domestic economy felt the effects of the global downturn in late 2008. The output level fell in the fourth quarter, especially in some non-naturalresource sectors, causing excess capacity to rise significantly. The year thus closed with 3.2% annual GDP growth (table IV.1 and figure IV.1). The hardest-hit sectors—whether based on real or projected data—were those whose performance is most closely linked to demand: manufacturing, retail, and construction.

#### Tabla IV.1

Gross domestic product

(real annual growth, percent)

	Weighted	2007	2008				
	2008	Year	1	II	Ш	IV	Year
Agriculture, livestock, and forestry	3.7	0.4	2.6	6.3	-3.0	2.5	3.0
Fishing	1.2	5.6	-4.5	5.0	7.2	-9.4	-0.7
Mining	6.7	3.1	-4.1	-5.6	-5.3	-5.1	-5.0
Manufacturing	15.8	3.1	0.9	0.6	2.1	-3.5	0.0
EGW	1.8	-28.8	-25.9	-10.9	19.4	12.3	-4.0
Construction	7.5	5.4	8.0	13.0	12.1	6.1	9.7
Retail (1)	10.5	6.1	4.6	6.9	6.7	-2.7	3.8
Transport	7.3	5.8	5.8	5.0	7.2	2.3	5.0
Communications	2.8	14.7	12.1	11.5	10.1	8.0	10.4
Other services (2)	37.0	6.5	5.4	4.7	4.3	2.5	4.2
Natural resources (2)	9.7	-4.4	-8.9	-5.2	0.0	-2.7	-4.3
Other (2)	84.6	5.6	4.7	5.2	5.0	1.2	4.0
GDP total (3)	100.0	4.7	3.4	4.6	4.6	0.2	3.2

(1) Includes restaurants and hotels

(2) See glossary for definition.

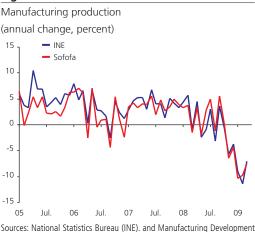
(3) Total GDP is the sum of natural resources GDP, other GDP, net VAT collected, and import duties, less bank charges.

Source: Central Bank of Chile.

The available data for the first quarter indicate that the decline in output has not intensified, at least not to the degree seen at the end of 2008 (figure IV.2). However, given the steep drop in the output level in late 2008, output is showing negative annual growth rates that will continue at least through this quarter. According to the average Monthly Index of Economic

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.

#### Figure IV.3

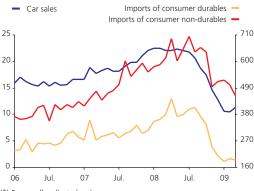


#### Figure IV.4

Association (Sofofa)

Retail sector indicators (\*)

(thousands of units; US\$ million)



(\*) Seasonally adjusted series.

Sources: Central Bank of Chile and National Association of Car Dealers (ANAC).

#### Figure IV.5

Expectations for sales and the output level (IMCE) (value over (under) 50 indicates that it will rise (fall))



Source: Icare/Universidad Adolfo Ibáñez

Activity (Imacec), the annualized growth rate of output was -2.2% in the first quarter<sup>1</sup>/.

The baseline scenario of this *Report* assumes that the annual output growth rate will be positive and closer to trend growth in the second half of 2009 and throughout 2010, in line with the strong fiscal and monetary stimulus packages and the solid fundamentals of the Chilean economy. For 2009 as a whole, therefore, economic growth will fall within the range of -0.75 to 0.25% in annual terms, with a net risk that is biased downward based on the probabilities of the alternative scenarios.

# **GDP** for natural resources

In 2008, the contribution of the natural resource sectors to aggregate growth was negative for the second consecutive year. This outcome can be blamed mainly on mining, which continued to be affected by low ore quality and technical problems; electricity, gas, and water (EGW), although this sector posted positive quarterly rates in second half of the year; and fishing, which contracted sharply in the last quarter of the year as a result of the slump in commercial fishing and lower production in fish farming.

Partial data for the first quarter indicate that the slump in mining production continued. Consistently with business perceptions in the sector, as reported by the Monthly Business Confidence Indicator (IMCE), production should pick up in the coming months, in response to increased metal prices. EGW continued to recover, reflecting the low basis for comparison and lower generation costs. The performance of fishing, in turn, mainly shows the effects of the salmon crisis.

### Other GDP

The GDP of the non-natural-resource sectors is showing the effects of the change in the macroeconomic scenario. Manufacturing and retail fell in late 2008, both in annual and quarter-on-quarter terms. Construction continued to record positive annual growth rates, but it declined substantially relative to previous quarters.

#### Manufacturing

Manufacturing has contracted at the world level (figure I.15). In Chile, manufacturing production fell steeply in level in the last quarter of 2008, and that trend continued in the first quarter of this year according to INE data. Some domestic manufacturing sectors are having trouble selling their products in external markets, which coincides with the steep, severe, and generalized contraction of the international markets for manufactured goods. The manufacturing slump began in mid-2008 before the external markets were hit by the economic turbulence, as a result of the high energy costs dating back to 2007 (figure IV.3).

The baseline scenario projects that manufacturing output will continue to shrink in the current quarter. The outlook for the sector depends on what happens with world GDP, in particular the country's trading partners, and its impact on the

<sup>&</sup>lt;sup>1</sup>/ In accordance with the policy on the regular disclosure of the Quarterly National Accounts, the first GDP estimate for the first quarter of 2009 was published on 18 May.

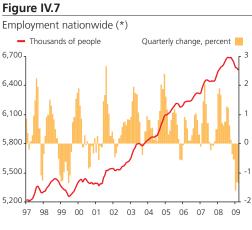
#### Figure IV.6

Construction sector indicators (\*)



(\*) Seasonally adjusted series.

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

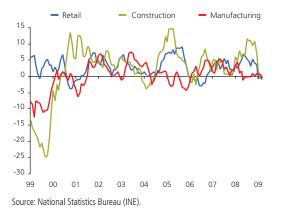


(\*) Seasonally adjusted series.

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



Sectoral employment (annual change, percent)



demand for manufacturing exports. The sector's inventories are still larger than considered ideal (IMCE). With regard to production, IMCE forecasts continue to be pessimistic, although there is some improvement at the margin.

#### **Retail and other services**

Value added from retail activity has fallen in line with the reduction in domestic spending. Both retailers and wholesalers have been affected by the lower consumption and investment. The biggest declines have been recorded by wholesalers (especially sales of building materials and sales of machinery and equipment) and car sales, which fell over 50% in annual terms, on average, between January and March. In seasonally adjusted terms, the data for March displayed a slight recovery relative to previous months. Retail trade shrank in line with trends in consumption and imports of this category of goods (figure IV.4).

Sales forecasts by businesses in the sector, as captured by the IMCE, remain pessimistic, but they have risen since the start of the year. Inventories continue to be above the desired levels. In the second half of the year, the loose monetary policy should have a positive effect on output in this sector (figure IV.5).

Sectoral data indicate that in the last quarter of 2008 and the first quarter of this year, transport and communications—like other service sectors—felt the effects of the lower aggregate output and the reduction in foreign trade.

#### Construction

The outlook for construction is different from the other sectors when measured in terms of annual change. In seasonally adjusted terms, however, activity in the sector fell off sharply in late 2008. So far this year, partial indicators of the sector's output continue to post negative month-over-month changes. The one exception is cement sales, which are no longer falling monthly as of the most recent data (figure IV.6). Demand indicators, such as home sales, point to a recovery in levels for the first quarter of this year, which is consistent with the evidence that mortgage lending boosted both the real estate and banking sectors (figure III.8). Business expectations, as captured by the IMCE, remain pessimistic, but they have improved in recent months.

The March CBC survey reveals a slight decline in the value of projects for this year (figure III.5). In contrast with the last survey, projects are being postponed across all sectors, a trend confirmed by several data sources. Nevertheless, a portion of investment should continue to be strong, especially in areas supported by fiscal programs.

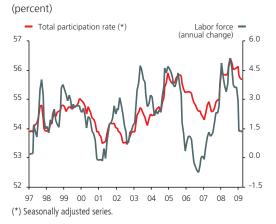
### Labor market

Labor market figures for the first quarter of 2009 reflect the change in the macroeconomic scenario, which is consistent with the cyclical response of jobs to changes in economic activity<sup>2</sup>/. According to the INE, employment fell from average annual growth rates of over 3% in 2008 to negative rates in the moving quarter ending in March of this year. In seasonally adjusted

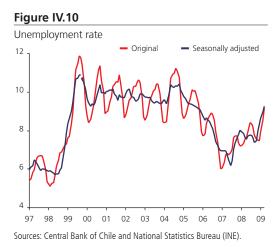
<sup>2/</sup> For more detail, see box IV.1, January 2009 Monetary Policy Report.

#### Figure IV.9

Total participation rate and annual growth of the labor force

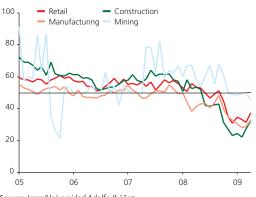


Sources: Central Bank of Chile and National Statistics Bureau (INE).



#### Figure IV.11

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



Source: Icare/Universidad Adolfo Ibáñez.

terms, the employment rate has fallen since the moving quarter ending in October of 2008 (figure IV.7). The Chilean Association for Occupational Safety and Health (AChS) and *Universidad de Chile* find the same trend for Greater Santiago, with some differences in level. By job category, the INE data reveal a slowdown in wage labor beginning in November. Self-employment had recorded slightly positive growth rates for the moving quarters ending between August and December, but so far this year it has declined again. While this type of employment might be expected to increase at this point in the cycle, it is actually showing signs of a prolonged contraction. This coincides with a higher educational level of the labor force and an increase in women's participation in the labor market<sup>3</sup>/.

By sector, INE year-over-year data reveal a contraction of jobs in retail and construction in recent months. The growth rate of manufacturing jobs has been practically zero since the middle of last year. The AChS reports annual job losses in all these sectors, with rates of -10.1% for construction, -5.5% for manufacturing, and -3.0% for retail as of March (figure IV.8).

The annual growth rate of the labor force has gradually lessened, from over 5% in July 2008 to 1.3% in the moving quarter ending in March. The slower growth of the labor force has encompassed both men and women, but it has been strongest in the primary component<sup>4</sup>/. The participation rate, in turn, has fluctuated around 56% since the beginning of 2008 (figure IV.9).

According to INE data, the national unemployment rate increased to around 9.2% in the moving quarter ending in March (9.3% in seasonally adjusted terms) (figure IV.10). An analysis of recruitment ads reveals that job vacancies are just over half what they were in August of last year, although they recovered slightly in the most recent period. INE data further indicate that the unemployment rate for the Santiago Metropolitan Region also reached 9.2% in the moving quarter ending in March. According to *Universidad de Chile's* quarterly survey of Greater Santiago, this rate was 12.8% in March. The differences in level in the rates reported by the two sources stem from methodological considerations, such as the type of survey questions, the conceptual framework, the sample, and the estimated data<sup>5</sup>/. Regardless of the differences, the unemployment rate has risen in both surveys in seasonally adjusted terms.

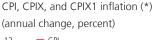
The employment outlook, as captured by the IMCE, is pessimistic, but the most recent observations point to some improvement (figure IV.11). The IPEC reports similar expectations. The evidence from previous episodes of an economic slowdown in Chile indicates that the labor market reacts to the GDP cycle with a lag. Therefore, given the usual statistical relationship between the output gap and employment, the situation in the labor market will probably continue to worsen in the coming months, with increases in unemployment even after the economy has begun to recover.

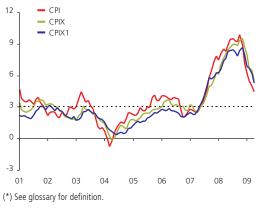
 $<sup>^3\!/</sup>$  Villena (2008) and Puentes and others (2007) provide a more complete discussion of the causes of the drop in self-employment.

<sup>&</sup>lt;sup>4</sup>/ The primary work force corresponds to male heads of household, between 25 and 54 years of age. <sup>5</sup>/ Bregger and Easley (2006) provide a complete technical analysis of the existing methodological differences between INE and *Universidad of Chile* employment surveys.

# V. Prices and costs

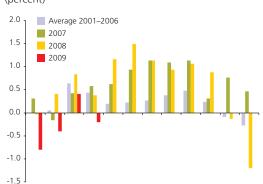
#### Figure V.1





Source: National Statistics Bureau (INE).

Figure V.2 Monthly CPI inflation (percent)



Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sept. Oct. Nov. Dec Source: National Statistics Bureau (INE).

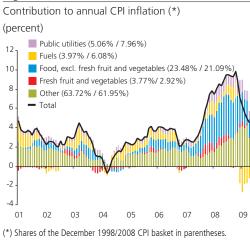
This chapter examines recent trends in the main components of inflation and costs, identifying different sources of inflationary pressures and their probable future behavior.

## **Recent trends in inflation**

Annual CPI inflation has fallen in recent months, from a peak of 9.9% in October 2008 to 4.5% in April 2009. A significant share of the swift decline in total inflation can be explained by the drop in the prices of specific goods, like fuels. In addition, a change in the underlying trend led to a substantial reduction in inflation expectations. In the first four months of 2009, annual CPI inflation fell even faster than projected in January, with monthly inflation rates below the averages for the 2001–06 period and for the last two years. Since last November, monthly CPI inflation rates were negative on five occasions (figures V.1 and V.2). In the coming months, annual CPI inflation is expected to keep falling, with substantial fluctuations between the end of this year and the start of the next. This reflects the changes in the basis for comparison inherent in the high inflation recorded between May and October 2008 and the negative inflation between November 2008 and February 2009.

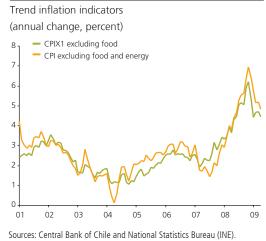
In comparative terms, the drop in inflation in Chile has been sharper than in other economies. This shows the speed with which external price shocks are transmitted to the local market, as was also the case when inflation rose (box I.2). Since the end of 2007, CPI inflation has been strongly determined by trends in the international price of oil and its derivatives. In the year to date, the WTI oil price has remained substantially below the US\$100 it averaged in the same period of 2008, despite fluctuations. Consequently, fuel prices have had a negative contribution to annual inflation of two percentage points, on average, so far this year (figure V.3). The contribution of food prices also shrank, from a peak of nearly four percentage points between May and August of last year to under two percentage points in the most recent data. In contrast to fuels, food prices on the domestic market have been stable, rather than falling month to month.



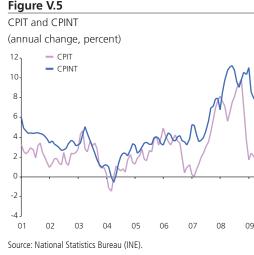












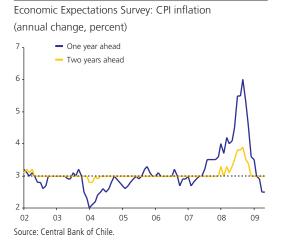
In January of this year, the INE changed the CPI basket and the measurement methodology. The joint impact of these changes in the annual inflation measure is estimated to be quantitatively small (on the order of 0.1 percentage point since April). However, the changes introduced into the methodology for calculating certain prices has translated into wider price swings for these goods, and their fluctuations thus have a stronger effect on the monthly change in the index.

Measures of core inflation reflect the significant drop in the prices of specific products, resulting in lower annual rates, although to a lesser degree than the CPI. Annual CPIX1 inflation fell from a peak of 8.7% in November to 5.3% in April, while the CPIX dropped from 9.5% to 5.5% in the same period. Inflation measures excluding components such as food and energy prices (leaving 67.2% of the 2008 CPI basket) declined from almost 7% annually in November to 5.4% in April, while the CPIX1 excluding food (leaving 54.9% of the 2008 CPI basket) moved from 6.2 to 4.9% annually in the same period (figure V.4). Annual tradables inflation (CPIT) peaked at 9.9% in October, falling to 1.7% in April. In the same period, annual nontradables inflation (CPINT) fell three percentage points, although annual rates are still high at around 8% (figure V.5). The difference in these two trends could stem from the fact that the CPINT is still being influenced by the indexation of certain products, which causes it to lag the CPIT. Goods inflation (CPIG) fell from its October peak (10.1%) to 3.8% in April. Services inflation (CPIS) and the core counterparts of these two measures (CPIGX and CPISX) exhibited a rising trend through November 2008 and then dropped off in recent months, although by a lower magnitude than in the case of the CPIG.

Trend inflation measures have not reflected the drop in inflation as strongly. Thus, while the trimmed mean CPI is lower, it is still around 6%. The trim of the most volatile components (TMVC), which excludes the most volatile prices in each period, has fluctuated around 5% in the last three months. Given its construction methodology, it is possible that price variations deriving from the change in the CPI basket are distorting this measure.

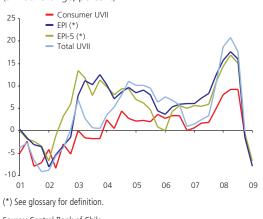
## Inflation expectations

Most measures of inflation expectations have come down in recent months. This is especially apparent in the short term, and it is consistent with the recent plunge in inflation and the forecasts for an easing of inflationary pressures, given the expansion of excess capacity and the drop in commodities prices. The Central Bank's Economic Expectations Survey (EES) shows expected annual inflation for December of this year falling from 3.5% in January to 1.2% in May; it then rises to 2.8% for December 2010 and holds steady at 3% for two years ahead (figure V.6). Similarly, private nonfinancial agents have adjusted downward their negative views on inflation. The IPEC consumer survey reports a drop in the share of people surveyed who responded that inflation would rise "a lot" in the next two months, from 52% in December to 43% in April. According to the IMCE business survey, expected inflation in twelve months fell from 6.0 to 3.4% in the same period. Finally, measures deriving from financial asset prices must be analyzed very carefully, since





External inflation (annual change, percent)



Source: Central Bank of Chile.







the premiums implicit in the pricing of various assets are clearly affected by the vigorous activity in the bond market and the accompanying portfolio changes. All told, most measures of inflation expectations have fallen in the past few months, and this trend is especially apparent in the short term.

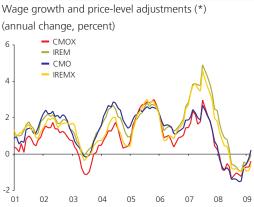
Regarding private monthly inflation expectations, it is important to note that they are likely to vary widely over the course of the year and, on occasion, to be caught off guard by the actual inflation figures. This reflects the change in the methodology for measuring the CPI, which, as mentioned earlier, has increased the price volatility of some of the basket components. In addition, the unusual monthly inflation records of the last two years (in terms of both magnitude and sign) can introduce further volatility into the forecasts.

### Cost pressures and margins

As in Chile, and in line with the drop in demand worldwide, real inflation has fallen in the majority of the economies that are important for foreign trade. Given this scenario, cost pressures have continued to ease off considerably this year. Imported inflationary pressures in dollars, measured through the change in the external price index relevant to the Chilean economy (EPI), fell 10% at the margin in annual terms, after increasing nearly 20% annually in the third quarter of 2008. The twelve-month change in the unit value import index (UVII) fell drastically in the fourth quarter of 2008, to -0.1%, and the drop is expected to have deepened in the year to date. The same pattern is found with the UVII for consumption, although the drop was smaller in magnitude (figure V.7). The baseline scenario of this Report assumes that relevant annual external inflation in dollars will be -5.7% in 2009. This figure is based on projections of lower inflation in the developed economies and in some emerging markets, given the global situation. In fact, the developed economies are expected to record negative annual inflation rates, on average, measured in local currency (figure I.6).

Converted to pesos, imported cost pressures have diminished. Although the peso is more depreciated than it was a year ago, the drop in dollar prices has been considerably greater. Basic food prices, which were one of the main sources of high inflation in Chile and other emerging economies in 2007 and 2008, have risen slightly at the international level. The baseline projection scenario, drawn from futures data and the outlook for world growth, assumes that in the short term, these prices will continue rising, although at much lower rates than in the recent past.

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—have fallen steadily. The WPI reached 11.7% in annual terms in April, down 14 percentage points from October, while the PPI recorded the lowest rate in its existence (-7.2% annually) (figure V.8). In the first quarter, the survey that forms the basis of the Monthly Business Confidence Indicator (IMCE) signaled that businesses in the manufacturing and retail sectors expect the cost of inputs to fall. However, the April survey indicates that costs are expected to remain high for the next three months.



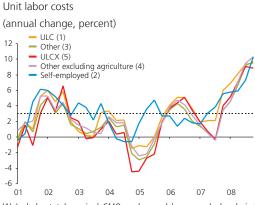
(\*) For details on the construction of these indicators, see the January 2008 Monetary Policy Report, box V.1. See glossary for definitions.

Source: Central Bank of Chile.

#### Figure V.10







<sup>(1)</sup> Includes total nominal CMO, real waged hours worked, salaried employment, and total GDP.

(2) Same as Total, but replaces salaried employment with national employment.

(3) Includes other CMO, other salaried employment, other GDP (excluding EGW, mining, and fishing), and real salaried hours worked.

(4) Same as Other, but excluding the agricultural sector from other salaried employment and from other GDP.

(5) See glossary for definition.

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

The latest data on indirect measures of business margins reveal a slight increase in some and stabilization in others, after recording dissimilar trends in 2008. Thus the durable goods margin—measured as the ratio between the CPI and the WPI—fell systematically in 2008 but has now stabilized at a historically low level. This trend is strongly influenced by the change in the WPI, given that the durables CPI recorded much more gradual changes in the period. The margin on foods—calculated by comparing food prices in the CPIX1 and the PPI—has risen very slightly since mid-2008, when food prices rose sharply both locally and internationally. This suggests that the increase in food prices at the international level did not trigger a tightening of distribution margins in the country, in which case the drop in these prices should also be reflected in domestic markets. Beyond what these indices signal, company returns in the last quarter of 2008 and other margin calculations indicate that while margins have narrowed, they should not be an important source of future inflationary pressures.

## Wages

Wage costs have not changed significantly in the past several months. If anything, the annual growth rate of nominal wages has already stopped increasing, at least according to the available data from INE. This could indicate that the increase is in line with what one would expect based on the usual price-level indexation clauses and the current state of the cycle (figure V.9). As of March, labor costs (CMO) and the wage index (IREM) grew 7.5 and 7.3%, respectively, in annual terms, after closing 2008 at 8.3 and 8.5%. The Chilean Association for Occupational Safety and Health (AChS) reported figures of over 11% in November 2008, which have fallen to around 9.5% for the year to date (figure V.10). By sector, wages have fallen more than the aggregate in manufacturing, construction, and retail, which is in line with the slowdown in these sectors.

The annual growth rate of unit labor costs (ULC) either rose or held constant in the fourth quarter of 2008, depending on the measure. This largely reflects a drop in labor productivity, associated with the dynamics of wage labor and output (figure V.11). The baseline scenario of this *Report* assumes that ULC will behave in line with the fall in inflation, the expansion of excess capacity, and employment dynamics.

# **VI. Inflation scenarios**

#### Table VI.1

World growth (\*)

(annual change, percent)

	Avg. 90-99	Avg. 00-05	2007	2008 (e)	2009 (f)	2010 (f)
World	2.9	3.8	5.2	3.2	-1.2	2.1
World at market nominal exchange rate	2.4	2.9	3.8	2.2	-2.3	1.4
United States	3.1	2.5	2.0	1.1	-3.0	0.5
Euro zone	2.2	1.9	2.7	0.9	-3.5	0.4
Japan	1.5	1.6	2.4	-0.6	-7.2	0.9
China	10.0	9.4	13.0	9.0	6.5	7.5
Rest of Asia	5.5	4.8	5.9	3.0	-1.9	1.4
Latin America	2.7	3.0	5.7	4.2	-2.0	1.5
Commodity exporters	2.7	3.1	3.2	1.0	-1.7	0.9
Trading partners	3.0	3.1	5.0	3.0	-1.5	2.0

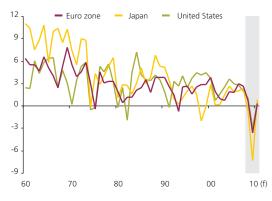
(e) Estimate. (f) Projection

(\*) See Glossary for definitions

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



GDP growth in developed economies (real annual change, percent)



#### (f) Projection

Sources: Central Bank of Chile, Bureau of Economic Analysis, Cabinet Office, Eurostat and IMF.

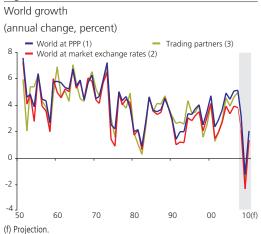
This chapter presents the Board's evaluation of the prospects for the Chilean economy over the next two years, including the analysis and decision of the monetary policy meeting held on 7 May 2009. Projections are shown for the most likely inflation and growth trajectories, which are conditional on a 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 included.

### **Baseline projection scenario**

#### **External scenario**

The world economic outlook has deteriorated more than was foreseen in our January Report. Thus, contradicting January's forecasts, the world economy's growth rate measured at PPP will be negative this year. This results from the astonishing synchrony with which the increased global financial uncertainty swept over the world between the end of 2008 and early 2009, with no big differences across very dissimilar economies. Developed economies' GDP will fall by almost 4% this year (-1.7% forecast in January), posting declines of 3.0%, 3.5% and 7.2% in the U.S., the Euro zone and Japan, respectively (table VI.1 and figureVI. 1). Emerging economies will also perform poorly, although countries like China and India will post significantly positive growth rates that will help this set of economies to show positive annual GDP growth on average (figure VI.2). Toward 2010, thanks to global uncertainty gradually fading out, the world's economic and financial conditions will be progressively normalized. In this scenario, where developed economies are weak and emerging economies pick up, global output is expected to remain below its trend (figure VI.3).

The working assumption for the long-term price of copper holds it at US\$1.6 per LME pound. Because it is presently above US\$2/lb and medium-term prospects point to tight supply and partially recovered demand, the metal is forecast to post average prices of US\$1.80 this year and US\$1.85 in 2009, both figures being higher than those assumed in the previous *Report*. Our working assumption for the long-term oil price is also the same as in January: US\$75 per WTI barrel. Projections based on the prices implicit in futures contracts in the ten days prior to this *Report's* statistical closing foresee average prices of US\$52 in 2009 and US\$64 in 2010 (figure VI.4). Accordingly, the terms of trade are expected to fall 13.5% in 2009 and 3.8% in 2010, less than foreseen in January, driven by copper (figure VI.5). The external price index relevant to Chile (EPI), measured in dollars, will drop 5.7% this year and will rise 7% in 2010. This rise in inflation by 2010 results from the foreseen increase in commodity prices and the depreciation of the U.S. dollar in international markets.



 Between 1950 and 1980, weighted by PPP of 1980. After 1980, 2008 weights used.

(2) Between 1950 and 1970, weighted by market exchange rates of 1970. After 1970, 2008 weights used.

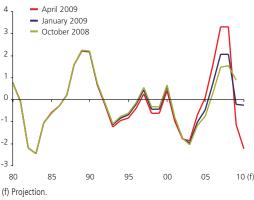
(3) Between 1950 and 1970, weighted by trading partners's shares of 1970. After 1970, 2008 weights used.

Source: Central Bank of Chile based on World Bank, Eurostat, IMF, and Penn World Tables data.

#### Figure VI.3

World output gaps

(percentage points of trend GDP)

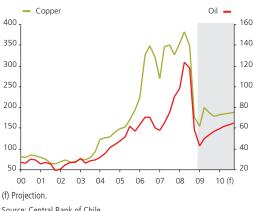


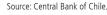


#### Figure VI.4

Oil and copper prices

(US¢/lb, LME; US\$/ barrel, WTI)





#### Aggregate demand, output and external accounts

In the baseline scenario of this *Report*, the Board projects y-o-y GDP growth to stand within the range between -0.75 and 0.25% during this year (table VI.2). Domestic demand will fall 4.7% annually, private consumption will grow slightly, while investment will post a y-o-y variation of -14.3%, mainly due to a weak machinery and equipment component. Measured at 2003 prices, the ratio of investment to GDP is projected to drop to around 25.5% of GDP, while, at current prices, it drops to around 22% of GDP. The trajectory assumed for GDP considers growth increasing in the coming quarters, driven by normalized levels of domestic demand. However, the lagged effect of the sharp fall in output of late 2008 will keep annual variation figures negative at least throughout the present quarter. In contrast, positive numbers will be seen in the month-to-month and quarter-to-quarter comparisons. Toward 2010, the baseline scenario sees GDP growth approaching its trend.

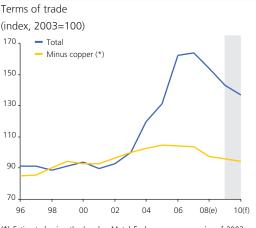
In accordance with the fiscal authority's announcement, the baseline scenario assumes that this year the structural surplus rule will be temporarily changed from 0.5% to 0% of GDP and that there will be a fiscal deficit. The fiscal accounts are expected to behave as announced by the government when it made public the recent fiscal policy measures and funding needs which, considering the General Treasury's solvency, can be easily covered.

The steep drop in imports will drive net exports to contribute positively to growth expected for 2009, contrary to recent years. This same factor, combined with the projected trend for commodity export prices, is behind the projected surplus in the trade balance again this year. This and the reduction in the deficit of foreign investment returns corrects the projected current account deficit for 2009 to less than half what was forecast in January: 1.8% of GDP. Measured at trend prices, this deficit amounts to 4% to 5% of GDP<sup>1</sup>/. The limited increase in the current account deficit is expected to be financed without creating any tensions. Although there are risks, the sustained access to external credit and the levels of international liquidity of the Chilean economy paint a picture of much less potential difficulties than were foreseen earlier in the year.

#### Inflation

In the baseline scenario, annual inflation will continue declining in the coming months, fluctuating significantly around the turn of the year 2010, due to the changed basis to compare with the high inflation rates between May and October 2008 and negative rates last November through February. Thus, y-o-y CPI inflation is forecast to be negative between the end of the third quarter and the beginning of the fourth quarter of 2009, to close the year at 0.6%. Then it should increase gradually to meet the 3% target by the end of the projection horizon, that is, by the second quarter of 2011 (table VI. 3 and figure VI.6). Core inflation will show similar movements, but with milder swings. This future trajectory for inflationary pressures than were forecast some months ago. This is explained by significantly larger output gaps and a quick transmission of the world price declines to the local cost structure. Inflation expectations have stabilized in levels that are generally consistent with these projections.

<sup>1</sup>/ Considers corrections to prices and not to volumes. Long-term prices for copper and oil are US\$1.60 per pound and US\$75 per barrel, respectively.



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

Source: Central Bank of Chile.

#### Table VI.2

	2006	2007	2008	2009 (f)
(annual change, percent)				ercent)
GDP	4.6	4.7	3.2	-0.75 to 0.25
National income	7.1	7.1	3.8	-2.8
Domestic demand	6.8	7.8	7.4	-4.7
Gross fixed capital formation	2.3	12.0	19.5	-14.3
Total consumption	7.0	7.1	4.2	0.2
Goods and services exports	5.1	7.6	3.1	-1.7
Goods and services imports	10.6	14.9	12.9	-10.6
Current account (% of GDP)	4.9	4.4	-2.0	-1.8
		(l	JS\$ million)	
Current account	7,154	7,189	-3,400	-2,700
Trade balance	22,780	23,635	8,900	2,600
Exports	58,680	67,666	66,500	46,100
Imports	-35,900	-44,031	-57,600	-43,500
Services	-631	-975	-600	-300
Rent	-18,401	-18,595	-14,600	-7,000
Current transfers	3,406	3,123	2,900	2,000

<sup>(</sup>i) i iojectioni

Source: Central Bank of Chile.

#### Table VI.3

Inflation

(annual	change,	percent)
---------	---------	----------

	2008	2009 (f)	2010 (f)	2011 (f)
Average CPI inflation	8.7	2.3	1.5	
December CPI inflation	7.1	0.6	2.3	
CPI inflation in around 2 years (*)				3.0
Average CPIX inflation	8.4	3.7	1.1	1
December CPIX inflation	8.7	0.5	2.2	
CPIX inflation in around 2 years (*)				2.9
Average CPIX1 inflation	7.8	3.8	1.0	
December CPIX1 inflation	7.9	1.0	2.2	
CPIX1 inflation in around 2 years (*)				3.0

(f) Projection

(\*) Corresponds to inflation projection for the second quarter of 2011.

Fuente: Central Bank of Chile.

The inflation trajectory forecast is based on a number of working assumptions. On one hand, the real exchange rate has diminished since early in the year, reflecting continuity in the Chilean economy's access to external credits, as well as the mild increase in the current account deficit. Its present level is not far from what is believed to be consistent with its long-term fundamentals and, as a methodological assumption, it is expected to be in the long term in the levels it was in the two weeks prior to this *Report's* statistical closing. On the other hand, wage dynamics are in line with historical patterns and with the stage of the cycle. Real wages' annual growth has accelerated—not surprisingly, given the reductions in y-o-y inflation figures.

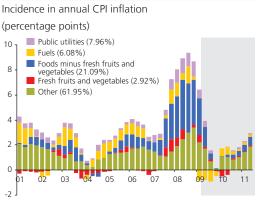
For the nearest future, it is assumed that fuel prices in the domestic market will be affected by the reversal in the tax rebate established early last year. This contributes nearly 0.6 percentage points of higher inflation for 2009. Projections also consider that the direct effects of methodological changes implemented by the National Statistics Bureau (INE) to measure the CPI are temporary. On one hand, they affect the seasonal behavior of some products and, on the other, the stamp tax rebate will be reversed in 2010. Finally, the projections use as a working assumption that, nationwide, the change in CPI measurement will have no material effects on the level of inflation.

A trajectory for the monetary policy interest rate is set as a working assumption to configure the baseline scenario. On this occasion, the policy rate will, in the short run, follow a path similar to the one that can be inferred from financial asset prices of 8 May 2009. However, towards the end of the projection horizon, this interest rate trend runs below the one deduced from said prices. (figure VI.7). This is a working assumption that does not represent a commitment for the future conduct of monetary policy, which will be adjusted to accommodate the effective evolution of the macroeconomy and inflation projections.

### **Risk scenarios**

As usual, the baseline scenario described above reflects the events that are believed to have the highest probability of occurrence with the information available at the closing of this *Report*. Logically, different real life events will lead to different macroeconomic conditions. Currently, the level of uncertainty is definitely higher than normal and, after assessing the likelihood of alternative scenarios, the Board considers that the balance of risks for growth is biased downward, and unbiased for inflation (figures VI.8, VI.9 and VI.10).

The average annual variation that the Chilean economy will ultimately post during 2009 with its effects on output gaps and inflation convergence with the target is subject to high degrees of uncertainty. The synchronicity that has been observed in the drop in output worldwide is astonishing for both its size and its speed. Still, Chile's macroeconomic adjustment differs from those in countries that are in the eye of the financial hurricane. There, the contraction of final demand has been largely the culprit of the reduction in output. Chile also differs from those financially sound economies that are very integrated to the international manufacturing chain, where net exports have driven the collapse of economic activity. As a matter of fact, in Chile, on the demand side, net exports have contributed to growth, while inventory accumulation has dropped significantly.

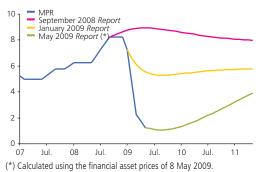


 From the second quarter 2009 on, the gray area denotes the breakdown of projected inflation in the baseline scenario.
 In parentheses, weights in the CPI basket of December 2008. Before that, built with the weights in the December 1998 basket.

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

#### Figure VI.7

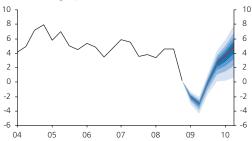
Monetary policy interest rate and forward curve (percent)





#### Figure VI.8

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 basline 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 monetary policy interest rate will, in the short run, follow a path similar to the one that can be inferred from financial asset prices of 8 May 2009. However, towards the end of the projection horizon, this interest rate trend runs below the one deduced from said prices.

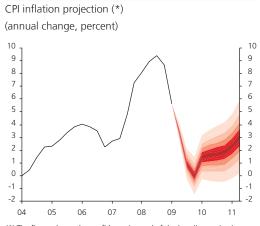
Source: Central Bank of Chile.

The above suggests that, although the main reason behind the downturn in output and demand in Chile has been the world crisis, the strongest link between the crisis and the domestic economy has been the reaction from firms and household's expectations to the uncertain global scenario. This is a natural response from a globally integrated economy like Chile, where a foreign crisis of the size of the current one leads agents to postpone their decisions to borrow, spend and invest until they have a clearer picture of the global economy into the medium term.

Accordingly, a large part of risks in the baseline scenario depend on the actual behavior that the global economy will ultimately display, considering the unusually large range of risks. Risks associated to short-term prospects for world growth are less and not so unbalanced as they were in January. The synchronic fall in output and demand has triggered an unprecedented worldwide adjustment in inventories. Thus, the magnitude of the previous adjustment, together with the adoption of strong measures of fiscal and monetary policy, the financial resilience of the better part of the emerging world and a relatively large international consensus regarding the importance of taking decisive steps to deal with the financial problems, have made room for incipient signs of recovery of manufacturing output, exports and confidence indicators in several economies, particularly in Asia. Therefore, a sharp rebound of world demand and activity in the near term cannot be ruled out, and is probably being anticipated by the financial markets. However, deteriorated expectations hindering such a rebound cannot be ruled out either, especially if new episodes of financial instability occur in some important economy.

Toward the medium term, the series of risks for the world economy is bigger than in January. The probability of world growth resuming the rates of 2004-2007 is low, and resolving the financial problems is likely to take time. This, together with the usual uncertainty surrounding the global full-employment activity, poses doubts about the likely behavior of world inflation in the medium term. A scenario of economic weakness caused by, for example, a milder-than-expected impact of fiscal and monetary actions taken globally or a new round of uncertainty and volatility, would increase the risk of inflation settling at lower levels than are considered good for long-term development. Conversely, a stronger recovery of the world economy, in a context of tight commodity markets and bad management of the process of withdrawing the enormous fiscal and monetary stimulus at the world level, could complicate the international inflationary environment.

Another source of risk that persists is global imbalances. Although they have tended to moderate, it is an open question how much of this adjustment is purely cyclical and how much can be attributed to a more structural correction. The baseline scenario assumes that the U.S. dollar will depreciate in the medium term, but it is subject to high uncertainty. Another risk factor is related to the possibility that, facing a delay in their recovery, the economies that have been hit hardest by the financial crisis end up adopting protectionist measures. While unlikely, if this scenario materializes it will reduce growth prospects across all economies. Still, its effects would be more severe on small open economies that have prospered in the last decades on the basis of being increasingly integrated to the world.

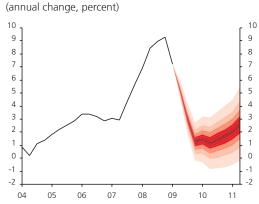


(\*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% around the basline scenario are included. These intervals summarize the risks on inflation as assessed by the Board. The projection scenario incorporates as a methodological assumption that the monetary policy interest rate will, in the short run, follow a path similar to the one that can be inferred from financial asset prices of 8 May 2009. However, towards the end of the projection horizon, this interest rate trend runs below the one deduced from said prices.

Source: Central Bank of Chile.

#### Figure VI.10

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 monetary policy interest rate will, in the short run, follow a path similar to the one that can be inferred from financial asset prices of 8 May 2009. However, towards the end of the projection horizon, this interest rate trend runs below the one deduced from said prices.

Source: Central Bank of Chile.

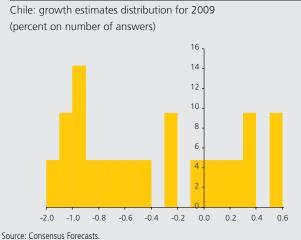
A more favorable growth scenario for the Chilean economy can be the outcome of increased synchrony with those economies that are already showing stronger activity. This, combined with the robust impulse of macroeconomic policies and a strong effect of measures supporting credit and the labor market, may accelerate the recovery of output and demand. It is also possible that, in a scenario where global uncertainty is still unresolved, expectations of agents in Chile and around the world fail to recover, and domestic demand continues to be frail, the foreseen rebound of the local economy may be limited or halted.

Overall, it is important to keep in mind that the use of a range for growth projections reflects different levels of output that are consistent with the set of assumptions used to configure the external and internal scenarios, particularly regarding the effects of fiscal policies, as well as the assumed trajectory for the monetary policy interest rate in the baseline scenario comparable to the one the market expects for the near term. Unchanged from January, the level of uncertainty continues to be higher than it was before the global financial crisis, so the probability of economic growth being within the projected one percentage point range is smaller than in other occasions. Logically, the materialization of risk scenarios has implications on the effective inflation trajectory and, therefore, on monetary policy. Accordingly, the Board reaffirms its commitment to conduct monetary policy so that projected inflation will stand at 3% over the policy horizon.

## Box VI.1: Output contractions in Chile

In the last fifty years, the Chilean economy has recorded drops in the output level on three occasions: in 1975, in 1982–83, and in 1999. In each case, both internal and external factors played a role, although their magnitude, seasonality, and impact on output was heterogeneous. The baseline scenario of this Report assumes that in 2009 the growth rate of the Chilean economy will range from -0.75 to +0.25% in annual terms, which is consistent with the estimates of various market agents (figure VI.11). This box reviews the previous output contractions and highlights the differences with the current episode.

#### Figure VI.11



In 1975, the oil crisis that began a year earlier caused world GDP growth to plummet to its lowest level in the postwar era: 1.5% in annual terms. Domestically, output fell almost 13%, with a substantial decline in domestic demand, owing to the sharp fiscal and consumer adjustments. The impact of the external crisis on the Chilean economy is evident in the

significant deterioration of the terms of trade (table VI.4).

#### Table VI.4

Internal and external variables (percent)

Period	World growth at PPP	TOT (*)	Fed Funds U.S.	Chile's growth
1975	1.5	-39.3	6.2	-12.9
1982-83	3.7	0.1	10.5	-16.4
1999	3.5	-4.5	5.0	-0.7
2009	-1.2	-13.5	0.3	-0.75 a 0.25

(\*) Up to 1999 calculation corresponds to Bennett and Valdés (2001).

Sources: Central Bank of Chile. and Bloomberg.

The early 1980s were characterized by an inflationary problem at the international level, which was addressed with a generalized increase in interest rates in 1981<sup>2</sup>/. The effect of the tight monetary policy was manifested in a drop in world growth, which reached its lowest level since 1975: 0.9% in 1982. The Chilean economy had high levels of spending and debt, under an inadequate financial regulatory system. Combined with the cutoff of external financing, this unleashed a severe crisis between 1982 and 1983, with the bankruptcy of important financial institutions and a strong contraction in output and spending. Chile's GDP fell 16.4% in the period<sup>3</sup>/.

In 1999, Chile's GDP fell 0.7%. This contraction was associated, in part, with an external crisis that hit a large number of emerging economies—beginning with the financial problems in southeast Asia in 1997—and with an overexpansive cyclical phase in the local economy.

In late 2008, the world scenario changed abruptly, causing a disruption of the financial markets and bringing interest rates to record lows. The new macroeconomic scenario translated into a worsening of expectations at the world level, sharp adjustments in production, and a slump in commodities prices. For 2009, world growth and the growth of trading partners will be negative for the first time in the postwar era. Moreover, the degree of uniformity among countries in terms of the impact of the crisis is unprecedented (box I.1).

In sum, the current episode is embedded in the most adverse global scenario—in financial and real terms—in the postwar era. Chile is not immune to external crises, as evidenced by the terms of trade, which will fall an estimated 13.5% in 2009, after falling 15% in 2008. Nevertheless, the country's capacity to mitigate the cycle is substantially greater than it was in past episodes, given that the country is facing the world crisis with a solid financial system, an appropriate regulatory system, an important accumulation of external savings, and a fiscal policy based on clear and stable rules—all under a floating exchange rate regime and a flexible monetary policy, based on an inflation target, that has actively addressed the changing environment.

<sup>&</sup>lt;sup>2</sup>/ For reference, the U.S. monetary policy rate rose from an annual average of 13.7% in 1980 to 18.1% in 1981, falling to 11.9% in 1982.

 $<sup>^3\!/</sup>$  According to the National Accounts at 1977 prices, it fell 13.6% in 1982 and 2.8% in 1983.

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## Glossary

- **CMOX**: Labor costs (CMO) excluding community, social, and personal services, EGW, and mining.
- Commodities exporters: Australia, Canada, and New Zealand.
- 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 Asia: China, Hong Kong, India, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan, and Thailand
- **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 zone, 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.
- **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, services: Includes the following sectors: construction; retail; transport and communications; financial and business services; home ownership; personal services; and public administration services.
- **IREM**: Wage index. The average wage paid per hour, weighted by the number of regular hours worked.
- **IREMX:** IREM excluding community, social, and personal services, EGW, and mining.
- Latin America: Argentina, Bolivia, Brazil, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, and Venezuela.

- 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, The Netherlands, Italy, Japan, Mexico, Peru, South Korea, Spain, Sweden, United Kingdom, United States, and Venezuela.
- MER-5: MER using only the currencies of Canada, the euro zone, Japan, the United Kingdom, and the United States.
- MER-X: MER excluding the U.S. dollar.
- **Oil exporters:** Kuwait, Norway, Russia, Saudi Arabia, United Arab Emirates, and Venezuela.
- **Overnight index swap (OIS):** Contract establishing the net payment between a fixed interest rate and the daily compound interest rate of a floating reference rate, to be carried out at a specified future date.
- **RER:** Real exchange rate. A measure of the real value of the peso against a basket of currencies, which includes the same countries used to calculate the MER.
- Rest of Asia: Hong Kong, Indonesia, Malaysia, Philippines, Singapore, South Korea, Thailand, and Taiwan.
- **Swap rate:** The fixed rate in an interest rate swap, which is exchanged with the observed average interbank interest rate, based on a given amount of capital and a specified period in the future.
- TIB: Nominal U.S. Treasury bond.
- TIP: Inflation-indexed U.S. Treasury bond.
- **TMVC (trim of most volatile components)**: Trimmed mean CPI, excluding the items with the most volatile prices.
- **Trading partner's growth:** Growth of Chile's main trading partners, weighted by their share of total exports in two moving years. The countries considered in this calculation represent the destination of 94% of total exports.
- 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.
- VIX: Stock volatility index, based on S&P 500 options contracts.
- World growth at market exchange rate: Each country is weighted according to its GDP in dollars, published in the IMF's *World Economic Outlook*.
- 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 2009–10 are calculated from a sample of countries that represent about 85% of world GDP. The growth of the remaining 15% is estimated at around 1.3% in the two-year period.

## Abbreviations

**BCP**: Central Bank bonds in pesos **BCU**: Central Bank bonds in UFs **MPR**: Monetary policy rate

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**Juan Esteban Laval Z.** Legal Representative

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ISSN: 0716-2219 Santiago, Chile Agustinas 1180, Santiago, Chile P. O. Box 967, Santiago, Chile Tel.: 56-2-670 2000 Fax: 56-2-670 2231 www.bcentral.cl bcch@bcentral.cl

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